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5	PUBLIC HEARING
6	before
7	THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA)
8	and
9	THE U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
LO	regarding
L1	2017 AND LATER MODEL YEAR LIGHT-DUTY VEHICLE GREENHOUSE GAS
L2	EMISSIONS AND CORPORATE AVERAGE FUEL ECONOMY STANDARDS
L3	held at
L4	MARRIOTT COURTYARD DETROIT
L5	333 JEFFERSON AVENUE
L6	DETROIT, MICHIGAN
L7	on
L8	TUESDAY, JANUARY 17, 2012
L9	at
20	10:00 a.m.
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7	Office of General Counsel
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10	Jim Tamm, Chief
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12	Rebecca Yoon, Attorney Advisor
13	Office of Chief Counsel
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

1	TABLE OF CONTENTS	
2	Testifier	Page
3	Opening remarks by Ms. Oge	12
4	Opening remarks by Mr. Medford	15
5	Remarks by Congressman John Dingell	18
6	Bob King	21
7	President, United Auto Workers	
8	Larry Schweiger	26
9	President/CEO, National Wildlife Federation	
10	Mike Robinson	34
11	Vice President, Sustainability and Global	
12	Regulatory Affairs, General Motors	
13	Dr. Mark Cooper	39
14	Director of Research, Consumers Federation	
15	Of America	
16	Sue Cischke	42
17	Group Vice President of Sustainability,	
18	Environment and Safety Engineering, Ford	
19	Motor Company	
20	Alex Cornell du Houx	48
21	Truman National Security Project and	
22	Operation Free	
23	Jay Wilton	51
24	Vice President of Engineering Planning and	
25	Regulatory Compliance, Chrysler	

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	David Foster	57
4	Executive Director, BlueGreen Alliance	
5	Dan Pelissier	61
6	President, UAW Local 163 (General Motors	
7	Romulus Engine)	
8	Mike Stanton	65
9	President/CEO, Association of Global Automakers	
10	Don Chalmers	68
11	Chairman, National Automobile Dealers	
12	Association; President of Don Chalmers Ford	
13	Tom Thias	80
14	Sundance Chevrolet	
15	Doug Fox	84
16	Ann Arbor Automotive, President	
17	Ron Krupitzer	87
18	Vice President Automotive Market, American	
19	Iron and Steel Institute	
20	Neil Carter	92
21	Veteran	
22	Mitch Bainwol	95
23	President/CEO, Alliance of Automobile	
24	Manufacturers	
25		

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	John Juriga	99
4	Director of Powertrain, Hyundai/Kia American	
5	Technical Center	
6	Rhett Buttle	104
7	Director, National Outreach & Government	
8	Affairs, Small Business Majority	
9	Dr. Andrew Brown, Jr.	107
10	Executive Director and Chief Technologist,	
11	Delphi Corporation	
12	Christine Dingeman	112
13	Consumers Union	
14	Robert Bienenfeld	114
15	Senior Manager, Environmental and Energy	
16	Strategy, American Honda Motor Company	
17	Tracy Woodard	126
18	Director, Government Affairs, Nissan	
19	Mr. Sharif Sokkary	131
20	Citizen	
21	Bob Honeyman	134
22	Citizen	
23	Al Williams	138
24	Climate Equity Fellow for the Detroit NAACP	
25		

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	James Jacobs	144
4	President, Macomb Community College	
5	Reverend Peggy Garrigues	153
6	Pastor, Clawson United Methodist Church	
7	Brenda Archambo	155
8	Citizen	
9	Gil Archambo	158
LO	Citizen	
L1	Julie Lyons Bricker	161
L2	Executive Director, Michigan Interfaith	
L3	Power & Light	
L4	Tim Schacht	162
L5	Citizen	
L6	Tom Zerafa	164
L7	Citizen	
L8	Robin Eckstein	167
L9	Truman National Security	
20	Deborah Bakker	171
21	Senior Manager of Regulation and	
22	Certification Department, Hyundai Technical	
23	Center	
24	Hilary Sinnamon	174
25	Environment Defense Fund	

1		
2	TABLE OF CONTENTS (CONTINUED)	
3	Testifier	Page
4	Joe Kubsh	179
5	Executive Director, Manufacturers of	
6	Emission Controls Association	
7	Dr. Mihai Dorobantu	184
8	Director of Vehicle Technologies and	
9	Innovation, Eaton Cooperation	
10	Charles Griffith	187
11	Climate & Energy Program Director, Ecology	
12	Center	
13	John German	191
14	International Council on Clean	
15	Transportation	
16	Luke Tonachel	198
17	Senior analyst, Natural Resources Defense	
18	Council	
19	Matt Ross	202
20	Veteran	
21	Jody Shaw	206
22	Director, Technical Marketing & Product	

Research, United States Steel Corporation

THE RAGING GRANNIES

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	Doug Richman	219
4	Kaiser Aluminum	
5	James Crowfoot	228
6	University of Michigan	
7	Walter McManus	233
8	Research Professor	
9	Jeffrey Breneman	238
LO	U.S. Coalition for Advanced Diesel Cars	
L1	Judy Lindberg	250
L2	Citizen	
L3	Kerry Ebersole	252
L4	Pew Environmental Group	
L5	Steven McKinley	255
L6	Honeywell Turbo Technologies	
L7	Jessica Surma	260
L8	Environment Michigan	
L9	Karyn Schmidt	262
20	American Chemistry Council	
21	Ahmina Maxey	268
22	East Michigan Environmental Action Council	
23	Bruce Benda	270
24	Bayer MaterialScience	
\ -		

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	Diane Crawford	274
4	Sierra Club	
5	Jonathan Morgenstein	276
6	Truman National Security Project	
7	Sandra Turner-Handy	280
8	Michigan Environmental Council	
9	Greg Adams	282
LO	SABIC	
L1	James Blain	287
L2	PEP Stations	
L3	Rev. Charles Morris	289
L4	St. Christopher Parish	
L5	Marc Sommer	294
L6	Ohio Sportsman	
L7	Henry Pollack	289
L8	University of Michigan, Professor, Geophysics	
L9	Robert Bailey	300
20	Citizen	
21	William Bryce	303
22	Southeast Michigan Jobs with Justice	
23	Frank Hammer	304
24	Southeast Michigan Jobs with Justice	
) E		

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	Jim Egged	308
4	Citizen	
5	Brad van Guilder	311
6	Sierra Club	
7	Donna Walker	316
8	Sierra Club	
9	Gerald Hasspacher	317
10	Citizen	
11	William McMaster	321
12	Taxpayers United Michigan Foundation	
13	Dele Akinpelu	323
14	Wayne State University	
15	Ayddeji Akinpelu	325
16	Wayne State University	
17	Ade Abdalla	327
18	Energy/Efficiency & Environmental Health Service	ces
19	Kwebena Johnson	328
20	Legacy Electric Vehicles	
21	Dan Lombardo	330
22	Citizen	
23	Charles Altman	333
24	Citizen	
0.5		

1	TABLE OF CONTENTS (CONTINUED)	
2	Testifier	Page
3	Italia Millan	338
4	Citizen	
5	Don Hughes	339
6	Citizen	
7	Jim Richardson	341
8	Citizen	
9	Leon Linderman	343
10	Citizen	
11	Kimberly Hill	346
12	Detroiters Working for Environmental Justice	
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

- 1 MS. OGE: Good morning. Could you
- 2 please take your seats.
- 3 Good morning. I'd like to welcome you
- 4 to today's public hearing. My name is Margo Oge. I'm the
- 5 Director of the Office of Transportation and Air Quality
- 6 within the Environmental Protection Agency, and with me
- 7 today also is my colleague Ron Medford on my right. Ron is
- 8 from NHTSA. Ron and I are going to be the presiding
- 9 officers for this public hearing today.
- 10 We have over 90 individuals and
- 11 individuals that are representing organizations that have
- 12 signed to testify today. We're also very honored to have
- 13 Congressman Dingell. The Congressman, I don't have to
- introduce him to you. He's the Congressman of the great
- 15 State of Michigan, 15th District, and he's also known as the
- 16 Dean of the House of Representatives. So we're honored to
- 17 have him here today.
- 18 CONGRESSMAN DINGELL: Thank you, Madam
- 19 Chairman.
- MS. OGE: I want to thank each one of
- 21 you for taking the time to participate today in this very
- 22 important process.
- 23 Today EPA and NHTSA will be hearing
- 24 testimony on a proposal to establish greenhouse gas
- 25 emissions and fuel economy standards for light-duty vehicles

- for model years 2017 through 2025. The proposed standards
- 2 as of last November would achieve 163 grams of CO2 per mile
- 3 CO2 equivalent in 2025. This is equivalent to 54.5 miles
- 4 per gallon if vehicles were to meet this level, this 54.5 by
- 5 using fuel economy improvements.
- 6 This program is projected to save about
- 7 4 billion gallons of oil, 2 million metric tons of
- 8 greenhouse gas emissions for the lifetime of those vehicles
- 9 sold in the year 2017 to 2025. Higher costs for this
- 10 vehicle technology will add on an average of about \$2,000
- 11 for consumers buying a new vehicle in 2025. However, these
- 12 consumers will save on an average of \$6,600 in fuel savings.
- 13 That is about \$4,400 net savings. And for this estimate we
- are assuming that the gasoline prices in 2025 will be
- 15 approximately the same level as they are today.
- The proposal is built on the success of
- 17 the first phase of the national programs for model years
- 18 2012 to 2016. As you know, those standards were finalized
- 19 last April, and continuing the national program will ensure
- 20 that all manufacturers in this country can continue to build
- 21 a single fleet of used vehicles that will satisfy
- 22 requirements of both federal agencies, NHTSA and
- 23 Environmental Protection Agency and the State of California
- 24 programs.
- 25 President Obama announced the proposal

- for continuing the national program last July. NHTSA and
- 2 EPA issued a Notice of Intent last August outlining our
- 3 plans for a proposal, and this is the proposal that we are
- 4 seeking comments today. The State of California and 13 auto
- 5 manufacturers -- 13 auto manufacturers who represent
- 6 approximately over 90 percent of the U.S. vehicle sales
- 7 provided letters of support for the proposal. The United
- 8 Auto Workers and many other governmental organizations also
- 9 support the announcement.
- 10 I just want to note a very important
- 11 element of this program. The program covers a wide range of
- 12 light-duty vehicles including cars, pickup trucks, light
- 13 pickup trucks, SUVs and minivans.
- 14 Now, our agencies have designed the
- 15 proposed standards to preserve consumer choice; that is, the
- 16 proposed standards should not affect consumers' opportunity
- 17 to purchase the size of vehicle with the performance,
- 18 utility and safety features that meet their needs. This is
- 19 because the standards are designed as not to create
- 20 incentives of manufacturers of any particular size. So, for
- 21 example, this is not an incentive to downsize the vehicle.
- 22 Today's hearing allows interested
- 23 parties, all of you gathering together to provide comments
- 24 to the proposal in person. There will also be a public
- 25 hearing this coming Thursday in Philadelphia and also a

- third public hearing in San Francisco on January 24th.
- 2 In addition there is a written comment
- 3 period that will remain open until February 13th. The
- 4 comment period was originally scheduled to end January 30th;
- 5 however, we extended it to February 13th to provide
- 6 additional time for the public to comment.
- 7 The agencies expect to take final action
- 8 on this proposal at late summer of this year.
- 9 Now I would like to introduce my
- 10 colleagues represented here with me on the panel today.
- 11 Chet France on my left. Chet is the Director of our
- 12 Standards Division and is physically located in Congressman
- 13 Dingell's district in Ann Arbor, Michigan.
- 14 And also with him -- with us is Steven
- 15 Silverman. He's with the Office of General Counsel.
- 16 At this time I'd like to turn it over to
- my colleague Ronald Medford who will give his introductory
- 18 remarks and introduce his team.
- MR. MEDFORD: Good morning, everyone.
- Thank you Margo, and, Congressman Dingell, thank you for
- 21 taking the time to be here today, and thank everyone for
- taking the time to attend today's hearing.
- 23 I'd first like to introduce the panel
- 24 members from NHTSA who are sitting to my right.
- 25 First is James Tamm, Chief of our Fuel

- 1 Economy Division, and Rebecca Yoon who is the attorney
- 2 advisor for the Office of Chief Counsel of NHTSA.
- 3 Today's hearing provides opportunity for
- 4 the public to present oral comments regarding the Agencies'
- 5 proposed 2017 and later model year light-duty vehicle
- 6 greenhouse gas and corporate fuel economy standards.
- 7 On November 16, EPA and NHTSA introduced
- 8 joint agency documents related to the Notice of Proposed
- 9 Rulemaking. They included a preamble, two preliminary
- 10 regulatory impact analysis documents and one from each
- 11 Agency -- one from each Agency, and a technical support
- document. These documents describe in some detail the
- 13 proposed regulations and provide supporting information and
- analysis that support the proposal.
- 15 In addition, NHTSA issued a draft
- 16 environmental impact statement for the proposed fuel economy
- 17 regulations. The draft EIS compares the environmental
- 18 impacts of the proposed fuel efficiency regulations with
- 19 those of the regulatory alternatives presented in the
- analysis.
- 21 Today's hearing provides opportunity for
- the public to comment on both the proposed rulemaking
- 23 documents and the draft EIS. The written comment period as
- 24 Margo mentioned will close for the EIS on January 31st, and
- 25 the extension for the NPRM to February 13th.

1 Today's hearing is scheduled to run 2 until about 7:00 p.m., though we will be here as long as it 3 takes to allow everybody who wants to testify to do so. will use panels to speed up the process. The list of 5 preregistered panel members and their order is provided with 6 the agenda at the reception table. We request that each 7 person keep their testimony to 5 minutes if possible. We 8 know that ten was the allotted time, but I think we have 9 like 30 additional people signed up since we originally scheduled this. If anyone wishing to testify here hasn't 10 11 already signed up, please do so at the reception table. 12 Whether or not you testify, we would like everyone attending 13 today's hearing to sign in at the registration table. 14 Please plan to go straight -- we'll plan to go straight through the panels and only take a couple of 15 16 breaks during the day, as the court reporter is going to 17 need some time during the day to take a break. 18 After today the official record of the 19 hearing will be kept open for 30 days for any speaker 20 wishing to submit rebuttals or make any corrections to the remarks for the record. 21 If you would like a transcript of 22 23 today's proceedings you should make arrangements either with the registration desk or directly with the court reporter. 24 25 We will also make the transcripts available on our website

- and in the public docket for the rulemaking.
- 2 This hearing will be conducted
- 3 informally and formal rules of evidence will not apply.
- 4 Residing officers, however, are authorized to strike
- 5 statements from the record which are deemed irrelevant or
- 6 needlessly repetitious to enforce reasonable limits on the
- 7 duration of statements of any witness.
- 8 Before we begin, we're going to ask
- 9 Congressman Dingell to make a few remarks and after that we
- 10 will call the first panel.
- 11 CONGRESSMAN DINGELL: Thank you.
- 12 I want to commend the two agencies, EPA
- and NHTSA, and I want to commend our two chairmen for their
- leadership and work in this matter.
- 15 This is an extraordinary event. Out of
- 16 respect for all of our witnesses and the two agencies, I
- 17 will limit my remarks to a few off-the-record -- or rather
- outside my testimony remarks and will submit my testimony
- 19 with your permission, Madam Chairman, for the record.
- 20 My name is John Dingell. I'm a member
- of Congress in the 15th District. It is my purpose today to
- 22 testify strongly in favor of the proposal upon which this
- 23 panel is engaged and to point out that after years of
- 24 fighting which goes back to 1968 when Congress introduced
- 25 the first legislation to have clean air, we have now come to

- this extraordinary agreement on fuel efficiency standards on
- 2 automobiles.
- And the two agencies, EPA and NHTSA, are
- 4 to be commended for their work as are the members of the
- 5 labor movement represented here this morning by my friend
- 6 Bob King, and also the automobile companies for their hard
- 7 work.
- 8 And special commendations to California
- 9 for their cooperation in this in responding to the
- 10 remarkable leadership of President Obama and the
- 11 Administration which has literally squared the circle in
- that they had brought together all of us on a single
- 13 standard for fuel efficiency for the automobiles and
- light-duty trucks for many years to come. This is an event
- 15 which I must say ranks with the loaves and fishes.
- 16 Having said this, the events through the
- 17 American consuming public, the industry, our concerns over
- 18 the environment, our concerns about autos and automobile
- 19 production, getting the economy going back are going to be
- 20 enormous.
- 21 So with those remarks, I express my
- 22 congratulations to the two agencies. I thank the President
- 23 for what he has done. I look forward to seeing to it that
- these regulations are adopted. They are in the public
- 25 interest, and they are very much a matter of genuine concern

- 1 to the nation, and when adopted will be a matter of singular
- 2 appreciation because of the benefits they will confer on
- 3 everybody: industry, labor, the consuming public and the
- 4 environment.
- 5 Having said that, I ask that my entire
- 6 statement be inserted in the record, and I will look forward
- 7 to hearing as much as I can of this testimony before I have
- 8 to leave to get back to Washington for some votes today.
- 9 Thank you, Madam Chairman, thank you,
- 10 Mr. Chairman.
- 11 MS. OGE: Thank you, Congressman
- 12 Dingell.
- 13 MR. MEDFORD: Just a few more rules as
- we're calling up the first panel. If your comments today
- 15 are going to be directed toward the draft EIS and the
- 16 environmental impact statement we request that you
- specifically mention that before you begin your comments
- since we're combining the hearings for those two proposals.
- 19 There's also no need to identify that
- your comments are directed toward the proposal. We will
- 21 assume that everything is directed toward that unless you
- 22 state otherwise.
- 23 When the witnesses on the panel have
- 24 finished their presentation, we will have an opportunity
- 25 here on the panel to ask questions related to the testimony.

- 1 The witnesses are reminded that any false statements or
- 2 false responses to questions may be a violation of law.
- 3 So I think we're ready to call the first
- 4 panel. I think the first panel is Bob King and Larry
- 5 Schweiger. If you come up and go to the table and be so
- 6 kind as to write your name on the little sign and put it in
- front of you so we can all know who you are.
- 8 And if you would be so kind for the
- 9 purposes of the court reporter making sure she gets the name
- 10 and the affiliation of your organization, start your
- 11 testimony that way.
- So we will begin first with Bob King.
- MR. KING: Yes. My name is Bob King and
- 14 I'm President of the United Auto Workers International
- 15 Union.
- Thank you for the opportunity to be here
- 17 today. As you know, the UAW represents just under a million
- 18 active and retired members across a diverse range of
- 19 industries and occupations. Over 150,000 UAW members work
- in the light-duty vehicle and parts industry that the
- 21 proposed rules cover.
- It's an honor to be here this morning on
- 23 behalf of our membership to voice UAW's full and strong
- 24 support for the proposed rules, regulating greenhouse gas
- emissions and fuel economy. The proposed rules are

- 1 sensible, achievable and needed. They are good for the auto
- 2 industry and its workers, good for the broader economy, good
- 3 for the environment and good for our national security.
- 4 Adopting the proposed rules will give an
- 5 additional boost to the revitalization of the auto industry
- 6 that began with President Obama's courageous action in the
- 7 depths of the industry's crisis to save American
- 8 manufacturing jobs by giving GM and Chrysler the breathing
- 9 room they needed to restructure.
- 10 After a painful process in which workers
- and retirees made significant sacrifices, the industry is
- 12 coming back strong. Our units with collective bargaining
- agreements with Ford, General Motors and Chrysler include
- 14 substantial investments by all three companies, in some
- 15 cases bringing back work from overseas.
- 16 The 20,000 UAW-represented hourly jobs
- that will be protected and added over the next four years
- 18 will have a substantial and positive ripple effect
- 19 throughout the supply chain as well as the local
- 20 communities.
- 21 One important reason we are so confident
- 22 that the industry's future -- in the industry's future is
- 23 that we are excited about the new green technologies that
- 24 are being developed in the United States and produced in
- 25 UAW-represented facilities. The drive to bringing

- 1 innovative fuel-saving technologies to market is
- 2 transforming the auto industry in the United States in
- 3 creating good jobs in the research labs to the factory
- 4 floor. General Motors, Ford and Chrysler have made
- 5 unprecedented commitments to invest billions of dollars in
- 6 their U.S. operations over the next few years and in every
- 7 case the investment of supporting new vehicles and
- 8 powertrains that will be more efficient than the previous
- 9 generation.
- 10 This includes an exciting advance such
- as 8-, 9-speed automatic transmission, both dual clutch and
- 12 conventional, and engines that feature advanced valve timing
- and gasoline direct injection, downsized and turbocharged
- 14 engines, and vehicles that are considerably lighter than the
- 15 previous generations but retain the same size. Technology
- such as start/stop systems and electric-powered steering are
- 17 also making a contribution to vehicle efficiency.
- 18 There's a common element in all of these
- 19 technologies. They are all now or will soon be produced by
- 20 UAW members and factories located in the United States, and
- 21 that's just the beginning.
- UAW members are also producing new
- 23 technologies that may not reach large volumes for many years
- 24 but represent the long-term future of the industry. That
- 25 includes hybrid transmissions, electric drive components,

- 1 lithium ion battery packs, and plug-in and pure electric
- 2 vehicles.
- 3 Although most auto makers will continue
- 4 to meet fuel efficiency and tailpipe emissions through
- 5 improvements in conventional vehicles, we are excited that
- 6 these new transforming technologies are being produced by
- 7 UAW members. These are the automotive jobs of the future.
- 8 We are very pleased that they are starting to ramp up here
- 9 in the United States.
- 10 Thanks to the fresh start President
- 11 Obama gave to the domestic auto industry, new labor
- 12 agreements that are the result of innovative,
- problem-solving approach in bargaining and the strong
- 14 transparent working relationships we have with UAW
- 15 employers, the U.S. auto industry is growing and adding
- 16 employees. These proposed rules are the cornerstone of that
- 17 growth. It provides certainty as manufacturers map out
- 18 their product investment plans.
- 19 I want to underscore why we believe the
- 20 drive to increase fuel efficiency and reduce tailpipe
- 21 pollution is creating jobs in the U.S. auto industry.
- 22 One obvious reason is that consumers are
- 23 demanding more fuel-efficient vehicles, and meeting that
- 24 demand is an increasingly important part of the business.
- 25 In an age of rising and volatile fuel prices, American

- 1 families want to save money on fuel.
- 2 A second, more fundamental reason is
- 3 because the technology needed to improve efficiency and
- 4 reduce pollution represents additional content on each
- 5 vehicle. That additional content must be engineered and
- 6 produced by additional employees.
- 7 Last year the UAW and the Natural
- 8 Resources Defense Council and Larry's organization, The
- 9 National Wildlife Federation, produced a report called
- 10 Supplying Ingenuity. That report identifies more than 500
- 11 separate facilities in the United States, employing over
- 12 150,000 people, where some or all the employees are working
- to invent, engineer, or produce advanced vehicles and fuel-
- savings components. These are real jobs supporting real
- 15 American families.
- 16 Also I want to say that UAW believes
- 17 that the auto manufacturers, all the companies that
- 18 participated in the technical discussions about these
- 19 proposals and signed a letter of commitment to support its
- 20 frameworks deserves tremendous credit for their commitment
- 21 to dramatically increase the efficiency and reduce the
- 22 emissions of vehicles sold in the United States.
- This is a testament to good government.
- 24 It shows how government can bring disparate stakeholders
- 25 together to solve problems that are important to the

- 1 American public. These proposed rules will reduce the
- 2 pollution that contributes to climate change, significantly
- 3 reduce America's dependence on foreign oil and save American
- 4 families money at the pump. They will also create jobs in
- 5 the auto industry and throughout the economy.
- 6 That's an incredible set of positive
- 7 effects from these proposed rules, and it sums up why the
- 8 United Auto Workers are in strong support of these
- 9 proposals.
- 10 President Obama and his Administration,
- including the two agencies here today, did a tremendous job
- in developing the proposed rules. We thank the President
- 13 for all the great work he has done to strengthen the
- 14 American auto industry and automotive communities.
- 15 Thank you very, very much for your time
- 16 and consideration.
- 17 MR. MEDFORD: Great. Thank you.
- Mr. Schweiger.
- MR. SCHWEIGER: Good morning.
- I am Larry Schweiger and I am the
- 21 President and CEO of the National Wildlife Federation. I
- 22 wanted to say thank you, Director Oge and Deputy
- 23 Administrator Medford, and also recognize my good friend
- 24 Congressman John Dingell for your steady hand in Washington.
- On behalf of our 4 million members and

- 1 supporters, it is my pleasure to speak this morning in
- 2 support of these proposed landmark standards. I'm pleased
- 3 to be here with Bob in Detroit today. As a one-time GM
- 4 mechanic, I expect to be even more thrilled when I walk
- 5 through the auto show this afternoon.
- 6 In 2009 when the tide was flowing
- 7 against the auto industry, the National Wildlife Federation
- 8 stood up to support the auto recovery package. At the time
- 9 I believed that the U.S. auto industry could innovate and
- 10 build the kind of clean cars and trucks the consumers and
- 11 environment increasingly demand.
- 12 America needs a strong, clean industrial
- sector that employs billions with good jobs while producing
- the most efficient products possible. Our members depend on
- 15 all kinds of vehicles from small hybrids to cars to pick-ups
- to off-road vehicles. We still believe in the potential of
- 17 the American auto industry.
- Over the past two years, the hard
- 19 working people here in Detroit and in Ohio and Missouri and
- North Carolina and all across the country have been proving
- 21 dramatically that they have what it takes for America to
- 22 lead in a prosperous clean energy future. Their efforts,
- 23 combined with these new standards, and effective public and
- 24 private investment show how an industry can be retooled to
- 25 be vibrant in the present and even more relevant and

- 1 powerful in the future. Strong standards through the
- 2 2025 year are critical to staying on this path.
- 3 The standards are also an example of how
- 4 an industry and labor and the conservation community can and
- 5 must work together to use the Clean Air Act as a tool for
- 6 innovation and to solve critical and environmental energy
- 7 and economic changes we face today.
- 8 These standards deliver.
- 9 I've spent the past eight years all
- 10 across America talking to our members and many others who
- want to see America's outdoor heritage sustained and
- 12 preserved for their children. All too often our huge demand
- for oil stands in the way.
- 14 Carbon pollution is warming our climate
- 15 locally and worldwide. These changes threaten people and
- 16 global security right now, and they are a most profoundly
- 17 threatening force against the future of wildlife. Rising
- temperatures, flood, fires, droughts and ecosystem
- 19 alterations are creating direct habitat loss, increased
- 20 invasive species and other threats for wildlife species, and
- 21 many of those species may not adapt.
- The 20 million barrels of oil America
- 23 uses every day accounts for 40 percent of the U.S. carbon
- 24 pollution load that causes climate changes. Meanwhile, when
- 25 drilling projects go wrong, whole ecosystems are threatened

- 1 by disasters like the Deepwater Horizon spill in 2010, and
- 2 smaller leaks and spills like the recent Enbridge oil spill
- 3 here in Michigan. Recent pipeline spills do grave harm
- 4 right in our backyards: to residents, to wildlife like
- 5 herons, muskrats, and ducks and geese and destroy decades of
- 6 community efforts that were intended on restoring rivers
- 7 like the Kalamazoo. Today we have real opportunity to
- 8 combat these threats.
- 9 The proposed 2017 through '25 standards
- 10 will double the fuel economy for our cars, SUVs and pickups
- 11 from today's levels to an average of 54.5 miles per gallon
- 12 by 2025. These vehicles will save Americans 4 billion
- barrels of oil and 2 billion metric tons of carbon
- 14 pollution.
- 15 Taken together with light- and heavy-
- duty standards being implemented now, the proposed standards
- will cut carbon pollution by over 650 million metric tons by
- 18 year by 2030, about 10 percent of the total carbon pollution
- 19 today. This is a historic step forward to combat our
- 20 climate challenge.
- 21 Together these standards will cut our
- demand for oil by 3.4 million barrels per day; more than all
- 23 the oil we get today from the Persian Gulf, Venezuela and
- 24 Russia combined.
- 25 As we are ensuring that every car and

- 1 truck uses less fuel, steady expansion of electric and
- 2 advanced vehicle technology can lead us even further into
- 3 mass markets, high performance vehicle fleet that uses
- 4 little oil and produce nearly zero pollution.
- 5 Deep cuts in the oil we need means less
- 6 pressure for risky new drilling projects in the Arctic or
- 7 for clear cutting forest for Canadian tar sands. It means
- 8 less need for new pipelines, fewer leaks and fewer threats
- 9 to people, wildlife and our public lands.
- 10 These standards show we can take real
- 11 steps to roll back climate changes and protect wildlife for
- 12 generations yet to come.
- 13 These standards just don't deliver for
- 14 America's outdoor heritage consumers save big as well.
- 15 The proposed standards will save Americans a half trillion
- 16 dollars. That's tens of billions of dollars a year
- 17 American families and businesses can spend at home building
- 18 jobs instead of sending overseas for oil. Families and
- 19 businesses will save more than \$4,000 on the lifecycle cost
- on a car or truck after accounting for the cost of the more
- 21 fuel-efficient vehicles.
- 22 For household budgets doubling fuel
- 23 economy is like cutting the price of gasoline in half. For
- 24 those concerned about cutting dependence on foreign oil and
- 25 reducing pain at the pump, the best place to drill for oil

- 1 is under the hoods of our cars.
- 2 These standards bring innovation and
- 3 fuel savings to owners of all kinds of vehicles for many of
- 4 our members, the outdoor traditions that mean the most to
- 5 them including getting together with family and friends,
- 6 loading gear into the truck and heading outdoors to hunt and
- 7 fish. Across the country, communities and businesses that
- 8 depend on outdoor recreation depend on these trips. For
- 9 those who rely on larger vehicles, high gas prices hit
- 10 particularly hard, and achieving robust fuel efficiency is
- 11 critical and welcome.
- 12 Fortunately, today's fuel economy
- standards don't just focus on cars but ensure improvements
- 14 across all vehicle sizes and types to achieve an overall
- increase in fuel economy and reduction in pollution. An
- 16 innovation is delivering far better efficiency together with
- 17 improved power and performance. The standard is essential
- 18 to deliver cars and trucks that work in the outdoors and for
- 19 it.
- The proposed standard is also critical
- 21 to regain and sustain our leadership in the most advanced
- 22 vehicle technologies including hybrid electric cars and
- 23 trucks. These technologies will be critical to combating
- 24 high fuel prices and environmental challenges into the
- 25 future and the competitiveness of the American auto industry

- in a changing world.
- 2 Investments in cutting edge electric
- 3 vehicles and other innovations increase fuel efficiency
- 4 across the board, and long-term targets create certainty in
- 5 a world tyrannized by volatile oil prices and availability.
- 6 Together we must work to build a robust network of
- 7 innovators, suppliers and caring consumers to lead in the
- 8 global economy for the auto industry's future.
- 9 And it's working now.
- 10 National Wildlife recently released the
- 11 report that Bob mentioned that makes it clear that we are
- creating -- there's now over 300 companies in 43 states
- 13 engaged in adding over 100,000 jobs in the past year
- building and selling next generation autos and trucks.
- 15 That's what it means and why it matters
- 16 for America to lead the clean energy economy. The standards
- 17 you are considering today are essential for sustaining that
- 18 progress, and for these reasons that's not surprising.
- 19 A recent survey by Consumers Reports
- found that 93 percent of the public is in support of
- 21 stricter fuel economy standards. The public understands how
- 22 the fuel standards work. They work for wildlife, they work
- 23 for American families and they work for the auto industry
- and autoworkers and for the overall economy.
- 25 We thank the agencies for your clarity

- of vision and perseverance in developing these standards.
- 2 We will be submitting additional technical comments and
- 3 appreciate your consideration today.
- 4 Thank you.
- 5 MR. MEDFORD: Thank you both.
- 6 Do my colleagues have any questions?
- 7 MS. OGE: I just want to thank both of
- 8 you for taking the time to testify. We're looking forward
- 9 to your written testimony and also looking forward to having
- 10 the technical dialogue with both of your teams, as well as
- 11 looking forward to finalize this proposal.
- Thank you.
- MR. MEDFORD: Thank you.
- 14 The court reporter would like to receive
- if possible a copy of your full written or oral testimony.
- 16 She can use that for completing the transcript, or give it
- 17 to the desk.
- 18 MS. OGE: So we have a tough court
- 19 reporter. She's going to tell you when to slow down.
- So I'm going to call the second team,
- 21 the second panel: Mike Robinson, Mr. Mark Cooper, Sue
- 22 Cischke, Mr. Alex Cornell du Houx -- I hope I pronounce your
- 23 name right -- and Mr. Jay Wilton.
- Good morning.
- 25 We'll start with Mr. Robinson. Good

- 1 morning.
- MR. ROBINSON: Good morning, Director
- 3 Oge.
- 4 My name is Mike Robinson. I'm Vice
- 5 President for Sustainability and Global Regulatory Affairs
- 6 at General Motors.
- 7 On July 29th, 2011, President Obama
- 8 announced the Administration's intentions to adopt a
- 9 national program to address vehicle greenhouse gas emissions
- and fuel economy for the years 2017 and beyond.
- 11 GM Chairman and CEO Dan Akerson joined
- 12 the President and others that day because we were encouraged
- 13 that this commitment provided the opportunity to continue
- the national program approach in setting fuel economy
- 15 standards that was started with the 2012 to 2016 federal
- 16 rules. The Administration and many other interested parties
- 17 came together that day because we agreed that such a
- 18 national approach was paramount and could accomplish much to
- 19 address the nation's energy and environmental priority.
- We only knew the framework of the
- 21 proposed regulations at that time, but we made clear that we
- 22 were prepared to work with EPA and NHTSA to flush out the
- 23 details. In that regard I appreciate the opportunity to
- 24 testify today to reaffirm GM's commitment to that process we
- 25 talked about in July and to comment briefly on the proposed

- 1 rules of the two agencies.
- 2 First, let me underscore that General
- 3 Motors supports the joint proposal from EPA and NHTSA to
- 4 address 2017 through 2025 model year vehicles. Most
- 5 importantly, the proposal intends to minimize the
- 6 destructive impacts of having multiple programs at the
- federal and state levels. On this note, we also want to
- 8 commend the State of California and the California Air
- 9 Resources Board for their collaboration in working towards
- this national approach and program.
- 11 We welcome the opportunity to work with
- 12 the agencies as they finalize the proposed regulations. In
- this regard, there were three specific remarks that I would
- make today: first, reiterate the need for a comprehensive
- 15 mid-term review; second, comment about the flexibility and
- credits in the proposal; and, third, make one specific
- 17 suggestion for improvement in the proposal.
- 18 As this proposal makes many optimistic
- 19 assumptions and sets goals all the way out to 2025, 13 years
- from today, it is imperative that we collectively check the
- 21 validity of those assumptions as we move through that
- 22 extended period of time. We suggest not only one formal
- 23 mid-term review as the agencies themselves have planned for
- 24 the proposal, but a series of smaller technical and detailed
- 25 focused check-ins on the key assumptions contained in this

- 1 proposal. These check-ins will allow the program to stay on
- 2 track and lead to the best long-term results. Of course,
- 3 the more formal mid-term review is also essential since
- 4 NHTSA must itself conduct a separate rulemaking to set the
- 5 requirements under the CAFE law for the final four years of
- 6 this period.
- 7 But you have my commitment that we will
- 8 provide whatever data, analysis, and input we can to help
- 9 the agencies to make judgments and course corrections along
- 10 the way.
- 11 Moving into my second comment, General
- 12 Motors fully supports the flexibilities in this proposal.
- 13 Some may criticize them, but the flexibilities included go
- directly towards real CO2 reduction and the furthering of
- 15 advanced technologies.
- 16 The flexibilities do provide some
- 17 compliance opportunity for the manufacturers in the future,
- but importantly these are already assumed in both of the
- 19 agencies' assessment of the future of fuel economy levels
- 20 that are anticipated under this proposal. As a result they
- 21 are absolutely necessary for us to achieve the equivalent
- 22 compliance levels anticipated.
- 23 Finally, a specific concern that we have
- 24 with the proposal is related to the treatment of so-called
- 25 upstream electricity emissions. EPA has couched the

- 1 quantification of upstream emissions at 0.0 grams per mile
- 2 as a "flexibility" for automakers. This characterization is
- 3 really inappropriate and could lead EPA at some point to
- 4 reduce or eliminate this so-called flexibility. At its
- 5 core, the problem is that the word flexibility suggests some
- 6 measure of choice or control. However, automakers control
- 7 neither the feedstocks nor the conversion processes for
- 8 generating and creating electricity. Suggesting that at
- 9 some point we could or should be responsible for these
- 10 emissions is worrisome to us. To the degree that these
- emissions are going to be addressed by government,
- 12 legislators and regulators need to create a program to do so
- directly, not indirectly through further restrictions on
- vehicles. With due respect, we have a tough job ahead of us
- 15 as it is.
- 16 Let me also note that the proposed
- standards will not be easy; they will be difficult and they
- 18 will be expensive. The success of our current new offerings
- in the marketplace like the Chevy Malibu, Equinox, Cruze and
- 20 the Volt convince us we are on a good path toward meeting
- 21 these early requirements the proposal will create, but we
- 22 will need further breakthroughs in technology and good
- 23 customer acceptance of the additional vehicle changes,
- 24 technologies and costs that will be associated with
- 25 providing the vehicles needed in the future years to allow

- us continued success in meeting the aggressive requirements
 down the road.

 Clearly this proposal represents a

 dramatic attempt to advance the mutual goals of CO2

 reduction and increased energy diversity. The mid-term

 review is essential to make sure that we also revisit the

 assumptions inherent in establishing these goals to make
- 8 sure we have not overwhelmed technology development or the 9 needs of consumers or their willingness to accept and pay 10 for the associated changes in vehicles.
 - In conclusion, we urge both EPA and NHTSA to continue the strong leadership role they have displayed at the federal level with an integrated approach that addresses infrastructure of vehicles themselves, fuels, and customer behavior as well as all other sectors of the economy. This proposal is a positive first step and a good foundation on which we can all build.
- We intend to provide detailed technical
 written comments to amplify on some of these points and to
 comment on issues raised by EPA and NHTSA in the NPRM.
- 21 And I'm glad to answer any additional 22 questions you may have as a panel. Thank you.
- MS. OGE: Thank you.

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- Mr. Cooper, good morning.
- 25 MR. COOPER: Thank you, Madam

- 1 Chairwoman, Mr. Chairman. I am Dr. Mark Cooper, Director of
- 2 Research of the Consumers Federation of America.
- 3 We greatly appreciate the opportunity to
- 4 testify today because our analysis of the standards proposed
- 5 by NHTSA and EPA find they are a landmark in the U.S. energy
- 6 policy that will deliver major economic security and
- 7 environmental benefits to consumers and the nation while
- 8 putting the U.S. auto industry on a path to global success.
- 9 By far, the single largest benefit is
- 10 the reduction of consumer expenditure on gasoline and the
- 11 decrease in the cost of driving. For the typical consumer
- who purchases a new auto that complies with the 2025
- standard with a 5-year auto loan, the average life of auto
- loans these days, consumer pocketbook savings will be
- 15 immediate and substantial.
- 16 Higher fuel economy standards lower the
- 17 cost of driving from the first month. They are cash flow
- 18 positive because the reduction in gasoline expenditures is
- 19 greater than the increase in the monthly payment to cover
- 20 the cost of fuel saving technology. At the end of the auto
- loan the consumer will have saved an average of \$800. By
- 22 the tenth year the vehicle will have generated an average of
- over \$3,000 in savings. Therefore, the resale value of the
- vehicle is likely to be much higher.
- These potential consumer benefits come

- 1 at a moment when American consumers are in desperate need of
- 2 relief from rising and volatile gasoline prices. Gasoline
- 3 prices set a record in 2011 in both nominal and real terms,
- 4 averaging \$3.53 per gallon. This week's price is a record
- for the month of January, and that clobbers the economy and
- 6 the consumer pocketbook.
- 7 Household gasoline expenditures set a
- 8 record in 2011 reaching an average of over \$2,850 per year
- 9 which means that gasoline expenditures were 40 percent
- 10 higher than expenditures on home energy, electricity,
- 11 natural gas and heating oil. Ten years ago gasoline
- 12 expenditures were 13 percent lower than home energy and that
- is why consumers are so troubled by gasoline prices.
- 14 But rising gasoline prices have also
- 15 changed the structure of the cost of driving. Ten years ago
- the cost of owning a vehicle as reported in the consumer
- 17 expenditure survey was the largest single component of the
- 18 cost of driving by far, about three times as high as the
- 19 cost of gasoline. In 2011 the cost of gasoline will equal
- or exceed the cost of ownership in the consumer expenditure
- 21 survey. This is an entirely new automobile market.
- 22 Given the burden on household budgets
- 23 and the continuing problem of oil vulnerability, it is not
- 24 surprising to find that in our surveys, over a dozen in the
- 25 past six or seven years, we find that three-quarters or more

- of respondents are concerned about gasoline prices and
- dependence on Mideast oil. They get the fact oil imports
- 3 are a political problem.
- 4 They think it is important to reduce oil
- 5 consumption and they support higher fuel economy standards
- 6 as a way to do so. Almost two-thirds of the respondents'
- 7 records supported 60-miles-per-gallon standards with a
- 8 payback of three to five years, and this proposed standard
- 9 meets and exceeds that. They also think a higher standard
- 10 will be good for automakers.
- 11 So if there is one thing you take away
- 12 from this hearing today, remember this is a consumer benefit
- 13 program. This is a wonderful consumer program. In fact, we
- estimate that 80 percent, 500 billion of the \$600 billion of
- total benefits are the consumer savings. So this is a
- 16 consumer program.
- 17 But indirect national benefits are also
- 18 really important. Reducing oil consumption and imports by
- 19 over 4 billion barrels or almost 4 billion barrels will keep
- \$370 billion in the domestic economy, and that creates jobs.
- 21 It will lower the price of gasoline by 25¢ a gallon. It
- 22 will reduce vulnerability to oil price shocks. It will
- 23 reduce the number of troops we have in harms way and with
- 24 aircraft carriers running around the Straits of Hormuz.
- 25 Everyone has to get that important benefit.

- 1 The simple fact of the matter is that 2 with every scenario considered by the two agencies the 3 benefits vastly exceed the costs, and everyone gets that. 4 That's why you heard labor, you have heard the 5 environmentalist, you've heard automakers and you've heard 6 consumers support this program. 7 Simply put, these standards may well be 8 the most important energy policy of the last quarter of a 9 century. They are a win-win-win for consumers, for the
- I urge you to adopt it. Thank you.

economy, for national security and the environment.

MS. OGE: Thank you.

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- 13 Miss Sue Cischke. Good morning.
- MS. CISCHKE: Good morning. I am Sue

 Cischke, Group Vice President of Sustainability, Environment

 and Safety Engineering for Ford Motor Company.
- 17 It's a pleasure to be here today to 18 provide our perspective on this very important rulemaking. 19 Just over two years ago I was here commenting on the first 20 nationally harmonized greenhouse gas and fuel economy 21 regulations and encouraging the continuation of a harmonized 22 requirement beyond 2016. We applaud the combined efforts of 23 EPA, NHTSA and CARB, and this proposal provides our industry both a single program moving forward as well as a regulatory 24

framework that enables manufacturers to plan and invest in

- the future with confidence. We are committed to working with you to finalize these regulations.
- 3 The standards proposed are aggressive,
- 4 but so are the demands from our consumers for greater fuel
- 5 efficiency. As a result, we are continually investing in
- 6 our product strategy to improve the fuel economy and reduce
- 7 the greenhouse gases of our fleet. Starting this year,
- 8 one-third of our vehicle lineup will offer a model that
- 9 achieves at least 40 miles per gallon. In addition to the
- 10 Transit Connect Electric, last year we delivered our first
- 11 all-new Ford Focus Electric. Later this year we will start
- 12 production on our C-Max Energi plug-in. And just last week
- 13 we announced and unveiled our next generation 2013 Fusion
- 14 Hybrid, and an all-new 2013 Fusion plug-in hybrid. Our
- 15 commitment goes beyond our products, and we also have set a
- 16 goal to reduce facility emissions of CO2 by 30 percent by
- 17 2025 on a per-vehicle basis. You will continue to see us
- offer more great products with advanced, innovative
- 19 technologies to improve the fuel efficiencies of our
- vehicles and to deliver outstanding quality and features
- 21 that our customers desire.
- The key is to ensure that the proposed
- 23 targets do not outpace consumer demand or the affordability
- of the technologies needed for compliance. As a full-line
- 25 manufacturer we are challenged to meet a broad range of

- 1 customer wants, such as function, performance, comfort and
- 2 convenience, safety, and, of course, fuel economy. And all
- of these attributes need to come together in a line of
- 4 vehicles that consumers afford. After all, attainment of
- our national goals for CO2 reduction and energy security
- 6 cannot be met by niche products and technologies. It does
- 7 little good to produce vehicles with improved fuel
- 8 efficiency unless those vehicles are actually purchased by a
- 9 wide range of American consumers.
- 10 Further, the technologies must be self-
- sustaining in the marketplace and not dependent upon
- 12 long-term government subsidies. That philosophy has been
- 13 the basis of Ford strategy since 1903, however I wasn't
- 14 there at the time.
- 15 We must also acknowledge that market
- 16 success is dependent upon many factors outside of our
- 17 control, such as the price of fuel, the state of the
- 18 economy, or the availability of affordable technologies and
- 19 materials. The further we look into the future, the more
- 20 difficult it is to predict these factors with accuracy. The
- 21 proposed rule extends to the 2025 model year which is an
- 22 unprecedented time frame in the context of fuel economy
- 23 regulations. This presents a significant challenge for
- 24 manufacturers. While the establishment of longer-term
- 25 standards provide manufacturers with targets for future

- 1 product planning investment, the longer time frame leads to
- 2 greater risk that the assumptions underlying the standards
- do not come to fruition. For example, if a lack of adequate
- 4 infrastructure hinders the introduction of new fuel-saving
- 5 technologies or if fuel prices turn out to be substantially
- 6 lower than anticipated, it might be necessary to change the
- 7 standards in order to avoid damage to American jobs and the
- 8 U.S. economy.
- 9 This is why the proposed mid-term
- 10 evaluation of the 2022 to 2025 greenhouse gas standards is
- 11 so vital to this joint proposal. As proposed, the mid-term
- 12 evaluation provisions require EPA to make a fresh
- determination regarding the appropriateness of the proposed
- 14 2021 model year standards after considering a variety of
- 15 factors and soliciting public comments. This process will
- take place concurrently with NHTSA's process for setting
- final standards for 2022 to 2025 model years. The mid-term
- 18 evaluation is an essential check point to ensure that the
- 19 standards for these models are consistent with evolving
- 20 market conditions. The existence of a robust, meaningful
- 21 mid-term evaluation process is critical to Ford's support
- 22 for this rulemaking package.
- 23 Turning now to the more specific
- 24 elements of the proposed rulemaking, we support the relative
- 25 manner in which car and truck targets have been set to

- 1 reflect their respective capabilities to improve fuel
- 2 economy. This is based primarily on the agencies' updated
- 3 analysis of full-sized trucks from the 2012 to 2016
- 4 rulemaking. In particular, EPA acknowledged that it had
- 5 "underestimated the impact of the different pickup truck
- 6 model configurations," in the model year 2012 to 2016 rule.
- 7 They further acknowledged that the "very largest light
- 8 trucks have significant load-carrying and towing
- 9 capabilities that make it particularly challenging for
- 10 manufacturers to add fuel economy-improving technologies in
- 11 a way that maintains the full functionality of those
- capabilities." We concur with the agencies' analysis and
- 13 conclusions.
- 14 In general, we continue to encourage the
- agencies to take a holistic view of the transportation
- 16 sector to encourage the implementation of technologies and
- 17 strategies whose benefits might otherwise be reflected in
- 18 the formal fuel economy test procedures.
- 19 Manufacturers are developing more
- innovative in-vehicle systems such as more efficient air
- 21 conditioning, use of refrigerants with lower global warming
- 22 potential, and improvements in energy management and
- aerodynamics. These technologies provide a real-world
- 24 benefit for drivers but are not fully reflected on the fuel
- 25 economy label. We commend the agencies for acknowledging

- 1 these technologies in the rulemaking.
- 2 Further, we anticipate working together
- 3 to establish the correct methodologies to account for the
- 4 benefits of driver-activated technologies. For example,
- 5 coaching systems result in more fuel-efficient driver
- 6 behavior as well as eco-route planning tools can provide a
- 7 significant improvement in real-world fuel economy. Also,
- 8 market fuel quality, particularly octane level, can have a
- 9 significant positive impact on all on-road vehicles and
- should, therefore, be a key part of our national strategy to
- improve energy security.
- 12 Once again, we appreciate the
- opportunity to provide our testimony on this important
- 14 rulemaking. We are continuing to review all the different
- 15 aspects of the proposal and we plan to provide detailed
- 16 written comments aimed at achieving and finalizing
- 17 regulations consistent with the commitment that all parties
- have made to this national program.
- 19 Thank you. And I'll be able to take
- 20 questions at the end of the panel.
- MS. OGE: Thank you.
- 22 Mr. Alex Cornell du Houx.
- 23 Could you pronounce your name for us.
- 24 MR. CORNELL du HOUX: Cornell du Houx.
- 25 You are very, very close.

- 1 MS. OGE: Good morning. Thank you. 2 MR. CORNELL du HOUX: Good morning, 3 Madam Chair and members of the panel. 4 My name is Alex Cornell du Houx and I 5 represent Brunswick, Maine in the state legislature, and I 6 also work with the Truman National Security Project and 7 Operation Free. 8 I have been in the military since 2002 9 and I served in Iraq with the Marines in the infantry. 10 When I served in Iraq with the Marines 11 in and around Fallujah I came across a line of cars, trucks, 12 and tractors as far as the eye could see. We decided to 13 investigate and finally reached the end of the line to find that they had been waiting in 100-degree heat all day for 14 gasoline and diesel, and it really struck me how dependent 15 16 this nation was on this single source of energy and how 17 crippled it made them. They were so desperate for this 18 single source of energy that when the curfew came, they 19 didn't care that we had shot over their heads to break up 20 the line. And then it made me think about our country, and it made me pause and think about how the United States was 21 dependent on this single source of energy and how 22 23 essentially we are forced to line up to countries like Iran and Venezuela for this single fuel. 24
- 25 So this is one reason I joined Operation

- 1 Free, a coalition of veterans and national security
- 2 organizations that have come together to focus on this and
- 3 make us more secure because this will boost their economy,
- 4 it will increase our environmental health and to make sure
- 5 that we have a more secure America.
- 6 Our military leaders have taken note,
- and the DOD, the nation's largest energy consumer, has a
- 8 goal to reduce their carbon pollution by 20 percent by 2020.
- 9 The Quadrennial Defense Review stated although they produce
- 10 distinct types of security and economic stability
- 11 challenges, climate changes are inexplicably linked. CIA
- 12 also opened a center on climate change.
- 13 The Army has one of the largest electric
- vehicle fleets in the world, over 4,000 vehicles aimed to be
- 15 by three years. The Air Force will have 50 percent of its
- 16 aviation fuel from biofuels by 2016. The Marines, where I'm
- 17 from, will lead the way and they're aiming for a 30 percent
- 18 energy reduction by 2015. The Navy is launching what they
- call the great green fleet by 2016, which includes hybrid
- destroyers and F-18s that run off the bio-fuel. The Navy
- 21 also aims to reduce petroleum fuel in its commercial feet by
- 22 50 percent by 2015.
- 23 When I was in Iraq I saw our dependence
- on oil was a constant threat to our security and
- 25 independence. The Department of Defense has set ambitious

- 1 goals to reduce our dependence on oil and improve fuel
- 2 standards because they understand the risks it poses to our
- 3 nation.
- 4 And this is not just a lesson from the
- 5 military. Our addiction doesn't only affect our national
- 6 security; it's detrimental to our economic security as well.
- 7 Every day we are sending \$1 billion a day overseas to pay
- 8 for oil many of which could be staying here in this country
- 9 supporting our own economy. Nearly half of the oil used is
- from cars and light trucks. So increasing fuel efficiency
- 11 will have a tremendous impact.
- 12 Our \$1 billion a day dependence on oil
- makes us vulnerable to unstable and unfriendly regimes. Not
- only does cutting our dependence on oil make us more secure,
- 15 it invests hard-earned American money back into our economy.
- 16 This standard for cars and light trucks
- 17 by 2025 is the single best step we can take right now to
- 18 curb this dangerous addiction to oil. It will help my
- 19 community and countless communities around the nation to
- 20 improve their economic security. It will also keep America
- 21 competitive with foreign automakers, many of which already
- 22 have higher standards of their own than ours, and it would
- 23 increase our national security making us more independent in
- 24 keeping billions of dollars out of the hands of people who
- don't have America's interest at heart.

- 1 By implementing the standard we will be
- 2 taking control of our energy future and creating a more
- 3 secure America.
- 4 Thank you. And I'll be happy to answer
- 5 questions.
- 6 MS. OGE: Thank you for testifying;
- 7 thank you for your service.
- 8 So the last member of this panel is
- 9 Mr. Wilton.
- 10 Good morning.
- 11 MR. WILTON: Good morning. I am Jay
- 12 Wilton. I am Chrysler Group's Vice President of
- 13 Engineering, Planning and Regulatory Compliance. I
- appreciate the opportunity to comment today on EPA's and
- 15 NHTSA's proposed national greenhouse gas and fuel economy
- 16 rules.
- 17 Chrysler recognizes the benefit to the
- 18 country of continuing the national program to address fuel
- 19 economy and greenhouse gases. EPA and NHTSA began this
- 20 program in 2009 with standards for model years 2012 through
- 21 2016 and now the agencies are continuing it for model years
- 22 2017 through 2025.
- The challenge of meeting the proposed
- standards must not be underestimated. We believe it's
- 25 important to observe that reaching the projected overall

- 1 average of 163 grams per mile of carbon dioxide in model
- 2 year 2025 will have to be achieved within 13 years or
- 3 approximately two product cycles.
- 4 However, Chrysler fully supports the
- 5 goals of this program. Sergio Marchionne, our CEO is also
- 6 the CEO of Fiat, which is the industry's fuel economy leader
- 7 in Europe. He understands and endorses these commitments
- 8 and is determined to pursue the product actions necessary
- 9 for Chrysler to meet these 2017 and beyond goals.
- 10 Chrysler and Fiat have already begun
- 11 transforming the fleet with fuel efficiency improvements on
- our flagship Chrysler 300 Sedan, which achieves the best in
- 13 class 31 miles per gallon with its new HB transmission and
- 14 our recently revealed Dodge Dart with its 1.4-liter
- 15 multi-air engine and 6-speed dual dry clutch transmission.
- 16 Chrysler is also working on the advanced
- technology of vehicles for tomorrow with the planned launch
- 18 of the Fiat 500 electric vehicle and our collaborative
- 19 efforts with the Department of Energy to develop plug-in
- 20 hybrid electric technology for our minivan and our Ram-1500
- 21 pickup.
- 22 Chrysler strongly supports a single
- harmonized national greenhouse gas and fuel economy
- 24 performance standard. It allows manufacturers to offer
- 25 vehicles that customers want to buy and at prices they can

- 1 afford. The availability of supporting cost-effective
- 2 technologies along with the aforementioned customer
- 3 considerations will provide the proper measure of
- 4 performance for the proposed program.
- 5 Chrysler will support the final rules if
- 6 they reflect the commitments and the foundational principles
- 7 of the framework agreement. These foundational principles
- 8 are one, strong performance requirements; two, a mid-term
- 9 review to assess customer acceptance; and, three, the broad
- 10 use of incentives to encourage technology innovations and
- 11 early integration into production vehicles.
- 12 We believe the mid-term review is
- critical in determining whether the customer is buying and
- 14 will continue to buy the technology packages needed to
- 15 comply with the standards year over year. Efforts to search
- 16 for parameters that measure potential customer acceptance
- must not lose sight of the most important question, are they
- buying the product. Measuring whether customers will buy
- 19 what we offer even next year is challenging. Speculating as
- 20 far as 13 years in the future holds significant uncertainty
- 21 and risk. A mid-term assessment of the underlying
- 22 rulemaking assumptions provide a credible and equitable
- 23 mechanism to adjust standards for future consumer and
- 24 technology uncertainties and is a primary reason Chrysler
- 25 supports this program.

I would also like to make some comments
on other provisions of the proposed rule.
First, Chrysler agrees with setting the
truck performance requirements based on the underlying
physics of these types of vehicles. We believe the proposed
2017 through 2025 standards support this premise and correct
the deficiency of the 2012 through '16 rule which overlooked
these factors.
The truck standards for 2012 through '16
model years were not supported by fundamental science,
accommodating that science which seemed to be restricted by
statutory directions to not back-slide on standards from
previous years.
The 2017 through 2025 truck standards
are challenging while respecting the utility of these
vehicles and their importance to the nation's economy.
Second, Chrysler supports the additional
detailed proposal for capturing off-cycle fuel economy and
greenhouse gas improvements. The agencies wisely built on
this facet of the 2012 through '16 regulation that
this facet of the 2012 through '16 regulation that recognizes improvements in fuel economy and greenhouse gases
recognizes improvements in fuel economy and greenhouse gases

minimum penetration levels in various aspects of the

- 1 proposed rule. These thresholds are unnecessary in our
- 2 opinion and serve as potential disincentives to invest in
- 3 new technologies. We propose that all actions be recognized
- 4 as they had historically been on a per-vehicle-so-equipped
- 5 basis. This is an equitable approach where every vehicle
- 6 built with the required technology for our customers is
- 7 acknowledged. If a minimum penetration rate is required, a
- 8 manufacturer may be discouraged from pursuing innovative
- 9 technologies with uncertain acceptance and possibly no
- 10 credit or payback.
- 11 In conclusion, I want to reiterate
- 12 Chrysler's support of the single harmonized national
- 13 standard for fuel economy and greenhouse gas emissions. We
- 14 look forward to continuing to work with the agencies
- 15 throughout the rulemaking process and after the final rule
- is published later this year.
- 17 I appreciate the opportunity to testify
- and would be happy to answer questions as well.
- MS. OGE: Thank you.
- 20 Any questions of the panel?
- MR. MEDFORD: No. I'd like to thank
- everybody.
- 23 MS. OGE: I have one question for
- 24 clarification for Mr. Robinson.
- 25 You mentioned the importance of the

- 1 mid-term review, but also you mentioned the importance of
- 2 having more frequent reviews of the program.
- 3 Could you just elaborate a little bit
- 4 what that means.
- 5 MR. ROBINSON: Sure, I'd be glad to,
- 6 Chairwoman.
- 7 The mid-term review is going to be some
- 8 period from today. It's, depending on how you want to
- 9 define the beginning of it, at least five years from now,
- 10 probably more.
- 11 Through the comments you heard from
- other panelists and myself, there's a lot of uncertainty
- 13 between now and then. It would be our expectation and hope
- that the agencies would solicit, invite and act upon
- 15 continuous data and analysis that we can provide along with
- data and analysis from other sources, obviously, to make
- 17 informed judgments along the way so that we don't wait. If
- 18 there are obvious events that occur, if there are things
- 19 that are not coming true that are assumed in the rulemaking,
- then adjustments would be made instead of waiting for a
- 21 mid-term course correction. That's all we're talking about.
- MS. OGE: Thank you.
- 23 Any questions from the panel?
- 24 Thank you. I want to thank the panel.
- 25 So I'm going to wish Ms. Cischke publicly a wonderful,

- 1 healthy, well-deserved retirement.
- 2 (Applause)
- MR. MEDFORD: Thank you. I think we are
- 4 ready for the next panel.
- 5 I would just remind the speakers that
- 6 the court reporter would really like to have a copy of the
- 7 testimony.
- 8 Good morning and welcome, Mr. Foster.
- 9 MR. FOSTER: Good morning. Thank you
- 10 very much.
- 11 Good morning, Distinguished Members of
- 12 the Panel. My name is David Foster and I'm Executive
- 13 Director of the BlueGreen Alliance, a national partnership
- 14 of America's largest labor unions and environmental
- 15 organizations uniting more than 15 million members and
- supporters in support of the clean energy economy.
- 17 I would first like to commend the Obama
- 18 Administration and specifically the White House Council on
- 19 Environmental Quality, the Environmental Protection Agency
- 20 and National Highway Traffic Safety Administration for their
- 21 outstanding leadership on this critical issue of fuel
- 22 standards. America's working families continue to struggle
- 23 to fill their gas tanks in a steady but slow economic
- 24 recovery. But with your leadership we have an opportunity
- to help save consumers money at the gas pump, create and

- 1 preserve American jobs and strengthen the economy by setting
- 2 strong fuel standards.
- 3 The BlueGreen Alliance strongly supports
- 4 the light-duty vehicle standards for model year 2017 to 2025
- 5 that will raise fuel efficiency to 54.5 miles per gallon,
- 6 nearly double what today's fuel efficiency standard is and
- 7 limit the greenhouses gas emissions as it's been noted to
- 8 163 grams per mile.
- 9 The proposed standards build upon the
- 10 success of the current round of standards for model years
- 11 2012 to 2016. Combined with this program, by 2025, the U.S.
- can save an estimated 12 billion barrels of oil, equivalent
- 13 to four years of oil consumption from our current U.S.
- light-duty vehicle fleet, and 6 billion metric tons of CO2,
- 15 the equivalent of one year of total U.S. CO2 pollution by
- implementing these proposed standards.
- 17 Every day our country sends an estimated
- 18 \$1 billion to foreign countries for oil. Strong standards
- 19 will keep more of the dollars here in the United States and
- 20 move America to a more efficient advanced vehicle fleet
- 21 creating hundreds of thousands of jobs, economic
- 22 opportunities both inside and outside the auto industry.
- 23 Based on the agencies' initial technical
- 24 assessment, the net consumer savings of fuel expenditures
- 25 will be very substantial and will provide much needed relief

1 at the pump. By developing and producing advanced fuel-2 saving technology in the United States, automakers and 3 suppliers can create quality jobs and provide the clean, fuel-efficient cars and light-duty trucks consumers want. 5 The automakers are already making these 6 investments in response to the historic clean 2012-2016 7 standards as well as the growing consumer demand. From 8 pickup trucks to sedans the American automakers are 9 introducing models with clean fuel-efficient technology into 10 the marketplace. Models such as the redesigned Ford 11 Explorer SUV and the plug-in hybrid Chevy Volt I think 12 demonstrate the range of conventional and advanced 13 technology improvements available to consumers today. 14 In 2008 we saw the consequences when automakers had difficulty responding to consumer shifts in 15 16 response to volatile fuel prices. So these strong 17 feasibility standards will provide long-term certainty to the industry and ensure that innovation continues and recent 18 19 investments in advanced technology pay off. They will also 20 set the stage for weaning America off oil dependence for 21 good and for the long-term reductions in greenhouse gas 22 pollution we need to create a sustainable clean energy 23 economy. Evidence already exists that bringing 24

cleaner vehicles into the market creates American jobs. We

- 1 have, by example, the Advanced Technology Vehicle
- 2 Manufacturing loan program that will preserve or create
- 3 nearly 40,000 jobs in the U.S. auto sector, retooling
- 4 America's factories to produce advanced technology vehicles
- 5 and their key components.
- 6 The battery and electric drive component
- 7 ramp program is helping establish the United States as a
- 8 world leader in the production of this exciting new
- 9 automotive technology.
- 10 We also request continuing federal
- 11 programs to support these auto industry efforts in retooling
- 12 to meet the demand for cleaner, more efficient cars. And
- we're committed to advocate with you for this important
- 14 support for our domestic industry. Consumers looking to
- 15 purchase vehicles in the next few years are expressing
- 16 interest in higher fuel economy. Building the next
- 17 generation of advanced vehicles in the United States will
- 18 create tens of thousands of new engineering and
- 19 manufacturing jobs and strengthen America's rebounding
- 20 sector.
- 21 This is a unique opportunity to fulfill
- 22 your commitments to create American jobs, protect consumers
- 23 whether they drive a car or truck from high gas prices and
- to cut America's dependence on foreign oil. Our 15
- 25 BlueGreen Alliance partners and their 15 million members are

- 1 committed to promoting the fact that green auto jobs are a
- win-win for all Americans, and we're committed to raise
- 3 awareness among consumers of the significance of these fuel-
- 4 saving technologies.
- 5 So, as you finalize the light-duty
- 6 standards, we look forward to continuing our engagement with
- 7 your agencies and the other stakeholders working to
- 8 implement the strong standard which will maximize oil
- 9 savings and reductions of greenhouse gas pollution. They
- 10 are the secret to strengthening the U.S. auto industry.
- 11 They will increase the deployment of advanced technology,
- 12 protect U.S. automotive jobs and create more opportunity for
- 13 American workers.
- So we applaud the efforts undertaken so
- 15 far and believe that strong feasible standards can guarantee
- 16 the best possible outcome for American workers, our
- 17 communities, the economy and the environment.
- 18 Thank you.
- MR. MEDFORD: Thank you very much.
- 20 Mr. Pelissier.
- 21 MR. PELISSIER: Pretty close.
- MR. MEDFORD: Sorry.
- 23 MR. PELISSIER: Thank you. My name is
- 24 Dan Pelissier. I'm the president of UAW Local 163 located
- in Westland, Michigan. Local 163 has been in existence

- 1 since 1942. We have approximately 2,000 members at eleven
- workplaces.
- 3 Our two biggest units by far are engine
- 4 plants. One, Detroit Diesel, is owned by Daimler Trucks and
- 5 produces engines for over-the-road trucks and other
- 6 heavy-duty applications. We also have a unit on the Detroit
- 7 Diesel Campus, City of Detroit Filter Operations, which
- 8 produces pollution-control equipment for these large
- 9 engines. Although neither of these are affected by the
- 10 rules that is the subject of today's hearing, I want to
- 11 recognize that Local 163 has experienced the increase in
- jobs that can come with sensible regulation.
- The other engine plant represented by
- 14 Local 163 is General Motors' Romulus engine plant. Romulus
- 15 Engine opened in 1975. Since 1975 Romulus Engine has
- 16 produced 17 million engines, and since its conversion to
- 17 making gasoline engines in 1985 has built engines for
- General Motors products mostly, including many V-6 and V-8
- 19 and larger displacements over 6 liters in some cases.
- The plant also has been well-known for
- 21 its quality and productivity achievements over the years
- 22 and has been the most productive V-8 plant in North America
- 23 several times. However, over the years, the actual demand
- 24 for those engines in their current configuration has not
- 25 been what it was during the day of 17 million in annual

- 1 sales.
- 2 And like any manufacturing facility, we
- 3 always have to think about future product possibilities. No
- 4 program runs forever. Preserving and expanding employment
- is always a concern for the union. We need new investment
- 6 to retool our plant for the latest technology.
- 7 One trend that is driving technology is
- 8 the desire by consumers to save fuel. The fuel economy and
- 9 tailpipe pollution proposals we are discussing today gives
- 10 manufacturers additional certainty so they can invest in
- 11 producing more fuel-efficient products. These are huge
- investments, and added certainty helps.
- 13 Romulus engine plant learned last fall
- that we are going to be the beneficiaries of a large
- investment by General Motors that will retool our plant to
- make some of GM's most efficient engines.
- 17 GM will invest \$385 million at our plant
- 18 to establish for the first time in our plant's history the
- 19 production of 4-cylinder engines. I can't say anything
- about the details of the engine or the products that it will
- 21 power, but I can say that this is obviously very good for
- the future of our facility.
- This investment was made possible by
- 24 many factors, not the least of which is the new national
- 25 agreement between GM and the UAW that was bargained by UAW

- 1 President Bob King and Vice President Joe Ashton.
- 2 But it's also clear the commitment GM
- 3 made to increase the efficiency of its vehicles all the way
- 4 to 2025 and the desire of consumers to save money on fuel
- 5 means that many more vehicles will have an option for a
- 6 4-cylinder engine. After all, who would have thought that
- 7 Buick cars would be equipped with so many 4-cylinder
- 8 engines.
- 9 That's why Local 163 sees a direct
- 10 connection between the proposals under consideration here
- 11 today and the jobs of the future at our plant. We will
- 12 provide GM customers with an engine that is more efficient,
- 13 yet gives them the performance they want. The adoption of
- these proposals will improve the environment, reduce our
- dependency on foreign oil and create jobs for autoworkers,
- and that is why the UAW is here to offer our support.
- 17 Thank you.
- MR. MEDFORD: Thank you both.
- Do my colleagues have any questions?
- Thank you so much for your testimony
- 21 today.
- I think we're ready for the next panel.
- 23 MS. OGE: Like to call Mr. Mike Stanton,
- Doug Chalmers, Tom Thiel, Doug Fox, Ron Krupitzer, Robin
- 25 Eckstein, Neil Carter and John Juriga.

1	Good morning, Mr. Stanton. Welcome.
2	MR. STANTON: Thank you very much.
3	My name is Mike Stanton, and I am
4	President and CEO of the Association of Global Automakers.
5	We represent international motor vehicle manufacturers,
6	original equipment suppliers and other automotive-related
7	trade associations. Our members' market share and U.S.
8	production is just about 40 percent.
9	Global Automakers and its members have
10	always endorsed a comprehensive and harmonized national
11	approach to reducing greenhouse gas emissions and improving
12	fuel economy. The alternative to having complied with a
13	patchwork of state requirements would add significant cost
14	resulting in higher vehicle prices with no corresponding
15	environmental or energy benefits. We have been working with
16	the EPA, DOT and CARB to create a program that meets our
17	national and environmental and energy objectives while
18	providing manufacturers with flexibility and lead-time
19	necessary to design and build advanced technology vehicles
20	that will provide consumers a wide full range of vehicle
21	choices. This NPRM brings us another step closer to the
22	goal of having a long-term single national program.
23	The standards proposed by the agencies
24	are extremely stringent and are based on a large number of

assumptions about technology and the auto market over the

- 1 next 14 years. By extending the standards for many years
- into the future, the agencies provide manufacturers with
- 3 substantial lead time which is of great value in compliance
- 4 planning. On the other hand, the long time frame means the
- 5 standards in the later years will be based on some
- 6 assumptions. And for this reason we support the proposed
- 7 mid-term review to reassess the stringency of the standards
- 8 including technology penetration rates, fuel costs and most
- 9 importantly consumer acceptance.
- 10 So we also support the flexibility
- 11 mechanisms and credits that the agencies propose to make
- 12 available. These provisions enhance the ability of
- manufacturers to meet market demand while maintaining the
- emissions and energy benefits of the program. They also
- 15 provide another means of dealing with the uncertainty
- 16 associated with the out year standards. The various credits
- work in different ways, all of which are extremely
- 18 important. The credit banking and trading system provides
- 19 an incentive for manufacturers to implement advanced
- 20 technologies at early dates.
- 21 Off-cycle credits provide incentives for
- 22 manufacturers to pursue technologies that produce benefits
- 23 in actual on-road driving but are not measured using the
- 24 FTP. Advanced technology credit provides an incentive for
- 25 manufacturers to continue to develop and market these

- 1 technologies which have the potential for substantial
- 2 long-term improvements in fuel efficiency and emission
- 3 performance.
- 4 Air conditioning-system credits provide
- 5 manufacturers flexibility in pursuing a variety of
- 6 enhancements to system efficiencies and the use of advanced
- 7 low global warming refrigerants. We see these flexibility
- 8 mechanisms as an essential part of the program.
- 9 We also support the credit-based
- 10 compliance option for the methane and nitrous oxide
- 11 standards as well as the new upward adjustment approach to
- 12 allow these emissions to be included with the carbon dioxide
- emissions. However, we see no need for the proposed
- 14 prohibition on the use of different compliance options for
- 15 nitrous oxide and methane in the same year. This
- 16 restriction limits manufacturers' compliance flexibility but
- 17 with no clear environmental benefit.
- 18 With regard to the proposed requirement
- 19 for testing to measure nitrous oxide emissions beginning in
- 20 model year 2017 we urge EPA to reconsider the
- 21 cost-effectiveness of this requirement. The quantity of
- 22 these emissions is quite low and we see no indication that
- 23 they will become an important factor in climate change in
- 24 the future. Testing for this substance will require
- 25 expensive new analyzers. The performance remains to be

- determined. We urge the agency to allow manufacturers to
- 2 continue to demonstrate compliance using the pre-2017
- 3 analysis-based methodology in 2017 and thereafter. The EPA
- 4 could monitor these emissions and adopt new test-based
- 5 requirements in the future should the emissions grow in
- 6 significance.
- 7 And, finally, Global Automakers supports
- 8 the case-by-case small volume manufacturers approach. It
- 9 allows the flexibility that this small segment of the
- 10 industry needs while also mandating requirements necessary
- 11 to control greenhouse gases. We also support the
- 12 harmonization of the definition of small volume
- manufacturers.
- Obviously, we will have written comments
- which will expand on these points as well. To emphasize, we
- strongly support the program, we strongly want to work with
- 17 you and will work with you in the process involved in the
- 18 final standard and the mid-term review.
- Thank you.
- MS. OGE: Thank you.
- 21 Don Chalmers, good morning.
- MR. CHALMERS: Good morning.
- 23 My name is Don Chalmers. I'm Chairman
- 24 of NADA's Government Relations Committee and President of
- 25 Don Chalmers Ford in Rio Rancho, New Mexico. I traveled

- 1 here yesterday from Santa Fe, New Mexico, and I might ask
- the Committee's indulgence. I have had a personal thing
- 3 come up and I have a plane to catch, and if you could ask
- 4 any questions of me right after my testimony I would
- 5 certainly --
- 6 MS. OGE: We'll do that.
- 7 MR. CHALMERS: Thank you very much.
- 8 Today I would like to make three main
- 9 points. First of all, NADA supports one workable national
- 10 fuel economy program.
- 11 Secondly, NADA wants the highest fuel
- 12 economy that we can get as long as the mandates are feasible
- and affordable as customers do have choices.
- 14 And, third, the proposal dramatically
- underestimates cost impacts on new vehicles.
- 16 NADA supports the single national
- 17 program governing light-duty vehicle fuel economy as that is
- what Congress sought in 2007 when it enacted the Energy
- 19 Independence and Security Act. But dealers are concerned
- about the accelerated schedule in this proposal. The
- 21 mandates for model year 2011 to 2016 just now being
- 22 implemented aggressively move up the 2020 goal of 35 miles
- 23 per gallon by four years. If this proposal aims to set
- 24 mandates for model years 2017 through 2025, five of the
- 25 thirteen years out in the future will more than double the

- 1 fuel economy of the vehicles I now sell.
- 2 Sure, manufacturers need adequate time
- 3 to achieve compliance. And as a businessman, dealers
- 4 appreciate regulatory certainty, but we question whether
- 5 setting fuel economy mandates so far out makes sense when
- 6 critical variables like fuel prices, consumer behavior and
- 7 creditworthiness are paramount. If anything, this
- 8 contradicts Congress's intent that such standards be set in
- 9 5-year or fewer intervals. Moreover, any supposed certainty
- 10 may be fleeting given the proposal's mid-term review could
- 11 result in even stricter mandates for model years 2022 to
- 12 2025.
- The showroom realities I see suggest
- 14 that we should take the time to evaluate how consumers react
- to the higher-mileage/higher-cost vehicles manufacturers
- will build in the next few years. In other words, if we
- want, if we wait two years, manufacturers would still have
- the time necessary to comply and we would all have better
- 19 data on which to make decisions. Sales of new vehicles were
- 20 12.7 million last year, a far cry from the 17-plus million
- in the high water market in the mid 2000s, but much better
- than the 10.4 million sold in 2009.
- 23 Dealers embrace the pivotal role we are
- 24 playing to help lead our nation back to the road of
- 25 prosperity, but we are wary of anything that might depress

- 1 sales and turn back the gains being made. Simply put,
- 2 before rushing head-long into a new set of mandates aimed at
- doubling today's fleet fuel economy, we need to know better
- 4 what the ramifications will be.
- 5 To work, fuel economy rules must require
- 6 improvements that are affordable. Why? Because you can
- 7 mandate what the manufacturers must build but you can't
- 8 dictate what consumers will buy. If our customers do not
- 9 purchase these products, we all lose.
- 10 Not that we're not suggesting the
- 11 proposal is technologically infeasible. For example, my
- 12 manufacturer Ford Motor Company has or can develop the
- engineering and manufacturing expertise necessary to comply,
- 14 but at what costs. Our concern is for our customers and the
- 15 prices that they will face.
- 16 When prospective purchasers come to my
- 17 showroom, they have choices, even if their car just broke
- down that morning on the way to work and they definitely
- 19 need to get there. I'm always delighted when they buy a new
- car or truck. But if they can't afford what I've got to
- 21 sell or if what I'm selling fails to meet their needs, we
- 22 can always walk over to my used vehicle lot or explore the
- 23 option of having my service department fix up their old
- 24 vehicle. And you can trust that my many competitors in the
- 25 used car sales and service business will jump at the

- 1 opportunity to offer these option if I don't. So if new
- 2 mandates are achieved -- if new mandates are to achieve the
- 3 efficiency and emissions target sought, they must not
- 4 undermine vehicle affordability or performance.
- 5 By EPA's own estimates, current prices
- 6 would go up over today \$3,200. I heard different numbers
- 7 thrown around, but a third of that are the mandates that are
- 8 just now going into effect through 2016 and then another
- 9 \$2000, or a little over 2,000 on the mandates from 2017 to
- 10 2025, which will total in today's dollars \$3,200 over
- 11 today's prices. This would raise payments between \$60 and
- 12 \$70 a month in a typical automobile loan.
- 13 Lenders look when they approve the loan
- 14 at advancing or loaning between 18 and 20 percent of the
- buyer's monthly take-home pay. If marginal credit is
- involved, that drops to 12 to 15 percent. Someone suggested
- 17 you just put \$3200 more down on a car loan, but this is
- 18 pretty naive and really not connected to the reality of
- 19 today's showroom.
- I asked my sales manager to give me a
- 21 couple of recent examples of how this would affect our
- 22 customers. And he said, How many do you want? And I just
- 23 brought two here today that I can talk about. I can't give
- 24 names for privacy reasons, of course, but I've got a single
- 25 male, bought a car from me in the month of December. He has

- 1 a modest income of about \$24,000. He has very good credit.
- 2 He had saved and has a down payment of \$2,000, was
- 3 interested and bought a new Ford Fiesta.
- 4 The finance source gave him a qualified
- 5 approval that said his maximum payment could be no more than
- 6 \$350 a month. We negotiated it down to that and today he is
- 7 driving a new Ford Fiesta. But if the price had been
- 8 another \$3200 this customer would not have gotten this
- 9 vehicle. Very likely, and this is just speculation on my
- 10 part, would have ended up in my used car department buying
- 11 an older car.
- 12 The second example is a middle-aged
- couple, came in -- when I say middle-aged, they're around
- 14 55, and I hope I don't insult anybody by that. They were
- 15 looking at a new Escape. They had an income of \$3500 a
- 16 month but they had marginal credit. Down payment was their
- 17 trade-in. Their trade-in was a 200,000 mile used Ford
- 18 Taurus. They were qualified by the finance source to a
- 19 maximum payment of \$570 a month. They could have been
- looking at an Escape hybrid but they couldn't afford the
- 21 additional cost of the hybrid. They certainly could not
- 22 afford another \$3200 increase in price and would have kept
- their old Taurus, fixed it up, or bought a used car.
- 24 The results of both these examples are
- 25 the same: no new efficient vehicles would be on the road

- 1 today. I would have lost a sale, someone would -- there's a
- loss of jobs and in manufacturing the new vehicle that
- 3 wasn't sold. Basically everybody loses, including the
- 4 environment.
- In Oklahoma where I grew up, we would
- 6 say it doesn't make any difference if beans are only a
- 7 nickel a bushel. If you can't get the nickel, you can't buy
- 8 the beans. And, so, if they can't get the loan for the
- 9 vehicle, then they wouldn't get the car that they wanted
- 10 that we all want them to have.
- 11 As I said before, the proposal indicates
- that by 2025 the average price of the new light-duty vehicle
- will increase by some \$3200 over what it is today.
- 14 A study that the NADA will release next
- 15 month will raise significant concerns regarding how the
- 16 proposal calculates retail price impacts. By using a more
- 17 realistic analytical approach, our initial analysis shows
- 18 the proposal underestimates the cost at retail and suggests
- 19 a compliance-related price increase in my showroom could be
- at least 60 percent higher than that which would be up to
- 21 \$5,000 increase.
- NADA also will soon release a look-back
- 23 at the 2002 to 2010 medium- and heavy-duty truck emissions
- 24 mandates revealing the EPA underestimated the average
- 25 compliance cost by a factor of three. This look-back shows

- what can happen when a regulatory proposal seeks to set far
- in the future mandates based on far in advance predictions.
- 3 Importantly, it will also document the
- 4 widely recognized market disruptions that occurred as a
- 5 result. Like the light-duty vehicle customers, commercial
- 6 truck buyers seek out alternatives when faced with
- 7 unreasonable regulatory mandates.
- 8 In closing, I ask only that you take
- 9 into account the market realities of the showroom. If the
- 10 new vehicles manufacturers must produce fail to meet the
- 11 needs, desires or financial constraints of car and truck
- 12 buyers, those buyers will seek out and find other options.
- 13 Again, dealers support a national
- 14 program for improved light-duty fuel economy, but one
- consumers are willing and able to buy into.
- On behalf of NADA, thank you again for
- 17 the opportunity to present these views. I know that they're
- different than other people that came up here. But if we're
- 19 all thinking the same way, we're all not thinking.
- If you have questions, I'll be glad to
- answer them.
- 22 MS. OGE: Thank you, Mr. Chalmers.
- 23 Any questions for Mr. Chalmers before he
- 24 leaves?
- MR. MEDFORD: No. I think we'll look

- 1 forward to the new data that you mentioned.
- 2 MR. CHALMERS: Thank you.
- MS. OGE: Well, I have a couple of
- 4 questions.
- 5 So in your testimony, you clearly spoke
- 6 about the cost, and we can sit here and question you. The
- 7 purpose of this public hearing is to get input so we can
- 8 refine the final language.
- 9 You did mention, however, the benefits
- that the consumer will get out of this action, for example,
- 11 our analysis is in 2025, just from the 2025 new vehicle, the
- 12 cost of that new vehicle would be \$2,000 -- consumers will
- 13 save over \$6,000 in fuel savings assuming the gasoline price
- is the same as today in 2025, and in that the consumer will
- 15 save \$4,000.
- Would you please comment what is NADA's
- 17 position on that?
- 18 MR. CHALMERS: Thank you for the
- 19 question and I appreciate it. I probably didn't explain
- 20 things right.
- You used 2,000. I used 3200 because I'm
- 22 adding the extra --
- 23 MS. OGE: I understand. Let's stay with
- the 2025 \$2,000 and the benefit, the consumer benefit.
- 25 MR. CHALMERS: I would agree and I think

- all dealers agree and I want to sell very fuel-efficient 1 2 cars. And if we sell more fuel-efficient cars, there are a 3 myriad of benefits that can happen. But, again, if the customer can't get the financing for that car, then it makes 5 no difference and if he can save as much or even more, and 6 that depends on the consumer, if they can save as much or 7 even more than what their monthly payment goes up, it 8 wouldn't make any difference if the finance source will not 9 finance the car in the first place. Finance sources do not 10 look at how much you're going to save in fuel economy. They 11 want to know what your income is today and what the car payment is today. They don't look at fuel economy. 12 13 And because of that, we will have a group of people that fall off and would not be able to have 14 access to the new fuel-efficient cars that will be coming 15 16 out. And, unfortunately, it's the people that fall off and 17 don't get access are the people that probably need it the 18 most and can least afford it. Other people that can't 19 afford it, they could write a check for the car or have 20 excellent credit and much more capacity to borrow, they will 21 gain, but we would lose a significant percentage of the 22 marketplace. 23 MS. OGE: And one more question, and
- 25 I'm somewhat mystified by your

24

then you can go back home. Thank you for coming.

- 1 testimony. You're representing the Ford dealers.
- 2 MR. CHALMERS: Yes.
- 3 MS. OGE: And we just had Sue Cischke
- 4 from Ford testifying on the program and clearly sees also
- 5 the same concerns about the long-term of the standards, but
- 6 the support of a mid-term review to reassess where we're
- 7 going to be in the 2018 time frame.
- 8 So Ford thinks that they are going to
- 9 sell more cars, that's why they're supporting it. What do
- 10 you think? Why is there this disparity between what the OEM
- 11 is saying, that they support this program with the way that
- 12 we have structured it, and you represent the Ford dealers,
- 13 you believe that's not a good deal for consumers, for your
- 14 customers. Can you explain those, please, for the public
- 15 record what is the disconnect that I see.
- 16 MR. CHALMERS: Well, first of all, I'd
- 17 like to congratulate Sue who's a friend on her retirement
- and Ford won't be quite the company that it was the day she
- 19 leaves.
- 20 And I do believe we have a little bit
- 21 different view. And, again, we all need to say what we
- 22 think, and we don't have to think to be in lock step. We
- 23 may be closer together in our thoughts than we may think.
- 24 We are concerned that the further out that we try to guess
- 25 what the marketplace is going to be like, the more

1 inaccurate we're liable to be. And if we waited and 2 gathered information the next couple of years of what is 3 happening and how consumers are reacting to the 2011 through 2016 standards, if we waited a year and a half, two more 5 years, Ford Motor Company would still be able to comply with 6 the technology required to meet the standards we're talking 7 about, but we would have a whole lot more data on where 8 we're heading and it would be more accurate. So we would 9 end up with a better decision. That's Number 1. 10 The second thing that I just can't quite 11 get around is the affordability from a finance standpoint, 12 not from a long-term look at payment versus gasoline. It's 13 whether you can get qualified for a loan in the first place. That's my expertise. And that's what happens on the 14 15 showroom floor. The bankers or anybody can get a chart and 16 compare the payment to the fuel savings, and I don't know 17 much about how to -- the technology required to reach these 18 standards, but I do know exactly what my finance sources, 19 all of them look at, and they'll look at a payment versus 20 someone's disposable income. And if it's greater than what 21 they need regardless of how much they're going to save in 22 fuel economy, they won't -- they do not finance that car, 23 and that's the reality of vehicle financing today. 24 MS. OGE: Thank you.

Now I'm going to go to Mr. Tom Thias.

25

- 1 Good morning. 2 MR. THIAS: Good morning. 3 I want to thank you all for being here. I've been in the car business not as a dealer but as a 5 salesman for a quarter of a century. And I think all of us 6 in this room or maybe a few do not or have not recalled the 7 1970s with the oil embargo. That was not an annoyance for 8 just a weekend; that went on for months and months and 9 months, which began all this to begin with I believe in 1977. That was the direct response to this. 10 11 Let's come to the current era. It was 12 four years ago about this time when the cost of a gallon of 13 gasoline for the average person and businesses and companies began to creep up. If we go four years ago, it was about 14 \$2.65 at this time. By May I recall the panic when it 15 16 went -- April when it pushed over three; and then in June 17 and July and August when it pushed four. The talking heads 18 on the radio were talking about -- in fact, certain ones 19 were castigating us because, gee, it's \$8 a gallon in 20 Europe. Frankly, we were being strangled when it went past 21 \$3.50.
- 22 GMAC U.S.A. went out -- GMAC Canada went 23 out in September -- went out in August of '08. GMAC U.S.A. 24 went out -- this is the leasing companies -- went out in 25 August. Why? Because you had hundreds and hundreds of

- these full-size trucks that were put out three years earlier
- with a residual value in place that we cannot sell on our
- 3 lots nor could GMAC in their normal returns put these
- 4 vehicles onto the dealer lots, these program cars.
- 5 Each one hit General Motors and Chrysler
- 6 in a liquidity situation. They had to cover each one and
- 7 they would continue to come in from three years previous and
- 8 two years previous as far as they could see for the next two
- 9 and a half years. That may have been why they had to beg
- 10 for the money to cover it. All right?
- 11 By December of that year after GM had
- gone through its troubles, and Chrysler, the cost of a
- gallon of gas went back into the low twos. We have no
- 14 control over this. Those of you who drove in today and
- 15 gassed up your tanks, as of last Tuesday, at least in the
- 16 Lansing area, it was \$3.69 a gallon for regular. And,
- again, we have no control over this. There's ominous things
- on the horizon. You have probably heard the \$4-plus this
- 19 summer. That is why we're here.
- 20 What we have done so -- what we can say
- 21 now is that we are prepared. Four years ago, we didn't have
- 22 the vehicles. Now for General Motors we have the Chevy
- 23 Cruze. It gets 42 miles a gallon, and that's an average on
- the highway, two or three miles each side. We have the new
- 25 Chevy Sonic. And this Cruze, by the way, is the highest

- 1 selling car in the country, second I think in rank with the
- 2 Focus. And the new little car, the Sonic from Chevrolet
- 3 rated at 40. The new E-assist coming up, the full-size
- 4 Buick LaSabre on the ground now using electric lithium
- 5 batteries with an AC motor is rated at 36 miles a gallon.
- 6 My point is we are on the way.
- 7 Technology is marching on and I could go on for hours but
- 8 let me keep this short.
- 9 The amazing Chevy Volt, the extended
- 10 range electric vehicle. On the Monroney sticker, and that's
- 11 the window sticker in the window, from last year's 2011
- 12 Volt, the EPA stated this: If you drive an average of
- 45 miles between charges, you will average 168 miles per
- 14 gallon.
- 15 Now, the EPA says that 80 percent of the
- 16 population drives 40 miles a day on average. Now, think
- 17 about that for a minute. There is just a storm of negative
- 18 press against the Volt. Not the Leaf, not the upcoming Ford
- 19 Focus, from certain walks it is relentless from newspapers
- 20 and this and that.
- 21 This vehicle is phenomenal. It can go
- 22 101 miles -- let's not get into the product, I don't want to
- 23 sell you one here today. The point is you have the Ford
- 24 Focus coming out, you've got other -- if we look at it down
- 25 at the auto show where I'm headed next, you have a whole

- 1 area called Electric Avenue. Everybody is getting in on it,
- 2 and I think certain powers to be are very afraid. They will
- do whatever they can to stop this. And that may have been
- 4 why gas went to \$4 in '08, but that's my speculation and
- 5 I'll stay away from that.
- 6 One more thing. The complaint in these
- 7 small little cars -- and, quite frankly, the Volt is a
- 8 comfortable car. It will do 101 miles an hour in 0 to 6.89.
- 9 First, my local utility, Board of Water
- and Light of Lansing says this on their website, you can
- 11 check it out, cost to charge about a buck twenty a day.
- 12 That's if you're running the 25- to 50-mile range. Folks,
- that's \$36 a month plus a gallon of gas or two.
- 14 The average person is driving 20, or
- buying two gallons of gas a day driving that 25 to 40-45
- 16 miles. That's \$8 a day, that's \$240 a month, that's \$7,200
- over three years. The Impala brand new gets an average of
- 18 23.
- 19 My point is if I'm spending \$36 a month
- 20 plus a couple gallons of gas versus \$240 in a vehicle like
- 21 the Volt and the Leaf and the Ford Focus CV, I'm going to
- 22 save \$7,200 over two years. And if I'm leasing it at \$399 a
- 23 month, and I think the Leaf and the Volt are at the 40-50
- 24 somewhere, take that 7200 bucks I'm not spending away from
- 25 the \$399 a month on the lease, your net cost to drive is

- about 7200 bucks over the three years. Maybe I'm pushing it
- 2 too far. It's coming.
- 3 And finally, Bob Lutz, former Vice
- 4 Chairman of General Motors last Tuesday introduced Via
- 5 Motors. They are there. They're outfitting the OEM GM
- 6 pickup trucks, vans and Suburbans for the SUVs all electric,
- 7 40-mile range. Cost to charge, \$2 a day. Average fuel
- 8 economy -- this is their information, not mine -- 100 miles
- 9 a gallon.
- Now we're going to do and we're going to
- go out with this over the next -- until the next 2025, and I
- tell you now we're ready for it, as far as the abilities we
- 13 have for these vehicles to kind of offset that high dollar
- 14 gas. They don't have us anymore.
- 15 And that's my statement. Thank you.
- MS. OGE: Thank you.
- Mr. Fox, good morning.
- 18 MR. FOX: I hate to follow that.
- I am Doug Fox, owner of Ann Arbor
- 20 Automotive. We're a group of automotive retail dealerships
- 21 in Ann Arbor, Michigan, and I'm here to speak strongly in
- 22 favor of proposed standards fully effective in 2025.
- I'd just like to share a little bit
- about our experience and what we see in Washtenaw County.
- 25 Our customers strongly desire more fuel-efficient vehicles.

- 1 Our sales were up in 2011 over 20 percent, and that was
- 2 largely driven through the sales of fuel-efficient
- 3 clean-burning vehicles, many of which were hybrids.
- 4 There's tremendous interest, as the
- 5 gentleman that preceded me so elaborated on, in electric
- 6 vehicles. We have consumers that are just waiting with
- 7 bated breath for the new Nissan Leaf and the new Mitsubishi
- 8 i Car which will go on sale later on this year in this part
- 9 of the country. So we're very, very excited about that.
- 10 I think there seems to be universal
- 11 agreement I think from everyone that we've heard today that
- 12 everyone feels we should reduce our dependence on petroleum,
- 13 and these standards, of course, move us in that direction.
- 14 If I could just speak a little bit to
- 15 the gentleman that had to leave early. In terms of the cost
- and the concern that you might say, Well, geez, we're retail
- 17 guys up here, we sell these cars, why aren't we concerned so
- 18 much about these numbers that are being thrown around about
- 19 the increased costs to the consumer, 3,000, 5,000, I saw a
- 20 number as high as \$9,000 somewhere the other day.
- I guess I have a lot of faith in the
- future of technology and where things are moving in our
- 23 industry, and I think if you look at past history, where we
- are today, and where we were 25 years-30 years ago,
- 25 performance vehicles had to be V-8, had to have 400 cubic

- 1 inches of displacement. Today we can exceed those kind of 0
- 2 to 60 numbers with six cylinders, 25 percent less
- 3 displacement in the engine.
- 4 I feel that if you make some pretty
- 5 obvious assumptions that technology will continue to
- 6 improve, it's not going to stand still, and it's not going
- 7 to get worse. We don't know what the true cost of these
- 8 improvements will be in 2025. If you look at the cost -- if
- 9 you went back in 1999, 13 years ago and showed drawing and
- 10 specifications for an iPad or a Kindle to an electronic
- 11 company and said what would it cost to bring it to market in
- 12 1999, it wouldn't be \$199, it would be way higher than that.
- 13 So, I think for us to try to peg what these fuel economy
- standards will actually cost in terms of the price of the
- 15 vehicle today in 2012, it's a pretty fast-moving target.
- 16 So, I'm going to bet on the optimistic side and say that it
- 17 is probably not going to be as detrimental to sales as some
- 18 might think.
- 19 Lastly, I would just like to echo what
- 20 Congressman Dingell said, that this truly is a remarkable
- 21 moment in time. From almost everyone that I've heard speak
- 22 today, we really have, as he put it, squared the circle, and
- 23 there are really just winners here, everyone seems to win on
- 24 this deal.
- 25 So I'm strongly in support of it and I

- 1 appreciate you hearing my comments.
- 2 MS. OGE: Thank you.
- 3 Mr. Krupitzer.
- 4 MR. KRUPITZER: Good morning.
- 5 My name is Ron Krupitzer, Vice President
- of Automotive Market for the American Iron and Steel
- 7 Institute.
- 8 On behalf of the AISI I would like to
- 9 thank the Chairpersons Oge and Medford for conducting this
- 10 hearing today and also for the amazing work that was done
- 11 over the last several years by your agencies in preparing
- 12 the NPRM and supporting technical documents. We've had a
- chance to work in part with some of your engineers and I
- think it's been a great experience for us.
- 15 I would like to address the panel today
- on two major issues with respect to how the regulations will
- 17 affect, first, the use of steel in future vehicles, and,
- 18 secondly, greenhouse gas emissions.
- 19 On that first subject, AISI recognizes
- 20 that the new regulations will influence car companies to
- 21 consider mass reduction as a high priority.
- I would like to state for the record
- 23 that the steel industry has a history of providing mass
- 24 reduction for light-duty vehicles; most recently, in fact,
- 25 by developing advanced grades of advanced high-strength

- 1 steels for this purpose. These steels have tremendously
- 2 improved strength over conventional mild steel, enable parts
- 3 really to be thinner and lighter while carrying the same
- 4 required loads.
- In May of this year the "Great Designs
- 6 in Steel" seminar featured Ducker Worldwide who reported
- 7 that our new steels are now the fastest growing automotive
- 8 material in today's new car and truck. So, in fact, you can
- 9 see that these grades have already provided affordable mass
- 10 reduction for car makers in this decade.
- 11 Ducker also forecasted the acceleration
- in the growth of these advanced steels between now and 2025.
- 13 This increase in growth rate is expected largely because of
- 14 the new regulations which will demand, in fact, further
- improvement in fuel economy and associated mass production.
- 16 These advanced steels in the new vehicles today average
- 17 around 17 percent which have grown from zero since about
- 18 2002. That 17 percent can possibly triple by 2025.
- 19 And much work was necessary to grow to
- 20 this level, in fact starting with projects like the
- 21 ultralight steel research project that the global steel
- industry completed in 2002, to work that's now being done by
- 23 the Auto Steel Partnership which includes Chrysler, Ford and
- 24 General Motors and the North American steel companies.
- We've also had tremendous support in our development work

- with the U.S. Department of Energy and U.S. Advance
- 2 Materials Partnership.
- 3 Because of work like the lightweight
- 4 front end structure project and the future generation
- 5 passenger compartment, we actually accelerated the use of
- 6 these new steels in use in vehicles today.
- 7 Now, for the future, 2017 to 2025, the
- 8 subject of today's hearing, the AISI together with the world
- 9 steel producers under WorldAutoSteel, completed a study in
- 10 May of this year called FutureSteelVehicle. This study
- 11 examined the future of efficient structures for electrified
- 12 power-train vehicles like battery electric or plug-in
- 13 hybrids. Twenty new grades of high strength steels were
- included in this study compared to our previous work, and it
- 15 dramatically increased steel's portfolio of choices for car
- 16 makers to use in making light cars and trucks. Many of the
- 17 newest grades actually have strengths over 1000 MPa. And
- 18 just to calibrate you, that's well over five times the
- 19 strengths of conventional steels in vehicles.
- So, such results in these studies
- 21 surprised even us with mass reductions in some cases of 35
- 22 percent in the body structure in the FutureSteelVehicle
- 23 project.
- Now, such high reductions are really
- 25 because of these extremely high strengths that are now

- available and the new manufacturing processes that are also
- 2 available to suppliers like tailor rolling, hot stamping,
- 3 for example, extremely strong B-pillars and very safe
- 4 interior passenger compartments. FutureSteelVehicle results
- 5 reinforce the forecast by Ducker that these grades should
- 6 continue to grow at least out towards 2020.
- 7 So, the results of the FSV study has
- 8 been shared with North American car manufacturers. More
- 9 importantly it shows that significantly more mass reduction
- 10 can, in fact, result from the use of these newer steels.
- 11 What is also important in this study is that while we
- 12 compare different materials in this engineering work, we
- found that many of the costs in carbon emission consequences
- of this study resulted in the most favorable conclusions
- 15 from steel.
- 16 So, this takes us to a discussion of
- 17 what's the best way to make a green vehicle to keep
- greenhouse gases at the lowest possible level.
- 19 Now, on this second subject, the effect
- of the proposed regulation on greenhouse gas emissions, I
- 21 wanted to cite some work at University of California Santa
- 22 Barbara, University of Michigan and other places that will
- 23 be identified in our written comments, that have pointed out
- 24 already or done research on the value of life-cycle
- assessment in determining the true impact of vehicles on

- 1 greenhouse gas emissions.
- 2 Additionally, recent studies at UC Davis
- 3 have examined the consequences of continuing to apply only
- 4 tailpipe emissions -- that is driving cycle -- regulations,
- 5 whereby ignoring some of the critical upstream sources of
- 6 greenhouse gases. And I know General Motors earlier today
- 7 commented on the upstream emissions concerns.
- 8 Well, for example, in recent LCA case
- 9 studies by Geyer at UC Santa Barbara, he did a Sun to Wheels
- 10 Study, and in Ricardo's recent publications preparing for a
- 11 life cycle CO2 measure we saw that these organizations also
- support the fact that materials and manufacturing emissions
- are becoming a bigger and bigger part of total emissions, so
- 14 we can't ignore them.
- 15 LCA methods are perhaps the most
- 16 straightforward way to account for total emissions in
- 17 vehicles. It's important, therefore, that LCA methodology
- 18 be considered, although sometimes it's considered difficult
- 19 or complicated. Fortunately, some work UC Davis has pointed
- 20 to a rather simple method of using a bill of materials that
- 21 all car makers use to build their cars and trucks as a way
- 22 to calculate those upstream factors in emissions.
- 23 So what I'd like to conclude with is a
- 24 recommendation, and that is that I feel and the American
- 25 Iron and Steel Institute feels and the World Steel

- 1 Organization feels that considerable collaboration is really
- 2 necessary among car companies, regulators and suppliers to
- 3 establish a firm methodology for fairly accounting for life-
- 4 cycle emissions in vehicle regulations.
- 5 The steel industry stands ready to
- 6 participate in a multifunctional working group with the EPA,
- 7 NHTSA and automakers and their suppliers to address this
- 8 important challenge. We believe it is possible to develop
- 9 and test such LCA methods in time for the mid-term review
- 10 established for this regulatory period, but we have to start
- 11 right away.
- 12 Thank you very much for your attention.
- MS. OGE: Thank you.
- Mr. Neil Carter. Good morning.
- MR. CARTER: Good morning.
- 16 My name is Neil Carter and I'm here on
- behalf of many veterans like myself. I also point out the
- 18 many problems in the Southwest Region of Afghanistan in
- 19 2008.
- This is considered a turning point in
- 21 the native land to the war with Afghanistan because from
- 22 2003 up to this point the U.S. was more heavily invested in
- 23 Iraq, and once the native coalition had taken over the
- 24 Afghan mission.
- 25 My unit suffered particularly heavy

- losses in the spring and summer of that year and
- 2 subsequently from insurgents. As a Marine Corps officer, I
- 3 mostly operated in the Combat Operation Center or the COC at
- 4 the battalion headquarters. This is located in the very
- 5 middle of the camp in close proximity to the Marine living
- 6 quarters. Within the COC there were dozens of
- 7 communications data and other information systems many of
- 8 which were classified set up for battalion staff and other
- 9 personnel. This included laptops, radios and also
- 10 telephones. All these systems as well as the lighting in
- 11 the COC required a maximum amount of power in order to
- 12 maintain 24/7 operations. The generator ran nonstop
- 13 throughout the entire deployment. This generator was
- 14 connected to a fuel line that pumped fuel from a large drum
- that was positioned about 30 meters from the COC.
- 16 Every day an Afghan gentleman would
- drive this fuel truck through the operating systems and
- 18 security checks; drive up to the drum and refill more
- 19 generator fuel. The reason why the drum is positioned so
- 20 far from the COC was so that the Afghan trucker cannot get
- 21 too close to the COC and potentially view classified
- 22 material and hear any discussion pertaining to operations.
- 23 Not a single day went by in Afghanistan
- 24 when I saw the truck refueling in the COC while wondering
- 25 not only how long the U.S. taxpayer could afford to pay for

- all this oil we were going through, how could we continue to
- depend on someone who is not an American who was in daily
- 3 combat operations with us.
- 4 While I had no reason to believe that
- 5 the trucker would turn against us or sabotage our operation
- or worse, I also had no belief -- no reason to believe that
- 7 he would not. I was sure that like anyone else, he was only
- 8 trying to make an honest living, but the fact that American
- 9 lives depended on whether or not we had enough fuel to run
- 10 the COC. In a few instances the trucker didn't even show up
- 11 which severely impacted daily operations and put lives in
- 12 danger. I knew there had to be a better way.
- 13 Being in one of the volatile regions in
- 14 Afghanistan for eight months gave me time to contemplate and
- 15 speculate. I often thought about how we as a military could
- 16 operate using less oil and paying less on our host nations
- 17 to fuel our machines. During one of those blackouts when we
- had run out of fuel, could we have gotten more information
- 19 up to our men in the field a little faster and maybe saved a
- 20 life or two.
- 21 The United States of America has some of
- 22 the smartest minds in the world. President Kennedy drew on
- 23 the impossible and after a few short years after his
- 24 historic speech there was an American walking on the moon.
- 25 I know we can do the same today to develop cleaner, more

- 1 efficient methods to power our machines because at the end
- of the day American lives depend on it.
- 3 Thank you, and I'd be happy to take any
- 4 questions.
- 5 MS. OGE: Thank you for your testimony.
- 6 Thank you for your service.
- 7 I'm going to go to Mr. Mitch Bainwol.
- 8 Good morning.
- 9 MR. BAINWOL: Good morning. Thank you
- 10 for your time and service.
- 11 My name is Mitch Bainwol and I'm the CEO
- 12 of the Alliance of Automobile Manufacturers, an association
- of 12 vehicle manufacturers representing roughly
- 14 three-fourths of the cars sold in the United States.
- Two years ago the Alliance testified in
- 16 support of the 2012-16 greenhouse gas and fuel economy rule,
- 17 encouraged EPA, NHTSA and the California Air Resources Board
- 18 to continue the Single National Program beyond 2016. We
- 19 continue to support having a Single National Program and
- 20 appreciate your efforts to pursue this goal.
- 21 Of course, much has changed since 2009.
- 22 For one thing, automakers now are driving the country's
- 23 economic recovery. Autos represent the largest
- 24 manufacturing sector in the United States, and our sales are
- 25 viewed as a leading economic indicator. Today, our industry

- 1 supports 8 million American jobs, \$500 billion in industry
- 2 compensation and \$70 billion personal tax revenues.
- 3 Automakers and suppliers are adding tens of thousands of
- 4 jobs here in the United States.
- 5 Another significant change is that
- 6 automakers are offering more fuel economy or fuel-efficient
- 7 choices than ever before. 265 models that achieve 30 miles
- 8 per gallon or more on the highway. That's a 65 percent
- 9 increase over model year 2010.
- 10 The unprecedented effort of the coming
- 11 13 years to further our country's energy and environmental
- goals will succeed only, only if consumers buy the
- 13 fuel-efficient technologies that we will be offering.
- 14 Looking into the future, consumer
- purchasing patterns will be the biggest unknown. Besides
- 16 fuel economy, we know that consumers demand affordability,
- 17 safety, convenience and utility. One challenge we have is
- 18 that fuel economy considerations often rank below those
- 19 other factors. Fuel prices are especially difficult to
- 20 predict and have a huge impact on how consumers weigh fuel
- 21 economy at the dealership. That's why it's critical that
- 22 the final rule include a rigorous mid-term review with a
- 23 clearly defined process for its implementation.
- 24 During the review, the agencies should
- 25 seek expert peer-reviewed information including the input of

- 1 the National Academy of Sciences to answer these questions:
- 2 Are the costs of advanced technologies declining as
- 3 expected? Are researchers making the breakthroughs
- 4 anticipated? What's happening with fuel prices, and how are
- 5 consumers responding? What impact are the new requirements
- 6 having on sales and on employment? How are the new rules
- 7 impacting vehicle safety? What's happened with fuel
- 8 quality? Will liquid fuels support the fuel-efficient
- 9 technologies that have been introduced? Will the new
- 10 charging infrastructure be available to enable plug-in
- 11 hybrids, battery electric vehicles and fuel cell vehicles to
- 12 penetrate the market at the levels predicted?
- Of course, the ultimate question will be
- 14 whether mainstream consumers will be able and willing to
- 15 purchase the technologies needed to achieve the country's
- fuel economy, energy security and environmental goals,
- 17 particularly as the federal and state incentives are phased
- out. Thus, in addition to the questions I have identified,
- 19 the agencies should really focus on consumer purchasing
- 20 behavior.
- 21 Before concluding, let me briefly touch
- 22 on three additional points.
- First, let consumers determine the
- 24 winning fuels and technologies. Ultimately consumers should
- 25 decide what best meets their needs. Vehicles that run on

- 1 gasoline, diesel, biofuels, electricity, hydrogen and
- 2 natural gas will all play a role in improving fuel
- 3 efficiency and reduce greenhouse gas emissions.
- 4 Second, the rule needs to fit into
- 5 comprehensive energy policy. For instance, the proposed
- 6 rule indicates that the agencies expect electric vehicles to
- become an increasingly large part of the car market; yet,
- 8 the rule leaves open the possibility of requiring
- 9 manufacturers to account for upstream emissions -- this is
- 10 what Mike Robinson spoke about -- from electricity
- 11 generation in the event that the Administration is unable to
- 12 control these emissions through other channels. If programs
- 13 to address upstream emissions are needed, then let's put
- them in place with appropriate upstream regulations, not by
- imposing additional burdens on automakers.
- 16 Finally, manufacturers should be
- 17 encouraged through flexibilities and incentives to implement
- 18 verifiable innovations that enhance vehicle safety, that
- 19 explore new technology applications and reduce CO2
- 20 emissions. The Alliance will be providing in-depth written
- 21 comments focusing on how best this can be accomplished.
- 22 The rulemaking under consideration today
- 23 will govern vehicle production 5 to 13 years from now. It
- 24 comes on the heels of a 5-year rulemaking that cost
- 25 automakers approximately \$52 billion, a higher cost than any

- 1 previous rulemaking. The agencies predict that the
- 2 additional greenhouse gas reductions and fuel economy gains
- 3 from this rule will cost an additional 133 to 157 billion
- 4 dollars. This unprecedented effort and expense will further
- our country's important energy and environmental goals, but
- only if consumers purchase the more fuel-efficient and
- 7 climate-friendly and more expensive vehicle technologies.
- 8 Thank you for this opportunity.
- 9 MS. OGE: Thank you.
- 10 I keep on mispronouncing your last name.
- 11 What is your last name?
- MR. JURIGA: Juriga.
- 13 MS. OGE: Juriga. Good morning.
- MR. JURIGA: Good morning.
- 15 As Ms. Oge mentioned, my name is John
- 16 Juriga. I'm the Director of Powertrain for the Hyundai Kia
- 17 American Technical Center and I'm here to speak on behalf of
- 18 Kia Motors Corporation.
- Before discussing the proposal, I would
- 20 like to take a few moments to talk about Kia's
- 21 earth-friendly initiatives so we can better understand Kia's
- 22 perspective. Kia is the automotive industry's current fuel
- 23 -- one of the, Kia, automotive industry's fuel economy
- 24 leaders. We're one of the fastest moving global automotive
- 25 brands. When Kia Motors introduced the EcoDynamic sub-brand

- in 2009, it demonstrated the company's global commitment to
- developing innovative fuel-stretching and emissions-cutting
- 3 technologies, and in less than three years we are already
- 4 delivering dramatic results.
- 5 Last year, Kia introduced its first
- 6 hybrid in the U.S. market and the Kia Rio will also be the
- 7 first non-luxury or hybrid vehicle to offer idle stop and go
- 8 technology which turns off the engine when the vehicle is
- 9 not in motion. Both the Kia Optima Hybrid and the Rio
- 10 achieve EPA fuel-economy ratings of 40 miles per gallon
- 11 while delivering class-leading horsepower. And the Optima
- 12 holds the world record for the lowest fuel consumption by a
- 13 gasoline hybrid traveling through all 48 contiguous U.S.
- 14 states and needed less than six tanks of gas to cover nearly
- 15 8,000 miles, an average 64.5 miles per gallon.
- 16 Kia is also actively working with the
- 17 U.S. Department of Energy's Renewable Energy Laboratory to
- 18 develop advanced vehicles including fuel cell technology.
- 19 In December, Kia began selling the company's first electric
- vehicle in the domestic Korean market and we have announced
- 21 plans to launch a CUV-style EV for global markets in 2014.
- 22 And now to the proposal.
- I want to start by saying that Kia
- 24 emphatically supports the proposal and believes that it is
- 25 important for the agencies to set tough but feasible

- 1 standards while providing flexibilities which allow each
- 2 automaker to maximize their strengths in achieving the
- 3 standards. That being said, Kia has a few comments about
- 4 the proposal which we will mention here and go into more
- 5 detail in written comments.
- 6 Sort of the technical side, based on
- 7 research that we have conducted, Kia believes the methods
- 8 suggested by the agencies for nitrous oxide which must be
- 9 measured starting in 2013 are not fully proven and
- developed. Kia prefers the bag method analysis of
- 11 measurement to minimize reduction of testing throughout.
- 12 However, the NDIR and FTIR bag analysis methods currently
- 13 have repeatability and practicality concerns. We support
- 14 the measurement but recommend that it be revisited in a time
- 15 when there is improved and accurate and more efficient means
- 16 available.
- 17 Kia supports the use of A/C menu for
- determining air conditioning system credits but supports an
- increase in the maximum amounts of credits permitted if we
- were able to demonstrate an emission reduction greater than
- 21 the items provided in the menu. However, since the new AC17
- 22 test procedure has not yet fully been developed, Kia
- 23 recommends that EPA retain the idle test as an option until
- the AC17 has been proven to be more reliable rather than
- 25 requiring the use of the AC17 procedure at the beginning of

- 1 2017.
- 2 Additionally, Kia requests the
- 3 industry -- for industry consistency that EPA set more
- 4 detailed guidelines for the framework to prove out the A/C
- 5 system durability. It's unclear how A/C system durability
- 6 is defined.
- 7 Kia appreciates these substantial lead
- 8 times for these regulations which will provide stability in
- 9 long-term planning. However, Kia believes it is important
- 10 for the agencies to include mid-term evaluations to allow
- 11 for revisions if some of the assumptions made in the
- 12 drafting of the rule are not proven to be correct. Even
- though Kia supports the standards, Kia recognizes it is
- 14 difficult to accurately predict the outcome -- to accurately
- 15 predict how to deliver the 2025 technology in that time
- 16 frame. Consumer acceptance of those technologies and costs
- 17 will also be a challenge. The mid-term review will help us
- 18 ensure that the standards are robust for all OEMs near to
- 19 the time frame of implementation.
- 20 Kia plans to move fast to advance our
- 21 technologies, reduce greenhouse gas emissions and improve
- 22 fuel economy, and we are committed to contributing to the
- 23 sustainability of our plans.
- 24 Thank you for this opportunity to
- 25 provide our viewpoint and we'll be providing written

- 1 comments as well.
- 2 CHAIRPERSON OGE: Thank you. Any
- 3 questions from the panel?
- 4 MR. SILVERMAN: One question -- one
- 5 question for Mr. Krupitzer.
- 6 MR. KRUPITZER: Yes.
- 7 MR. SILVERMAN: The agency had an
- 8 extensive discussion of safety in the proposal. I'm
- 9 wondering if you would say a little bit about that and if
- there are any safety implications for use of that steel.
- 11 MR. KRUPITZER: Thank you for asking the
- 12 question. Those comments will be covered in our written
- 13 comments. Because of the time today we didn't get into it
- in much depth.
- 15 I think in general with regard to
- safety, we have done quite a bit of research over the last
- 17 10 or 15 years in the steel industry. We have proven beyond
- a doubt that it's very possible to use lighter structures
- 19 and achieve equivalent test performance on safety.
- I think that the new Kahane report is
- 21 very interesting -- we're still analyzing it, by the way --
- 22 and the vehicle-to-vehicle situation is a different story.
- 23 But I think that in general we don't have any objections to
- the initial conclusions that were drawn in that study, which
- 25 really points out the importance of the footprint

- 1 methodology in defining, you know, your basic vehicle
- 2 structure.
- 3 So, again, steel provides with its high
- 4 strength varieties the opportunity to reduce the mass in a
- 5 given footprint, which I think is critically important as
- 6 suggested in that Kahane study as being probably the primary
- 7 factor in determining how effectively we can design vehicles
- 8 to be safe in collisions within the fleet among different
- 9 size vehicles.
- 10 So without changing the laws of physics,
- 11 I think that this regulation should not have a serious
- impact on the progress that we're making now on the safety
- of vehicles on the road.
- MR. SILVERMAN: Thank you.
- MR. MEDFORD: Okay, thank you very much.
- I think we're ready for the next panel.
- 17 We have Rhett Buttle, Christine
- Dingeman, Robert Honeyman, Al Williams, Bob Bienenfeld, Ann
- 19 Mesnikoff, Andrew Brown, Sharif Sokkary.
- If you would write your name on one of
- 21 those tents it would help the recorder.
- 22 Okay, Mr. Buttle. Thank you. Good
- 23 afternoon.
- 24 MR. BUTTLE: Thank you. Actually, I
- 25 have to run out after I testify to catch a flight.

- 1 MR. MEDFORD: Okay. Thank you.
- 2 MR. BUTTLE: Good morning. My name is
- 3 Rhett Buttle. I am the National Outreach & Government
- 4 Affairs Director for Small Business Majority.
- 5 For those of you who aren't familiar,
- 6 the Small Business Majority is a nonpartisan, small business
- 7 advocacy organization that is founded and run by small
- 8 business owners. We represent the 28 million American small
- 9 businesses who are self-employed or own a small business
- 10 with up to 100 employees or under. Our organization uses
- 11 scientific research, economics and opinion to understand and
- 12 represent the interest of small businesses.
- 13 Solutions to our country's economic
- malaise start with our small businesses, but the government
- 15 must support them if we are going to harness their powerful
- 16 roles as job creators. Small businesses have a potential to
- 17 stimulate the economy but they need smart policies to help
- 18 them do so, such as stronger fuel efficiency standards. By
- 19 concentrating their efforts on raising the requirements
- 20 automakers must meet, legislators can help entrepreneurs
- 21 save money and give them the boost they need to rebuild
- 22 America. We know this from our research.
- 23 The rising cost of fuel is a key area
- 24 where the government can help small businesses. We released
- 25 a national opinion poll in September of last year that found

- 1 that 87 percent of small business owners believe it's
- 2 important to the United States to take action now to
- 3 increase fuel efficiency in cars and light truck. A 59
- 4 percent majority described this as very important.
- 5 Moreover, small business owners in influential automotive
- 6 states such as Michigan, Ohio and California demonstrated
- 7 equally strong support for these stringent standards.
- 8 Our survey also found 71 percent of
- 9 small business owners believe American car companies do not
- 10 innovate enough, and 73 percent believe the federal
- 11 government should do more to make them innovate. Therefore,
- 12 it's not surprising that 80 percent of small business owners
- supporting requiring the automotive industry to increase
- 14 fuel-efficiency standards to 60 miles per gallon by 2025 an
- 15 even a higher standard than the 54.5 miles per gallon
- 16 standard the Obama Administration proposed in November.
- 17 Small business owners know they'll
- 18 benefit from strengthened fuel economy standards. The
- 19 proposed rules are right on par what entrepreneurs told us
- 20 they want improved fuel standards that have the power to
- 21 cut long-term business costs. Stronger standards are a
- 22 surefire way to help small business owners to save money on
- fuel, invest in their companies and their time.
- 24 Of the employees we polled, the rising
- 25 cost of doing business came in as their top concern

- including rising fuel cost. This helps explain why so many
- 2 small business owners believe in stronger fuel economy
- 3 standards have the potential to boost their bottom lines.
- 4 In fact, 87 percent of small business owners agree that
- 5 improving innovation and energy efficiency are good ways to
- 6 increase prosperity for small businesses. If lawmakers are
- 7 going to meet entrepreneurs' needs, raising fuel economy
- 8 standards is a great way to start.
- 9 Though higher standards, the money small
- 10 business owners and consumers will save on gas will better
- 11 equip the American public to foster economic growth by
- 12 patronizing businesses everywhere, by promoting business
- 13 everywhere. We support raising the fuel economy standards
- because it will be a boon to small business in our economy.
- Thank you very much.
- MR. MEDFORD: Thank you very much.
- Does anyone have any questions? We
- 18 understand you have to leave now.
- 19 Thank you very much.
- MR. BUTTLE: Thank you for your time.
- MR. MEDFORD: Next, Dr. Brown.
- DR. BROWN: Thank you very much. I
- 23 appreciate the opportunity, Deputy Administrator Medford,
- 24 and Director Oge, good to see you again, and my friends Jim
- 25 Tamm as well as Chet France.

1	Good afternoon, and thank you for the
2	opportunity to appear before you today.
3	I am Dr. Andrew Brown, Jr., Executive
4	Director and Chief Technologist for Delphi Corporation. I
5	am also a recent past president of the Society of Automotive
6	Engineers and I am currently Chair of the National Research
7	Council Board on Energy and Environmental Systems.
8	Delphi is a leading global supplier of
9	mobile, electronic and transportation systems, including
10	powertrain, safety, thermal controls and security systems,
11	electrical/electronic architecture and in-car entertainment
12	technologies.
13	As a major automotive advanced
14	technology supplier, Delphi has a significant interest in
15	this Notice of Proposed Rulemaking and we appreciate the
16	opportunity to comment directly.
17	We support the continuation of a
18	national program that incorporates energy efficiency and
19	emission reduction benefits, while remaining technology
20	neutral without favoring selective approaches.
21	We support the existing credit options
22	and applaud the agencies' efforts to extend additional

flexibility for off-cycle credits.

Being green is a vital everyday aspect

of doing business that touches all industries. It is no

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24

25

- 1 longer a niche movement. But the automotive industry in
- 2 particular has made a strong commitment to be more
- 3 sustainable and efficient throughout its supply chain.
- 4 The future of transportation rests on
- 5 the steady pillars of environmental care, safety at all
- 6 levels, the ability to communicate with other vehicles and
- 7 with the infrastructure we rely on when we drive.
- 8 These safe, green and connected
- 9 solutions must be the foundation of the quest for a green
- 10 and sustainable mobility industry.
- 11 To this end, I would like to share five
- important concepts that Delphi feels will help the
- automotive industry move toward a greener future.
- 14 First, internal combustion engines,
- 15 ICE's, both gasoline and diesel, will continue to improve
- 16 and, therefore, be a major propulsion source for years to
- 17 come. We as an industry and you as a government agency
- 18 should be supporting efforts to improve current internal
- 19 combustion engine technology. And we urge the EPA and NHTSA
- 20 to take a careful look at the contributions that can be made
- 21 by both gasoline and diesel engines.
- 22 Second, vehicle electrification is
- 23 shaping the future of automotive power and propulsion and
- 24 will continue to do so for many years to come as more
- 25 drivers look to hybrid electric vehicles and start/stop

- 1 technology as a way to improve their efficiency and green
- vehicle choices. This market is expected to grow steadily
- 3 for the foreseeable future and will be affected by global
- 4 government regulations.
- 5 Third, this rulemaking will enable the
- 6 consumer to experience the inherent value of technologies
- 7 that have a reasonable payback period.
- 8 Fourth, the air conditioning system is
- 9 the highest ancillary load on the system. We highly support
- 10 the EPA's proposed credit system to incentivize
- 11 energy-efficient HVAC technology that can reduce the fuel
- needed for the air conditioning system by 40 percent.
- 13 Finally, I recommend that the National
- 14 Research Council technology cost estimates and
- 15 implementation cadence data be included in the agencies'
- 16 analyses and be considered a primary source of information.
- 17 Industry reports and other analyses can also be used to
- 18 provide even more insight and sensitivity.
- 19 I would now like to turn to specific
- 20 technologies which we as Delphi believe are solutions to the
- joint EPA/NHTSA emissions and fuel emissions standards.
- 22 As I said earlier, the best potential is
- 23 with improved internal combustion engine technologies.
- 24 Delphi has a strong portfolio of ICE-compatible technologies
- 25 including direct injection fuel systems and advanced fuel

- 1 injectors for alternative fuels, such as E-85 ethanol and
- 2 compressed natural gas, variable valve lift and electric cam
- 3 phasing to improve engine performance over the full engine
- 4 operating range and reduce pumping losses. Multi-strike
- 5 emissions systems to improve advanced high dilution
- 6 combustion schemes, fuel delivery modules with brushless
- fuel pumps to reduce parasitic losses, and evaporative
- 8 emissions canisters with heated purge to improve canister
- 9 purge efficiencies under low conditions common with hybrid
- 10 vehicles.
- 11 Second, Delphi has a proven track record
- in achieving energy and emissions reductions in diesel
- 13 technology. Specifically, Delphi's direct injection fuel
- 14 systems and linear oxygen sensors support diesel combustion
- 15 with urea dosing systems, ammonia sensors and particulate
- 16 matter or soot sensors help meet stringent emissions and on-
- 17 board diagnostic requirements.
- 18 Finally, Delphi also has a portfolio of
- 19 products that will help electrify the vehicle. Some of
- these products include traction inverters, DC to DC
- 21 converters, battery packs, battery controllers, hybrid
- 22 control systems and chargers.
- I would also like to mention that Delphi
- 24 holds a unique position in the automotive aftermarket by
- 25 having the ability to apply knowledge from its original

- 1 equipment heritage to products that support emissions and
- fuel requirements well into a vehicle's long life.
- New technologies benefiting fuel economy
- 4 and emissions anticipated to be ready for the 2017 to 2025
- 5 time frame include waste heat recovery, intelligent
- 6 transportation systems and cost reductions for electric
- 7 drive electronics.
- 8 In conclusion, Delphi appreciates the
- 9 opportunity to comment on this Notice of Proposed
- 10 Rulemaking. Again, we feel a national program that
- 11 incorporates energy efficiency and emission reduction
- 12 benefits should remain technology neutral. I think you can
- 13 see that Delphi has taken this approach in order to provide
- 14 its customers the broadest range of technologies to meet
- 15 their individual requirements.
- In addition, existing credit options and
- 17 additional flexibility for off-cycle credits provide an
- 18 incentive for the industry to look across the entire
- 19 automobile for solutions.
- Thank you very much, and I'm available
- 21 for any additional input and clarification.
- MR. MEDFORD: Thank you, Dr. Brown.
- 23 Miss Dingeman.
- MS. DINGEMAN: Thank you.
- 25 My name is Christine Dingeman. I live

- 1 in Rochester Hills, Michigan. I am a volunteer for the
- 2 Consumers Union, but I am here on my own behalf today.
- I would like to speak in favor of the
- 4 54.5 miles per gallon target for cars and light trucks by
- 5 2025. I've been waiting for this since 1979 when the oil
- 6 embargo caused all the lines at the gas station. I think
- 7 it's taken way too long to get here.
- 8 I have many reasons to support this
- 9 measure but I am going to share just a few today.
- 10 We must reduce our dependence on oil
- 11 foreign and domestic for the security of our nation. Our
- dependence on fossil fuels weakens our ability to remain an
- independent nation free of imports of foreign nations or
- 14 corporate interests. Increasing fuel efficiency will lead
- 15 to alternative fuels and eventually to cars and trucks that
- don't rely on fossil fuels at all. This will result in a
- 17 more secure nation.
- 18 We must protect our environment. About
- 19 half of the oil we use fuels our cars and trucks. It also
- 20 pollutes our air causing serious health effects and wreaks
- 21 havoc on our environment with oil spills and pipeline leaks.
- 22 As the mother of an asthma suffer and
- 23 the widow of a lung cancer victim, I am very concerned with
- the rise in respiratory diseases over the last 10 to
- 25 20 years. My husband never smoked; he was a marathon

- 1 runner, yet he died of lung cancer. Cleaner air means a
- 2 healthier population and a huge savings for the nation on
- 3 medical costs.
- 4 Third, we must reinvigorate our economy.
- 5 Increasing the fuel efficiency of our cars and light trucks
- 6 will generate jobs not only in the auto industry but in
- 7 alternative fuel cell development and other related
- 8 companies. This will provide consumers with greater vehicle
- 9 choices and significant savings on fuel costs. As we,
- 10 consumers, purchase new more efficient vehicles, we will
- 11 help put people back to work while saving in our own
- 12 pocketbooks.
- This is an important issue to me and I
- am in total support of the 54.5 miles per gallon target.
- 15 I thank you for hearing my comments
- 16 today.
- 17 MR. MEDFORD: Thank you very much.
- Mr. Bienenfeld.
- MR. BIENENFELD: Good afternoon. I'm
- 20 Robert Bienenfeld, Senior Manager of Environment and Energy
- 21 Strategy in the Product Regulatory Office of American Honda
- 22 Motor Company.
- 23 We appreciate the opportunity to share
- 24 with you Honda's thoughts on this joint EPA and NHTSA
- 25 proposal for a national greenhouse gas and fuel economy

- 1 standard for the light-duty vehicles for the model years
- 2 2017 to 2025.
- 3 This NPRM builds upon the important
- 4 foundation established by the seminal greenhouse gas and
- 5 CAFE standards adopted for the '12 to '16 model years.
- 6 These newly proposed standards represent an ambitious,
- 7 challenging, and dramatic set of goals for most of the
- 8 automobile industry.
- 9 Honda has long advocated for fuel
- 10 economy standards, and by inference lower greenhouse gas
- 11 emissions, as well as a single national standard. Over the
- 12 last year and a half, Honda has worked cooperatively with
- 13 NHTSA, EPA, the White House and the California Air Resources
- 14 Board towards the development of these proposed rules. We
- 15 have committed significant resources to provide information
- 16 to these agencies in the development of the rules including
- 17 making our top technology executives available to them.
- 18 These proposed regulations set forth in
- 19 the NPRM when harmonized with the proposed regulations now
- 20 under consideration in California have the potential to
- 21 simplify and rationalize OEM obligations throughout the
- 22 United States. Without these harmonized regulations, there
- is a significant risk that OEMs would face fragmented,
- 24 conflicting and burdensome regulation of fuel economy and
- 25 greenhouse gases. There's a strong likelihood that the

- 1 California regulations, which likely would be adopted by
- 2 additional states, would diverge from the Federal
- 3 Regulations resulting in a patchwork of standards that
- 4 differed in stringency, testing requirements, and
- 5 flexibilities throughout the country.
- 6 Honda has long advocated for technology-
- 7 neutral performance-based standards. These are important
- 8 principles for several reasons. First, technology-neutral
- 9 is important because these standards would be in place for
- 10 more than a dozen years into the future. It is impossible
- 11 to predict the potential advances that would be made over
- 12 this time in each and every technology. Technology-neutral
- 13 standards help to assure that favoritism in 2012 does not
- 14 lead to failure in 2020. And just as importantly, each OEM
- 15 will have different capabilities with respect to each
- technology, and favoritism for a technology necessarily
- 17 results in, intentionally or not, favoritism for an OEM.
- 18 Secondly, performance-based standards
- 19 are the best way to assure that regulations result in the
- 20 greatest advance possible for our social goals.
- 21 It is in keeping with these two
- 22 foundational principles, technology-neutral and performance-
- 23 based standards, that we offer the following suggestions for
- improving the 2017 to 2025 proposal.
- 25 In the 2012 to '16 regulation EPA set

- the CO2 value for the electric portion of the plug-in
- 2 electric vehicles and battery electric vehicles to zero as
- 3 an incentive for OEMs to bring these relatively expensive
- 4 vehicles to market. This incentive was capped both in terms
- of volume and timing. These constraints have been weakened
- 6 by their extension through 2025. Honda believes that this
- 7 policy is misguided and creates significant incorrect
- 8 perceptions about the relative merits of these technologies.
- 9 We agree with most of the environmental community that the
- 10 social benefits must be understood and measured on a
- 11 well-to-wheel basis. It is clear that there are no special
- virtues to be associated with tailpipe greenhouse gas
- emissions if the well-to-tank emissions are high.
- 14 Additionally, without a comprehensive
- well-to-wheel assessment of greenhouse gases, EPA and others
- who rely on EPA's assessments will improperly favor or
- signal preferred technologies rather than providing
- 18 technology-neutral standards.
- 19 We think the solution to quantify
- 20 well-to-wheel greenhouse gas emissions is already within the
- 21 government's grasp. The Department of Energy uses a
- 22 respected, widely accepted model called GREET, and the NGOs,
- 23 academics and the federal government itself use GREET to
- 24 model policy choices when considering light-duty vehicles
- and their impact on the greenhouse gas emissions. We

- 1 believe it makes sense for EPA to adopt DOE's GREET model in
- order to evaluate the well-to-wheel impact on various
- 3 technologies.
- 4 EPA has solicited comments on its
- 5 proposal for advanced technology multipliers as a means to
- 6 facilitate market penetration of the most advanced vehicle
- 7 technologies as rapidly as possible. Honda supports the
- 8 proposed multipliers for EV, PHEV, and fuel cell
- 9 technologies. EPA requested comment on the idea of
- including natural gas vehicles in the technology
- 11 multipliers. Natural gas vehicles can reduce CO2 as much as
- 12 25 percent simply through changing the fuel from gasoline to
- natural gas. In addition, there is a new-found abundance of
- 14 this clean domestic fuel. Together these attributes mean it
- 15 makes sense to include natural gas vehicles in the advanced
- 16 technology multiplier.
- 17 However, EPA intends to use the SAE
- 18 utility factor in calculating the contribution of each fuel
- in climate change in the future bi-fuel vehicle, which Honda
- 20 believes will virtually eliminate any regulatory
- 21 differentiation between a dedicated and the bi-fuel natural
- 22 gas vehicle to detrimental effect. Therefore, Honda
- 23 suggests that EPA instead add dedicated natural gas vehicles
- 24 to the EV and fuel cell electric vehicle group of
- 25 technologies and add bi-fuel natural gas vehicles to the

- 1 PHEV group of technologies with respect to the multiplier.
- 2 EPA and NHTSA propose for the 2017 to
- 3 2025 periods to radically alter the light-duty truck curves
- 4 from their '12 to '16 slopes. The agencies have proposed
- 5 dramatically increased stringency for the smaller footprint
- 6 truck and little or no stringent increases for the larger
- 7 footprint trucks. Honda previously shared data with the
- 8 agencies indicating that if any change were to be made to
- 9 the curves, it was more appropriate to flatten out the
- 10 curves or moderate the increase in stringency for the
- 11 smaller footprint trucks and to increase the stringency for
- 12 the larger trucks. In other words, Honda believes that
- smaller light trucks are being unfairly singled out for
- increases in their standards, especially compared to the
- 15 larger vehicles. This obvious -- this is obviously because
- 16 the smallest trucks will have an annual increase of around 4
- 17 percent while the largest truck will have an annual increase
- of less than 1 percent.
- 19 Subsequent to the publication of the
- NPRM, on December 7th, 2011, the University of Michigan
- 21 issued a study by Whitefoot and Skerlos. Honda agrees with
- 22 their conclusion. And I'm quoting: "In the near term, the
- 23 analysis suggests that the slope of the function determining
- 24 fuel economy targets based on vehicle footprint should be
- 25 flattened for both passenger cars and light trucks and even

- 1 further for light trucks.
- 2 Additionally, the agencies' own data
- 3 show this to be true. Simply looking at the EPA's and
- 4 NHTSA's estimates for the compliance cost differences
- 5 between passenger cars and trucks, both agencies estimate
- 6 lower compliance costs for trucks than passenger cars, and
- 7 this is primarily due to an imbalance in the light truck
- 8 slope and a much more stringent burden being placed on the
- 9 lower sales volumes of the smaller light trucks and little
- 10 to no additional stringency being put on the larger light
- 11 trucks.
- 12 EPA and NHTSA believe that full-sized
- 13 pickup trucks have unique challenges in improving fuel
- 14 economy and GHG emissions due to payload and towing
- 15 requirements. Honda believes that vehicles other than full-
- 16 size pickup trucks should receive similar consideration in
- 17 preserving their utility. SUVs and minivans, for example,
- are often fully loaded by families resulting in expectations
- 19 or coming from expectations of 7- or 8-passenger seating
- 20 capabilities while maintaining payload and towing
- 21 functionality. Similarly situated vehicles ought to be
- 22 treated the same.
- 23 We've singled out these key issues for
- 24 comment while recognizing that there is much to appreciate
- 25 and support in this proposed regulation. The agencies are

- 1 to be commended for the depth and breadth of their research
- 2 and analysis. The addition of a thoughtful and reasonable
- 3 approach to off-cycle credits is exciting to us and we
- 4 believe will result in the introduction of many new and
- 5 innovative technologies.
- The proposed mid-term review seems
- 7 appropriate to us and we believe it will be essential to
- 8 checking progress and making necessary adjustments that
- 9 cannot be foreseen from this early date.
- 10 Thank you very much.
- 11 MR. MEDFORD: Thank you very much.
- 12 Miss Mesnikoff.
- 13 MS. MESNIKOFF: Thank you. I'll try to
- speak as slowly as I can. I tend to speak very fast so if
- 15 I'm going too guickly
- Thank you for the opportunity to testify
- 17 today. I am Ann Mesnikoff. I'm the Director of the Sierra
- 18 Club's Green Transportation Campaign.
- 19 On behalf of Sierra Club's 1.4 million
- 20 members and supporters, Sierra Club applauds EPA and NHTSA
- 21 for proposing to strengthen vehicle efficiency and
- greenhouse gas standards for model year 2017 to 2025 cars
- and light trucks. Together with the standards for 2012 to
- 24 2016 vehicles this Administration has put new cars on the
- 25 path of being twice as efficient as new cars today. By

- 2025, the new vehicles are expected to average 54.5 miles
- 2 per gallon and emit 162 grams per mile of greenhouse gas
- 3 pollution delivering to consumers vehicles down the road
- 4 according to the agencies will average 37 miles per gallon.
- 5 These standards are the biggest single
- 6 step we can take to reduce greenhouse gas emissions and
- 7 tackle our oil addiction. Cars and light trucks drive our
- 8 addiction to oil to consume over 8 million barrels of oil a
- 9 day and CO2 nearly 20 percent of U.S. climate-destructing
- 10 pollution. Our oil addiction drains our economy as much as
- 11 \$1 billion every day costing jobs and threatening our
- 12 national security.
- 13 As we noted in our report to hear on the
- issues of the American Securities Project, much of our oil
- 15 comes from countries at high risk of instability several of
- 16 which work actively against U.S. interests. Recent
- developments with Iran are yet another reminder of this
- 18 fact.
- The progress EPA and NHTSA have made in
- 20 tackling our oil addiction and slashing pollution through
- 21 setting standards together has been breathtaking after
- decades of inaction on vehicle standards. Over the past 18
- 23 months the Administration has worked together with the
- 24 California State officials to engage the public, the auto
- 25 industry and auto workers as well as the environmental

- 1 community and others.
- 2 The process has resulted in the proposal
- 3 we are commenting on today. Sierra Club with other groups
- 4 formed a coalition so that we could educate the public, our
- 5 members, and decision-makers of the importance of
- 6 strengthening vehicle standards. In Washington the
- 7 coalition was confident that the technology would be
- 8 available to transform new cars by 2025. The
- 9 Administration's proposal makes enormous progress towards
- 10 that goal and the events that will deliver our future are
- 11 huge.
- 12 By 2030 we will be using 1.5 million
- barrels less oil every day due to these standards.
- 14 Consumers will save more than \$3,500 at the pump even after
- 15 paying for the fuel-saving technology. Savings will be even
- 16 greater if gas prices rise above current levels. According
- 17 to DOT and the EPA these standards will save our economy and
- 18 consumers more than 311 to 421 billion dollars. These
- 19 hundreds of billions of dollars will translate into new
- 20 jobs.
- 21 The report from Ceres estimates that
- nearly half a million jobs may be added to the economy
- 23 between jobs and the auto industry.
- 24 Finally these standards will keep 280
- 25 million metric tons of carbon pollution out of the

- 1 atmosphere. That's the equivalent of shuttering 72 coal-
- 2 fired power plants for one year.
- 3 Americans want choices in the vehicle
- 4 market but they do not want to guzzle gas nor do they want
- 5 to waste billions at the pump. Americans consistently
- 6 support higher standards and are willing to pay more to save
- 7 oil. We can now be confident that technology once used to
- 8 make vehicles more powerful will be used to improve fuel
- 9 efficiency from improving the internal combustion engine,
- 10 better transmissions, high strength lightweight materials,
- and to hybrid and plug-in vehicles.
- 12 The EPA and NHTSA both note the proposed
- standards preserve consumer choice. The fact is that these
- 14 standards enhance consumer choice. Consumers today already
- 15 enjoy a full range of more efficient and less polluting
- vehicles. The new analysis shows that new vehicles
- 17 purchased last year averaged a half mile more per gallon
- than those in 2010, an improvement that saved \$722 million
- 19 at the gas pump where consumers bought 214 fewer billion
- 20 gallons of gas than the year earlier.
- 21 This year Automotive News included in
- 22 its top ten new things in 2011 Ford's EcoBoost engine for
- 23 its F-150 pickup truck, the top selling vehicle in the
- 24 country. The Automotive News wrote a year ago, "Who would
- 25 have guessed that Ford's F-150 pickup buyers would prefer an

- 1 EcoBoost V-6 to a traditional V-8?" This shows that the
- 2 technology exists and has been put to work to improve the
- 3 efficiency and reduce emissions from even the largest pickup
- 4 trucks and the consumers will choose to buy better mileage.
- 5 The new proposed standards will continue
- 6 to improve technologies and push them into the market. They
- 7 will unleash innovation and create jobs. There's already
- 8 been a dramatic shift among automakers from being a "can't
- 9 do it" street to one that is innovating and touting change.
- 10 Thirteen automakers are publicly supporting these proposed
- 11 standards.
- 12 There are several issues we will comment
- on in depth in the docket including the issue of the zero
- 14 emissions electric vehicles but also the need to address the
- 15 outdated testing methods used for measuring vehicle
- 16 efficiency standards, which in part result in the
- discrepancy between standards as they are proposed and what
- 18 consumers will see in their dealership lots.
- 19 There is no doubt with these standards
- 20 that these are the biggest single steps we can take to move
- 21 Americans beyond oil and curb carbon pollution. However,
- 22 more needs to be done. Even with more efficient vehicle
- 23 standards, we must increase our transportation choices to
- 24 reduce how much people drive and reduce the carbon content
- of the fuels we use. When it comes to vehicles, however,

- 1 President Obama and EPA and NHTSA have quaranteed progress
- for the next 13 years. We urge EPA and DOT to finalize
- 3 strong standards in July.
- 4 Thank you very much.
- 5 MR. MEDFORD: Thank you.
- Ms. Woodard.
- 7 MS. WOODARD: Thank you. Good
- 8 afternoon.
- 9 My name is Tracy Woodard and I am
- 10 Director of Government Affairs at Nissan North American. My
- 11 responsibilities include ensuring that Nissan is positioned
- in the U.S. market to sell cars Americans want to buy and to
- make sure we do so in a way that promotes safety and a
- 14 cleaner environment. I am pleased to have the opportunity
- 15 to testify here today and to offer Nissan's support for the
- 16 national program and the current proposal.
- 17 As you know, Nissan is a global
- automotive manufacturer offering a full line of light-duty
- 19 motor vehicles in the United States and throughout the
- world. Nissan currently has over 11,000 employees in the
- 21 United States, as well as three domestic production plants
- 22 with an annual production capacity of nearly 1 million
- 23 vehicles. Nissan supports the national program and remains
- 24 committed to the regulatory program as set forth in the
- 25 notices of intent and the proposed rule.

1	Nissan expects its fleet during the
2	model years covered by this rulemaking to include a diverse
3	array of technologies and powertrains in order to meet the
4	aggressive proposed targets. Nissan remains dedicated to
5	continued improvements in gasoline-powered vehicles, safe
6	mass reductions, and advances in traditional hybrid
7	technology.
8	Nissan has also led the way in investing
9	in zero emissions technology for the mass market. We have
10	been working with governments on every level to prepare
11	infrastructure and in supporting the government programs to
12	ensure the long-term viability of low and zero emission
13	vehicles.
14	Nissan's commitment to the proposed rule
15	is premised on a robust and comprehensive mid-term
16	evaluation for the model years 2022 to 2025. The standards
17	are extremely aggressive and extend beyond current
18	development planning periods. The agencies have assumed a
19	significant amount of technology advancement, consumer
20	acceptance, and fleet shift during these model years
21	covered.
22	The ability of auto manufacturers to
23	meet these standards will depend not only on our commitment
24	to incorporate additional and transformational technologies

but also on factors external to vehicle design and

- 1 engineering. The mid-term evaluation is essential to
- 2 ensuring that the standards remain technologically and
- 3 economically feasible during those time periods.
- 4 The proposal also represents a
- 5 significant leap forward in advancing more environmentally
- 6 friendly vehicles and zero emissions transportation.
- 7 As a leader in electric powertrains, we
- 8 brought to market the all-electric Nissan Leaf in December
- 9 of 2010. Already, we have sold more than 9,800 Nissan Leafs
- in the U.S. and about 20,000 around the world. The Nissan
- 11 Leaf is a full service family sedan designed for range,
- 12 functionality, and safety and has received a combined miles
- 13 per gallon equivalent rating of 99. The Nissan Leaf is a
- top safety pick by the Insurance Institute for Highway
- 15 Safety and the first all-electric car to earn an overall
- 16 five star safety rating from NHTSA. The battery contains
- 17 air-cooled stacked laminated battery cells and is located
- 18 below the front seats and rear foot space, keeping the
- 19 center of gravity as low as possible and increasing
- 20 structural rigidity compared to a traditional 5-door
- 21 hatchback.
- 22 In the near future Nissan plans to
- 23 introduce electric vehicles in other market segments
- 24 including the luxury market.
- 25 Nissan is currently building a battery

- 1 production facility plant in Tennessee which we expect to
- 2 complete in late 2012. When the plant is at its full
- 3 capacity, Nissan will be capable of domestic production of
- 4 200,000 advanced technology batteries annually. The battery
- 5 plant will be located adjacent to Nissan's vehicle assembly
- 6 plant in Smyrna which is being retooled to accommodate
- 7 production of up to 150,000 electric cars annually.
- 8 Combined vehicle and battery production at these facilities
- 9 will create up to 1300 U.S. manufacturing jobs when the
- 10 plants are operating at full capacity.
- 11 While Nissan has invested heavily in
- 12 batteries and electrical powertrain technology, optimal
- 13 environmental benefits as a result of zero emission electric
- vehicles requires sustained industry-wide investment in this
- 15 technology. This, in turn, depends largely on the extent to
- which infrastructure is developed and consumers adopt these
- 17 technologies.
- 18 The production credits in the proposed
- rule are essential to incentivizing continued manufacturer
- investment in these advanced technologies, increasing their
- 21 rate of adoption and the rate by which the United States
- 22 will realize a zero emission society.
- 23 We will provide more extensive written
- 24 comments to support the agencies' efforts to promote
- 25 transformational change to enable advanced technology like

- 1 battery electrical vehicles to gain a strong foothold in the
- 2 new vehicle market.
- We also understand that certain groups
- 4 have raised concerns about upstream emissions from
- 5 energy-producing facilities that power the grids that charge
- 6 the vast range of consumer goods including electric
- 7 vehicles. The solution to the issue of emissions from
- 8 energy production facilities is not to discourage the
- 9 proliferation of electric vehicles or other consumer goods
- 10 by devaluing their contribution to a cleaner environment.
- 11 Discouraging that fleet by diminishing the way in which the
- 12 environmental benefits are presented to the public will only
- 13 serve to reduce the market for electric-powered vehicles,
- 14 delay further serious advancements in low emissions
- 15 electricity and perpetuate the domination of
- 16 emission-producing internal combustion engines. We support
- 17 the continued focus on tailpipe emissions in this program.
- 18 While we have no control over the energy production
- 19 facilities or their emissions, we also support public and
- 20 private efforts to move the power supply towards renewable
- 21 energy sources.
- The national program represents a
- 23 significant step forward in reducing greenhouse gas
- 24 emissions and fuel consumption through a unified federal and
- 25 state regulatory structure. We appreciate the efforts of

- 1 federal agencies and California in providing a regulatory
- 2 program that allows for one product pathway to compliance
- 3 and that includes incentives to promote longer term public
- 4 policy.
- 5 We look forward to continuing to work
- 6 with you towards a final regulation and implementation of
- 7 the program.
- 8 Thanks.
- 9 MR. MEDFORD: Thank you.
- 10 I think -- is it Mr. Sokkay?
- 11 MR. SOKKARY: Sokkary.
- MR. MEDFORD: Sokkary.
- MR. SOKKARY: Yes. Thank you
- 14 Mr. Chairman. Good afternoon to members of the panel. I do
- appreciate this opportunity to speak before you today.
- The intent of my comments today are to
- support the adoption of 54.5 miles per gallon fuel
- 18 efficiency standards to give my perspective on how this is
- 19 critical to our national security. I base my remarks on my
- 20 11-year career as a Marine Corps officer and being deployed
- 21 to Afghanistan once, and my policy knowledge of the greater
- 22 Middle East developed through my travels there. I must also
- 23 point out that I am here today speaking for myself and not
- 24 the Department of Defense or the United States Marine Corps.
- 25 All here know the shocking numbers,

- 1 \$1 billion a day overseas to pay for our oil. It is also
- 2 common knowledge that much of this money goes to governments
- 3 and organizations that do not support American interests or
- 4 intentions. Our enemies benefit both from the money that
- 5 can be funneled to forces in conflict with our troops and by
- 6 giving the enemy a strategy target that will be able to
- 7 affect U.S. actions.
- 8 The clearest evidence I have of this
- 9 latter point is that my attack helicopter squadron was
- 10 tasked with providing security for Iraqi oil pipelines while
- 11 I was in Iraq. This was an additional task once we were in
- 12 country and it came about because the insurgents discovered
- 13 that one of the ways they could have a great effect on the
- security and stability of the situation was to attack the
- 15 pipelines and disrupt the flow of oil that was critical to
- the Iraqi government and American forces.
- 17 I should also point out that our
- 18 services with attack helicopters were in high demand, and
- 19 while this new task did not sacrifice our critical support
- to U.S. forces, it was one more task and a litany of
- 21 requirements that kept us very busy and stretched thin.
- I believe the reason the pipelines were
- 23 considered important enough for us to protect was the
- 24 critical need for oil. This need was driven by the
- 25 requirements in country and our unquenchable thirst for it

- 1 at home. If the free flow of oil is not as critical to us
- 2 or our allies we will not have to dedicate assets such as
- 3 the aircraft pilots from my squadron to protect such
- 4 infrastructure, and the enemy will not be able to target
- 5 such things in order to harm our strategic interests.
- 6 The way to lessen this critical need of
- 7 oil is to decrease the demand. Because almost half the oil
- 8 we use goes to fueling our cars and trucks, one of the most
- 9 effective ways to decrease the demand is to improve the
- 10 efficiencies of these cars and trucks. The new standards of
- 11 54.5 miles per gallon will go a long ways towards achieving
- 12 this efficiency.
- 13 I would like to close with a general
- 14 comment on standards. As a Marine Corps officer I had the
- 15 privilege of leading some of the best men and women in the
- 16 world. Given their training, dedication and professionalism
- I knew that anything I tasked them with they could
- 18 accomplish. This was a testament to them as individuals and
- 19 their families for making them the people they were, but
- 20 also critically it was because the Marine Corps set high
- 21 standards for all Marines to follow and then hold every
- 22 Marine to those standards.
- I believe there is analogy to the
- 24 current debate on fuel economy standards. Many see the
- 25 standards of 54.5 as a high standard to meet, but by

- 1 creating this high standard, you can leverage the training,
- dedication and professionalism of U.S. auto industry workers
- and engineers. I have no doubt we will be able to make
- 4 fleets of cars that are more efficient and will continue to
- 5 rival the best in the world.
- 6 Thank you.
- 7 MR. MEDFORD: Mr. Sokkary, thank you for
- 8 your testimony. Also thank you for your service to our
- 9 country which is much appreciated.
- Mr. Honeyman.
- 11 MR. HONEYMAN: Thank you for allowing me
- 12 to speak.
- I am Bob Honeyman. I'm a local guy. I
- grew up in Detroit, spent 25 years in Ann Arbor, got
- 15 diverted to South Florida for a couple of decades but now
- 16 I'm back home. The cold is much better.
- 17 I'm not employed by Consumers Union, it
- 18 may be indicated in your notes. I am just a guy. I was
- 19 asked by Consumers Union to speak to the panel.
- So, you know, one of my early exposures
- 21 to EPA was down in South Florida. When I moved down there,
- 22 I was shocked that every year in order to renew my tags, I
- 23 had to go to a facility and have a tailpipe inspection. And
- 24 I guess it was because the air quality in Miami and South
- 25 Florida was less than desirable.

1 But about a dozen years ago, I was 2 looking, you know, for the tag application and the piece 3 about the tailpipe inspection was missing. So I called to find out and I was told that because air quality had 5 improved enough, the testing requirement was gone, it was no longer required, which, you know, said several things: one, 6 7 it says that regulation does work, and it says also that not 8 all federal programs have lives of their own. They do end. 9 There's a myth that unregulated free markets are the most efficient in the world. The problem 10 11 with that is that, you know, no one looks at the hidden costs, you know. We know about scrubbers on coal-fired 12 13 plants and we know about the emission standards that were set up by EPA for the auto industry. You know, those 14 essentially actualized the hidden costs, made them up front 15 16 costs, made them cheaper, and forced the consumer to bear the burden which is where, you know, those costs should be 17 18 felt. 19 I'll give you Fukushima as an example of 20 hidden costs that, you know, had the right regulatory environment been in place, Japan and the surrounding area 21 22 wouldn't have to deal with that calamity. 23 One of the things that struck me in preparing for this was that we all think the United States 24 25 is the most innovative country of creators, you know,

- there's no problem that we can't solve. Yet, I found a
- 2 paper that was presented to -- a background paper presented
- 3 to the UN-sponsored commission on sustainable development a
- 4 year ago written by Ann Early and Green Wieskal.
- 5 They compared fleet efficiency across
- 6 different countries, and while the U.S. showed 25 miles per
- 7 gallon in 2008, I was surprised, China is 40 percent better,
- 8 and Europe and Japan are 80 percent better. So the modestly
- 9 regulated auto industry in this country failed to come up
- 10 with the innovations that created fuel efficiency that the
- 11 rest of the world is able to benefit from.
- 12 So in my mind, it is incumbent upon us,
- upon the EPA to create the standards that create the
- 14 requirements that the auto industry clearly can live up to
- 15 because it's being done elsewhere in the world.
- 16 The hidden costs to 25 miles per gallon,
- 17 the domestic fleet consumed something like 3.2 trillion
- 18 barrels of oil in 2008. We imported 4.2 trillion barrels in
- 19 2008, and we added nearly \$400 billion to our trade deficit.
- Nearly half the trade deficit was because of oil that was
- 21 imported.
- You know, everything being equal,
- 23 ignoring population growth, you know, if we held up the
- 24 efficiency of the fleet, then my calculations, for what it's
- 25 worth, we'd save approximately a million and a half to two

- 1 -- I'm sorry, one and a half trillion to two trillion
- 2 barrels of oil a day, which is, you know, in the
- 3 neighborhood of \$150 billion of imports that we no longer
- 4 have to fund with currency outflow.
- 5 You know, to ignore the fact that the
- 6 biggest exports in this country over the last 25-30 years
- 7 have been jobs, the currency that's sitting out there is
- 8 just immense. It's several trillion dollars, maybe more,
- 9 sitting in, you know, Asia and other places.
- 10 Fortunately, we have, you know, annual
- 11 budget deficits so that our largest export is treasuries,
- 12 otherwise we might have a serious problem with the daggers
- 13 and all. But clearly it's something that we have to handle.
- 14 Even reducing the trade deficit by 20 percent, which is what
- 15 I figured roughly the --
- MR. MEDFORD: Can I ask you in the
- interest of time to wrap it up.
- 18 MR. HONEYMAN: Sure. I'm just about
- 19 done.
- 20 That still saves a lot of currency that
- 21 is going offshore.
- 22 And, finally, the regulation makes
- 23 capitalism work better. And I look at the EPA as clear
- evidence of how it works and how it works well.
- Thank you.

1	MR. MEDFORD: Thank you very much.
2	And Mr. Williams.
3	MR. WILLIAMS: Thank you.
4	My name is Al Williams. I am Climate
5	Equity Fellow for the Detroit NAACP.
6	First I would like to say thank you, and
7	am extremely elated to be here today to present our comments
8	on the proposed vehicle standards on behalf of the Detroit
9	NAACP and all the NAACP branches in the State of Michigan.
10	We are fully engulfed in an environment
11	of social justice issues and we see environmental justice as
12	a social justice issue. So when we heard of the Obama
13	Administration and the proposed landmark fuel economy carbon
14	pollution standards that would double car and light truck
15	fuel economy by 2025, we were ecstatic, absolutely ecstatic
16	and are doing all that we can to make sure that the
17	community knows, African-Americans, fellow Detroiters
18	throughout Metropolitan Detroit understands the importance
19	of the standards.
20	You know, the U.S. economy or the
21	U.S. has been a world leader in a number of different
22	things, but our policies on transportation and fuel
23	efficiency and greenhouse emissions have been to say the
24	least one of the worst across the world.

Our fuel taxes are amongst the lowest in

- the world and we greatly lag behind Europe and Japan when it
- 2 comes to setting effective efficiency standards. The
- 3 2012-2016 rule took a giant step towards catching up to the
- 4 new proposed rule for 2017 to 2025. And it will extend the
- 5 progress and set longer term requirements.
- 6 The consistent long-term signals will
- 7 help manufacturers plan for ongoing technology developments;
- 8 and, once again, we applaud the EPA, NHTSA as well as DOT as
- 9 well as California and the Obama Administration for taking
- 10 another large step along a long road to sustainable
- 11 transportation systems.
- 12 So, for us, you know, this is about
- 13 countenance. For the NAACP these proposed standards will
- 14 help families, families with passenger cars, light trucks,
- 15 SUVs. It will help them save money, put more money back in
- 16 your pocket. To extend the standards enacted last year that
- 17 cover vehicles sold in 2012-2016 will raise the average fuel
- economy by 2016, but the first ever fuel-efficiency
- 19 standards for medium- and heavy-duty trucks from 2014 to
- 20 2018 will also be enacted this year. So, the common sense
- 21 standards that are represented here will be our largest
- 22 reduction in oil consumption in the history of the United
- 23 States of America.
- 24 This means cars, light trucks will go
- 25 twice as far on a gallon of gas, and families and small

- 1 businesses will spend half as much on gas to get to where
- they need to go on a daily basis, which is absolutely
- 3 important.
- 4 These standards mean reducing our
- 5 dependence on foreign oil and it also, as was said earlier,
- 6 will strengthen national security. In 2010 the United
- 7 States imported more than 4.3 barrels of oil -- 4.3 billion
- 8 barrels of oil sending billions and billions of dollars to
- 9 other nations where our economy suffered immensely and
- 10 struggled.
- 11 These proposed standards will reduce oil
- 12 consumption, greenhouse gas emissions, and air pollution.
- 13 They will reduce dependence on oil by 4 billion barrels
- 14 which is very, very significant, and it will slash 2 billion
- metric tons on greenhouse gas emissions.
- 16 As I said earlier, the average American
- 17 household spends approximately \$2,000 per year on gasoline.
- I don't know if I have \$2,000 a year to spend on gasoline
- anymore, but the daily gasoline costs in the United States
- is astronomical. And adopting these standards of fuel
- 21 efficiency and emissions performance, to take it to 54.5
- 22 miles per gallon by 2025 will save me, my mom, my family and
- 23 consumers across the country about \$6,000 a year, maybe
- 24 more, which is very significant, and when it can go to so
- 25 many other places to do so many other positive things other

- 1 than going to a foreign oil distributor.
- 2 Promoting fuel efficiency will create
- 3 high quality jobs right here in the United States. As said
- 4 earlier, one of the biggest things they outsourced in the
- 5 past 20 years has been jobs, and the City of Detroit has
- 6 felt it more than anybody else, I would say. Better fuel
- 7 economy standards will improve our competitiveness and
- 8 advance vehicle technologies and stimulate innovation,
- 9 economic progress and, most importantly, energy
- 10 independence.
- So my hat goes off to the Obama
- 12 Administration, the EPA, NHTSA, DOT for taking these very,
- very important steps. And having these hearings here today
- during the auto show and to have people like President Bob
- 15 King and UAW sign on in support of this is very important,
- 16 very important to not only the political talking hands of
- the world but it's even more important to my grandmother who
- 18 stays on Dexter and Davison and still drives a car from the
- 19 1980s and has spent so much of her, I don't know, constant
- income that comes the same amount every month on gas that's
- 21 fluctuating almost every day now to help her save money to
- 22 put towards my son's college career or to put towards the
- 23 business on her street to stay in business. I mean, that's
- 24 absolutely important to functioning for cities like Detroit
- who are not functioning as well as they can.

- I want to bring this back to laymen's
- 2 terms. These proposed standards will save the wildlife and
- 3 the environment. The standards will cut 2 billion tons of
- 4 carbon pollution, which helps our wildlife. It will reduce
- our need for oil, like I said before, eliminating the
- 6 consumption of 4 billion barrels of oil. And it will save
- 7 consumers money, it will save consumers money, put more
- 8 money back into our pockets so we can help the economy on
- 9 our own.
- 10 And last but not least, the most
- 11 important thing, which transcends through lives, I believe,
- is it creates jobs. It will create jobs. I said this,
- 13 NAACP has for years, if you want to reduce crime, create
- jobs. The EPA is doing that and helping other doing that.
- 15 And I applaud you for that.
- 16 And, then, last but not least, our
- 17 historic addiction to dirty oil has been absolutely
- 18 astronomical. And if you ask me, it's taken its toll on a
- 19 number of different occasions and really has put the United
- 20 States at the bottom of the barrel on a number of different
- 21 levels. 3.4 billion barrels of oil a day. Three times as
- 22 much oil as would be produced from the controversial
- 23 Keystone pipeline, which means we will save much more oil
- 24 than that pipeline from Canada to Texas will produce. And
- then, you know, we're cutting our intake of oil.

- 1 So I applaud the EPA; I applaud NHTSA.
- NAACP stands behind this. There's community of colors
- 3 throughout the City of Detroit and Metropolitan Detroit.
- We support you. We've been to Chicago in support of this.
- 5 We will go to Philadelphia in support of this. We will
- 6 stand up in support of this, and we applaud the EPA, the
- 7 Obama Administration as well as all the automakers who have
- 8 partnered up in support of this.
- 9 Thank you very much.
- 10 MR. MEDFORD: Thank you very much.
- 11 Any questions from our colleagues?
- 12 Listen, we'd like to thank each and
- 13 every one of for your testimony today. We're going to take
- 14 a 30-minute break now and come back with Panel 4 in 30
- minutes, so that will be 1:50 sharp.
- 16 (A recess was taken from.
- 1; 20 p.m. to 1:58 p.m.)
- 18 MS. OGE: So we will start the afternoon
- 19 with our next panel: James Jacobs, Brenda and Gil Archambo,
- 20 Pamela Ortner, Reverend Peggy Garrigues, Julie Lyons
- 21 Bricker, Mr. Timothy Schacht, Mr. Tom Zerafa, and Miss Robin
- 22 Eckstein.
- 23 If you could please take a seat,
- 24 indicate the names in the signs in front of you, and I would
- ask you to speak slowly, not too slowly, but slowly enough

- 1 so your comments can be recorded.
- 2 So we will start with Mr. Jacobs. I
- 3 understand that he has another appointment and he needs to
- 4 leave after his testimony.
- 5 MR. JACOBS: Thank you very much. Thank
- 6 you for indulging me.
- 7 Thank you for the opportunity to testify
- 8 before this public hearing. My name is Jim Jacobs. I am
- 9 the President of Macomb Community College, which is located
- in Southeast Michigan. Macomb Community College provides
- 11 learning experiences to more than 59,000 students annually
- and it is the largest grantor of associate degrees in the
- 13 State of Michigan.
- 14 By virtue of our location and long
- 15 history of partnership with the auto industry, which is
- 16 heavily concentrated here, we are uniquely able to comment
- on the education and training issues affecting the auto
- industry in consequence of the 2017 and later model year
- 19 light-duty vehicle greenhouse gas emissions and corporate
- 20 average fuel economy standards.
- 21 The auto industry has been undergoing
- 22 profound radical technological and business changes over the
- 23 years. The production of clean, fuel-efficient vehicles and
- 24 their key components is now a major driver of industry
- 25 growth and job opportunities. According to the study by the

- 1 UAW and the National Wildlife Federation and the National
- 2 Resources Defense Council, there are now more than 150,000
- 3 workers nationwide working on the production of
- 4 fuel-efficient vehicles. Adding technology to these
- 5 vehicles to enhance fuel efficiency and reduce emissions
- 6 creates jobs, because new work is needed to research, design
- 7 and manufacture and install these devices on trucks and
- 8 cars.
- 9 The recovering auto industry as a whole
- 10 has added 100,000 jobs last year and is on track to add
- another 60,000 jobs this year. Many of these jobs will be
- 12 in the area of advanced internal combustion engines, hybrid
- 13 powertrains and electric vehicles, and many of them are
- 14 located here in Southeast Michigan.
- 15 Our college is providing the training to
- 16 these workers who will need to build the clean, fuel-
- 17 efficient cars of the future. For our region and the United
- 18 States auto industry the future is now.
- 19 We collaborate with three sets of
- 20 partners as we redefine and develop major curriculum changes
- 21 in response to changing the automotive technology. The
- 22 first and foremost is industry itself. We maintain strong
- 23 linkages to many companies and industry associations for
- 24 expressed purposes of anticipating and defining work force
- 25 means. One particularly strong example is the Michigan

- 1 Academy for Green Mobility Alliance Or MAGMA. It's a
- 2 Michigan regional skills alliance which includes members of
- 3 all the major automobile manufacturers in Michigan -
- 4 Chrysler, Ford, GM and Nissan and Toyota; major automobile
- 5 suppliers like Delphi, Denso, Eaton and many others, battery
- 6 manufacturers including LG Chemical, A123 as well as major
- 7 industry associations and educational institutions. This
- 8 agency has taken a lead in redefining and endorsing courses
- 9 in curriculum in advanced automotive technology.
- 10 The second set of collaborators are
- 11 government agencies, primarily in the form of funding for
- 12 grants in developing and disseminating curricula. One
- example of such grants is the Department of Energy's
- 14 Electric Drive Vehicle Grant to educate and prepare the
- 15 technical and scientific workforce for the emerging electric
- 16 vehicle industry.
- 17 Another is the National Science
- 18 Foundation Grant to fund a new Center for Advanced
- 19 Automotive Technology located at Macomb Community College.
- This advanced technology education center is one of the 41
- 21 national centers sponsored by NSF and will be central for
- development and dissemination of advanced automotive
- 23 technology programs in content not only to Michigan but
- 24 nationally.
- 25 Our third set of partners are other

- 1 educational institutions. Through our educational
- 2 connections and innovations we work with the universities
- and community colleges in Michigan and nationwide to develop
- 4 and promote the education of technicians and engineers in
- 5 the technologies that will enable dramatic fuel improvement
- for the U.S. fleet and will assure technological leadership
- 7 of the domestic industry. An example of our educational
- 8 institution collaboration is the Automotive Communities
- 9 Consortium, a national collaborative network of 18 community
- 10 colleges led by Macomb which is designed to facilitate the
- 11 college-to-college institutional peer learning environment
- 12 for sharing best practices in education in community.
- 13 As of today, Macomb Community College
- 14 has a hybrid electric vehicle curriculum, an alternative
- 15 fuel certification and a renewable energy certificate.
- 16 These lead to Associate Degrees in Automotive Technology,
- 17 Electronic Engineering, and Automated Systems and are
- designed to lead to a wide range of jobs in emerging fields
- 19 and curricula in the 4-year degree programs.
- 20 Macomb Community College offers five
- 21 exclusive courses: Hybrid Electric Vehicle Fundamentals,
- 22 Hybrid Electric Vehicle Power Management, Introduction to
- 23 Electric Vehicle Propulsion Systems, Motors and Control for
- 24 Electrical Vehicles and Institutional Industrial
- 25 Applications, Sensors and Control Systems.

Т	Macomb Community College also offers
2	Advanced Energy Storage for Mobile Applications, Electric
3	Line and Smart Grid Design, Principles of Hydrogen Fuel
4	Technology, a Capstone Electric Vehicle Build program.
5	These courses are designed to be transferred to Wayne State
6	University's Bachelor of Science and Electric Transportation
7	Program which is an excellent example of how partnering can
8	lead to programs that cleanly articulate with one another.
9	This coordination benefits both industry and their
10	requirements for appropriate skilled workforce and students
11	who wish to advance their education most efficiently.
12	Macomb and other educational providers
13	fully recognize the importance of the technological
14	volatility in today's automobile industry. We're committed
15	to responding quickly to the needs of this industry and of
16	the communities we serve so that our students will continue
17	to enter the workforce fully prepared to contribute to the
18	renovation of the U.S. auto industry.
19	We look forward to working with our
20	partners in industry, education, and the government to
21	continue the education and training of the future work force
22	in the new automobile industry that will be created with the
23	standards that you've proposed.
24	Thank you very much.
25	MS. OGE: Thank you.

1	Ms. Pamela Ortner.
2	Good afternoon.
3	MS. ORTNER: Good afternoon.
4	My name is Pamela Ortner and I am a
5	Michigan Nurse Advocate working with Healthcare Without
6	Harm. Healthcare Without Harm is an international coalition
7	of more than 430 organizations in 52 countries working to
8	transform the healthcare sector worldwide without
9	compromising patient care so that it is ecologically
10	sustainable and no longer a source of harm to public health
11	and the environment. I appreciate this opportunity to
12	comment on the proposed standards and EPA's and NHTSA
13	efforts to protect the public's health through the
14	implementation of this rule.
15	My father if he was still living would
16	be 107 years old today. He worked most of his working life
17	at the Ford Motor Company Highland Park Plant. He was the
18	cost analyst for the operation. I became aware at an early
19	age of the impact of the auto industry and it was an
20	important part of my life and my community. I grew up in
21	Detroit.
22	In 1988, I became involved in a campaign
23	to close an incinerator in my community and I began to
24	become aware of public health impacts from different types
25	of industry. It was common sense to me that this was a

- 1 nurse's role.
- 2 It made sense to become involved in the
- 3 effort to shutter the incinerator, and I have since been
- 4 interested in supporting the work of the Environmental
- 5 Protection Agency, especially as it relates to the auto
- 6 industry.
- 7 In 1995 the Institute of Medicine report
- 8 on Nursing Health in the Environment validated my work and
- 9 the work of nurses to be involved in environmental health
- 10 issues. The report called for an integration and
- 11 enhancement of environmental health in nursing education
- 12 practice and in research. According to the IOM, if
- 13 environmental health hazards and health effects are to be
- 14 recognized and dealt with effectively it is of fundamental
- 15 importance that all healthcare providers have a clear
- 16 understanding of the association between environment and
- 17 health.
- I'm attending the hearing today to urge
- 19 the EPA and President Obama to keep these proposed standards
- 20 as strong as they are. We recognize how important they are
- 21 for so many reasons. They're going to save our communities
- 22 and our individuals money at the pump which will strengthen
- our economy, clean up our air, create jobs, increase our
- 24 independence on oil and combat climate disruption. Harmful
- 25 air emissions will be reduced by 297 million metric tons by

- the year 2030 if these standards are put into place.
- 2 The question about climate science and
- 3 climate change, when the news reports it, the news
- 4 reporting for saying there is climate change is 50 percent,
- 5 and the news reporting for scientists' reports that say that
- 6 it is not, in fact, happening is 50 percent. But, actually,
- 7 local public health departments around the country now are
- 8 putting programs into place to protect our population from
- 9 climate change.
- 10 Human health effects of climate change
- 11 can cause an increase -- will cause an increase in
- 12 heat-related mortality in cities, increase in allergins,
- increase in rates of water and foodborne diseases, increase
- 14 in vector-borne diseases such as malaria, cholera, Dengue
- and plague and increase in skin temperature.
- 16 Ground level ozone as we know causes
- 17 health problems because it irritates the mucous membranes,
- 18 damages lung tissue, reduces lung function and sensitizes
- 19 the lung to other irritants.
- 20 Particulate matter, which is part of the
- 21 emissions, can damage lung issue, aggravate respiratory and
- 22 cardiovascular diseases and can alter the body's defense
- 23 systems against foreign materials, can cause cancer and
- 24 premature death.
- 25 Sulfur dioxide is -- the immediate

- 1 effect is bronchial restriction, and people with asthma are
- 2 more sensitive to the effects of SO2; probably likely
- 3 because of preexisting inflammation that is associated with
- 4 asthma.
- 5 Nitrogen dioxide can irritate the lungs
- 6 and mucous membranes, aggravate asthma, cause bronchitis and
- 7 pneumonia and lower resistance to respiratory infection.
- 8 But those who are most vulnerable will
- 9 be most affected. Our bodies are becoming alarming
- 10 reflections of the toxic chemicals in the air. Pregnant
- women exposed to air pollution are more likely to have
- smaller babies and give birth prematurely. Studies have
- found that exposure to air pollution during pregnancy
- 14 significantly reduces fetus size, and that women who live in
- 15 regions with high carbon monoxide levels or fine particulate
- 16 pollution were approximately 10 to 25 percent more likely to
- have a preterm baby than other women, especially if they
- 18 breathe polluted air during the first trimester or the last
- 19 month of pregnancy.
- 20 Seniors exposed to air pollution are
- 21 more likely hospitalized for pneumonia or health problems.
- There are over 1.1 million senior citizens in the United
- 23 States. Studies have found that seniors who are exposed to
- 24 NOx and fine particulate matter were more than twice likely
- 25 to be as likely to be hospitalized for pneumonia, which is a

- 1 leading cause of illness and death in the elderly.
- In addition, exposure to carbon monoxide
- 3 increased the likelihood that seniors with heart problems
- 4 would be hospitalized.
- I just want to talk about briefly asthma
- 6 and the incidence of asthma in Michigan.
- 7 There are over 744,000 adults living
- 8 with asthma in Michigan and over 225,000 children. The
- 9 total estimated incremental cost, direct costs of asthma and
- 10 that's emergency room visits and pediatric hospital stays
- 11 currently is over \$1 billion in the State of Michigan.
- 12 Much like lead exposure, there is little
- 13 scientific debate about the harmful effects of climate
- 14 change and these pollutants from car emissions. The
- 15 proposed rule will save lives, protect the health of
- 16 millions and bring about an action that is long overdue.
- 17 There are many of us in Detroit that have been waiting for
- 18 this to happen for a long time. We can and must act to make
- 19 sure that we protect the most vulnerable among us.
- Thank you.
- MS. OGE: Thank you.
- 22 Now I'm going to call on Reverend Peggy
- 23 Garrigues.
- 24 Good afternoon.
- 25 REV. GARRIGUES: Yes. I'm Reverend

- 1 Peggy Garrigues from the Clawson United Methodist Church. I
- 2 speak as a person of faith and a religious leader.
- When my son Isaac was five years old we
- 4 had to twice take him to the emergency room for asthma
- 5 attacks because of air pollutants. We had good insurance,
- 6 so he's doing fine now, but many who will be impacted by the
- 7 health issues related to air pollution cannot afford good
- 8 insurance.
- 9 My Christian faith tells me to care for
- the poor, the orphan, the widow, the least of these.
- 11 Reducing the pollution we put in the air is a way of caring
- 12 for the most vulnerable that we are called to care for as
- 13 people of faith.
- 14 In 2006 I took a group of college
- 15 students to New Orleans to help clean up after Hurricane
- 16 Katrina. We saw firsthand the devastation and destruction
- 17 from a major storm and especially what was caused in poor
- 18 neighborhoods.
- 19 As global temperatures increase because
- of the increase in greenhouse gases, major storm events
- 21 increase in frequency and intensity and will cause more
- destruction, especially among those most vulnerable.
- 23 Along with my Christian faith teaching
- 24 me to care for those most vulnerable, it also teaches me to
- 25 be a good steward of God's creation, so anything we can do

- 1 to decrease greenhouse gases we put into the air is a way of
- 2 caring for God's creations as well as the vulnerable.
- 3 The official stance of the United
- 4 Methodist Church which I am a part of is that war is
- 5 incompatible with Christian teaching. The more we depend on
- foreign oil, the more we are likely to be going to war over
- oil resources especially in the Middle East. So the less we
- 8 depend on foreign oil by increasing our use of fossil fuels,
- 9 the less the incentive to go to war.
- 10 So, these standards, these proposed
- 11 standards will be an important step to helping people of
- 12 faith to live out their values and create a better world for
- 13 all of God's children.
- MS. OGE: Thank you.
- 15 Now I am going to call on Miss Brenda
- and Gil Archambo, both of you.
- 17 MS. ARCHAMBO: And I'm Brenda.
- MS. OGE: Welcome.
- 19 MS. ARCHAMBO: Thank you.
- 20 Good afternoon. Thank you for the
- 21 opportunity to testify today. We certainly appreciate it.
- 22 My name is Brenda Archambo, and I live
- 23 on Black Lake in Cheboygan County. That's in the northeast
- lower peninsula.
- I am an angler and I'm also President

- 1 and founder of Sturgeon for Tomorrow. Sturgeon for Tomorrow
- is a non-profit organization dedicated to the rehabilitation
- 3 and recovery of the Majestic Lake sturgeon which in Michigan
- 4 is a threatened species.
- 5 Michigan wildlife and national resources
- 6 are the backbone of our \$5 billion recreational tours and
- 7 economy. The Great Lakes are a national treasure.
- 8 Michigan's wildlife is as unique as the shape of its
- 9 shoreline and the variety of habitat found within its
- 10 borders. Whether it's a moose in the Upper Peninsula or a
- 11 musky in Lake St. Clair or the iconic lake sturgeon in
- 12 northern lower peninsula, wildlife helps define Michigan's
- 13 sense of place. It's part of our state's history and it's
- 14 inseparably linked to its wildlife, and it's really what
- 15 makes us pure Michigan.
- And as a sportswoman I am particularly
- 17 concerned about toxic pollution spewing from tailpipes and
- 18 then falling from the air onto our lakes and rivers and
- 19 forests polluting the environment and accumulating up the
- 20 food chain as fish and wildlife consume that contamination.
- 21 This directly affects many species including water fowl,
- 22 walleye, perch, bass, musky, and the iconic lake sturgeon,
- 23 all are revered in front of our state's
- angling/hunting/conservation heritage.
- 25 Safeguarding our natural resources is

- 1 important to those of us who are Michiganders who hunt and
- 2 fish and spend time in the woods and on the waters, but it's
- 3 also a wise investment in our economic future. Reducing
- 4 pollution from automobiles will help protect our
- 5 longstanding investment in our outdoor heritage. The
- 6 difference today is that we have the technology and the
- 7 feasibility and affordability to solve this problem.
- 8 The proposed fuel efficiency standards
- 9 for cars and light trucks as well as medium- and heavy-duty
- 10 trucks are bringing exciting, new, sparkling vehicles to
- dealers and driveways right now. And the new proposed
- 12 standards would extend these benefits doubling the fuel
- economy of our cars, SUVs and pick-ups to an average of 54.5
- miles per gallon by 2025.
- 15 Taken together the new and proposed fuel
- 16 economy standards cut our demand for oil by 3.4 million
- barrels of oil a day. It's really unconscionable that we
- are such addicts to this oil. That equates to nearly a
- 19 third of today's transportation fuel use. It's more than
- 20 all the oil we get today from the Persian Gulf and Venezuela
- 21 combined.
- These new standards could also cut
- 23 carbon pollution by over 600 million metric tons, about 10
- 24 percent of total U.S. carbon pollution today. Deep cuts in
- 25 the oil we need means less need for construction of new

Т	pipelines, fewer leaks and threats to people and wildlife
2	and our public and private land. It shows we can take real
3	steps to roll back climate change and protect wildlife for
4	generations to come. By utilizing our environmental laws we
5	can help rid the air and water of harmful pollutants and
6	restore the health of our ecosystem, and while these
7	standards are critical for wildlife, making our cars and
8	trucks more efficient also means hundreds of billions of
9	dollars in savings for families and businesses, thousands of
10	new jobs and greater energy security for our nation.
11	I strongly urge the EPA to move forward
12	and finalize strong fuel efficiency and greenhouse gas
13	standards that cut oil use and reduce carbon pollution
14	ensuring our outdoor legacy for future generations. Now and
15	in the future the EPA and other federal and state and
16	environmental laws can help ensure that the legacy we leave
17	our children is a clean and healthy planet.
18	Thank you.
19	MS. OGE: Thank you.
20	Does Gil have anything to add, any
21	comments?
22	MR. ARCHAMBO: Yes. I'll be very brief.
23	MS. OGE: Thank you.
24	MR. ARCHAMBO: Good afternoon.
25	My name is Gil Archambo. I live in

- 1 Cheboygan, Michigan. I am a UAW retiree and a former
- 2 building and electrical contractor. I'm also an avid
- 3 sportsman and a member of numerous conservation clubs. I've
- 4 always driven a light-duty pickup truck for my entire
- 5 life -- well, my adult life, because living in the north
- 6 woods and getting into the wilderness and out in the great
- 7 waters, I had to have the horsepower to haul heavy equipment
- 8 such as boats, 4-wheelers, snow machines and ice fishing
- 9 shanties.
- 10 One of my passions is ice fishing.
- 11 Guiding anglers, families, and especially our next
- generation out onto the ice to teach them about the
- longstanding winter ice traditions.
- 14 There's nothing better than getting out
- on the ice in the wintertime and bringing home a nice mess
- 16 of fish for dinner, being mindful, however, that Michigan
- 17 posted 120 fish consumption advisories in 2010.
- 18 I'd love to have my truck with increased
- 19 fuel efficiency while not compromising any horsepower.
- 20 Moreover, fuel efficiency deeply cuts the carbon pollution
- 21 from automobiles that contribute to our warming climate that
- 22 is causing iconic species to disappear and threaten the
- 23 future of many others. Autos are the largest contributor to
- carbon pollution in the U.S. after power plants.
- The new proposed fuel economy standard

- 1 would cut demand for oil by 3.4 million barrels per day. It
- 2 would save Americans over \$100 billion per year, and it cuts
- 3 gasoline consumption by one-third -- that's huge -- and
- 4 reduces our climate pollution by 8 percent annually.
- 5 Strong standards together with American
- 6 innovation and public and private investments in advanced
- 7 manufacturing and advanced battery technology have begun
- 8 bringing high quality jobs back to our communities across
- 9 the country and positioning American auto and auto component
- 10 manufacturers as leaders in cutting edge technology. For
- 11 example, while the U.S. had just two factories making
- 12 advanced batteries in 2009, this year U.S. manufacturers are
- expected to supply 20 percent of the world's advanced
- vehicle batteries. One study cites 38,000 jobs in Michigan
- 15 alone, that already tied to the work on clean air efficiency
- 16 and auto technology.
- 17 I support making our nation's cars and
- trucks more efficient to reduce the carbon emissions from
- 19 exhaust that is driving a warming climate which increases
- the threat to American wildlife and our conservation
- 21 heritage.
- We welcome the Administration's
- 23 leadership in developing a coordinated fuel efficiency and
- 24 greenhouse gas standard. This is something we have to
- 25 encourage and have sought for very long time.

1	Thank you very much.
2	MS. OGE: Thank you both of you.
3	Miss Julie Lyons Bricker.
4	Good afternoon.
5	MS. BRICKER: Thank you.
6	I'm Julie Lyons Bricker and I'm the
7	Executive Director of the Michigan Interfaith Power & Light.
8	It's a nonprofit organization that helps interfaith houses
9	of worship in the State of Michigan learn how to be more
10	energy efficient, learn about renewable technologies and
11	also practice other sustainability measures.
12	On the whole, our membership supports
13	the clean air efforts and they have started signing on to
14	the clean air promise, so as the Director, we will certainly
15	help continue bringing clergy to make statements and sign
16	letters to the editor and pen op-eds for this and other EPA
17	initiatives coming down the line.
18	But, really, I'm here today as a mother.
19	And I think these vehicle standards are a great step in the
20	right direction to help tackle global warming. I applaud
21	the Obama Administration, the EPA and the NHTSA for
22	releasing these standards, and I have hopes that the future
23	40 years will be even more successful than the EPA's past
24	40 years in terms of keeping our environment clean and
25	cleaning the water and air.

- 1 One of the things I didn't consider
- 2 until I heard the Archambos' testimony here is about what my
- 3 kids will have access to whenever they're teenagers and
- 4 young adults wanting to spend time in the environment; and,
- 5 so, I think we have to keep in mind not only what's
- 6 happening now but for their generation and their kids and
- 7 their kids' kids.
- 8 In closing, I think these standards
- 9 present a huge win on many fronts for the environment, the
- 10 economy and for national security.
- 11 Thank you for your time.
- MS. OGE: Thank you.
- 13 Mr. Timothy Schacht.
- MR. SCHACHT: Hi. I'm Tim Schacht. I'm
- 15 a veterinarian in private practice with my wife here in the
- 16 City of Detroit, and I appreciate the opportunity to speak
- 17 to the committee.
- 18 I would like to commend the EPA, the
- 19 Obama Administration and the automobile industry for the
- long, overdue attention now being given to the issue of
- 21 inefficiencies in how Americans power their cars. The
- 22 collaboration between government and private enterprise that
- 23 has targeted an increase in the fuel use standards for
- 24 domestic automobiles is welcome news for many years. Under
- 25 these new rules, Americans will be safer due to less

- 1 reliance on oil imports from regions that have proven to be
- dangerous to work with and because of the promise of less
- 3 pollution emitted from our tailpipes.
- 4 Americans will be wealthier due to less
- 5 money being sent offshore and, instead, available to be
- 6 spent within our own economy. Americans will also be
- 7 enabled to further capitalize on technologies both existent
- 8 and in development that will help achieve the reasonable and
- 9 attainable standards agreed hereto.
- 10 Of concern to me, however, is the risk
- 11 that these goals will be undercut and their benefits a false
- 12 promise. It is incumbent on government to protect the
- interests of citizenry, not special interests. The failure
- of past efforts to enact fuel efficiency standards that
- 15 bring about meaningful change has proven very costly.
- 16 My wife worked for EPA in the 1970s.
- 17 She was in Washington for the 1979 oil crisis and the
- 18 hostage crisis at the American embassy in Tehran. It was
- 19 clear to her that America having not learned from the 1967
- oil embargo and the 1973 oil crisis should develop a
- 21 national energy policy to protect us from such problems.
- 22 Nothing happened.
- 23 As a consequence, our nation has spent
- 24 trillions of dollars to kill thousands of people in order
- 25 that we might prop up a self-destructive, random and

- 1 rudderless energy strategy. Maybe it is true that the
- 2 events of the last 40 years have finally taught us what
- 3 1967, 1973 and 1979 did not. I certainly hope so.
- 4 However, the proof will be in the
- 5 pudding. Thus far all we have are words on paper and I
- 6 support those words. However, it is the actions these words
- 7 will direct that are of greatest importance. If the intent
- 8 of this directive is undermined or circumvented, then
- 9 clearly as a nation we will have been misgoverned and will
- 10 continue to live in denial of our complicity in a failed
- 11 energy strategy that has cost us vast fortunes and untold
- 12 human suffering.
- Thank you.
- 14 MS. OGE: Thank you.
- Mr. Tom Zerafa.
- 16 MR. ZERAFA: Thank you, and thank you
- 17 for the panel being here today to honor us here in Detroit
- 18 and our State of Michigan. And thank you to my esteemed
- 19 colleagues at this table for your testimony as well.
- I'm a native Detroiter. I've lived here
- 21 all my life in the area. I grew up in the southwest side of
- 22 Detroit right in the center of the Ford Rouge Plant, the
- 23 Cadillac Plant and the Fleetwood Plant, and I remember
- 24 growing up that most people that worked in the factory
- 25 didn't live too long after they retired from the factory

- because of heart disease, cancer, and various other diseases
- 2 because of the lack of environmental practices that were
- 3 happening in those auto industries at that time. The
- 4 average person, the average male died shortly within
- 5 five years of retirement if not before back in those years.
- 6 I remember very much many of our neighbors' funerals during
- 7 that time.
- 8 I thank the Obama Administration in
- 9 particular for making this an urgent matter, to reduce our
- 10 carbon footprint in the auto industry through the work
- 11 that's being done to bring better standards to our auto
- 12 industry for better fuel -- better use of fuel, better use
- 13 -- to reduce our use of fossil fuels and to promote safer
- ways of engineering our automobiles and other forms of
- 15 transportation through more natural means, through
- 16 electricity, through the battery and through other means
- 17 right now.
- 18 I guess a question I would have for
- 19 those of us who are currently driving and who intend to be
- 20 driving our current vehicles for a while yet, possibly up to
- 21 and beyond when these new standards take place is will we be
- able to retrofit our cars that we own at that time to the
- 23 new standards, will there be a means of doing that. That
- 24 might be something that needs to be looked into, rather than
- 25 having to purchase a brand new vehicle and for some of us

- 1 maybe not in the position of buying one at that time. So
- that might be something to be looked at. I haven't heard
- 3 that proposal yet from anyone so far since I've been here,
- 4 but that's a concern I have.
- 5 Again, you know, the need to reduce our
- 6 carbon footprint is very obvious with the winter we're
- 7 having right now in Michigan and throughout the Midwest. I
- 8 mean, it was 50 degrees out earlier today. This is not
- 9 Michigan weather. And a lot of that is due to what we have
- 10 put into the air. Anyone who contests that there is no such
- 11 thing as man-made pollution is wrong, because I believe a
- 12 lot of this has been made by the human race and that has had
- an effect on the warming of the seasons to a point where
- 14 they're unseasonable right now. And we are going to pay a
- price for it during the course of our lives.
- 16 But I say charge forward with this
- 17 program and I hope that -- I know that we will all benefit
- 18 from it in the long run.
- 19 And I quess just one more thing I wanted
- 20 to add that as we're working on the auto -- working on, you
- 21 know, the automobile, that we're also looking at other means
- of transportation as well to develop cleaner standards and
- 23 that is public transportation. By the year 2025 I'm going
- 24 to be 74 years old at that time. It's hard to believe that
- 25 and that's not that many years away, and I hope I don't have

- to be driving at that point. I hope that I'll be able to
- 2 hop on a bus or hop on a train or hop on a light rail at
- 3 some point, because there's going to be a time when I'm
- 4 probably going to be more of a danger to the road than an
- 5 asset. And, so, I hope that the auto industry people that
- 6 are here and everybody else and certainly the Administration
- 7 will take that into consideration to put their -- bear their
- 8 muscle to develop those types of transportation to a more
- 9 safe way and a more environment to protect the public.
- 10 Thank you so much.
- 11 MS. OGE: Thank you.
- 12 And the final member for this panel is
- 13 Ms. Robin Eckstein.
- 14 Good afternoon.
- 15 MS. ECKSTEIN: Thank you, ma'am.
- Robin Eckstein.
- 17 First of all, thank you very much for
- letting me be here and speak. I think it's a great part of
- our government that you guys have these public hearings and
- allow our input into your agency. I think that's awesome.
- 21 My name is Robin Eckstein. I'm here
- 22 with the Truman National Security project, but mainly I'm
- 23 here as a veteran. I think I have seen kind of firsthand
- 24 how our inefficiencies with fuel has really affected us and
- 25 especially our troops. I was stationed in Bagdad at the

- 1 Baghdad International Airport right after the initial
- 2 invasion in Iraq in 2003 as a truck driver, and my mission
- 3 while I was over there was to be in these convoys
- 4 transporting fuel and water to various outposts around
- 5 Baghdad and the surrounding area.
- 6 And every day when we rolled outside the
- 7 gates it was a roll of the dice, whether we were going to be
- 8 shot at, have IEDs, be blown up by enemy fire. And it
- 9 began -- it was obviously very clear that this was a bad way
- 10 of doing things because we were transporting all this fuel
- 11 in these very inefficient vehicles to the forward operating
- bases where, again, the fuel was being used very
- inefficiently.
- 14 And it became my mission after I got out
- of the military to see that changes like that, changes
- 16 happen. I may have taken off my uniform, but I'm continuing
- 17 my service for my country by coming to meetings like this
- 18 and letting people know that it is a national security
- issue, too. I know you've heard from a lot of
- 20 environmentalists, faith groups and jobs and stuff about how
- 21 important it is for fuel efficiency standards but I think
- 22 one of the biggest is national security and our troops. And
- 23 I know the Iraq war is over, but there's still the
- 24 Afghanistan war going on, and let me tell you it's even more
- 25 expensive to get the fuel transported over there.

- 1 The military has seen that this is a
- 2 problem and is already moving into a positive direction.
- 3 They're testing new fuel-efficient vehicles for the military
- 4 to use. And, frankly, if the military can do it, I don't
- 5 see why the United States can't for the rest of us. And I
- 6 really think that the EPA moving in this direction is so
- 7 positive because -- you know, my sister recently had a baby
- 8 and I've got this great niece now and I don't want her to
- 9 have to grow up and be in the military and have to be in a
- 10 convoy and get shot at because they're doing things
- 11 inefficiently. And fuel efficiency standards is kind of a
- 12 no-brainer.
- 13 And, like I said, if the military is
- 14 already doing it there's no reason why the United States
- 15 can't get behind them and continue making the changes that
- 16 we need to see.
- 17 So I'm definitely in support of
- strengthening the fuel efficiency standards that the Obama
- 19 Administration has brought forward.
- I thank you very much for having me in.
- MS. OGE: Thank you for coming and thank
- 22 you for your service.
- 23 MR. MEDFORD: Thomas, I don't have your
- 24 name on my list and I can't read it from here, but you asked
- 25 a couple of questions and --

- 1 MR. ZERAFA: Yes, I did.
- 2 MR. MEDFORD: Your first one is a
- 3 challenging one which is about retrofitting.
- 4 I think most of us know, most of the
- 5 activities of fuel economy involve new powertrains, they
- 6 involve aerodynamics, they involve new materials that are
- 7 strong that weigh less.
- 8 The only area I can think of is low
- 9 rolling resistant tires and at NHTSA, DOT, we are working on
- 10 some information to rate the new tires for rolling
- 11 resistance and fuel economy. So that would be one area that
- we can provide information on.
- 13 Your other question was about what to do
- 14 with public transit in this region, and I just want to point
- 15 out that the Department is working very closely with the
- 16 Mayor and the Governor in this state to improve the public
- 17 transit here in Detroit specifically but in the state
- 18 overall. So I think from that front there's a lot of
- 19 transportation support particularly with Detroit.
- MS. OGE: Any other questions from the
- 21 panel?
- Thank you. Thank you for coming
- 23 forward.
- 24 MR. MEDFORD: So I think we're ready for
- 25 the next panel.

1 Good afternoon, everyone. Get started I 2 think Deb Bakker needs to leave soon, so we'll start with 3 you, Ms. Bakker. MS. BAKKER: Good afternoon. 5 Deborah Bakker, Senior Manager of Regulation and 6 Certification Department at Hyundai Technical Center, and 7 I'm speaking today on behalf of Hyundai Motor Company. 8 It is a pleasure to be here today to 9 provide our perspective on this very important rulemaking. 10 We appreciate the significant effort on the part of all the 11 agencies and the difficult task of developing feasible and harmonizing national greenhouse gas emission standards. 12 13 Before discussing the proposal, I'd like to take a few moments to talk about Hyundai's thoughts on 14 fuel efficiency and our efforts and successes in this area. 15 16 Hyundai is one of the industry's most 17 fuel-efficient automakers. We are on track this year to surpass the government industry fuel economy target of 35.5 18 19 MPG for the 2016 model year. Currently four Hyundai models 20 - Sonata hybrid, Elantra, Veloster and the Accent - achieve 21 EPA highway fuel economy ratings of 40 MPG. 22 We're the only automaker that provides 23 the fleet-wide fuel economy performance in our release of

monthly sales figures, and these 40 MPG models account for

one-third of our U.S. sales in 2011.

24

25

1	In 2010 we publicly pledged to reach
2	50-plus MPG for our fleet by 2025, and in our discussions
3	with the agencies on this rulemaking we have consistently
4	supported the standard in excess of 50 MPG. We continue to
5	strongly support the agencies on this rulemaking. We
6	believe it's the right thing to do for the environment and
7	for the nation's energy security.
8	Hyundai agrees with many of the
9	flexibilities and credits provided in the proposal. We
10	support the credit and banking provisions and continued
11	application of off-cycle credits for technologies whose
12	benefits cannot be counted for on the city and highway
13	cycles. Hyundai believes off-cycle technology is an area
14	that is ripe for innovation and can provide important gains
15	in real-world fuel economy.
16	Now that the agencies have quantified
17	the value of various off-cycle technologies in a menu
18	format, Hyundai asks that the EPA and NHTSA allow the menu
19	credits to be used in the 2012 to 2016 model years. In
20	addition, we recommend that the agencies eliminate the ten
21	gram cap on menu technologies. EPA plans a cap because the
22	menu technologies are based on limited data. However,
23	Hyundai agrees with the agency that the credits offered are
24	conservative and that the cap is not necessary.

Hyundai also appreciates that there are

- 1 a number of flexibilities in the proposal that address OEMs'
- different strategies for creating a fuel-efficient fleet.
- 3 For example, some OEMs are focusing resources on electric
- 4 vehicles and they are receiving credit multipliers for
- 5 expanding that technology. Others are improving the fuel
- 6 efficiency of cargo-carrying larger pickup trucks, and the
- 7 agency is providing incentives to improve those
- 8 technologies. Some OEMs plan to be fuel efficiency leaders
- 9 for gasoline vehicles in the 2017 to 2025 time frame, and
- 10 the California Air Resources Board is proposing to allow
- 11 those OEMs to offset part of the zero emission vehicle
- 12 mandate for a limited time through over-compliance in
- challenging GHG/CAFE standards. We appreciate the
- government's recognition of these varying OEM strategies by
- 15 providing a variety of incentives to maximize performance in
- 16 each area.
- 17 Hyundai also appreciates the substantial
- lead time for these regulations which will provide stability
- 19 for long-term product planning. Hyundai supports the
- 20 mid-term evaluation because it provides an opportunity to
- 21 ensure that the details of the program are appropriate.
- 22 Although we believe the proposed
- 23 requirements are feasible, Hyundai recognizes that it's
- 24 difficult to perfectly predict out to the 2025 time frame
- 25 the necessary technologies and costs and consumer acceptance

- 1 of those technologies. The mid-term review will help ensure
- 2 that the requirements are sound closer to the time of
- 3 implementation.
- 4 Thank you for the opportunity to comment
- 5 today and we will be submitting written comments with
- 6 additional details.
- 7 MR. MEDFORD: Okay. Do we have any
- 8 questions before she has to leave?
- 9 Deb, I have just one thing. You
- 10 commented that there are limits on the credits that you can
- 11 get based on the menu but I think we also said in the
- 12 proposal that if you provide data that support greater
- 13 credits that can be considered and greater credits can be
- 14 given.
- 15 You're aware of that; right?
- MS. BAKKER: Right. We're just saying
- that for simplicity's sake we wanted to opt into the menu
- 18 rather than generating the data. We wanted to be able to go
- 19 to the ten gram cap.
- MR. MEDFORD: Okay. Thank you.
- Okay. Next. Miss Hilary Sinnamon.
- 22 MS. SINNAMON: My name is Hilary
- 23 Sinnamon from the Environment Defense Fund. On behalf of
- the Environmental Defense Fund and our more than 700,000
- 25 members nationwide, I sincerely thank you for the

- opportunity to testify today on this landmark proposal to
- 2 address the extensive climate disrupting pollution from
- 3 passenger vehicles and to provide consumers nearly double
- 4 the fuel efficiency of today's cars and light trucks.
- 5 As Pulitzer prize winning author Thomas
- 6 Friedman recently wrote: "This is a big deal." Increasing
- 7 the efficiency of our passenger fleet is one of the most
- 8 effective things you can do to reduce our dependence on oil
- 9 and will likely be one of President Obama's greatest climate
- 10 and energy security legacies.
- 11 The United States consumes more than 19
- 12 million barrels of oil a day which is nearly a quarter of
- 13 the oil consumed in the entire world and more than all
- 14 European Union nations combined. Our nation's fleet of cars
- 15 and light trucks, the focus of this proposal, consumes more
- than 8.6 million barrels of oil per day, 45 percent of total
- 17 U.S. petroleum consumption.
- 18 Over half of the oil we use each day is
- imported from foreign countries, many of which do not like
- us. The U.S. consumes nearly 25 percent of the world's oil
- 21 production, but controls less than 2 percent of the supply.
- 22 We send over \$1 billion a day overseas to pay for oil. The
- 23 majority of it goes to nations deemed dangerous or unstable.
- 24 As General Anthony Zinni said, "We will pay to reduce
- 25 greenhouse gas emissions today or we will pay the price

- later in military terms. And that will involve human
- lives." His statement underscores why we need to act now.
- 3 We need to reduce the amount of oil we
- 4 consume in the U.S. by a lot. Thankfully, we've already
- 5 taken the first step. In 2010 the agency finalized the
- 6 first phase of fuel-efficiency and greenhouse gas standards
- 7 for model years 2012 to 2016 vehicles which are already in
- 8 showrooms and on roads today. Those standards will make the
- 9 first dent in the oil dependence by reducing consumption by
- 10 1.8 billion gallons over the lifetime of the vehicles. That
- is a lot of petroleum but it is not enough. That's why this
- 12 proposal to further improve fuel efficiency of model years
- 13 2017 to 2015 is very important. It will further reduce our
- oil consumption by 4 billion gallons. When this program is
- 15 fully implemented we will reduce our daily consumption by
- more than we import from the entire Persian Gulf today.
- 17 The high price of oil threatens our
- 18 fragile economy. In fact, the price of a gallon of gas is
- 19 up 10 percent since January of last year, 25 percent since
- January of 2010, and 100 percent since January of 2009. At
- 21 today's average gas prices consumers are spending more than
- 22 \$1 million a day to fuel their passenger vehicles, the
- 23 largest household expense after housing. These high fuel
- 24 prices leave consumers with less money to spend elsewhere.
- 25 We need to put some of that money back into consumers'

- 1 pockets.
- 2 Based on the projected future savings
- from today's proposal, vehicle owners could save more than
- 4 \$4,000 over the life of their new vehicle, offsetting the
- 5 higher vehicle cost in under four years, and that's at
- 6 today's fuel prices. Consumers who buy a vehicle with a
- 7 typical 5-year loan will see immediate savings about \$12 a
- 8 month.
- 9 This proposal also comes at a time when
- 10 we're seeing a strengthening industry. In fact, at the Auto
- 11 Show here last week Detroit was called a beacon of hope for
- 12 the global auto industry. That's because of the double
- digit growth in passenger vehicle sales in 2011 and
- 14 projected similar growth for 2012. And much of these gains
- 15 are coming from cleaner, more efficient vehicles.
- 16 Our petroleum addiction also has
- 17 significant environmental consequences. The combustion of
- oil in our nation's fleet of light-duty vehicles emits about
- 19 20 percent of total U.S. greenhouse gas emissions. Carbon
- 20 dioxide and other potential heat-trapping gases contribute
- 21 to climate change, which can threaten us at home and abroad.
- The number of people at risk due to
- 23 droughts will increase, because many low-rainfall areas are
- 24 projected to receive less rain and because rising
- 25 temperatures and evaporation will cause soils to dry.

- 1 Seasonal snowpacks in the Western United States will shrink,
- 2 endangering water supplies relied upon by Western
- 3 communities. The number and extent of wildfires, insect
- 4 outbreaks, and tree mortality in the interior West and
- 5 southwest and Alaska will likely expand. And damaging
- 6 impacts outside of the United States may harm our trade,
- 7 humanitarian, and national security interests.
- 8 National disasters in 2011 wielded the
- 9 costliest toll in history a massive \$380 billion worth of
- 10 losses from earthquakes, floods, tornadoes, hurricanes,
- 11 wildfires and tsunamis and more. And that figure does not
- 12 include the expenses associated with sickness or injuries
- 13 triggered by the disasters.
- 14 If finalized, stronger fuel efficiency
- and GHG standards for passenger vehicles could reduce carbon
- 16 dioxide pollution by more than 6 billion tons over the life
- 17 of the program, the equivalent to the total CO2 emissions
- 18 for the entire United States in 2010. It would be the
- 19 biggest step our nation has taken yet to address climate
- 20 change, and many believe it would be the single biggest step
- 21 any nation has taken so far to address global climate
- change.
- 23 In conclusion, I would like to say that
- 24 Environmental Defense Fund is proud to be among the
- 25 manufacturers, the automakers, the economists, the health

- 1 and environmental advocates, the states, the national
- 2 security groups, the small businesses and the consumers who
- 3 all agree that cleaner, more efficient vehicles are a step
- 4 forward for American families and businesses.
- 5 Thank you.
- 6 MR. MEDFORD: Thank you.
- 7 Now we'll go to Mr. Kubsh.
- 8 MR. KUBSH: Thank you.
- 9 Good afternoon. My name is Joe Kubsh.
- 10 I'm the Executive Director of the Manufacturers of Emission
- 11 Controls Association, and I am pleased to provide comments
- in support of EPA's and NHTSA's proposed rulemaking on
- 13 light-duty vehicle greenhouse gas emission standards and
- corporate average fuel economy. We believe an important
- opportunity exists to significantly reduce greenhouse gas
- emissions and improve fuel economy from passenger cars,
- 17 light-duty vehicle trucks and medium duty passenger
- 18 vehicles.
- 19 MECA is a nonprofit association of the
- 20 world's leading manufacturers in emission control technology
- 21 for mobile sources. The experience of our industry over the
- 22 last 40 years vividly demonstrates the connection between
- 23 vehicle emission regulation and economic development. Prior
- 24 to 1970 our industry did not exist, but with the enactment
- of the Clean Air Act in 1970 our industry has flourished,

- developing successive generations of technology to meet
- 2 ever-tightening regulatory standards.
- In 2010 alone our industry generated
- 4 approximately \$12 billion of economic activity in the United
- 5 States and accounted for approximately 65,000 jobs mostly in
- 6 manufacturing. EPA's greenhouse gas emission standards on
- 7 light-duty and heavy-duty vehicles are aiding in the
- 8 development of a thriving U.S. industry focused on a wide
- 9 range of technologies that can reduce vehicle greenhouse gas
- 10 emissions.
- 11 As detailed in EPA's proposal there are
- 12 a large set of technology combinations that are available to
- 13 further reduce greenhouse gas emissions from passenger
- vehicles and light-duty trucks including fuel efficient
- 15 advanced gasoline and diesel powertrains. MECA, like many
- 16 commented already today, supports performance-based
- standards that are technology neutral.
- 18 Implicit in federal and state greenhouse
- gas emission analyses is the ability of these advanced
- 20 powertrain options to meet the applicable criteria pollutant
- 21 emission standards. All of these advanced light-duty
- 22 powertrain options combined with the appropriately designed
- and optimized emission control technologies will be able to
- 24 meet all current and future federal and state criteria
- 25 emission requirements. In this manner, advanced emission

1	controls for criteria pollutants enable advanced powertrains
2	to also be viable options for reducing greenhouse gas
3	emissions. In many cases the application and optimization
4	of advanced emission control technologies on advanced
5	powertrains can be achieved with minimal impacts on overall
6	fuel consumption. Auto manufacturers will also take
7	advantage of synergies between advanced emission control
8	technologies and advanced powertrains to assist in their
9	efforts to optimize their performance with respect to both
10	greenhouse gas and criteria pollutant exhaust emissions.
11	Advanced diesel emission control
12	technologies like particulate filters with lower
13	backpressure characteristics, selected reduction catalysts
14	with improved performance at lower exhaust temperatures and
15	SCR catalysts coated directly on particulate filter
16	substrates are examples of emerging diesel emission control
17	technologies that will allow future diesel powertrains to
18	not only be as clean as gasoline engines from a criteria
19	pollutant perspective, but diesel powertrains will deliver
20	improved fuel consumption characteristics and lower
21	greenhouse gas emissions. The use of diesel particulate
22	filters also delivers significant reductions in black carbon
23	emissions from diesel engines, a combustion emission that
24	also has important climate change impact.

For gasoline vehicles, direct injection

- 1 technology enables gasoline engines to achieve fuel
- 2 efficiency and is expected to be a dominant pathway to
- 3 meeting future light-duty gas emission standards. Again,
- 4 emission controls like secondary air injection systems and
- 5 3-way catalysts ensure that these more fuel-efficient
- 6 gasoline engines meet tough EPA or California criteria
- 7 emission regulations. Advanced gasoline emission controls
- 8 catalysts are available and will continue to evolve and be
- 9 optimized to ensure that future gasoline direct injection
- 10 engines will meet the toughest criteria pollutant emission
- 11 standards with minimal impacts on overall vehicle exhaust
- 12 system backpressure and fuel consumption.

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13 Under lean combustion conditions similar emission control technology used on diesel vehicles can be 14 used to reduce emissions from lean, gas direct injection 15 16 powertrains. These include the particulate filters to 17 reduce PM emissions, SCR catalysts and/or lean NOx adsorber 18 catalysts known to reduce NOx emissions. Lean NOx adsorber 19 catalyst performance has a high degree of sensitivity to 20 fuel sulfur levels. The current EPA fuel sulfur limits for 21 gasoline are too high to allow lean NOx adsorber catalysts 22 to be a viable NOx control strategy for future fuelefficient gasoline lean burn engines that employ direct fuel 23 injection technologies. MECA believes that EPA should lower 24

gasoline fuel sulfur limit to a 10 ppm national average and

- 1 its pending Tier 3 light-duty vehicle emission standards
- 2 proposal to allow NOx adsorber catalysts to be used on such
- 3 vehicles in the future in order to provide additional
- 4 options for improving the efficiency and reducing greenhouse
- 5 gas emissions from gasoline vehicles.
- 6 The performance of advanced emission
- 7 control technologies for advanced diesel gasoline and
- 8 natural gas-fueled powertrains can also be optimized to
- 9 minimize nitrous oxide and methane greenhouse gas emissions
- 10 from future light-duty vehicles consistent with the limits
- 11 EPA set for these important greenhouse gas emissions in
- their initial round of light-duty vehicle greenhouse gas
- 13 emission standards.
- 14 Emissions controls for gasoline and
- 15 diesel engines can also be used with low carbon alternative
- 16 fuels, but it's important that the specifications associated
- 17 with any low carbon fuel should be compatible with the use
- of available exhaust emission control technology.
- To conclude, MECA commends EPA, NHTSA
- 20 and California for taking important steps to further reduce
- 21 greenhouse gas emissions and improve fuel economy for light-
- 22 duty vehicles. Our industry is prepared to do its part and
- 23 deliver cost-effective advanced emission control
- 24 technologies to the market for these more fuel efficient
- vehicles.

- 1 Thank you for this opportunity to 2 provide comments on this proposal. 3 MR. MEDFORD: Thank you very much. Mr. Dorobantu. 5 MR. DOROBANTU: Madam Director, Mr. Administrative Director, I am Dr. Mihai Dorobantu, 6 7 Director of the Vehicle Technologies and Innovation team at 8 the Eaton Cooperation's Vehicle Group. I want to thank the 9 agencies for the opportunity to give testimony regarding the 10 proposed rule. 11 Eaton is a leading diversified, global power management company with sales in 2010 of about \$13.7 12 13 billion. We are fundamentally committed to helping the world use less energy and use energy safely. Our innovative 14 technologies help customers manage electrical, hydraulic and 15 16 mechanical power safely and efficiently. In addition, these 17 four management technologies help customers control costs 18 and reduce the energy requirements. 19 Eaton has been actively helping 20 automotive and truck manufacturers to improve the efficiency
- automotive and truck manufacturers to improve the efficiency
 of their vehicles for over 100 years and we will continue to
 deliver innovations that differentiate manufacturers in the
 marketplace. We are a global leader in advanced engine
 valve train systems, superchargers, and traction modifying
 devices. We are also a global producer of fuel emission

- 1 control devices and electrical vehicle charging stations.
- 2 Eaton provides automotive and truck manufacturers with
- 3 technical solutions that improve fuel efficiency and reduce
- 4 emissions without compromising performance.
- 5 It is the products and technologies from
- 6 Eaton's automotive operations that will be the focus of my
- 7 testimony today.
- 8 We manufacture engine subsystems such as
- 9 supercharger-based boosting, variable valve activation and
- 10 cylinder deactivation products that contribute significantly
- 11 to the improvement in emissions and fuel economy driven by
- the proposed standards. We believe our products and
- 13 technologies will offer OEMs attractive, practical choices
- 14 to comply with the standards and derive economic benefit
- 15 across the entire segment.
- 16 There are many stakeholders in the
- 17 light-duty vehicle market that are pressed by commercial and
- social responsibilities to improve performance, reduce fuel
- 19 consumption and reduce greenhouse gas emissions. What
- 20 brings us all together is the realization that reducing the
- 21 emissions and fuel consumption is also a business advantage
- 22 in the long term. If the new standards are carefully chosen
- 23 and implemented, they can drive benefits to a broad spectrum
- 24 of stakeholders by reducing the total cost of operations for
- 25 customers, reducing the nation's dependence on foreign oil,

- 1 fostering innovation, and creating high-value jobs while
- 2 fundamentally improving our environment.
- 3 Eaton appreciates the agency's use of
- 4 sound economic analysis and in-depth technology reviews
- 5 during the rulemaking process. We believe that the
- framework outlined in the NPRM is a good step towards the
- 7 final regulation that will foster innovation, foster both
- 8 technology and competition while maintaining fleet diversity
- 9 and incentivizing over-achievement of emissions and fuel
- 10 economy targets. It is important that certain principles
- 11 outlined in the notice are further developed in the upcoming
- 12 period.
- 13 Eaton believes it is vital that the rule
- maintains the flexibility to adapt the solutions that can be
- rapidly adopted by OEMs and accepted by consumers. An
- 16 example is the increased use of supercharged and mild hybrid
- technologies that provide fuel savings and performance with
- return on investments that is acceptable to the average
- 19 consumer.
- The proposed rule provides regulatory
- 21 incentives that foster innovation and technology deployment.
- 22 We believe that many of the technologies needed to achieve
- the proposed standards are available. Some are already in
- 24 use, while others will benefit from the new paradigm these
- 25 proposed regulations will provide. Working with our OEM

- 1 partners, Eaton looks forward to providing high performance
- 2 and cost-effective fuel efficient technologies. Eaton is
- 3 looking forward to participating in the rulemaking process
- 4 with specific comments to the EPA and NHTSA on the proposed
- 5 rule in the near future.
- Thank you.
- 7 MR. MEDFORD: Thank you very much.
- 8 Mr. Griffin.
- 9 MR. GRIFFITH: Thank you, Deputy
- 10 Administrator and Director Oge, and thank you all for your
- 11 time here today.
- 12 Good afternoon. I am Charles Griffith,
- 13 Climate & Energy Program Director at the Ecology Center, an
- 14 environmental nonprofit organization based in nearby Ann
- 15 Arbor since 1970. I am here to express my organization's
- strong support for the proposed standards.
- 17 The Ecology Center has had a long
- 18 history of involvement in the promotion of policies to
- 19 encourage the improvement in vehicle fuel economy and reduce
- 20 greenhouse gas emissions. Currently we are coordinating the
- 21 Built By Michigan campaign, an effort to advance policies in
- 22 the state as well as nationally that help promote the sale
- and use of electric vehicles and other advanced vehicle
- technologies. Our effort includes businesses, local
- 25 government officials, electric vehicle enthusiasts and

- 1 others who share a common interest in ensuring that the U.S.
- 2 auto industry remains a leader in the development of these
- 3 emerging technologies and to support a range of policies and
- 4 other programs that can help to support their
- 5 commercialization and manufacture here in our state and
- 6 across the country. Clearly the proposed standards that we
- 7 are discussing here today represent one of those needed
- 8 policies.
- 9 There are some other specific comments
- in support of the proposed standards I would like to make
- 11 today.
- 12 One is that the proposed standards
- 13 continue the attribute-based structure and requirements for
- 14 steady improvement that were established in the current
- standards. When first proposed by the agencies in 2009
- 16 following the historic 2007 Energy Independence and Security
- 17 Act, this new approach represented a breakthrough in
- 18 regulation for this sector. Not only were the requirements
- 19 more fairly applied among vehicle manufacturers but the
- 20 rules also more effectively stimulated innovation by
- 21 requiring improvements across all vehicle sizes and classes.
- 22 The rules also included provisions that help ensure the
- 23 continued production of domestic fuel-efficient vehicles,
- and we support those as well.
- 25 Second, we do like the longer time frame

- 1 contained in the proposed rules. By looking out further
- 2 into the future the rules can ensure consistency of approach
- 3 and allow manufacturers to better plan for the vehicles that
- 4 they will need to develop. While we do have some concerns
- 5 about the proposed mid-term review providing an opportunity
- 6 to slow progress, we understand the need for potential
- 7 adjustments due to many unknowns that far into the future.
- 8 We are hopeful that such a review will show that even more
- 9 progress is achievable.
- 10 We are especially supportive of the fact
- 11 that the proposed rules will not only lead to significant
- reductions in petroleum use and greenhouse gas emissions,
- 13 but that they will also lead to big savings by consumers at
- the pump as well as to the economy generally. The estimated
- consumer savings of approximately \$3,000 to \$4,400 in net
- lifetime savings is almost certainly a conservative estimate
- when considering likely increases in the fuel prices and
- improvements in technology. The estimated social level
- benefits of \$311 to \$421 billion are, therefore, likely
- 20 conservative as well. We certainly think that consumers and
- 21 businesses alike who rely on transportation will all
- 22 significantly benefit from having the 300-plus billion
- dollars more in their pocketbooks to spend on other things.
- 24 Equally impressive are estimates of job
- 25 creation and benefits to the manufacturing sector.

Т	According to research commissioned by Ceres more than
2	500,000 new jobs would be created as a result of the new
3	standards, many of them here in Michigan. Another study on
4	the automotive supply chain for fuel-efficient vehicle
5	technologies found there were already more than 150,000
6	people employed in the advanced engine, transmission and
7	other electric vehicle supply sectors with over 38,000 of
8	those jobs here in Michigan. Jobs in these automotive
9	supply chains could be expected to nearly double with the
10	implementation of the new proposed standards.
11	It's important to note that while
12	significant job losses have been sustained in the automotive
13	industry in recent years, investments and new fuel-efficient
14	technologies now provide a strong basis for new
15	manufacturing job growth, providing even greater
16	competitiveness for the U.S. going forward. The proposed
17	standards along with other policies to facilitate research,
18	development, and commercialization of new technologies will
19	help to ensure those job gains continue to be realized here
20	in the region as well as in the U.S. more broadly.
21	The Ecology Center would also like to
22	express support for the flexibility mechanisms in the
23	proposed standards, and in particular the incentives for
24	electric vehicles, plug-in electrics and fuel cell vehicles.

As I stated earlier, support for these

- 1 emerging technologies is critical if we are to maintain U.S.
- 2 leadership and encourage new manufacturing opportunities
- 3 here at home. We do agree, however, that the incentives
- 4 should be phased out over time so the full emissions of
- 5 these vehicles can be accounted for. We, therefore, support
- 6 the decrease in the incentive multiplier and the proposed
- 7 manufacturer caps on the 0-gram per mile value for upstream
- 8 emissions.
- 9 Beyond the direct benefits of the
- 10 standard, the Ecology Center would like to commend the EPA
- and NHTSA on its successful negotiation that is reflected in
- 12 the standards we are discussing here today. It is no small
- feat to be able to bring together such a broad
- 14 representation of interests including the automotive,
- 15 environmental and consumer groups as well as the State of
- 16 California to negotiate a rule that all parties can support.
- 17 We believe it is important to recognize the successful
- 18 process that the agencies have managed and led, including
- 19 the cooperation between the two agencies itself.
- In closing, we would like to thank the
- 21 agencies for their exceptional work on these proposed rules
- and for the opportunity to speak here today.
- 23 MR. MEDFORD: Thank you very much.
- Mr. German.
- 25 MR. GERMAN: Hello. My name is John

- 1 German. I am happy to present comments on the proposed
- 2 vehicle standards on behalf of the International Council on
- 3 Clean Transportation.
- 4 ICCT has broad expertise in all
- 5 transportation areas and our primary mission is to help
- 6 regulatory agencies worldwide reduce air quality pollutants
- 7 and greenhouse gas emissions.
- 8 While the U.S. has consistently been the
- 9 world's leader in reducing pollutant emissions, U.S.
- 10 policies on transportation fuel efficiency and greenhouse
- 11 emissions have been far less effective. The 2016 rule took
- 12 a giant step towards catching up and the proposed rule would
- 13 extend the progress and set longer term requirements. We
- 14 applaud EPA, NHTSA, along with California, the
- 15 Administration and the vehicle manufacturers for taking
- another large step along the road to a sustainable
- 17 transportation system.
- 18 My comments today will focus on the
- 19 conservative nature of the technology benefit and cost
- 20 analyses of the rule. I will also touch upon the safety
- 21 benefits of the rule and suggested improvements in program
- 22 design and off-cycle credits. Alan Lloyd's testimony next
- 23 week on behalf of ICCT will focus on the standard
- development process and on suggestions for improvements on
- 25 some of the credits. ICCT will provide detailed written

- 1 comments to the docket and will also address additional
- issues such as the consumer welfare and the interim review.
- The opportunities to improve efficiency
- 4 in the near term are far larger than most people realize.
- 5 The internal combustion engine is widely perceived as
- 6 century-old technology that is at the end of its
- development, but the reality is exactly the opposite.
- 8 Computer simulations, computer-aided design are enabling
- 9 vastly improved designs and technologies. On-board computer
- 10 controls provide unprecedented integration of engine,
- 11 transmission and hybrids operation. Instead of slowing
- down, the pace of technology development just keeps
- 13 accelerating.
- 14 The sophistication of assessing
- 15 technology efficiency improvements has been increasing as
- 16 well. To support development of the 2025 standards EPA
- 17 contracted with Ricardo to conduct full-system simulation
- modeling of the latest technology developments.
- 19 ICCT has been intensively involved in
- 20 the simulation modeling process for the last two years. It
- 21 is very clear to us that the technology being assessed by
- 22 Ricardo are on the conservative side. In fact, this is
- 23 unavoidable due to the restriction to the currently
- 24 available data and engine maps. Engine technology is
- 25 improving much faster than we can keep up with, and engines

- 1 better than those modeled by Ricardo are already in
- development. For example, the diesel maps used by Ricardo
- 3 for the U.S. simulations are already out of date, and ICCT
- 4 has already recontracted with Ricardo to rerun the diesel
- 5 simulations for Europe using maps representative of the
- 6 latest diesel technology.
- 7 Another example is the engine map for
- 8 the gasoline engine with boosted-EGR which is higher fuel
- 9 consumption than a similar concept in development by the
- 10 energy absorption.
- 11 This rapid technology improvement can
- 12 also be seen by looking at historical data. The 2001
- 13 Natural Research Council report found that turbocharging and
- downsizing could improve fuel economy by 5 to 7 percent.
- 15 The most recent estimates in the draft RIA found this
- 16 benefit is now two to three times higher. This is not due
- 17 to the older estimates being wrong, but rather to rapid
- improvements in combustion and turbocharging technology over
- 19 the last 10 years.
- 20 By comparison, the 2025 rules are
- 21 13 years away. The efficiency estimates in the draft rule
- 22 are actually quite conservative and there should not be any
- 23 consideration of rolling them back.
- 24 Computer simulations will especially
- 25 impact lightweight material design. In the past

- 1 optimization of materials was a long, slow process of
- 2 gradually changing a few parts of the time to avoid
- 3 unanticipated problems with safety, ride, noise and
- 4 vibration.
- 5 The recent development of sophisticated
- 6 and accurate vehicle simulations is opening up a new world.
- 7 The initial use of these models was to improve safety
- 8 design. The simulations were so effective that 5 star crash
- 9 ratings became almost universal and NHTSA had to revise
- 10 their rating criteria. The simulations are continuing to
- 11 rapidly improve to the point where they are starting to be
- 12 used to simultaneously optimize the material composition,
- 13 shape and thickness of every individual part, including
- 14 secondary weight reductions.
- The shift in material design
- capabilities also impacts the cost to reduce vehicle weight.
- 17 The studies in progress by Lotus and FEV are using highly
- sophisticated simulation models to optimize part material
- 19 and design. The results of these studies will be far more
- 20 accurate of future designs and they must be used to assess
- 21 the costs of weight reduction for the final rule.
- 22 ICCT is also paying FEV to do additional
- 23 teardown cost assessments in connection with our work in
- 24 Europe. These include updating the future hybrid costs, new
- 25 cost assessments for advanced diesel engines, basic

- 1 start/stop systems, manual transmissions and cool EGR
- 2 systems. These results will be shared with EPA and NHTSA as
- 3 they become available.
- 4 ICCT will address the safety issues in
- 5 more detail in our written comments including the results
- 6 from DRI's latest safety analysis.
- 7 I will just make two quick observations.
- 8 First, every time Kahane reanalyzes the impact of mass
- 9 reduction on fatalities, the fatality increase goes down.
- 10 More importantly, the coefficients in Kahane's modeling
- 11 reflects the material composition in historical vehicles.
- 12 This is dominated by conventional steel. This modeling
- 13 implicitly assumes that lighter vehicles do not change
- 14 material composition. However, future weight reduction will
- 15 be accomplished primarily with use of high-strength steel
- 16 and aluminum, both of which have better crash properties
- 17 than the standard steel. Their use will improve vehicle
- 18 crash performance and reduce fatalities, even in small cars.
- 19 In fact, Honda has moved aggressively towards the use of
- 20 high strength steel in small cars, in part due to the safety
- 21 benefits.
- 22 ICCT strongly supports the overall
- program stringency. However, we are concerned some
- 24 cost-effective reductions may not be achieved due to certain
- elements found in the performance rule.

1	One of ICCT's guiding principles is that
2	standards should be technology neutral. The proposed
3	provisions to assign zero carbon emissions to electric-only
4	operation and for artificial credits for certain pickup
5	truck technologies distort the compliance system and reduce
6	the overall benefits of the program. The separate footprint
7	curve to cars and light trucks also distort the requirements
8	by making it easier for vehicles classified as light trucks
9	to comply. A single footprint function would still give
10	larger trucks a less stringent target to meet while avoiding
11	vehicle classification games.
12	Another guiding principle is the
13	requirement should properly represent in-use emissions. Our
14	concerns here center on the off-cycle credits and the
15	failure to include non-CO2 climate forcing agents such as
16	black carbon. ICCT supports the concept of off-cycle
17	credits. However, we will provide detailed written
18	suggestions on how to better implement them so that they are
19	valid and avoid double counting.
20	In closing the ultimate goal is to
21	create a sustainable transportation system. ICCT looks
22	forward to working with everyone involved including, first
23	of all, including the federal and state agencies and vehicle
24	manufacturers to help shape the best policies and programs
25	to meet our clean air, energy security and climate change

- 1 objectives.
- MR. MEDFORD: Thank you very much.
- 3 Luke Tonachel.
- 4 MR. TONACHEL: Good afternoon, and thank
- 5 you for the opportunity to testify today.
- 6 My name is Luke Tonachel, and I'm a
- 7 senior analyst in the Energy and Transportation Program at
- 8 the Natural Resources Defense Council.
- 9 I am pleased to be here on behalf of
- 10 NRDC's 1.3 million members and on-line activists.
- 11 The proposed standards are a giant step
- 12 forward. The standards are good for the environment,
- 13 consumers, and the economy. The standards ensure that as a
- 14 nation we are investing in our future instead of being
- 15 beholden to a status quo of heavy dependence on oil which is
- 16 fueling dangerous emissions of carbon pollution and draining
- 17 our economic wealth.
- 18 These standards present the U.S. with a
- 19 choice on how to spend a half trillion dollars over the next
- 20 20 years. A half trillion dollars is a conservative
- 21 estimate of the value of the fuel savings from this program
- from 2017 to 2030. Without the standards we will
- 23 unnecessarily send \$350 billion overseas to OPEC and other
- 24 oil-producing countries. We will also pad the revenues of
- 25 the oil industry by another \$150 billion.

- 1 By raising standards to the equivalent 2 of 54.5 miles per gallon by 2025, we'll invest that 3 \$500 billion back into our economy and create almost 500,000 4 new jobs while cutting carbon pollution. 5 Under the rule, the U.S. would invest 6 about \$300 billion in new vehicle technologies bringing 7 cleaner, more fuel-efficient cars and trucks to the 8 marketplace. Consumers would have an additional \$200 9 billion in their pockets to spend on the economy, thanks to the fuel sipping vehicles. 10 11 Making better vehicles means more U.S. 12 jobs. A recent report from the investor group Ceres 13 estimates that the auto industry investments and consumer savings triggered by the proposed standards would generate 14 484,000 jobs across the country. This is not surprising. 15 16 NRC recently partnered with the UAW and 17 the National Wildlife Federation to quantify the jobs being 18 spurred by the current 2012 to 2016 standards. In our joint
- companies across 43 states to make parts that enable cars
 and trucks to cut pollution and go further on a gallon of
 gas.

 Consumers win under this proposal
 because they have more choices of cleaner, fuel-efficient

report, "Supplying Ingenuity," we found that over 150,000

workers are currently employed in 300 automotive supply

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- offerings in the showroom. As the agencies' analysis shows,
- consumers will have net savings of up to \$4,400 over the
- 3 life of their vehicle under the standard. Importantly, for
- 4 most consumers that finance their vehicles, the net savings
- 5 will be brought home immediately.
- 6 Under the standards the combination of
- 7 fuel expenditures and new car payments will be lower in the
- 8 first month. By 2030 the aggregate national savings will
- 9 provide the equivalent of an annual tax rebate of \$330 for
- 10 every American household.
- 11 Consumers want cleaner, more
- 12 fuel-efficient vehicles, and they are buying them.
- 13 According to data from the University of Michigan, the
- 14 average fuel economy of new vehicles since data was first
- 15 collected in October 2007 has been increasing year over
- 16 year.
- 17 Improved efficiency is being achieved
- across the fleet. Gone are the days when the V-8s were
- 19 king. 6- and 4-cylinder engines are the norm with thrifty
- 4-cylinders being the most popular choice. The agencies'
- 21 analysis shows the internal combustion engines will continue
- to reign through the 2017 to 2025 standards. Over 80
- 23 percent of new vehicles in 2025 will be internal combustion
- 24 engine cars and vehicles with more advanced and innovative
- engines, transmissions and bodies.

- 1 Hybrid electric and plug-in electric 2 vehicles will continue to grow in the marketplace, but most 3 new cars and trucks under the standard will run solely on gasoline, just less of it. In addition to using less gas, 5 these new vehicles will cut emissions of dangerous global warming pollution in half compared to today's average 6 7 vehicles. 8 NSRC estimates that the 297 million 9 metric tons of greenhouse gas reductions in 2030 from the 10 standards is equivalent to avoiding the annual emissions 11 from 76 coal-fired power plants. 12 These standards will help protect our 13 economy by helping reduce extreme weather events such as hurricanes, heat waves and floods. 14 15 The national program and this latest set 16 of standards are examples of good government. Despite the gridlock in Congress, the EPA, NHTSA and the California Air 17 18 Resources Board have demonstrated an effective partnership 19 to develop policies that meet the objectives of the Clean 20 Air Act and the Energy Policy and Conservation Act. 21 Each agency has played an important and
- 22 critical role in shaping this proposal. This proposal is
 23 also a product of discussions with the automotive industry,
 24 labor, environmental, and consumer stakeholders, and the
 25 result is a strong set of standards.

- In conclusion, the U.S. has an opportunity to invest half a trillion dollars over the next
- 3 20 nears. Implementing the 2017 to 2025 standards will
- 4 allow us to invest that money in America. It will promote
- 5 vehicle technology leadership, protect the environment, help
- 6 consumers and create U.S. jobs.
- 7 Some in Congress seek to disrupt this
- 8 standard-setting process. If they were to succeed,
- 9 Americans would be robbed of more choices of cleaner, more
- 10 efficient vehicles, the automotive industry would struggle
- 11 under the market uncertainties driven by volatile fuel
- 12 prices, and the nation would be faced with greater oil
- dependence and pollution. The agencies should forge ahead,
- 14 keep the model year 2017 to 2025 standards strong and make
- 15 them final this summer.
- Thank you for your attention.
- MR. MEDFORD: Thank you very much.
- 18 Mr. Ross.
- 19 MR. ROSS: Distinguished Panel, my name
- is Matt Ross. Thank you for the opportunity to testify.
- 21 I was leading soldiers into Iraq the
- first day of the war in 2003. There I was awarded the
- 23 Bronze Star and the Presidential Unit Citation. Today I'm
- 24 here to talk to you from the Truman National Security
- 25 Project in view of some encouragement to bolster our

- 1 national security.
- 2 Several weeks into the invasion in Iraq,
- 3 I was setting up a Tactical Operation Center. We were just
- 4 north of the Euphrates River. Baghdad had not yet fallen.
- 5 A plane zoomed above the treetops too low even for close air
- 6 support. The surface-to-air damaged A10 Thunderbolt crashed
- 7 a couple hundred yards from our position, and we pulled back
- 8 as the uranium-depleted ammunition started to kick off.
- 9 A few days later I was sitting in the
- 10 pilot ejection seat reflecting on our purpose for being
- 11 there, and I was looking out over our JP8 fuel trucks and
- they were parked in front of the rusting Iraqi oil
- infrastructure, and I realized this country doesn't have
- many assets. About the only thing of value here are the
- 15 gigantic oil reserves, and as our President George W. Bush
- 16 put it, America is addicted to oil.
- 17 So lack of a forward-thinking energy
- 18 policy has created this unsustainable dependence on foreign
- oil by this great country of ours. We have just 3 percent
- of proven world reserves, and we use approximately
- 21 25 percent of global oil production. The military cost of
- 22 sustaining and securing this foreign oil is terrible.
- 23 Former CIA director James Woolsey
- 24 clearly stated the case: Except for our own Civil War, this
- is the only war we have fought where we are paying for both

- 1 sides. We pay Saudi Arabia \$160 billion for its oil, and 3
- or 4 billion of that goes to the Wahabis that teach children
- 3 to hate. We are paying for these terrorists with our SUVs -
- 4 a clear and present case to be sure. Other hostile
- 5 governments like Iran and Venezuela of course use our petrol
- 6 dollars against us in other ways.
- 7 The Pentagon knows well how oil impacts
- 8 national security. The DOD is, of course, the largest
- 9 single user of petroleum in the nation. So the most
- 10 powerful military force on the planet could not function
- 11 without it. As a result, the U.S. military is actually
- taking major steps towards clean, renewable energy
- 13 production. For instance, out at Fort Carson, Colorado, the
- 14 Army has partnered with a local energy provider to build a
- 15 floatable tank solar array that powers some 540 homes. The
- 16 Navy has already commissioned its first electric drive
- 17 surface warfare ship in the U.S. Makin Island and
- 18 additionally they intend to employ a carbon-neutral carrier
- 19 strength force group using bio-fuel and nuclear power by
- 20 2016. Clearly our military leaders have identified energy
- 21 as a national defense issue.
- There are enormous negative
- 23 externalities for burning fossil fuel that jeopardize our
- 24 national security. In February 2010 the Pentagon published
- 25 the first quadrennial defense review which specifically

- 1 addressed climate change. Climate change will contribute to
- 2 food and water scarcity, will increase the spread of disease
- 3 and may spur or exacerbate mass migration. While climate
- 4 change alone does not cause conflict, it may act as an
- 5 accelerant of instability of conflict placing a burden to
- 6 respond on civilian institutions and militaries around the
- 7 world. You've all heard the U.S. military referred to as
- 8 the 9-1-1 of the world. That's why I'm here.
- 9 So, in addition to these extreme weather
- events that may lead to increased demands for defense
- 11 support to civilian authorities for humanitarian assistance
- or disaster response both within U.S. and overseas, in 2008
- the National Intelligence Council judged more than 30 U.S.
- 14 military installations were already facing elevated volatile
- 15 risks from rising sea levels. So to be clear, the Pentagon
- is not prone to shall I say "save the polar bears" type
- 17 crusades. So clearly if the Pentagon is taking steps in
- 18 this direction, this is a clear and present threat to
- 19 national security and we need to pay attention.
- 20 We've known for decades that fossil
- 21 fuels cause serious environmental harm and now it's clear
- that they're endangering our national security.
- 23 So we are extremely privileged to live
- 24 in this great nation. Like the A10 Thunderbolt the U.S. is
- 25 resilient, well built, battle-tested. However, the fossil

- 1 fuel addiction we have threatens our national security much
- 2 as the Iraqi anti-aircraft crews threatened that A10
- 3 Thunderbolt.
- 4 Now, the pilot ejected seconds before
- 5 his plane crashed and parachuted to safety. We as a nation
- 6 don't have that option. We need to change the course on the
- 7 energy policy before it's too late. The new EPA proposal
- 8 for 54.5 miles per gallon is a great step in that direction.
- 9 Thank you.
- 10 MR. MEDFORD: Thank you. We would like
- 11 to thank you for your testimony and we would like thank you
- 12 and appreciate your service to our country. Thank you very
- much.
- MR. ROSS: You're welcome.
- MR. MEDFORD: Mr. Shaw.
- 16 MR. SHAW: Good afternoon and thank you
- 17 for the opportunity to appear before you today to provide
- 18 comment on proposed CAFE rules.
- 19 My name is Jody Shaw. I'm the Director
- of Technical Marketing & Product Research for United States
- 21 Steel Corporation.
- 22 My role within U. S. Steel is to assist
- 23 the automotive industry to make the best use of our product
- vehicle structure in all applications and to ensure U.S.
- 25 Steel is producing the products that the automotive industry

- 1 requires today and in the future.
- 2 I'm also the Chairman of World
- 3 Automotive Steel, the automotive applications organization
- 4 for the World Steel Association representing 17 global steel
- 5 companies that provide the vast majority of the steel for
- 6 the 16 million vehicles globally produced each year.
- 7 The goal of WorldAutoSteel is to
- 8 demonstrate the advantages of steel in vehicle design as
- 9 well as establish the technical requirements of steels in
- 10 future vehicles.
- 11 The message I'm providing you today
- complements the position taken by the global steel industry
- and the other pro-environmental stakeholders who share the
- objectives of reducing the carbon footprint of motor
- 15 vehicles.
- 16 U.S. Steel supports the objectives of
- 17 the EPA and NHTSA to improve fuel economy and reduce the
- 18 greenhouse gas emissions associated with light vehicles. We
- 19 also support the Energy Independence and Security Act of
- 20 2007 and the President's May 21st, 2010, request that the
- 21 EPA and NHTSA work together to develop a national program
- 22 that would produce a new generation of clean vehicles in
- 23 response to the country's goal of reducing carbon emissions
- and reducing oil consumption.
- 25 CAFE was initiated in 1975 in the wake

- of the 1973 oil embargo with the objective of reducing
- dependence on foreign oil. That program adopted miles per
- 3 gallon measured in the equivalent tailpipe grams of CO2 per
- 4 mile as the method to achieve reduction in oil consumption.
- 5 It was the right approach to achieve this stated objective.
- 6 However, extending that same measure
- 7 towards the new objectives of reducing greenhouse gas
- 8 emissions will not achieve the intended outcome, but in
- 9 contrast it will result in increased total energy use and
- 10 CO2 emissions. In fact, the magnitude of these unintended
- 11 consequences will increase as the fuel economy in grams of
- 12 CO2 per mile become more stringent between now and 2025.
- To explain, a vehicle consumes energy
- and emits CO2 during all phases of its life which includes
- 15 manufacturing, driving and end-of-life disposal.
- 16 Considering all phases of a vehicle's life accurately
- measures its true carbon footprint.
- 18 In today's vehicle the driving phase CO2
- emissions represents 85 percent of the vehicle's total
- 20 carbon footprint which allows the regulators to ignore the
- other phases of impact. However, as fuel economy
- requirements double from 27.5 miles per gallon today to 54.5
- 23 miles per gallon in 2025 the driving phase conditions will
- 24 be cut in half, thus increasing the importance of the other
- 25 vehicle savings.

1	Also consider that many of the
2	technologies and materials necessary to achieve these fuel
3	economy improvements are energy and CO2 intensive in the
4	manufacturing phase and will increase the vehicle's
5	manufacturing phase CO2 emissions altering end-of-life
6	impact in both relative and absolute measures.
7	Several recent studies demonstrate that
8	vehicles aiming to achieve the future fuel economy and
9	tailpipe emission targets will have a 50/50 split between
10	CO2 emissions associated with the driving phase and other
11	phases. Under the proposed regulation 50 percent or more of
12	the total CO2 emission associated with these future vehicles
13	will fall outside of the regulation.
14	So how does this conflict with the
15	national objective of using CO2 emissions and energy use of
16	vehicles to address climate change? As I stated, many
17	technologies are required to achieve the proposed 54.5 miles
18	per gallon target of high manufacturing emissions. Examples
19	of this: The materials that compete with steel such as
20	aluminum, magnesium and carbon fiber, which are 6 to 20
21	times more energy- and carbon-intensive in the manufacturing
22	phase on a pound-per-pound basis.
23	While these materials may improve fuel
24	economy and tailpipe CO2 emissions in the driving phase,
25	those improvements are not sufficient to offset the upstream

- 1 CO2 emissions associated with producing these materials.
- 2 To address these unintended consequences
- 3 and achieve optimal environmental resource allocation,
- 4 future regulations should evaluate CO2 emissions associated
- 5 with all the vehicle's life. This will ensure that
- 6 technologies are not deployed and improve the driving phase
- 7 emissions while increasing a vehicle's overall carbon
- 8 footprint.
- 9 In this regard we have been working with
- 10 EPA and NHTSA over the past several years to consider the
- 11 more appropriate methodology which resulted in Section 3.G.5
- of the NPRM requesting additional information on this topic
- 13 for which I would like to thank and commend the EPA and
- 14 NHTSA for their open-mindedness on this issue.
- 15 There are many advantages to a vehicle's
- 16 CO2 regulatory approaches and corporate lifecycle thinking
- over the current tailpipe emissions approach, beyond the
- obvious advantage of actually achieving the intended outcome
- of reduced energy use and CO2 emissions.
- First, such an approach will enable
- 21 vehicle makers with increased design flexibility in
- 22 complying with the regulation which will result in lower
- 23 cost vehicles and improved environment performance.
- 24 Vehicle makers can provide an example
- 25 that the lowest lifecycle CO2 technology solution is also

- 1 the low cost solution. In contrast, the same examples also
- demonstrate that the selection of technology to improve fuel
- 3 economy and tailpipe emissions alone would have resulted in
- 4 increased manufacturing costs while increasing the carbon
- 5 footprint of the vehicle. Regulations that drive vehicle
- 6 makers towards solutions that increase cost and total carbon
- 7 emissions does not make sense. Regulations that incorporate

A second advantage is that it would

- 8 lifecycle thinking will address such unintended
- 9 consequences.

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drive the vehicle supply chain to reduce the carbon

intensity of their products because of the commercial

advantage you would provide them; that is, low carbon

suppliers would provide a competitive advantage to their customer, the vehicle manufacturer, in complying with the

regulations. Regulations properly executed result in a race

to the CO2 bottom as manufacturers compete to be the low

carbon supplier. The studies sponsored by the steel

industry and conducted by the University of California at

Davis proposes a methodology for CAFE regulation that

21 incorporates lifecycle thinking while maintaining the simple

grams of grams of CO2 per mile metric on current EPA/DOT

vehicle stickers. And that will dovetail into the existing

CAFE regulations. This methodology addresses the unintended

25 consequences and results in real carbon reductions associated

- with vehicles using information readily available to the
- vehicle makers.
- This proposed lifecycle methodology
- 4 still needs further development in order to be incorporated
- 5 into regulation, but great strides are being made and should
- 6 be ready for trial in the coming years. Already several
- 7 automakers are utilizing lifecycle tools during vehicle
- 8 design. The steel industry is building a consortium of
- 9 stakeholders to further develop this lifecycle methodology
- 10 and identify the details to ensure its feasibility and
- 11 regulations. Properly devised, we believe lifecycle tools
- 12 incorporated into the regulation will result in a better
- 13 framework that increases flexibility for auto designers and
- improves transparency while enhancing the environmental
- integrity of the underlying regulation.
- 16 The current 2017-2025 light-duty vehicle
- emissions proposals call for a mid-term evaluation that will
- lead to a final agency action. We believe that a complete
- 19 evaluation of the feasibility of incorporating lifecycle
- 20 thinking into vehicle emissions regulations is possible
- 21 within the mid-term evaluation phase.
- We will continue to work closely with
- 23 EPA and NHTSA on this issue and urge the agency to actively
- 24 solicit advice and input from multidisciplinary experts
- 25 prior to the mid-term review.

1	In the 110-year history of the United
2	States Steel Corporation, we have conducted ourselves
3	according to a framework of sustainable business conduct and
4	corporate citizenship established by one of our founders,
5	Elbert H. Gary. These principles known as the Gary
6	principles are established in nine uncomplicated statements.
7	The first of these statements is I
8	believe that when a thing is right it will ultimately and
9	permanently succeed. In light of that principle, lifecycle
10	thinking applied to climate change regulations is the right
11	thing, and I believe it will ultimately succeed; however,
12	ultimately could be a long time with unintended and harmful
13	consequences occurring before the right thing is finally
14	employed.
15	We have an opportunity here to implement
16	the right solution in the near term and avoid unintended
17	consequences. Vehicle emission regulations that incorporate
18	lifecycle thinking is the right approach to achieve positive
19	environmental economic objectives. Accordingly we urge
20	regulatory policymakers to begin to investigate the
21	application of lifecycle analytics and metrics into future
22	vehicle emission regulations.
23	Thank you.
24	MR. MEDFORD: Thank you, Mr. Shaw.
25	Questions from any of my colleagues?

1 MS. OGE: I have one question for 2 Mr. Shaw. 3 Thank you for your testimony. So your proposal for the lifecycle 5 analysis for steel and high strength steel material, is your 6 proposal also applied for every substantive and every 7 material that is used in the car anywhere from fabrics to 8 plastics to graphite? That's one question. The second: Have you talked to the 9 10 OEMs, because what you are suggesting is that they would be 11 responsible to do lifecycle analysis for the material they 12 are using in addition to the other materials to give us for 13 the standards. 14 So two questions. 15 Thank you. 16 MR. SHAW: Thank you. 17 The intent and the examples we Yes. 18 provided in our discussions with the EPA and NHTSA would 19 include all the materials, but there's a bill of materials that are associated with the vehicle, and it's a standard 20 deliverable that every vehicle comes with, and those can be 21 interpreted with the database as the materials. 22 23 So I agree that for OEM to chase the

target footprint for the whole supply chain for the

thousands of suppliers that produce the vehicle won't be

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- 1 possible. The approach we are recommending uses the
- 2 database which are available such as the national GREET
- 3 model that have this data already included in there and it
- 4 comes very simplified, and there are examples by the OEM of
- 5 the production vehicles today that have done that.
- And, also, we have shared this with, at
- 7 the recommendation, to the Alliance of Automotive
- 8 Manufacturers and made the same kind of discussion. Of
- 9 course, adding another layer of regulation on top of these
- ones were not seen very positively.
- 11 So, when we got through the presentation
- of this idea of design increases design flexibility; they
- saw an opportunity in that they would have more ability to
- comply with the regulations; and, so, they were interested
- in more information, and we will continue to work with them.
- 16 We think we can have a reasonable solution by the interim
- 17 review.
- Thank you.
- MS. OGE: Thank you.
- MR. MEDFORD: I'd like to thank the
- 21 panel for your testimony this afternoon and for your
- indulgence and your time. So thank you very much.
- 23 MS. OGE: Before we have our next panel,
- 24 there's a request by a group of ladies that have asked to
- 25 briefly make some statements for this public hearing, so I

- 1 will ask them to come forward. If I pronounce your names
- 2 right, but Nancy Goedert and Sharon Strus and Carolyn
- 3 Dougherty and April Mitchell. If you could please have a
- 4 seat. What would you like to do?
- 5 So for the reporter, you need to say who
- 6 you are.
- 7 MS. GOEDERT: This will only take about
- 8 three minutes. We are the Raging Grannies, and we have a
- 9 couple of songs, quick songs for you.
- 10 Nancy Goedert, G-O-E-D-E-R-T.
- 11 MS. STRUS: Sharon Strus, S-T-R-U-S.
- 12 MS. DOUGHERTY: Carolyn Dougherty.
- MS. MITCHELL: April Mitchell.
- 14 THE RAGING GRANNIES: The people in cars
- 15 go round and round, round and round, round and round. The
- 16 people in the cars go round and round all through the town.
- 17 The people in the street go cough,
- 18 cough, cough, cough, cough, cough, cough, cough. The
- 19 people in the street go cough, cough, cough, all through the
- 20 town.
- 21 We Grannies out here say Clean up it,
- 22 Clean it up, Clean it up, we Grannies out here say Clean it
- 23 up, we want it now.
- MS. GOEDERT: And we have one more.
- 25 THE RAGING GRANNIES: Let's not buy an

- 1 automobile that pollutes air, water and field. We demand
- 2 earth friendly cars, so Earth won't become like mars. We
- 3 must care for Mother Earth so she can keep on giving birth
- 4 and sustain our lives in a healthful way. Let's resolved to
- 5 do it today.
- MS. DOUGHERTY: I have a question.
- Just from what I had heard, there's so
- 8 much progress with computers and all the materials, the use
- 9 of materials and the strengthening of the field and
- 10 et cetera, it seems like there should be periodic
- improvements, you know, sort of getting it all together and
- there must be a way that people are communicating with each
- other, I suppose. So that seemed interesting.
- MS. OGE: I want to thank -- you're
- 15 known as the Raging Grandmas. We thank you all for coming.
- MR. MEDFORD: This is the best
- 17 entertainment I've ever had in a hearing.
- 18 MS. OGE: Let's give them a hand.
- Now we're going to go our next panel. I
- 20 hope the next panel will be as entertaining.
- 21 So I will ask Jody Shaw, Doug Richman,
- Jim Crowfoot, Walter McManus, Jeffrey Breneman and Judy
- 23 Lindberg to please come forward.
- 24 I'm going to apologize for asking the
- 25 panel to come forward. We're going to take a 10-minute

1	break because the reporter needs a break. Without her, we
2	have no record and we need that accurate so she's in charge
3	for the time for this panel. Thank you.
4	(A short recess was taken)
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MS. OGE: Hello I think we're ready to start.

Can you please take your seats? So forgive us for the interruption, but we're ready to start. So we will start with Mr. Doug Richman. And I'd ask you to please state your name and do speak slowly, not that slow, but you know, sufficiently slowly so your remarks can be recorded.

MR. RICHMAN: Okay. Good afternoon. And my name is Doug Richman. I'm Vice-President of Engineering at Kaiser Aluminum, and I'm here today representing the Automotive Transportation Group of the Aluminum Association. And I want to sincerely thank the panel for allowing us this opportunity to comment on this regulation, regards as an extremely important piece of regulation and one that has a major potential impact on the automobile transportation future of our nation.

We recognize that developing a comprehensive national fuel economy regulation is a formidable task with profound consequences, and we want to sincerely congratulate the agencies on the outstanding job. We sincerely see it as an outstanding body of work and the conclusions are realistic, attainable and will achieve our national objectives in energy so we think it's an

outstanding job and a credit to all of the agencies and individuals who are involved. It's been a pleasure to work with the organizations.

My comments today will address the issues of the advanced materials as they are applied and referred to within the context of the NPRM strictly delegating our comments to the materials portion only. And as part of our testimony today, we'd like to enter four recent documents into the record. I'll briefly summarize them. These comments and printed copies will be submitted with our written testimonial in response to the document.

The four studies that we would like to enter are first the Ducker Worldwide survey of materials used in the auto industries of 2012 projecting material usages out to 2025 in response to anticipated changes in fuel economy regulation be the first one. The second one we're going to enter into the record is a recent study conducted by DuPont where they surveyed automotive OEM and Tier 1 supplier executive engineers on their perspectives on the role of advanced materials in meeting future fuel economy and CO2 emissions requirements. The third document we'll enter is comments made by Honda Motor Company at a recent international auto body symposium in Michigan here, and

the fourth one, the fourth document is a lifecycle study recently completed by the European Union as part of their effort in support of the regulations on CO2 emissions in Europe. All four of those actual documents will be submitted.

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I'll just make some brief comments. Ducker study, which we just completed late last year, concluded that to achieve the fuel economy objectives and CO2 emissions requirements required by 2025, the average vehicle in North America will have to be reduced in weight by about 375 pounds. They came to that conclusion in discussions with OEMs and Tier 1 suppliers. Of that 375 pounds, aluminum will play a significant role. Aluminum content today in the average vehicle in North America is 347 pounds of aluminum or 9% of the curb weight of the vehicle. That aluminum content is expected to increase to 550 pounds per vehicle by 2025 to support fuel economy and efficiency improvements that are required. In that sense, aluminum will contribute about 60% of the weight reduction that's anticipated for the overall average vehicle by 2025.

The second study conducted by DuPont recently was again a survey of automotive industry executives and engineers, and in that study that group indicated

aluminum was identified as the most helpful material in helping them meet their fuel economy and efficiency objectives through 2025, confirming much of the same information that the Ducker study had found.

The third document item that we'll enter is comments made by Honda Engineering, specifically by their senior vice-president of R&D activities for the America's, Frank Paluch, and his comment, "Based on our current understanding, we believe we're approaching the practical limits in the application of traditional materials. It will be increasingly difficult or impossible to meet the future fuel efficiency and carbon dioxide emission requirements with vehicle bodies made with traditional materials." And in that context we view Honda as among the growing number of OEMs that recognize that future vehicle design requirements will depend upon lighter, stronger and more crash-absorbent materials like aluminum in the future.

The fourth item that we'd like to enter into the record is this recent study by the European Union on CO2 lifecycle emissions, and in the NOI for this NPRM, new vehicle lifecycle analysis was discussed and the European study confirms much of the statements that are in the NPRM, the environmental impact statements

associated with this NPRM. The study supports the conclusion that weight reduction with aluminum and high-strength steel achieves significant use-phase CO2 emissions reductions that more than offset and more than outweigh the additional emissions created during the vehicle production. Those findings are very consistent with the EPA drafts and whatnot, environmental impact statement.

Now when we discuss weight reduction, we always have to keep in mind safety considerations. There's a constant debate and concern about the relationship between weight and safety. The aluminum industry shares and supports the agencies' priority for continuous improvement in vehicle safety. Weight reduction has been certainly identified as an important part of a comprehensive vehicle fuel economy improvement initiative and that must be implemented in a manner that preserves or enhances vehicle safety. We support that.

Developing an appropriate assessment of potential weight reduction strategies requires a very thorough and complete understanding of the independent influences of vehicle mass, vehicle size, design technology and safety features that are implemented in a vehicle. Unfortunately, limitations and available

data, predominantly historical data, and currently available modeling technologies make it virtually impossible to separate the independent influence of those separate technologies. It's even more difficult to predict the impact of weight reduction as we look forward in the 2025 timeframe and try to anticipate improvements in vehicle safety engineering, fundamental design and also the deployment of new and advanced safety enhancing technologies.

In the face of this difficulty in assessing the data, we'd like to congratulate the NHTSA for their thorough, thoughtful and professional approach taken in analyzing the relationships in trying to separate the relationships between these virtually inseparable engineering parameters.

Considering the uncertainties involved in the weight versus safety debate, we believe the agencies' position on vehicle weight reduction represents an objective, well reasoned assessment of the available information and is appropriately conservative. We believe the future has a lot of improvement in it and we expect that to be materialized. That will probably -- we expect that will be the subject of the midterm assessment of the regulations as we go forward. They'll be some body of data to support better

separation of the weight versus safety issue.

Recent studies by the NHTSA and reflected in the NPRM indicating the down-weighting, not downsizing, down-weighting of large and midsize vehicles will have a neutral or positive impact on overall fleet safety while improving fuel economy. In this vehicle segment, automakers have been using lightweight materials, including aluminum, for some time, and from all we can see, that use of the lightweight materials is increasing in this market sector.

With respect to smaller vehicles, the data is clearly difficult to separate and those clear conclusions on safety versus weight have been, have been extracted from the data. Due to that uncertainty, the NPRM does not anticipate significant mass reduction in vehicles below 3000 pounds. Analytical studies provided by the Aluminum Association, and others, suggest that vehicle size, not weight, is the largest determinant of vehicle safety. We believe that in the near future advancements in small vehicle design and deployment of lightweight body structures, including aluminum, will achieve significant weight reduction while preserving vehicle size and improving safety performance, and we think again that will be something we'll review with you all at the midterm review of the

progress in the CAFE regulation.

Turning to the size-based standard, the

Aluminum Association continues to support the agencies'
use of the size-based footprint approach to regulating
both fuel economy and CO2 emissions. We believe this
approach recognizes and in fact encourages
manufacturer's aggressive development and
implementation of advanced fuel efficiency improvement
technologies throughout the vehicle fleet.

Administering a comprehensive size-based standard is an important and complex task, to be sure. The NPRM, this NPRM, clearly identifies that the EPA will use annual assessments of vehicle footprint, fuel economy and performance and the sales mix to establish OEM fleet fuel economy targets for each year. The Aluminum Association believes this approach assures OEMs receive full credit for design-related technologies implemented throughout the fleet, while assuring that we achieve our overall objective for fuel economy improvement of the total fleet.

As we think about light-weighting and advanced materials, the other question that comes up after safety is cost. Clearly strong, affordable carbon reducing materials are being used at an increasing rate to meet down-weighting objectives now

and in the future. Aluminum is widely recognized as a cost-effective choice for reducing weight in automotive bodies, individual components, and vehicle structures. As auto makers turn to greater use of aluminium, secondary weight reductions are emerging as a major cost savings enabler. As we get larger and larger weight reductions, we're able to make larger and larger reductions in vehicle support systems.

Vehicle weight reduction allows reducing size, weight and cost of powertrain, transmission and chassis components, the secondary weight reduction factors in a vehicle. Without sacrificing performance or safety of the vehicle, cost savings from these secondary weight reductions can offset and have in fact proven to offset in a lot of cases the majority of the cost improvements associated with moving to advanced materials, whether that be advanced aluminum, high-strength steel or in some cases composites.

So in conclusion, we see that weight reduction, weight optimized future vehicles and components will take maximum advantage of available engineering materials. These materials are continually being improved to further enhance the ability of auto designers to design efficient vehicles. Materials including aluminum, high-strength steel, magnesium and

composites will all find use in the vehicles of the future, they'll work -- live together in more efficient vehicle structures.

Aluminum offers a unique combination of attributes including low weight, high strength, excellent energy absorption capability, natural corrosion resistance at a reasonable cost. For those reasons, we believe aluminum will play an increasing role in the optimized vehicle of the future. Thank you. And if there are any questions, I'll be happy to --

MS. OGE: Thank you. Now I'm going to call on Mr. Jim Crowfoot.

MR. CROWFOOT: I appreciate this opportunity to testify. My name is James Crowfoot. I testify this afternoon from two perspectives. One perspective, my concern for my grandchildren and all the children of their generation, and I hope the children born after them, and from the perspective of someone who's spent his life working on the questions of un-sustainability and sustainability in a major research university in a college that has devoted much of its efforts and attention to this work.

I want to strongly support the standards being proposed and the processes by which these

standards have been arrived at. There's no question that you have paid attention to the science, the natural sciences and the social sciences as you've proceeded in coming to these standards and working on refining them. And the college of which I've been a part of all of my adult work-life is committed to those sciences and is pleased that the work that you included in the standard.

Similarly, I'm very impressed by the use of the multi-stakeholder approach, the policy making and rule setting that has been manifested in this process. This is cutting edge, it's not something that has characterized policy making in many areas of our national and state policies in the US and major accomplishments have occurred in this way.

Interdisciplinary use of sciences is very present in the standard and in the multi-stakeholder process and is very much to be applauded. Obviously, the standard builds on an acknowledgement of the realities of global climate change or climate disruption. Coming to Detroit today in mid January and the outdoor thermometer in my Prius is registering 52 degrees Fahrenheit was a constant reminder that for all of my years living in the Midwest I've shoveled the least snow this winter, and I've yet to really pull out

my heavy-duty winter coat, and this data is congruent with the pattern data as we look back. One of my favorite bays in Michigan when I was in my thirties and forties, I'm now in my seventies, would freeze over nine winters out of ten. In the last 15 years, it's one year out of ten. So we are experiencing climate change and disruption. The only thing that is off the pattern of the science that has so informed me is that it's happening much more rapidly. What I'm experiencing this January was what I was reading about being projected for 2030, 2040 for the locality in which I live. So from the point of view of what has been occurring in relation to the CAFE standards, automobiles, and all the related questions, this represents a very large and major step.

But now back to my reason for being here. My primary reason, my grandchildren and all the children. We must acknowledge at this point that the standard over 50 miles per gallon is a way that we can most quickly refer to it is all too low, all too low. We must acknowledge at this point the best that I can say and my peers who study un-sustainability is that yes, this will reduce the accelerating emission of greenhouse gases globally. It will reduce the rate of increase. It won't stop it, and it obviously won't

reverse it.

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We also have to say, those of us who work in this field, to our grandchildren. You asked me about what I understand and what I can expect in my lifetime, two root issues that I have not heard referred to this afternoon. In my lifetime, born in 1939 to the date our economic output globally has radically changed and it now is growing exponentially higher at a rapidly increasing rate. And more familiarly to all of you, the human population has done the same. When I was born there were about two billion people on the planet, seven billion plus now, headed for a minimum of nine billion, probably more likely 12 billion humans on the planet. This is unsustainable. It represents our entrance into a crisis for human civilization. already affecting us. I refer to the weather. look at our economy and the global economy. As I look to the lives of my grandchildren and their peers, I am deeply worried. And I have to admit that my best estimate and those of my peers is that there probably is a slightly higher probability that their lives will at best be severely disrupted if not checked by the pattern that we are in and we are headed to.

So from their perspective, I hope they would applaud us today if they paid attention to the historic

context in which so many of us have struggled and continue to struggle to make the positive progress manifested in the room today. I hope they'd at least acknowledge that we have made some baby steps. But as we do it, and we applaud each other and all of our peers who aren't here who are responsible for this progress, I hope that we will keep all of the children and their futures in mind, and all of the data that indicates yes, this is a meaningful step. But the biggest part of the value of this step, in my judgment, is its educational value.

Sitting here today was wonderful for an hour and a half waiting. It was one of the few times I haven't minded waiting to hear from all of the people who spoke before me. I was so moved by people arguing about lifestyle assessment, by the grandmothers who were here, and most of all by people in our Armed Forces from Iraq bringing back their wide-awake opening consciousness developing experiences from being the implementers of our current policy which attends with it great military costs and the risk of life and loss of life. So it's a pleasure to be here. It's a pleasure to be educated and to hear from the people who've been testifying. I would only ask that the record show the perspective of the grandchildren and

the generations I hope will follow them who really are in a bind because the way of which we're proceeding is fundamentally not sustainable. Thank you.

MS. OGE: Thank you. Now I'm going to call Mr. Walter McManus. Good afternoon.

MR. McMANUS: Thank you for allowing me to participate today and to comment on the proposed rules to extend the National Program beyond the average fuel economy standards and greenhouse gas standards that have been set for 2012 through 2016.

My name is Walter McManus. I'm a Research Professor of Decision and Information Sciences at Oakland University in Rochester, Michigan. I -- prior to this -- I was at University of Michigan for five, six years and I worked at JD Power before that for five years, and before that I was at General Motors for about a decade in forecasting market analysis and strategy and also new product development. I want to emphasize that my comments today are my own professional opinion and don't reflect the -- necessarily reflect the opinions or the views of my employer or anybody else.

I've been looking at these issues for a long time, and one of my first studies of the impact of fuel economy and miles per gallon and fuel prices on profits

was in 2005, and at the time I predicted that if fuel prices spiked about 50% above where they were, that there would be billions of dollars lost by the Big Three, Detroit Three, because of their dependence on SUV's and large pickups, which at the time I would not call gas guzzling, but I think I changed my view on that.

As it turned out, in 2006 and '7 and '8, I grossly underestimated the extent of the devastation that was to come. And I believe that the National Program is supposed to establish aggressive and coordinated greenhouse gas and fuel economy standards for passenger cars, light trucks and medium duty passenger vehicles to alleviate some of the risk that we saw firsthand here in Michigan and are just now come out of. But for the National Program to be successful, NHTSA and EPA had to work cooperatively with lots of stakeholders, and I think they and the automakers and all of the stakeholders are to be commended for establishing and sticking to this joint rulemaking process.

I've written about lots of things over the past decade or so and I, you know, my top-level conclusion is that with, with higher fuel economy standards, there's no doubt in my mind that the

domestic industry can drive innovation, generate jobs in Michigan and around the country, capture investment in a leading edge in the American multi-billion dollar global market for clean technology.

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I want to talk about a couple of studies in particular, and there are others that are listed in my comments. The most recent study I've done, I sort of sat back a little and tried to understand how auto companies and other investors make decisions about investments in new technologies that are risky, and the report is called "Investor Behavior in Advanced Vehicle Technology and Development Employment." My goal was to help analysts and forecasters better understand how investors behave, including automakers, in the automotive industry. And it is well known, in the financial communities at least, that the conventional financial valuation approach to investments undervalues investment projects in new technologies. My analysis suggests that by taking account of flexibility and properly valuing it, the market for alternative powertrains -- sorry the proposed fuel economy standard is 54 and a half miles per gallon by 2025 will give automakers and their customers greater flexibility in adjusting to unpredictable, but inevitable, oil price volatility and spikes in the future.

Correctly recognizing the investment and the flexibility in the investment decisions, this value will encourage automakers to increase the pace of investment in new powertrain technologies and, in turn, the investments encouraged, thus encouraged will be reflected in higher profits, more employment and greater prosperity in Michigan and the country. The future market for alternative powertrains is highly uncertain, but as time passes, automakers and consumers will learn more about alternative powertrains and some of the uncertainty will be resolved.

Automakers today face a choice. A, wait to decide whether to invest until the uncertainty has been resolved or B, make an initial investment now that keeps their auto -- the powertrain options for the automaker open. If the market takes off, then waiting could, in retrospect, be a disaster as the automakers face huge investment share of the market. If the market takes off, the waiting could be a disaster in retrospect. A foothold investment or a toehold investment, B, the B strategy avoids this disaster by giving the automaker flexibility. The flexibility has a very high value in such an uncertain market. The conventional approach forces financial analysts to treat a complex investment project that goes on for

several years as a single decision. The critically important value of flexibility in that decision-making process is ignored. The conventional approach thereby discourages investments in new technologies in an uncertain market. Using the conventional approach, investment in alternative powertrains doesn't make much sense. If automakers currently are incurring losses, why should they invest in more?

Some automakers have begun to use some financial valuation approaches that recognize or allow them to put a dollar value on flexibility. These approaches include decision and risk analysis and real options analysis. Advantages of these new tools is that they incorporate market and regulatory uncertainty, provide a financial value for flexibility that can justify additional investment, give a more accurate understanding of the project's value.

In the future, alternative powertrains may be very profitable. Investment today in alternative powertrains preserve the option to take advantage of that outcome. By adopting these kinds of tools, automakers have the potential to realize great improvement in profit. In an uncertain world, these approaches encourage investment projects that are robust across a range of possible outcomes.

1	Flexibility is rarely incorporated in conventional
2	investment valuation, but it's critical in surviving in
3	this uncertain market. And I'll end there, since I
4	went over my time. Thank you.

MS. OGE: Thank you. Mr. Breneman, good afternoon.

MR. BRENEMAN: Hello, everyone. I'm Jeff
Breneman, the Executive Director of the US Coalition
for Advanced Diesel Cars. The members of the Coalition
are a group of leading automotive suppliers employing
tens of thousands of Americans and we appreciate the
opportunity to submit the following testimony here in
Detroit, the global epicenter of manufacturing and
innovations.

Our Coalition members are on the forefront of innovation in every technology that will be used to improve fuel efficiency during this rulemaking period. We are not here today to ask for any incentives for diesel technology in the CAFE rulemaking. Our members strongly believe that automotive policies should be technology neutral and rely strictly on performance-based standards.

The Coalition strongly supports the

Administration's twin goals of increasing fuel economy

and reducing greenhouse gas emissions. We appreciate

the tremendous efforts that has been required to create the regulatory framework with the California industry and other stakeholders in order to meet these important national policy goals. The Coalition knows that the ingenuity and resourcefulness of the world's best engineers, not only here in Detroit, but all over the globe, are up to the task of achieving both the goals through -- both goals through advanced technology.

In just the last decade we have witnessed the commercialization of many advanced technologies. In model year 2012, consumers can choose from advanced turbo charged 4-cylinder gasoline engines providing over 40 miles per gallon with a comparable power of a traditional 6-cylinder gasoline engine from only a few years ago. One of the top-selling pickups now offers a popular turbo charged 6-cylinder in addition to the traditional V-8 that provides comparable performance and significantly improved fuel economy. More importantly, consumers are choosing the more fuel-efficient options when buying that popular light truck model.

Americans can now choose the fourth generation of a popular hybrid that has sold over one million vehicles in the last decade. They can choose a

plug-in hybrid. They can choose a full electric powertrain. They can even choose a natural gas vehicle. They have technology options such as start/stop, cylinder deactivation, and yes, they have many models of clean diesel to choose from. Today's hearing is an important part of the process so that will provide long-term stability for the automotive industry.

Additionally, in large part thanks to these aggressive goals, we can witness one of the most transformational decades of innovation in the history of the automobile. This is an exciting time, and the regulatory agencies here today can be a true partner in this historic time.

To ensure that we spur not only innovation but broad innovation that will include multiple technology paths, public policies, regulations and incentive plans must be technology neutral. Government should set the goals, even aggressive goals, that inspire the freedom to innovate, and then get out of the way. State, federal and public officials and regulators must resist the temptation to pick winners and losers; to let politics and fads enter the debate or to engage in centralized planning in a highly complex industry.

Market acceptance is also critical to define the best technology or portfolio of technologies necessary to reach the targets set by governments. The Coalition believes that today's advanced vehicle technologies will offer Americans real opportunities to immediately and significantly reduce our dependence on petroleum, reduce greenhouse gas emissions and provide consumers significant savings on fuel.

the adoption of better fuel economy and environmental policies for the light-duty market, they allow the perfect to be the enemy of the very good. By looking to end all petroleum use in the future, current policies are unwittingly preventing consumers from the opportunity to realize significant fuel savings and significant improvements in greenhouse gas emissions today. By rewarding technologies that the federal government believes will be the best solution in the undetermined future, the federal government is actually creating disincentives for automobile manufacturers from bringing new innovations and technologies to market that, in fact, are more suitable for the driving habits of Americans today.

In 2006, the EPA released data showing that Americans are now driving more miles at highway speeds

than in 1975 and federal test procedures were designed to implement. Despite the fact that the majority of miles traveled are at highway speeds, policymakers have focused on urban driving technologies that are not well suited for highway speeds and do little, sometimes even providing a negative benefit for fuel economy and CO2, when driven outside of the urban cycle. Yet consumers are savvy and demonstrated the dedication to research advanced vehicle technology and choose the platform that best meets their needs. When given the choice, over 30% are choosing the diesel option, and less than 10% are choosing the hybrid option, clearly reflecting their understanding the majority of their miles are accumulated at highway speeds.

Federal government's favoritism of
hybridization and electrification continues in EPA and
NHTSA's joint NPRM with two areas of particular concern
to the Coalition. First, the NPRM presents a process
of incentivizing specific technologies by establishing
and awarding credits for "game changing technologies,"
such as a hybrid trucks and electric vehicles.
Additionally, the NPRM continues to ignore the EPA and
NHTSA's own data that shows the majority of miles
traveled by the average American are on highway
conditions instead choosing to favor and reward a

technology that is best suited to city driving and start/stop conditions. The Coalition continues to advocate for policies that incentivize game-changing fuel savings by rewarding outcomes, not implementation of a specific technology.

In the NPRM, EPA and NHTSA outline proposals that offer manufacturers incentives to incorporate game-changing technologies into the full-sized pickup truck market. These incentives in the form of credits come in two forms. One will provide credits to manufacturers to produce hybrid electric pickup trucks, another will award credits to manufacturers that produce pickup trucks that meet a similar performance-based standard.

EPA and NHTSA argue the HEV technology in pickup trucks is an emerging technology that faces substantial challenges in gaining initial market penetration. The Coalition finds this argument tenuous on a number of levels. First, the Coalition believes the HEV technology, which has been on the market for over a decade, is not an emerging technology today, and certainly will not be an emerging technology in 2017 when these credits are set to go into effect. To the contrary, light-duty HEV's have been a viable option for a number of consumers, particularly those who drive

in urban conditions. It might be considered an emerging application of an existing technology, but it certainly cannot be described as an emerging technology almost 20 years of being on the market, which will be the case when this rule goes into effect. In fact, the GMC Sierra and Chevy Silverado hybrid applications in the truck segment have been on the market for nearly a decade.

Second, EPA and NHTSA state that because of the substantial cost required to produce full-sized HEV pickup trucks, automakers have difficulty justifying the investments necessary to produce these vehicles without a government incentive. The Coalition believes that government incentives to create a market for specific technologies are the wrong path to achieve fuel efficiency gains and emissions reductions.

Examining consumer acceptance of alternative vehicle technologies in light-duty vehicles where hybrid technology is already well established foreshadows the pratfalls of choosing a single technology winner for the full-sized pickup truck segment on a technology neutral approach that promotes all advanced technologies will achieve real results.

Current take rates for passenger HEV's clearly demonstrate consumer hesitance to invest in a

vehicle that, while it's fuel efficient on the test cycle, does not fulfill their driving needs. When we refer to take rates, we're referring to the percentage of consumers who purchase an advanced technology powertrain over a standard gasoline powertrain when the option exists on the same vehicle.

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From June 2010 to June 2011, the average take rate for HEV's was 5%. That means consumers chose a standard gasoline engine over the HEV version of the same vehicle 95% of the time. Comparing that to the take rate of the clean diesel technology over the same period, consumers chose the diesel option over the standard gasoline version 39% of the time. While both technologies offer comparable fuel savings over a standard gasoline vehicle, diesel technologies lower purchase price, and greater functionality proved more attractive to consumers than the HEV. The Coalition recognizes there are some popular vehicles such as the Toyota Prius that only offer the HEV option, therefore, do not factor into that average take rate referenced above. However, when provided the option, the vast majority of consumers are still choosing the standard gasoline vehicles over HEV.

EPA and NHTSA do not show any market data to suggest consumers will treat full-sized HEV pickup

trucks any differently. In fact, consumers have already displayed significant reluctance to make an investment in a full-sized hybrid truck. In model year 2010, consumers showed the GMC Sierra and Chevy Silverado hybrid .23% of the time preferring the gasoline option in more than 99% of the cases. This amounts to 1165 hybrid models out of nearly 500,000 Sierra and Silverados sold in 2010, yet the incentive assumes consumers will flock to this option.

Despite inquiries to the agencies and with suppliers, we are unaware of any data the demonstrates that most full-sized pickup truck owners accumulate the majority of miles under urban conditions and duty cycles. Conversely, these light trucks will be burdened with carrying the significant weight of the battery technology at highway speeds while using a gasoline or a diesel-powered engine.

By driving conditions that do not utilize the benefits of hybridization, it is unclear that the fuel economy gains and emissions reductions have predicted to result from this game-changing technology are actually attainable. The Coalition strongly believes that skewing the market through incentives and credits in favor of one technology that consumers may not want will leave innovations to current technology that will

produce real fuel economy gains and emissions reduction on the table. Instead, the Coalition urges the EPA and NHTSA to pursue only the performance-based standard credit outlined in the NPRM and apply such standards across all vehicle classes.

By focusing on outcomes, not specific technologies, EPA and NHTSA will unleash American innovation and ingenuity to identify and develop the suite of technology solutions that we need to meet consumers' disparate driving needs. This would naturally include all forms of advanced technology vehicles in every class, but only those for which there's a market. Set the bar, and American innovation will meet the goal.

The Coalition sees no benefit in maintaining a performance-based credit and a separate credit for full-sized HEV pickup trucks when the latter can, and should, qualify under a strictly performance-based structure. Instead of sending a strong signal to both manufacturers and consumers that hybrid trucks represent the best technology option, EPA and NHTSA should make the case for any technology that meets the aggressive quidelines set forth by the NPRM.

The Coalition believes that following an evolutionary path that capitalizes on the innovative

technologies that are available and cost effective in the near and medium term, EPA, and NHTSA, and the consumer will all achieve the desired results of greater fuel efficiency and reduced emissions.

Unfortunately, the NPRM seems to outline more of a revolutionary path without guaranteeing the real results.

During the comment period for the model year 2012-2016 joint rulemaking on CAFE, the Coalition argued that regulation does not accurately account for real-world driving conditions. EPA's own data from its '06 study confirms that the average Americans accumulate the majority of their miles at highway conditions. In spite of this, calculations that indicate drivers accumulate the majority of their miles in urban conditions were utilized for the model year 2012-2016 rule, and again are used in the model year 2017-2025 proposed rule.

Interestingly, EPA is not using its own data and public information to calculate the accurate fuel economy for CAFE despite the fact that it already utilizes the '06 data to calculate the societal benefits resulting from the implementation of advanced vehicle technology. Because the calculations used for this rule inaccurately reflect --

MS. OGE: Excuse me. We have a lot of people waiting. We're running a little bit late. Thank you.

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MR. BRENEMAN: Sure. The regulatory agencies certainly understand the gap between lab certification and real-world fuel consumption keeps growing each and every model year. The NPRM states that EPA and NHTSA are considering significant changes to the test procedures. The agencies have also stated they lack the statutory authority to change some of these calculations. If EPA and NHTSA have determined that they lack the authority to update the calculations to reflect the real-world driving habits of the current American drivers, the agencies should educate Congress on the impacts of this flawed statute and formally ask for the statutory authority from Congress to update these calculations. Instead, we're moving forward in yet another rulemaking process using 1975 calculations that will lock in these inaccuracies for the next decade and beyond.

The Coalition recognizes no single technology will benefit the needs of every driver by rewarding outcomes. We are confident that our efforts to reduce petroleum use will be successful in the near and long-term. Performance-based target incentives will unleash a new era of innovation in Detroit and across

1	the globe on an entire portfolio of technologies that
2	is needed in the driving habits. This is how we will
3	truly realize game-changing improvements in fuel
4	efficiency and reductions in greenhouse gases. Thank
5	you.
6	MR. MEDFORD: Thank you very much.
7	MS. LINDBERG: My name is Judy Lindberg.
8	MR. MEDFORD: We don't want to cut you too
9	short, but we're really running very late.
10	MS. LINDBERG: My name is Judith Lindberg. I
11	am a retired registered nurse. I was born and raised
12	in Detroit and I'm now living in Marysville, Michigan,
13	which is a community about 55 miles northeast of here.
14	I came here today to urge the adoption of the proposed
15	standards of 54.5 miles per hour for passenger cars and
16	trucks by 2025.
17	The science of global warming is irrefutable
18	and the growth of greenhouse gases must be stopped.
19	According to EPA, these proposed standards will cut
20	greenhouse gas emissions by 2 billion metric tons per
21	year. Health experts tell us that declining air
22	quality has been a major cause of the increased
23	incidents and severity of asthma as well as many other

respiratory problems. As a nurse, I have seen this.

And we are not the only nation recognizing

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the threat of greenhouse gases and the resulting global warming and health issues. Worldwide there is support to do something about it, and I believe that American ingenuity should be leading the way. For years after the oil squeeze of the mid 1970's I have been waiting, hoping, urging our federal government to take the initiative to encourage fuel-efficient cars as part of a national energy policy, but it was not my government, but the Japanese, who led in this direction with the introduction of the Prius. It could have been us.

Finally, in 2010, the EPA and the DOT put us on the right trajectory with the finalization of fuel efficiency standards for new cars 2012 to 2016. I applaud the leadership of the Obama Administration and I urge the administration to continue through, even though there is a political pushback about rampant government regulations. Please be mindful that electric cars require energy to recharge, and in forming new regulations that this energy is accounted for in the final miles per gallon figures.

I am not a nurse -- I am a nurse. I am a nurse. I'm a little bit nervous with all these suits around here, intimidating. But I'm a nurse and not an engineer. I'm cognizant, though, that it will be difficult. It doesn't sound as difficult as I thought

1	it might have once been after listening to the
2	testimony today. But my story is that in 2008, I had
3	to replace my car and I wanted to buy American. I'm a
4	Detroiter. By then, global warming, gas prices and
5	health concerns could not be ignored, and I wanted to
6	be a good citizen of the earth so I looked for an
7	economical, fuel-efficient car. There were very few
8	American options. Again, it was the Japanese who
9	filled the bill. I bought a Honda Fit.

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I'm encouraged by the American manufacturers' recent progress and with the adoption of these proposed standards I think they'll have a concrete goal and can stop whining and show the world American ingenuity.

Thank you for allowing me to testify today.

MR. MEDFORD: Thank you very much. Anybody have any questions? Thank you panelists for your testimony.

I'd like to call the next panel, please. Good afternoon. So as you guys all appreciate, we're running very late and if I could ask you to really try and stick to five minutes so that everyone that's really come today will have an opportunity to testify before midnight, it would be really appreciated. Let's see. Is Kerry Ebersole here? Kerry, you can go.

MR. EBERSOLE: Thank you and good afternoon.

I'm Kerry Ebersole, a Michigan representative with Pew Environment Group's Clean Energy Program here in Michigan leading advocacy effort. We're here today to support the rule as proposed, a fleet-wide average 54.5 miles per gallon fuel economy for model 2025 year vehicles and encourage the agencies not to allow the final standards to be weakened during the midterm review period.

It's entirely fitting that we're here in Detroit, the Motor City, birthplace of American auto industry and now the engine of its rebirth. It's a town that's faced extraordinary adversity in recent years, but now we're shifting gears, thanks to the recovery of the auto industry and in the spirit of Detroit, the spirit of reinvention.

We need to look no further than spirit of reinvention and action in electric vehicles like the Chevy Volt, Ford Focus electric and up and coming Chrysler models. It's electric vehicles like these that will, in part, help automakers reach these fuel economy standards powered by the growing advanced battery manufacturing industry here in Michigan at places like Dow Chemical, Johnson Controls, LG Chem and A123 Systems.

Over 38,000 auto workers work in 97

facilities across our state manufacturing the clean and efficient technology that goes into our automobiles. The fuel economy standard proposed by the Department of Transportation and Environmental Protection Agency will slash 2 billion metric tons of greenhouse gas emissions. Raising fuel economy standards 54.5 miles per gallon will reduce our consumption by 4 billion barrels. That's good news for our environment, but better news for consumers.

The average American household spends \$2000 per year on gasoline, consumers will save up to \$6600 in fuel costs over the life of a model year 2025 vehicle and pass that savings on in the form of lower fuel prices for reduced consumption.

As you know, the public strongly supports reducing US oil dependence through higher fuel economy. Our bipartisan poll commissioned in July 2011 found that 91% of Americans identify US dependence on foreign oil as a threat to our national security, and significant bipartisan majorities in every region of the country believe that adopting stronger fuel economy standards is the best way to lessen that dependence.

This rule as proposed is a significant mile per gallon standard increase from 2007 and will save consumers money at the pump, blunt the economic and

national security threat presented by oil dependence
and price volatility and help American manufacturers
develop new technologies that spur investment and
research development and production of advanced
vehicles

We need, we need further innovation to drive both our economic prosperity and benefits to our economy -- I'm sorry, benefits to our environment. And I think you'll find greater fuel economy is where the rubber meets the road. Thank you.

MR. MEDFORD: Thank you very much. Mr. McKinley.

MR. McKINLEY: Steve McKinley. Thank you and good afternoon. My name is Steve McKinley, and I'm the vice president of Engineering for the America's for Honeywell and Turbo Technologies, a business unit of Honeywell.

As a Fortune 100 company, Honeywell products span global industries, including aerospace, automated controls, performance materials, transportation.

Within these disciplines, Honeywell has more than 130,000 employees, including nearly 20,000 engineers and scientists, invents and manufactures technologies to address challenges linked to global macro trends such as safety, security and energy efficiency.

On behalf of Honeywell and Honeywell Turbo

Technologies, I appreciate the opportunity to speak for
a few moments on the issue of light-duty vehicle
greenhouse gas emissions and corporate average fuel
economy standards. In short, Honeywell supports the
National Program of increasing fuel economy and
reducing greenhouse gas emissions. A harmonized
regulatory structure allows OEMs to define product
pathways forward toward compliance. This, in turn,
allows suppliers to focus research and development in
order to provide the most substantial short and
long-term benefits.

As a leading provider of turbo-charger technologies for more than 50 years, Honeywell is already working with nearly every global automaker to reduce -- to enable reductions in greenhouse gas emissions and fuel consumption. Turbo technologies enable greenhouse gas reductions by facilitating engine downsizing, replacing large engines with smaller, more efficient engines with improved emissions and fuel economy without sacrificing performance consumers want and depend upon. Downsized turbo-charged engines can increase fuel economy from 20 to 40% in gas and diesel applications, respectively, relative to larger nationally aspirated engines they are replacing.

Research and development into yet more advanced turbo technologies is already underway. We believe and continue to demonstrate that the internal combustion engine has a lot of potential still remaining.

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Particularly during the later years covered by this rulemaking, more advanced technologies are even more likely to enable compliance with the standards. The movement towards new powertrain technologies on the other hand is laudable but limited. The vast majority of the new vehicle fleet during the next decade, at least, will likely remain internal combustion engines. These are the vehicles which will contribute to the vast majority of greenhouse gas emissions reductions achieved under these requirements. As such, it is our position that regulatory rules should not favor new powertrains or specific technologies at the expense of technologies capable of achieving substantial gains in the near and midterm. The program should instead remain technology neutral and recognize all significant performance improvements.

The singular focus on new powertrain technologies overlooks the improvements becoming available as new downsized boosted engines and new turbo technologies are developed. And I would point out that we already are applying turbo technologies not

only to clean diesel and downsized gasoline engines, but to hybrid vehicles and even compressed natural gas powered vehicles.

Incentives focused on new powertrains only for model years 2017 through 2021 may inadvertently divert investment and resources. As the agencies recognize, turbo technologies will contribute significantly during the model years covered by this rulemaking, the agencies should commit during the mid-term review to evaluate the availability of more advanced turbo technologies and to ensure an equal production incentive as any ongoing incentive provided to battery technology.

While turbo charging reflects the majority of car sales in other parts of the world like Europe, currently at more than 60% penetration, we're just starting to see the widespread adoption of this technology in the United States. Turbo penetration has gone from 4% to more than 10% in only the past few years. At Honeywell, we expect that number to increase to more than 23% in the next five years, and by 2025 there are industry estimates suggesting turbo penetration approaching 80% of sales. Conversely, artificially pushing investment toward battery-powered vehicles places more reliance on an uncertain

technology and its ability to meet the policy objectives of substantial movement in greenhouse gas emissions and fuel consumption reductions.

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Within the current rules, I would respectfully point to incentives favoring hybrids and electrification and non-urban cycles as being misplaced. Also by the time these rules go into effect, the idea that hybrid electric technology should be incentivized as emerging belies their availability for more than a decade, although new applications may be tried. Government incentives to create a market are not a guarantee for success, and internal combustion engine technology should be considered on an equal footing as battery technologies because they offer more certain, well-defined benefits, and are proving successful in the marketplace. There are examples of turbo 4-cylinder gasoline engines providing more than 40 miles per gallon with the comparable power of a traditional 6-cylinder gasoline engine from only a few years ago.

Like many of our technology partners and competitors, Honeywell would ask the Administration to broadly spur innovation with technology-neutral public policies, regulations and incentive plans. We are not opposed to new goals, even those considered very

aggressive goals. Like many who have spoken on this issue, Honeywell believes the best interest of the company can be achieved by rewarding outcomes as opposed to specific technology.

Thank you very much.

MR. MEDFORD: Thank you. Miss Surma.

MS. SURMA: Hello. My name is Jessica Surma and I'm the Federal Field Associate with Environment Michigan, a statewide citizens-based environmental advocacy group. I thank the EPA and the Department of Transportation for providing a venue and for the time allotted me to share my comments.

Strong clean car standards are the single biggest thing we can to get America off oil and cut global warming pollution all while saving consumers money at the pump. To fully realize the standards' benefit, the Obama Administration should push ahead with the strongest possible clean car standards equivalent to at least 54.5 miles per gallon by 2025 and keep them free of loopholes that could undermine their environmental benefits.

These environmental benefits are significant right here in Michigan. According to a report released by the Union of Concerned Scientist and the Natural Resource Defense Council, these standards would reduce

carbon emissions by 7.3 million metric tons per year in Michigan. By the year 2030, the proposed standards would cut annual global warming pollution by roughly 280 million metric tons nationwide, which would be roughly equivalent to shutting down 70 coal-fired power plants for one year. This is essential to the health and stability of our state and country.

In the past few years we have seen more and more extreme weather fueled by global warming. These events reinforce that we must act now to tackle this problem. The Obama Administration should be applauded for introducing these standards to help address this problem. These standards will also generate significant savings for Michiganders. According to the same report, here in Michigan the proposed standards will reduce gasoline consumption by 622 million gallons. This would mean 976 million dollars of net savings. This brings down to \$240 of savings per household per year. Michigan families will surely benefit from such savings.

While the standards are beneficial and feasible on paper, public opinion can be a significant factor as well. As a field organizer, it's my job to talk to people on the street, our organization's members, student groups, local elected officials and

community leaders. I've personally talked to hundreds of people who support the EPA's work, and our staff has gathered thousands of comments in favor of the new clean car standards, which we will submit in writing at a later date.

My experience with Environment Michigan is echoed by national numbers. A recent poll by Consumer Reports show that 77% of respondents agree that automakers should produce more fuel-efficient vehicles and that the government should increase standards and enforce them.

The proposed standards are an economic and environmental win for Michigan and the U.S. Combined with the widespread support that exists on this issue, it's clear that these standards should be a priority. On behalf of Environment Michigan, I strongly urge the EPA and the Obama Administration to promptly finalize these standard that will accelerate the United States away from oil.

Thank you for the opportunity to testify today.

MR. MEDFORD: Thank you. Miss Schmidt.

MS. SCHMIDT: Good afternoon. I'm Karyn
Schmidt. I represent the American Chemistry Council.
The American Chemistry Council itself represents the

leading companies engaged in the business of chemistry and ACC members apply the science of chemistry to make innovative materials that make people's life better, healthier and safer.

A key family of such materials is very exciting for all of us here today, very exciting, very exciting. And that's applause, thank you, thank you. I've been trying to get a little energy in the room.

Plastics. Our member company manufactures plastic and plastic composites, and these are materials that will be extremely important as we move forward in implementing the new CAFE standards. Our plastics division at ACC represents America's plastic makers and addresses the use of plastics in automotive applications.

Now what are plastics? This is where it gets really exciting. Plastics encompass a wide range of polymeric materials. It's not just a handful of things. Plastics make up thousands of different kinds of substances. A car might have, for example, polymeric in padding in seating, polycarbonate headlamps and polypropylene bumpers, so there's three different kinds of plastic right there. Plastics are also used to make plastic composites and the composite material is generally defined as any combination of

polymer matrix with a fibrous reinforcement. These are very high-tech, modern, innovative exciting compounds.

A composite is a plastic in which fiber like carbon or glass or Kevlar has been added for strength or stiffness.

Now why do we care? Well the plastics industry cares deeply, of course, and wants everyone else to share in our excitement about these materials, and the auto industry is excited too. The use of plastic composites in automobile manufacture has risen significantly in the recent years and, in fact, documents a substantial change in vehicle composition for model year 1995 to 2007 with a 25% increase in the use of plastics and plastics composites from that period. So we're very excited to move forward.

Now here today we're going to comment very very briefly on a few high points. We're going to leave the majority of our detailed comments for the written submission, but we do want to state on the record that we support the CAFE standards moving forward. We think that they are aggressive but achievable, and in particular, we support the credit approach taken by the agencies and the specific fuel efficiency goals and time limits proposed in the standard. We are not going to comment on the levels

proposed themselves except to reaffirm that the levels proposed by the agencies, in our view, are technologically feasible and economically practical as a matter of statute.

The American Chemistry Council's plastics division would like commend both EPA and NHTSA on its approach and on this proposal. We believe the proposal takes a huge step forward in increasing fuel efficiency requirements in automobiles.

The plastics divisions has long been a supporter of research to understand how plastics can be used in automobiles to decrease vehicle weight and otherwise impart performances and safety benefits. We support research to understand the feasibility of plastic composite intensive vehicles, or PCIV's. While today's average U.S. light vehicle contains about 330 pounds of plastic composites or about 80% of total vehicle weight, a plastic composite intensive vehicle contains a minimum of 30% by weight of lightweight plastics and composites in one or more subsystems beyond interior trim.

Why is this important? The proposed rule makes clear the relationship between fuel savings and lightweight of the vehicle. The proposal acknowledges that mass reductions of vehicle can be achieved in many

ways, including material substitution, design optimization and part consolidation. We agree. PCIV research amply documents the technological feasibility of designing and building vehicles with 30% or more plastic and plastic composites, and in our view, the agencies' application of mass reduction of up to 20% relative to model year 2008 levels is appropriate and achievable.

But there's more. Plastics are about more than just light-weighting of vehicles, plastics and polymer composites have enabled some of the most significant vehicle safety innovations in the past several decades including seat belts, airbags, child safety seats, and the same sources of these innovations still hold significant untapped potential to further enhance vehicle safety.

We agree with the agencies that it is important that the CAFE standards be set in a way that does not encourage manufacturers to respond by selling vehicles that are in any way less safe. In particular, we agree with and support the standard applied in assessing compliance strategies, and this is articulated as no adverse effect on overall fleet safety.

In the last five years the plastics industry

has worked aggressively to better understand how plastics can be used to enhance safety in automobiles and we will continue to do so. Congress recognized the importance of enhanced automobile safety by investing nearly \$2 million over a four-year period and to building an ongoing partnership between the plastics industry and NHTSA, and through this partnership, NHTSA has initiated and is currently implementing a safety roadmap for future plastics and plastic composites intensive for vehicles.

This project is already yielding fruit, as ongoing research is helping to improve the performance of plastic and composite material components. We support NHTSA'S sustained work to implement the safety roadmap.

My last comment. Aren't you excited? The proposed rule contains an option for off-cycle technology credit but, unfortunately, the off-cycle credit in the proposed rule does not recognize the thermal control benefits of polycarbonate in automotive glazing. The formula does recognize the benefits of certain types of glass in controlling solar radiation in parked vehicles, but in contrast, while polycarbonate glazing provides some solar control in relation to engaging this proposed baseline, the

benefits accrue in a broader range of scenarios in
which the effect of solar radiation is absent or less
pronounced. These include nighttime and overcast days
as well as those times when the vehicle is in motion.
More detailed comments will be presented by other
colleagues later today, but we do urge that this will
make and consider a parallel credit that fully
recognizes thermal control benefits of polycarbonate in
glazing applications.

Thank you very much for your attention. I hope that you all now understand how exciting plastics are. ACC very much appreciates the opportunity to participate.

MR. MEDFORD: Thank you for your testimony.

Ms. Maxey.

MS. MAXEY: Good evening. My name is Ahmina Maxey. I'm with an organization called East Michigan Environment Action Council. We do work in southeast Michigan around environmental protection, environmental justice, and we've been located in Michigan, been here around for 40 years, and so I'm here to thank EPA and thank NHTSA for these really strong standards, and I really just want to voice my support for them.

Also Detroit is a city that is burdened with a lot of air quality issues and a lot of environmental

air quality issues, and so improvements in fuel economy will really improve conditions here in the city as far as, like I said, air quality. We have four major freeways that cut right through the heart of the city. We also have some of the highest -- we have the highest asthma rates in the state with three times the -- three times the average asthma rate of the rest of the state, and so I'm really excited about this. Also as a consumer I'm also really excited for my next car to have such high fuel economy standards.

In addition, I guess I wear multiple hats.

I'm a young professional here in southeast Michigan. I want to stay in Michigan but I don't want to have to rely only a car that will really be a gas guzzler, and so this is something that is really exciting.

And then also I have a family that works within the automotive industry, and so in light of what's recently happened, this is something that's really a great development to see that I know that there'll be opportunities in the future for innovation and things like that.

I'm not going take up a lot of time. I just wanted to comment, show my support, and then also just say that this is something that's really exciting so I'm hoping. I'm really excited to see what's going to

1 come.

2 MR. MEDFORD:	Thank you for yo	ır testimony.
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3 Mr. Benda.

MR. BENDA: Thank you very much. My name is Bruce Benda and I'm head of the Automotive

Transportation Business for Bayer MaterialScience, LLC.

I'd like to thank the EPA and NHTSA for giving me the opportunity to comment on these CAFE standard proposals.

MaterialScience is a part of the Global Bayer Group and one of the leading suppliers of high technology innovative materials such as polycarbonate, which was referred to by the ACC earlier. Polycarbonate is a clear, durable organic polymer with a low density, which makes it light weight. It is processed at a relatively low temperature and is very appropriate as a glass alternative for automotive glazing, and the temperature is very important there. We support the agencies' decision to consider only net weight reduction of vehicles that will not compromise overall vehicle safety.

Bayer MaterialScience has a rich history for contributing to automotive safety standards and is dedicated to developing innovative, high-performance

materials giving automakers a choice of materials when it comes to meeting the CAFE requirements. We believe that the off-cycle credit that is being proposed fails to capture or incentivize the thermal control benefits of the technologies such as polycarbonate glazing. Therefore, in the final rule, the agencies should expand the off-cycle credit or add a corresponding credit to account for these thermal control benefits of innovative technology such as polycarbonate glazing. Polycarbonate would help automakers to meet these CAFE requirements and reduce greenhouse gases by providing increased insulation benefits, contributing to net weight reduction of the vehicle, offering more aerodynamic styling options to the manufacturer and lower CO2 emissions over the lifecycle of polycarbonate.

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We support the comments that you will hear I believe in the next session from our industry colleagues from Sabic relating to thermal conductivity and the off-cycle credit. Using polycarbonate as a glazing material contributes to lower thermal conductivity. This benefit of polycarbonate will contribute to better energy efficiency in all types of vehicles. Thus, we reiterate our support for an expansion of the off-cycle credit to account for this

benefit or the addition of a new corresponding credit.

For years, automotive manufacturers have used polycarbonates and polycarbonate composites in the manufacture of their vehicles. Polycarbonate glazing allows for integration of parts that was previously not possible. This can contribute to vehicles being lighter in weight without compromising structural integrity of the vehicle. Polycarbonate can be used for better insulation benefits which can reduce demand on the vehicle's battery and HVAC units, thereby reducing greenhouse gases.

Polycarbonate has an extensive history of serial applications in the automotive glazing industry. These applications now include rear side windows, sunroof systems, panoramic roof systems and transparent rear body parts. Polycarbonate is also recognized by authorities around the world, including the United Nations Economic Commission for Europe. This material is less than half the density of glass, enabling weight reductions of up to 50%. This weight reduction contributes to CO2 emissions being cut by up to 728 pounds per vehicle over a vehicle service life of 95,000 miles, compared to cases where glass is used. The weight reduction due to polycarbonate use also would take place above the belt line in the vehicle

achieving not only better fuel efficiency, but also greater stability by lowering a vehicle's center of gravity.

Bayer MaterialScience has developed also transparent tinted colors of polycarbonate specifically for glazing that filter out the large portion of sun's infrared rays which minimizes the amount of energy entering into the vehicle. The glazing made of polycarbonate also offers benefits in terms of thermal insulation mentioned earlier, thanks to the plastic's thermal conductivity, which is roughly five times lower than that of glass. In cold weather conditions, this increases the temperature of the internal surface of the polycarbonate glazing inside the vehicle significantly, which in turn, cuts the energy needed to heat the vehicle and also improves comfort. Both features can improve vehicle energy management reducing fuel consumption and subsequent CO2 generation.

An independent study indicates that when studying polycarbonate versus glass over the life of a product, which will be made from initial production to the usage of the product to the waste phase, polycarbonate can help substantially reduce CO2 emissions. To give you an example, one kilogram of polycarbonate saves 14 to 22 kilograms of CO2 emissions

over the lifecycle of the material. If all of the
car's windows, with the exception of the windshield,
were made of polycarbonate, that would be approximately
a total of 33 pounds of plastic on average. The lower
fuel consumption would cut CO2 emission by up 730
pounds per vehicle over the vehicle service life. You
don't need to start smashing windows to know that
polycarbonate also has a significant impact strength
advantage over glass. With polycarbonate's superior
impact resistance, it can contribute to safety by
improving passenger retention in the event of a crash.

And last but not least, is the wide choice of styling options with polycarbonate. This design flexibility of windows can contribute to better aerodynamics for vehicle manufacturers, which, of course, leads to lighter-weight vehicles and better fuel economy.

In closing, we'd like to express our support and thank you again for the opportunity to speak.

MR. MEDFORD: Thank you very much. Ms. Crawford.

MS. CRAWFORD: Mine is two minutes or less. Good evening, and thank you for allowing my testimony at this joint EPA and NHTSA hearing on Vehicle Fuel Economy and Greenhouse Gas Standards. My name Diane

Crawford and I am an active and a lifelong native

Detroiter from the Great Lakes State of Michigan. I'm

a Spartan too. I am an active citizen up supporting

and working with the Sierra Club learning to plan and

to do constructive, positive activities in the

community to improve our environment. I do believe

that we can all help.

Increasing new vehicle efficiency standards to 54.5 miles per gallon is doable by 2025 because it will allow citizens to get better mileage and can reduce the cost at the pump hopefully as well as significantly decreasing greenhouse gas emissions.

Foreign oil dependency must definitely continue to decline. I urge you to remain diligent and vigilant about your emissions. Stay the course and continue to protect us because we are depending on you. As a former educator, the No Child Left Behind Act for public schools was supposed to improve schools, students and staff, but it failed. Detroiters deserve to breathe cleaner air. Our asthma rates are too high and it is a killer in Detroit.

My two great grandnieces, ages five and seven, love to pretend they are driving my car like I did as a child, and many of you too. By 2025 I look forward to my great grandnieces driving me in a cleaner

air, more fuel efficient car that has significantly reduced greenhouse gas.

Finally, continue to reduce our dependency on foreign oil. Thank you again for coming to Detroit the Motor City and working collaboratively. We appreciate your efforts. My hope is that the best is yet to come. Thank you.

MR. MEDFORD: Thank you for your testimony.

Mr. Morgenstein.

MR. MORGENSTEIN: Good afternoon. Thank you for having he here. My name is Jonathan Morgenstein and I've served over 20 years in the Marine Corps Reserves both enlisted and as an officer. And today I'm not speaking on behalf of the Department of Defense or the Marine Corps. And although I'm here with the Truman National Security Project, Operation Free, these words are my very own; however, I want to draw on that National Security Military Service including two tours in Iraq to communicate with you today because I believe strengthening fuel efficiency standards is essential for the future of America.

If I may, let me ask you to look actually backwards briefly, and I want to show you an alternative path we could have walked if we had done this decades ago, a world with 54.5 miles per gallon

requirements starting in 1970. Think of a world where Saddam Hussein languished as a ruler of a poor country, resources insufficient to build a huge army and threaten anyone outside of his own borders; a world where bin Laden didn't have Gulf oil money to develop global reach; a world where Iran didn't have the petrocash to develop a nuclear weapon; however, instead we've walked this path.

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Because we've retained these low CAFE standards, our oil addiction has poured hundreds of billions of petrodollars into the pockets of authoritarian regimes and extremists around the world. As a result, we the United States, have fought three major wars in the last 20 years. Right now we are staring down the prospects of a fourth war with the regime in Tehran. Every one of these conflicts are a direct result of our addiction to oil. However, this isn't just an abstract idea of national security on a grand level, this is personal to me and to every man and woman who's worn our uniforms in the Middle East and Central Asia. CAFE standards are personal to tens of thousands of men, women and children who've lost loved ones in Iraq or Afghanistan or come home wounded. Friends of mine such as Second Lieutenant John Wroblewski and Sergeant Bill Cahir gave their last full 1 measure of devotion to their country in these wars.

Lieutenant Wroblewski ambushed and killed in 2004 while leading patrol in Ramadi, Iraq. Robo, as his friends called him, he was one of the best Marine Officers of our generation. I'm not here to reargue the merits of the Iraq War, but supporters and detractors alike almost acknowledge this truth: without America leading global addiction to Saddam's oil, Saddam Hussein would never have been either powerful enough or threat enough to us or our allies for us to care enough to engage in militarily. Ultimately, it was oil that dragged Robo into that valley where insurgents stole from him the greatness for which he was destined, stole from his wife, her newlywed husband, and stole for me a peer, a friend and a role model.

Sergeant Bill Cahir wanted nothing more than to make his country and world a better place. We served together in Ramadi in 2004. Bill came home and returned to his noble journalistic career, and in pursuit of continued greater service, he ran unsuccessfully for congress in northern Pennsylvania. I remember talking with Bill by phone shortly after his electoral loss. He wanted to continue serving so he said he'd like to do one more tour in Afghanistan. He returned from that tour in a coffin. When a sniper in

the Helmand River Valley took his life, he also took a husband and a father of twins who had not yet been born. They stole from all of us a man who would be doing great things for America and this world.

We all know why Bill was in Helmand that day, it was because Osama bin Laden in his warped extremist vision fueled by petrodollars for decades allowed him to build al-Qaeda into a global threat. Oil did not fund the Taliban sniper who murdered Bill, but Uncle Sam's oil addiction definitively dragged Bill and his Marine Corps brothers and sisters into those mountains and valleys. Strengthening CAFE standards will bring neither Robo nor Bill back to us, but it will reduce our addiction and restrict the flow of cash to insidious men around the globe.

When we talk about economic benefits of raising CAFE standards, and they are great, when we talk about the environmental benefits, which are enormous, we can talk about a thousand ways it will improve national security of the United States of America, let me leave you with this: If we implemented these CAFE standards or higher 40 or 50 years ago, the flow of oil money would have slowed considerably. We would have undermined these radical and authoritarian regimes that threatened our world. It would have

deprived these violent men of the money they need to do violence, and as a result, John Wroblewski and Bill Cahir would likely still be with their wives, would be with their children and still be my friend. And so I ask you, I implore you to continue to increase these standards. Do so now so that ten years from now we won't be having the exact same conversations asking why more of America's greatest men and women have sacrificed everything because of our addiction to oil.

MR. MEDFORD: Thank you. And for others that have joined you today, we really appreciate the service that you've provided the country. It's really a great thing for us to celebrate. Thank you for coming today.

Last now turn to Ms. Turner-Handy.

MS. TURNER-HANDY: My is name Sandra

Turner-Handy, and I work for the Michigan Environmental

Council, and I am here in support of the new proposed

emissions standards and I want to thank you guys in

advance for allowing me to speak this afternoon.

Improving fuel economy is an economic, social as well as an environmental justice issue. The rising cost of oil has depleted much of society's spending dollars resulting in many changing plans on simple things like going out to dinner, a movie and on how to travel or if they will travel. This has lessened the

amount of dollars circulating in our economy. Socially it creates a class of haves and have-nots. Many of the more the have-nots spend on fuel, lessens the amount one has to improve their economic status.

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Finally, fuel emission has become an environmental issue on many levels. One, it is a clear contributor to greenhouse gases resulting in climate change. On summer days in the City of Detroit it results in ground-level smog. Two, the emissions from gas and diesel-powered engines contributes to particulate matter to our air forcing a quality of air that becomes a clear and present danger to the health of the humans in this society. This leads to number three, which is the environmental impact which impedes one's health. The rate of asthma in Detroit, as mentioned earlier, is three times that of the rest of the State of Michigan. Heart disease and other respiratory illnesses are on the rise. Take a look at where freeways are developed. Freeways cut through neighborhoods of low income people of color. Take a look as you ride through my city and see no barriers as freeways bump directly upon residential areas. look at freeways in the suburbs. Freeways run along commercial districts, meaning the highest level of fuel emission contaminants is participated among the low

income communities of color. If you have yet to
understand how the current fuel standards directly
impact health, then I ask you to pay attention to the
steady rise in that health care cost.

New and proposed fuel and carbon pollution standards will create new jobs in manufacturing and related areas, which will help to improve our economy. It will also lessen the cost to import oil. The standards will improve one's social life with more dollars to save and spend with less in the gas tank. The standards will reduce greenhouse gases that contribute to climate change and improve air quality.

Finally, the proposed standards will assist in mitigating the health impact experienced by residents. Thank you.

MR. MEDFORD: Thank you very much. I'd like to thank everyone on the panel for your patience today and for your testimony, and we're ready to call the next panel. Thank you.

You can go ahead and begin, if you'd like.

MR. ADAMS: Thank you very much. Good afternoon. My name is Greg Adams. I'm Vice President of Automotive of SABIC Basic Industries Corporation, which is a global supplier of lightweight plastic materials to the automotive industry.

SABIC's Innovative Plastics business,

formerly known as General Electric Plastics, pioneered the use of lightweight engineering thermoplastics and composites in the automotive industry, and we continue those efforts today with new and exciting solutions.

I'm here today to talk about one of those solutions, advanced polycarbonate glazing, which provides substantial off-cycle reduction in air conditioning load.

In recent years, our subsidiary, Exatac, developed a polycarbonate automotive glazing technology capable of meeting regulatory and long-term durability requirements. Exatec's plasma-coated polycarbonate glazing resists deterioration and allows the glazing to withstand weathering conditions. Already prevalent in rooflites, Exatec's polycarbonate glazing technology is beginning to be used in backlites and fixed windows behind the A pillar.

Polycarbonate glazing technology provides three independent greenhouse gas reduction and fuel economy benefits. First, polycarbonate is lightweight, up to 40% lighter than glass. In one of our fleet test vehicles, we eliminated 26 pounds by replacing the glass sunroof panels and fixed glazing behind the A pillar with polycarbonate glazing.

That weight savings doesn't come at the expense of performance. Polycarbonate glazing with market-ready coatings technology provides durable high optical clarity. Our fleet vehicles employing polycarbonate glazing, along with rear wipers and defrosters, have been on the road and testing for over four years.

A second benefit of polycarbonate glazing is that because it is injection molded, the glazing can be suitably shaped and combined with other features. For example, a backlite, frame and liftgate can be consolidated, saving piece and assembly costs and providing opportunities to design a more aerodynamic vehicle.

The third benefit of polycarbonate glazing is a substantial off-cycle reduction in air conditioning load as a result of polycarbonate's very low thermal conductivity as compared with glass. Basically, polycarbonate glazing insulates the passenger cabin, helping to maintain a comfortable cabin temperature, thereby reducing the load of the air conditioning system.

The agencies have proposed an off-cycle credit for glazing that reduces air conditioning load by reducing solar radiation transmission into the cabin

interior. That credit focuses on the reduced air conditioning load needed to cool down a vehicle cabin that was heated by the sun, and will primarily benefit certain reflective glass technologies. We applaud the agencies for proposing this solar controlled credit; however, it only captures one phenomenon by which glazing can reduce air conditioning load and the associated tailpipe emissions.

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Glazing can also inhibit heat transfer from warmer outside air into the cooler conditioned air of the cabin. The polycarbonate glazing performs especially well in this respect. Polycarbonate glazing reduces the air conditioning load needed to maintain a comfortable temperature, once that temperature is reached. As a result, this benefit is realized not only when a standing vehicle is exposed to sunlight, but also when the vehicle is moving, and at times when solar radiation is absent or reduced, such as on cloudy days or at night. This insulation benefit is independent of and in addition to the benefits of solar control and should be recognized as such. The two credits could certainly co-exist. They would acknowledge real-world effects and would provide OEMs with greater flexibility in meeting the proposed emission targets.

Our written comments will detail a method for quantifying the off-cycle benefits from polycarbonate glazing, which is supported by two peer-reviewed papers. We urge the agencies to carefully consider modifying the proposal to capture the insulation benefits provided by polycarbonate glazing.

In addition to polycarbonate glazing technology, SABIC Innovative Plastics offers a number of other lightweight products that can advance the goals of this rulemaking. In fact, our various plastic products can comprise the entire front six inches and most of the rear six inches of a vehicle, including lights, grills, fasciae, bumpers, energy absorbers, structural reinforcements, liftgates and more. In addition to these familiar mature parts of the car, we have developed products such as the plastic steering wheel which will provide future weight benefits as they're incorporated into vehicle designs. We are also developing composite materials that can reduce vehicle mass and enhance design.

We believe that the technology of lightweight materials will advance substantially in the years covered by this regulation, as will our understanding of the benefits these materials can provide. We look forward to working with our OEM and our Tier customers

1	to determine the most cost-effective and safest ways to
2	incorporate advanced lightweight components and
3	structural elements into the vehicles and components
4	they manufacture.

Thank you for the opportunity to testify today and for your kind attention.

MR. MEDFORD: Thank you very much Mr. Adams.

Mr. Blain.

MR. BLAIN: I'm Jim Blain, president of PEP Stations, Livonia, Michigan. We are a premier premium American manufactured electric vehicle charging station and service provider. I'm here today to comment on the agreement reached between the Obama Administration and the automobile manufacturers on the proposed 54.5 miles per gallon fuel economy standards. But most importantly, I want to talk to you today as a registered architect with over 30 years of architectural experience regarding the charging infrastructure that will be needed to reach these fuel economy standards.

Imagine for a moment that you will not need to drive to a street corner gas station to get any of your energy needs, and I say this because I know this may strike you as unusual, but all the infrastructure for our energy, for our transportation needs in the

future exist in all the commercial buildings we have, this building and all the other buildings, it's all there. The days of going to the street corner, like I said, to get your transportation energy are going to be coming to an end. All the buildings today around the country are charging batteries all day long. They're charging laptop batteries, cell phone batteries, and power tool batteries. Everything is there, and all we're going to do is we're going to charge a battery in the parking lot.

The charging station, which we manufacturer and sell, will become nothing more than an amenity to the building. It will be like restrooms, handicapped parking, wall duplexes. It will be in everybody's building, and you will no sooner go into a building and ask may I use the restroom and somebody say well we don't have any. Every building has restrooms. Every building is going to have a charging station, just like every building has an outlet. And building owners will need these for their customers, their tenants and their clients. This day is upon us and it's not in the future.

I live in this world. I drive a Volt. I get the equivalent of 150 miles per gallon. It costs me about 50 cents an hour to charge my Volt. I have an

app on my phone, it tells me when it's charged. In the last 1200 miles I saved \$200 and 55 gallons of gasoline. I drive about 17,000 miles a year, which is probably pretty typical, and that amounts to about \$3000 and 800 gallons in savings. If you consider that over the lifecycle of a car, you can see that there's tremendous savings opportunities. In fact, the proposed fuel economy standards in corresponding miles per gallon metric may be an obsolete measurable in the next ten years. It's not the future, it's not science fiction, it's happening right now, it's happening right here in Detroit. Greater fuel economy will build a better future for years to come. Thank you.

MR. MEDFORD: Thank you. Reverend Morris.

REV. MORRIS: Thank you very much. I want to thank you for the opportunity to address the members of the Assessment and Standards Division of the U.S. EPA. Again, my name is Charles Morris. I'm a Catholic priest of the Archdiocese of Detroit and administer of St. Christopher Parish in the City of Detroit. I'm also the founder and the current public policy director of Michigan Interfaith Power & Light, non-profit representative of 150 houses of worship and faith-based institutions of higher education across the State of Michigan. Nationally, the Interfaith Power & Light

movement has chapters in 38 states that serve 14,000 congregations.

Administration for the proposed CAFE standards as well as other rule changes that they are implementing. This will result in several positive outcomes. First of all, it will help Americans wean off foreign oil and make our nation less vulnerable to foreign manipulation of markets, and as we just heard in the last panel, the poignancy of the necessity of that. It will save Americans money, we just heard, at the gas pump.

Secondly, in a peak oil world, not only will oil be more expensive to extract, but will require much more energy-intensive extractive measures with greater deleterious effects in terms of environmental health and create global warming emissions in the extractor process and the impact on local indigenous populations. One needs look no farther than the skyrocketing environmental justice and health costs to the aboriginal people of Alberta with three times greenhouse gas emissions over traditional forms of extraction and the resource allocation of water to see that alternative extraction of methods of oil such as the tar sands are not sustainable for the long haul. On other hand, the new fuel economy standards will save

an estimated 2 and 1/2 million barrels of oil per day, more than double the amount of that the proposed Keystone Pipeline can produce.

Three. Climate change will, according to the consensus of climatologists, and one noted just down at the end of the table here, have horrific impacts on our future in terms of droughts and flooding, disease vectors, species extinctions, and more intense storms. This portends all kinds of potentially horrific scenarios, with trillions of dollars of costs and untold human misery, from environmental refugees to pandemics, from crop failures to political instability. The proposed CAFE standards will help, although not enough, but it will help to mitigate the sharp rise of greenhouse gases behind climate chaos.

Fourth. As we just heard in the panel before, in our cities such as in the southwest Detroit area, in particular, where traffic is most intense, the exhaust from cars and trucks have a horrific impact on the health and development of those who are most disadvantaged, the children of minorities and seniors who live in these low-income communities. High rates of childhood asthma, heart trauma, cancer, and the list goes on, are too often characteristic of life in these distressed communities.

Catholic social teaching addresses the answer to the question that the lawyer asked Jesus in Luke chapter 10:29, "Who is my neighbor?" Does my neighbor include those whose voices haven't been heard at the table? The poor? Non-human life? Future generations? The answer, according to the three tenets of Catholic social teaching, is an unequivocal "yes." For Catholic social teaching in this case are underlined by three pertinent principles. Prudence. The virtue of prudence compels to act like the precautionary principle, which is derived from prudence, to address a problem now before it becomes worse, especially if that worse scenario is supported, as it is in this case, overwhelmingly by scientific evidence.

Second, the Common Good. We are in solidarity with one another. Contrary to certain current threads in the polity, we are called to act in the interest of the commons. We are all in this together, including non-human life and our children and our children's children to the 7th generation. And it is the charge, your charge, you know, the agencies such as the Environmental Protection Agency carry forth the cudgel of protecting the commons for all us and for the future.

And Priority For the Poor, the real wealth of

our society is found in how we treat the "least among
us." As Matthew says, we have a moral obligation to
our least advantaged brothers and sisters to ask what
kind of world and quality of life do we bequeath to
them?

In taking the morally right action, we create a better world for all. 26 billion dollars left

Michigan last year to pay for fossil fuel. What a difference it would make for jobs and for the quality of life if most of those dollars could remain in our state and serve as a catalyst for economic development.

Dollars that stay in the community carry a multiplier effect. What if our motto --

MR. MEDFORD: I'm not used to interrupting priests, but in the interest of time I ask that you complete your --

REV. MORRIS: I've got two sentences left.

MR. MEDFORD: Good. That's great.

REV. MORRIS: As a pleasant peninsula would be as true for the next generation. As we face our carbon constrained future, the fuel efficient and electrified vehicles on display at the North American Auto Show portend the can-do attitude of Detroit and America. We are poised, once again, to be a world leader in a future that is cleaner, sustainable and

1 more just for all God's children.

MR. MEDFORD: Thank you very much.

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MR. SOMMER: Thank you. Good afternoon, everyone. I appreciate you all sticking it out. I know it's been a long day. My name is Marc Sommer and I represent not only the sportsmen and women of the State of Ohio, but I also did most of my work while working with the National Wildlife Federation.

Having worked for the Department of Natural Resources for 18 years and educating sportsmen and women on how to do it, how to get out there and hunt and fish, this task that I took on with the National Wildlife Federation was a no-brainer, because what it gave me an opportunity to do is actually go out there and talk to them about how they can further their conservation efforts in the state. We talk about species extinction, we talk about extirpation, we talk about the buckeye tree finally ending up in the State of Michigan, which some might think was funny, depending on which football team you're rooting for, but it gave me an opportunity to get out there and talk to some of these sportsmen and women. And the common thing that I noticed when I was out there was these same people that out there hunting and fishing are the

ones that are working in these plants. They're the ones building these engines. They're the ones talking about all this technology. We don't do these things systematically, we do them systemically. The people building the Dynamax engine down in the DMAX plant in Dayton, which by the way was 20% fuel efficient improvement over last year's model. If I went in that plant and asked those people who wants to leave for the day and go hunting and fishing, I'm pretty sure a lot of them would have left with me that day.

These are the people who were our nation's original stewards. When we look back at Teddy Roosevelt, we can back long before Teddy Roosevelt and we see the people that were hunting and fishing, running trap lines were our original environmentalists. They were the ones that cared about it. They were the ones that wanted to make sure that those species were always there; that the turkeys, wild turkeys gone from the State of Ohio, will eventually be reintroduced and found in every single county.

These standards that we're talking about are not just about getting better gas mileage, we are talking about emissions and we've heard all about those today. We've heard about what the harm can come from those emissions. The people that we educate, it's not

just about giving them a car that gets better fuel efficiency, it's about helping them understand what is my role now. So the sportsmen and women that I talked to, it was an awareness campaign for the National Wildlife Federation, it wasn't to go out there and say you drive a truck and you only get 12 miles per gallon. The purpose behind the initiative was to make them aware of the technologies that are available; to show them that things are being done right here in this country so that in ten years from now when they go to get a different truck, they go to get a different SUV, they are educated on what's best to look at when they go to get something new.

Kind of in closing, I was in D.C. working with, of all people, politicians. For some reason, that's where they hang out, and one of the staff members said something that I kind of cringed at when I heard it. He said to me that the person that he was working for didn't necessarily want to jump full throttle into all of this. He said, what about the other countries? Why don't we wait and see what they'll do? Probably not the best attitude. If we think back in time, I'm pretty sure that Henry Ford didn't say well, you know, these horses are not too bad. Maybe I'll just put this little car idea on hold.

The same thing can be said when the Cuyahoga River caught on fire around Cleveland, people didn't sit back and say, eventually it will float down river and the fire will be put out. No. What they did was they rallied around an environmental catastrophe and what has now become as a result of that what we all refer to as Earth Day.

We innovate and we evolve based on improving our qualities of life, and that's exactly what these standards are helping us do. They're helping us save money at the pump, which is the only place we can affect the bottom line of what we do with fuel. We are cleaning up the air, we are cleaning up the environment, and as many people earlier today have talked about, we're ensuring that future generations have the choice as to whether or not they hunt and fish in a clean environment.

The last thing I want to say, and I'll be finished, we do live in a country where we innovate and we have done so in the past because we want to evolve and make things good, great and better. These standards are set up to do that. And I don't only look back the standards that we have put forth today over the last several years, but I also put forth the

ability for the EPA to regulate these things for the purpose that they were founded for. That is why they are here, that is why they were put into place, and that is why we should trust their judgment going into these negotiations. Thank you.

MR. MEDFORD: Thank you very much.

Mr. Pollack.

MR. POLLACK: Good afternoon. My name is

Henry Pollack, and I'm a Professor of Geophysics and a

Climate Scientist at the University of Michigan in the

Department of Earth and Environmental Sciences.

As a contributing author to the 2007

Intergovernmental Panel on Climate Change Fourth

Assessment Report and currently expert reviewer of the forthcoming Fifth Assessment Report now in draft form,

I'm pleased to see real steps being taken to curb greenhouse gas emissions that are changing earth's climate. These proposed fuel efficiency standards will by 2025 reduce carbon dioxide emissions by an amount that is equivalent to one year of the total emissions of carbon dioxide by the United States. In other words, in the 14 years that these standards will be in effect, the USA will produce from all sources, including the light-duty vehicles to which these standards will apply, the equivalent of only 13 years

of carbon dioxide. Let me put that one year, one avoided year into a global perspective. The rate of increase of carbon dioxide in the atmosphere is currently about two parts per million each year, and at this current rate of annual increase, the atmospheric concentration of carbon dioxide will grow by 28 parts per million by the end of 2025 and will reach even more dangerous levels by mid century.

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Currently, the USA produces about one-sixth of the global carbon dioxide emissions, and therefore, the USA is responsible for about one-sixth of the increase in atmospheric CO2. An avoidance of 12 months of US carbon dioxide emissions between now and 2025 is equivalent to a two-month avoidance in the global growth of atmospheric greenhouse gases. Stated another way, adding 28 parts per million of carbon dioxide to the atmosphere will take 168 months under a business as usual scenario, about 170 months if these new fuel efficiency standards are implemented. Please be assured that I am not denigrating this modest avoidance resulting from the proposed emission standards. To the contrary, I applaud the standards as an ambitious step in the right direction. The purpose of presenting these numbers is simply to show the enormity of the problem we face if we are to arrest climate change in

this century. We will need to take a great many more
steps such as this if we are to avoid the more
disruptive consequences of anthropogenic climate
change.

I urge the EPA, as well as the Departments of Energy, Commerce, Agriculture, Transportation, indeed, the entire federal government to step out boldly and quickly in partnership with the private sector wherever possible to engage in essentially energy reform measures. The journey of a thousand miles begins with a single step and we need to run, not walk, forward with a host of other energy efficiency standards and alternative energy sources before we will begin to make a substantial difference in arresting climate change.

Thank you very much for taking this first step. Thank you.

MR. MEDFORD: Thank you for your testimony. Thanks to all of the panelists for their testimony and again, thank you for staying late and staying with us to testify.

We're ready for the next panel, please. Mr. Bailey, you can go ahead.

MR. BAILEY: Thank you. I'm Robert Bailey, and I'm a Michigan resident, former Research Engineer at Fords Motor Company now retired.

1 MR. MEDFORD: Congratulations.

MR. BAILEY: And among other things I'd like to do today is to second the expressions of Mr. Blain and Mr. Morgenstein. They fill in nicely with my train of thought presentation here.

The Ford family has long pursued green products, electric powered vehicles and plug-in hybrids driven by lithium batteries, and the -- although Ford is not the first to produce these sorts of vehicles, one that is much like what Ford may well produce relatively soon is the Toyota plug-in Prius that is due to show up in March. It runs 13 miles in electric-only mode with fully charged batteries. They claim on their relatively simplified Toyota cycle that this vehicle produces the equivalent of 87 miles per gallon. I could comment later on what that might imply for the federal city/highway cycle.

Now the media have declared that the Ford C-Max car, which is likely to appear sometime this year, runs 30 miles per gallon on full charge. So you can imagine with that advantage over the Toyota vehicle that both those vehicles might do rather well on the city/highway federal cycle.

Now an example of Ford's pursuit of green vehicles has been the Ford EcoBoost Engine, which a

version of could be used on the hybrid eventually, and that engine has the advantage that using the displacement of fuel economy, the emissions of a 6-cylinder engine you can do the work of 8-cylinder engine, a rather significant engineering step forward, and it shows the environment in which the hybrid has been growing up and the sort of challenge that's been presented to it to live up to the Ford tradition.

Now once we have this picture of a vehicle that can go 30 miles without recharging, without using the energy in the gas tank, this gets people in metropolitan areas to work. And if one lives in a world that Mr. Blain was explaining, you now plug in your C-Max hybrid to your employer's electrical grid and while you're working eight hours, it gets all charged up and is now ready to go 30 miles back to your house without using any gas. That's rather impressive. I don't want to swear that the media is right on that exact number, we'll see when it actually comes out. There are very good engineers at Ford working on this. I've known some of them. I'm confident that they will do very well in pursuing that sort of a goal.

The next --

MR. MEDFORD: Just about out of time Mr. Bailey.

MR. BAILEY: The main point I wanted to make
is there's a whole lot of techniques that are usable to
reduce the weight of the vehicles. A 30% reduction in
that weight raises that mileage up to 45 or 50 miles
without using gasoline, and that is a game changer.

MR. MEDFORD: Thank you very much.

Mr. Bryce.

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MR. BRYCE: Good afternoon. My name is William Bryce. I am the organizer for Southeast Michigan Jobs with Justice. We are a coalition organization and bring together labor, community and religious organizations to campaign for justice in the workplace and communities where working people work and live. We are part of a network of coalitions in over 40 cities locally. We have over 20 member organizations ranging from small peace groups and environmental groups and environmental groups to labor unions with thousands of members, for example Southeast Michigan -- I'm sorry. For example, the Service Employees International Union Healthcare Michigan is a part of our organization, they have over 18,000 The Sierra Club is also an affiliate. members.

Our organization is indeed growing and I believe that we can safely say that we represent thousands of people in the Detroit area. As the

organizer of Southeast Michigan Jobs with Justice I have responsibility for overall coordination of our efforts and mobilizing affiliates to turn out members for various political actions.

My colleague, Frank Hammer, has been working on the Green Jobs issue with our jobs committee for several years. He has a specific understanding of this matter necessary for thoughtful comment on CAFE and has the added advantage of a lifetime in the auto industry where I think we all know that CAFE has been discussed with great passion for many years. So I turn over to Frank.

MR. MEDFORD: Okay.

MR. HAMMER: Good evening. I'm a 32-year veteran of the auto industry. I worked in production and skilled trade in the GM auto plant outside of Detroit in Warren, Michigan. I served ten years in the International Union and I'm now happily retired. I can tell you that while I was an officer of my local union I can still remember letters and, in fact, I brought one with me just in case you want to see one. 1991 where there were letters going to Senator Riegle warning about the increase in the CAFE standards, and this has been an ongoing chorus between the company's and my union for years, and so I'm happy to say that I

see that we're maybe now have tilted onto the other page and we're now both advocates for higher fuel efficiency standards, and I welcome this opportunity to support what you're doing.

I have had experience in CAFE standards over the years, first of all, fighting the higher standard while I was on staff. I can still remember the UAW corralling staff members to have a rally in support of save our trucks, save our jobs and things of that order all against the CAFE standards. But what I did learn when I was a future product sourcing rep in Pontiac, Michigan at the Powertrain facility was that every engine and every transmission designed started with what is the government's CAFE standard. That's how powerful the standard is. It established everything for every new generation of engine and transmission.

Now I've heard various arguments in favor of the standards. I'm not convinced about the one that says it's a job creator, and you have to understand that I'm a little bit gun shy on the question of job creation because in my 32 years experience I've seen the whole industry go down to about 100,000 whereas when I hired at GM, we were at 450,000 so in all those years we always heard about job creation, job creation. So I think the verdict on that is out. I think it

might create jobs, and it also might eliminate jobs. I don't know.

I am here as a member of the Jobs With

Justice which represents an integrated body of unions,
and I think that when the name was first coined, Jobs

With Justice, there was probably no thought given to
climate justice, and I want to sort of piggyback on
what Mr. Pollack said in a previous panel that today
that climate change is real. I'm very happy to see the
website of the EPA carry information about climate
change. I wish it was more linked to the question and
the discussion of fuel efficiency standards. It seems
to be in separate worlds and it should be combined
together that the reason we have to increase fuel
efficiency and to other measures is because we have a
very serious danger coming down the pike and that's the
consequences of global warming and climate change.

So I think that in terms of EPA's considerations that the standard should be, does what we do help to effectuate a slowing down of global warming, and that that is the highest standard that we should be measuring all of what we do in this industry and other industries as well.

Raising the standards will help reduce the consumption of fossil fuels, and for that reason alone,

I support your efforts. However, there is a problem, and I think that there's been some discussion on the web, for example, that higher standards might just let people drive cars some more, and that we have to take a complete measure of where the fuel, the higher fuel efficiency standards in terms of overall carbon emissions, we have to get a whole measurable picture.

The weaning of us off oil addiction will require more than efficient cars. It seems to me that the EPA with the Department of Transportation should accelerate giving choices to Americans in regards to, for example, public transportation. And if you've been tuned in to our metropolitan area, there's been a lot of debate going on whether we're going to have a light transit line up and down Woodward, which, by the way, we used to have many years ago, we used to have trolleys. Yeah, we'd like to get them back. It's a different age and if we rely on public transit, we can also begin to reduce carbon emissions. The same goes for a high speed rail line that was discussed between Chicago and Detroit.

The higher standards are achieved through the hybrid and electric cars is all well and good, but if the electric cars are plugged into coal-fired plants, all we're doing is removing the problem one step

1	removal out of sight of out of mind, and it seems to me
2	a holistic approach says not only do we have to improve
3	the efficiency standards, but we have to link that to
4	the use of renewable energies and not, not coal.
5	MR. MEDFORD: Thank you. Thank you Mr.
6	Hammer. I think we'll move on to Mr. Egged.
7	MR. EGGED: Well before I like really
8	introduce myself, I want to thank you five because just
9	sitting here for the three panels that I have, I'm
10	surprised you guys aren't downing aspirin like candy.
11	I mean you're inundated with a bunch of good
12	information, but it's all coming at you all at once.
13	Anyway.
14	MR. MEDFORD: Thank you.
15	MR. EGGED: My name is Jim Egged and
16	52-years-old but I'll be 53 in March, and I've been an
17	environmental activist all my adult life and most of my
18	adolescence. And I have not yet been blessed with
19	grandchildren, but, you know, I'm sure they'll be
20	forthcoming soon. And eventually those grandchildren
21	will have grandchildren and want to leave a legacy of
22	environmental activism for the future inhabitants of
23	the planet and just like my parents left to me. All
24	right.

And so in adopting these standards the 54 and

1/2 miles per gallon by 2025, I know that the EPA in its goal, you know, using the Clean Air Act to set the greenhouse gas standards for motor vehicle fleet of 163 grams of, you know, that's all a bunch of technical stuff like Dr. Pollack who, I read his book too, I love that, A World Without Ice.

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Anyway. In addition to the ecological impact this will have, I think it's also the biggest single step that the US has ever taken to reduce its dependence on foreign oil, which the military guy down there at the end, you know, has a lot to say about that, you know, from the first couple panels ago. Anyway. The money saved also will allow consumers to spend money elsewhere, you know, because if they're not spending money at the gas pump, they'll do what I call super stimulating the economy, you know, that's an old economic term that I just made up. Anyway. You know they can take the money, you know, that was stimulus for the economy, spending it frugally and saving it, and then again, re-stimulating it into the economy, thus, super stimulating it. So there's lot involved here.

Now in any case, it's not like the technology isn't there. Automakers will be able to comply with the new proposed standards because I'm sure that you've

already gotten because you've talked to Bob King,
you've talked to the Ford guy and the to the GM lady or
the other way around.

MR. MEDFORD: Ford lady, GM guy.

MR. EGGED: And Chrysler guy. So you know, that it's all there. 13 major automakers signed preliminary agreement and worked out with the White House and most automakers agree that the existing technologies can be used to achieve the plan's goals. These are technologies such as turbo charging, direct fuel injection, 8 to 10 speed automatic transmissions, electric drive and other fuel saving emissions, and that comes from Edmunds.com. Anyway, these technologies are on display as I speak right down the street the Cobo Hall and so guys like, you know, Dan Akerson, Alan Mulally, Sergio Marchionne and Jim Lentz, they all support this.

The only, you know, like one concern I have is to raise is like the mid-term review. As a retired firefighter, because that's what I did for a living, by the way, and background in science. I have two undergraduates, two baccalaureate degrees in science, I realize the importance of the review process. I just don't want this review to be an opportunity for the industry to slow or procrastinate these standards to

the point of non-implementation. The automakers did say that they could achieve these goals, that doesn't mean that they'll be in a hurry to do so, and I'm sure you understand that. I would like to urge both agencies to keep both the standards in place for all nine years, thus, letting the mid-term review -- not allowing the mid-term review to slow the process down. The review should be opportunity to make this program stronger.

And one last thing. The electric vehicles are treated as 0 emissions which kind of allows for the, you know, like a little cheating, I guess, on other end. So perhaps the cap of the special treatment of electric vehicles could be strong enough to not reduce the oil saving benefits, which is part of the purpose of the standards. And thank you guys for sitting here for so long listening to all this.

MR. MEDFORD: Sounds like you've been here all day too since early this morning, and thank you for coming.

Mr. van Guilder.

MR. VAN GUILDER: Good evening. My name is Brad van Guilder. I'm the staff person in Michigan with the Sierra Club, and again, I'd like also thank you for staying here and having this hearing all day

1	here in Detroit. I would like to address a policy
2	point or two and also relate the experience of myself
3	and my father as consumers attempting to make
4	responsible vehicle choices that actually reflect how
5	some of those policies are actually seen by consumers
6	who are, you know, ultimately the people who are going
7	to end up being affected by this. It's extremely
8	important that EPA is part of setting national
9	standards the combined objectives for both vehicle
10	efficiencies and establishing a greenhouse gas emission
11	standards. Mobile source pollution from cars and
12	trucks and the transportation sector are a large
13	contributor to air pollution generally, and climate
14	change in particular. These emissions have
15	historically been more difficult to address than point
16	source pollution. These standards lay out steady
17	improvement in fuel efficiency, an historic step in
18	significantly addressing climate change. By setting
19	the standards to model year 2025, manufacturers will
20	have a timeline necessary for a far more stable
21	industry. More importantly, these standards will drive
22	technology developments, material science, energy
23	storage, alternative fuels, and moving beyond the
24	internal combustion engine.

With all of these technology innovations, I'm

concerned about how the greenhouse gas emission equivalents will be calculated. This is especially important to ensure the integrity of a policy intended to substantively address climate change. The full lifecycle of any fuel with a propulsion system must be accounted for whether electricity derived from coal and the mining thereof, or bio-fuels derived from fossil fuel-intensive agriculture.

One of the criticisms I have heard is concern that the upfront cost of these vehicles may be higher as these new technologies are applied in large quantities of scale will help curb higher costs of the vehicles. However, the cost over the life of the vehicle has clearly been shown to be lower to consumers, and we all get the larger benefit of public health improvements and the associated costs of those public health improvements.

The financial industry should modify its

lending practices to address the new economics of clean
energy efficient technology. For example, energy
efficiency mortgages allow a prospective home buyer to

lower the cost for their mortgage because they have

lower utility bills that are factored into their

ability to pay their mortgages. A similar

reconsideration of the economics of a fuel efficient

vehicle should be applied with proper oversight of the financial industry.

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Finally, I'd like to speak as a consumer. 2009 both my father and I were considering purchasing new vehicles. Up to that time, most innovations in the auto industry were being applied to allow for production of larger vehicles instead of dramatically reducing fuel consumption. These new standards change the calculus and address pent up demand for vehicle that use far less fuel. I was looking for a small vehicle with good gas mileage that met my needs for hauling small items. I was very interested in the Honda Fit. It was frustrating with Honda going back and forth over whether they would produce a hybrid version of the Fit, and I'm sure many other manufacturers have dealt with similar kinds of questions, and it's not just Honda. I could not delay my purchase any longer when Honda announced that it would produce a hybrid version of the vehicle, but they would not sell it in the United States because of the apparent perception that the vehicle would not satisfy the performance expectations of consumers in the United States. I hope these new standards that will address the desires of all consumers and not just those that have been shaped by decades of advertising.

I think the consumers in the US are more than 1 willing to embrace a new energy economy that is driven 2 by more than the price of gasoline exceeding more 3 dollars for the gallon. My father's vehicle purchase 4 5 was a good example. My father is a decorated World War 6 II veteran, a retired airline mechanic and diehard 7 buy-American union guy. He'd only driven a large van 8 or pickup for over 25 years. He was looking for an 9 alternative to his 12-passenger V-10 van that got 8 to 12 miles per gallon that he was using as his regular 10 vehicle to drive to the grocery store. He shocked 11 everyone when he bought a third-generation Toyota 12 13 Prius. I'd like to take credit for that, but I knew nothing about it. He went out and bought that vehicle 14 on his own. But he was absolutely fascinated with all 15 16 the innovations that came with that vehicle, all the various tools on that vehicle that told him how he 17 18 could be more fuel efficient driving that vehicle. he even jokes that he's afraid that the gas might go 19 stale in the tank because he doesn't use the gasoline 20 fast enough in the tank. Now no disrespect to my 21 22 father or anyone else of his generation, but if a salty 23 old dog like my dad can embrace a new energy, a fuel efficient economy, then this country is finally ready 24 25 to do it.

- 1 MR. MEDFORD: Thank you very much.
- 2 Miss Woods -- Walker, I'm sorry. Ms. Walker.
- For the reporter, that's Donna Walker.

4 MS. WALKER: Yes. Thank you. My name is

5 Donna Walker, resident of Detroit and a member of

6 Sierra Club. I think I'll go over like a little bit of

7 my work and my riding history. But today you're

sitting in here and it was 52 degrees today in Detroit

9 Michigan.

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MR. MEDFORD: Thank you.

MS. WALKER: Lovely. Would you believe I used to work, my job in the '90s was to make sure to monitor those out in the street repairing water mains, and in 1994 in this week, this period of time, it was 17 degrees below zero. Also my son lives in northern Michigan. He's a letter carrier so I always watch the weather. There's no snow up there, no snowmobiling, no skiing, and he can't go ice fishing. There are impacts. Michigan, even in northern Michigan, there's big changes taking place in the weather.

Okay. I used to own a Chevy Metro. At one time I owned three of them. I gave them to grandchildren. 42 miles to the gallon highway, and GM stopped making it. It had a cast iron engine, it was wonderful, but they stopped making it. Not enough

profit? In '78 I owned a 2-cylinder Honda car. Oh I
loved that car, 54 miles to the gallon, and I drove to
Toronto and Wisconsin and gas at that time was 50 cents
a gallon. That's no longer allowed, and I wish it
could be brought back so on Jefferson and Woodward I
could just drive it.

The Smart Car, I'd go out and buy a Smart Car. They tell me in Europe the Smart Car gets 67 MPG; here 40, and I'm not buying that car. I used to have a Metro, did the same thing.

Now you talk about loss of jobs, when gas goes to \$7 a gallon in this economy, we're not going to be able to buy cars or fill them up with gas, and there will be great job loss because who's going to be able to afford to buy them?

Okay. And the last thing is, if we fail to implement such standards, many of us in this room in 2025, we're going to look back with great anguish and regret and say to ourselves, why didn't we do it then because things are changing. Thank you.

MR. MEDFORD: Thank you. Mr. Hasspacher.

MR. HASSPACHER: My name is Gerald

Hasspacher. I'm a retired teacher, and I'm a

practicing registered nurse. I'm one of two citizens

on the City of Warren Environmental Committee, I'm a

co-chair of the Green Cruise, which is a celebration of non-fossil fuel transportation, a week before the Dream Cruise, just the opposite. We'll have our seventh one this year, bigger and better than ever. I'm also the chairperson of Southeast Sierra Club Green Schools Promotion Committee, and over the past three years I've given 28 presentations to schools to help them become official Michigan Green Schools because Michigan has a 2006 law whereby if a school qualifies, they are designated an official Michigan Green School.

In my presentation I touch on sustainability, energy, ocean water, fresh water, Michigan native plants and animals, trees and transportation. And when I get to transportation, this is the prop that I use, and I bring somebody up and lift it up, and it's 20 pounds, and 20 pounds is what -- how much CO2 comes from each gallon of gas that we burn, and kids are surprised by that. And so we discuss it and I tell them that the CO2 that's going in the air is not going to come out for the next hundred years, and all the problems that we've been discussing couldn't possibly change for the next hundred years, and tomorrow when everyone turns on their cars it's only going to get worse. And so I ask them questions about that. I say, you think, that when you're driving down the expressway

and you're passing all those cars that they're thinking oh my goodness, I'm putting so much CO2 in the air, and they go no. And I say if it was orange coming out of our tailpipe, do you think we'd be concerned, and they go yes.

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And so we go back and we talk about how that CO2 effects everything. We talk about how the Arctic will be gone by 2030, and I ask them where will you find a polar bear, no, not in the water, no, not on the land. Somebody usually, it's in the zoo, yes. And is anyone giving money for the polar bears to help them, and I assume well I don't know why because be interesting to find out what the money's going to. We talk about Antarctica as being the size of the United States plus six Californias and an average mile high in ice, and what would happen to the cities in the United States and worldwide if even part of that melts, and I tell them if you're standing on the shore in Florida and the water goes up this much, how far do you have to move back. And they take their guesses and I tell them well you have to go over a mile back. And so that CO2 heats up, the thermal expansion and the melting water is going to put a lot of cities at risk. We talk about less fresh water. We talk about the danger to Michigan plants and animals. We talk about loss of Michigan's

And things that I stress to them are take ownership of
the earth that they're inheriting, and I try to empower
them to be better stewards of the earth through tips
but what I can't tell them is how dire things seem to

tree canopy and in fact this is happening worldwide.

6 be because science tells us that if we don't turn this

around soon, it's going to be catastrophic and there's

8 nothing that they're going to do.

So last week I was giving a presentation and a sixth-grader put up his hand he said, you know, I don't believe in global warming, and I said well, you know, there's an election coming up and two parties and one of them pretty much agrees with you and you're entitled to your opinion, but what I would ask you to do is talk to your teacher about the science of it, not the politics, not the blog, not the talk show hosts, look at the science and that's what I'm asking you to do today for those kids that sit on that floor and look up with those bright eyes and just soak this stuff up and are crazy about environment to do for them. Thank you very much.

MR. MEDFORD: Thank you very much, and thanks to all the panelists for your staying so late, appreciate your testimony, appreciate your interest in the issue.

I think we're ready for everyone else that's
listed to testify. I think we can fit you at the table
now. So if you come forward and put your names on a
name tag, we'd appreciate it very much. Is Mr.
McMaster among the group here?

MR. McMASTER: Yes.

MR. MEDFORD: You're first when you're ready.

MR. McMASTER: Thank you for the opportunity to speak. I am Bill McMaster and I'm state chairman of Taxpayers United Michigan Foundation. We are a statewide organization concerned about tax hikes and defense of our state constitution relative to tax hikes as well as the environment. We are quite surprised and disappointed that EPA has taken this course of mandating a 54.5 increase in gas mileage at this time. The reason being is is that no sooner do you accomplish the 32 milestone but here we have another one that is on top of that.

The Michigan climate being what it is is a state that uses larger cars; avoids smaller cars. It is basic rule of driving that a smaller car doesn't have that much clearance when you've got five or six inches of snow falling. When you have further families of three and four children or grandchildren, to transport them in a small car compact or subcompact or

electric car is impossible. The state has grown with good highways over the years as the auto industry has grown and native Michiganians very much appreciate being able to use the independence of our cars as we see fit.

The pollution of gasoline by increasing the 10% of ethenol has been a major disservice to motorists in Michigan because ethenol doesn't get as good of gas mileage as gasoline, and secondly, it fosters a pollution and a fire hazard at the pump and in operation. You may have noticed that only newer cars are able to use ethenol and that they do so with a warning at the pump that it explodes when you have any kind of a spark, including when you slide off your seat.

This idea that the auto companies endorse this concept is measured by the fact that the reason they approved it, they will tell you candidly, and endorse your 55 benchmark is because they're worried about individual states like California making a higher standard than other states and requiring the manufacture of certain vehicles to different standards in different states.

This idea that the Obama Administration can come into this state and declare to me and my family

1	and our statewide membership that we're going to have
2	to get along with smaller cars is not acceptable and we
3	will resist that. It is our hope, frankly, that these
4	kinds of unreasonable standards based on, in some
5	cases, as far as global warming and other factors, a
6	kind of science that may better be administrated or
7	administered through different administration and we
8	will work for the election of a different
9	administration next year. Thank you.
10	MR. MEDFORD: Thank you. Let's go we'll
11	come back to the end to answer any questions or ask of
12	them that you have, but the two brothers that are here,
13	it looks it's Dele and Ayodeji. I'll have you say your
14	last name. Maybe you can help us with that. You
15	can are you going to break up the five minutes and
16	share your testimony or
17	MR. AKINPELU. Yes.
18	MR. MEDFORD: Whoever would like to go
19	first, go ahead. Just state your name and your
20	affiliation.
21	MR. AKINPELU: Hi, everyone. My name is Dele
22	Akinpelu, that's how you pronounce it. That's a typo,
23	but that's fine.
24	Yes. Good evening everyone. I am an

environmental science student at Wayne State University

and also a current organizer with Sierra Club and I think the push that Obama, President Obama has for the 54.5 miles per gallon call for each -- for the new vehicles is a good step forward, a step in the right direction. I think that it's something that's been long needed for this economy and for our future and for current citizens of United States of America, and I think it's a great idea because well we all know that -- well some of us don't agree that carbon dioxide is contributing to climate change where science proves it has been for the last, you know, couple of decades, and if you can, you know, look at current graphs, Keeling curves and things of that sort that point to that such a thing is existing; that global climate change is existing, it has been continuing, and we can even feel the effects here in Michigan and different places globally.

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So I feel that's a great push forward, you know. Me coming from a scientific background I know how the importance of achieving this step and milestone forward, you know, because the United States should be on the frontline as far as having a greater sustainability tract, if you will, when it comes to the automotive industry as well as producing manufacturing vehicles, and so we compete also on an international

level with our Asian and Chinese counterparts that are producing also in vehicles as well who have currently been exceeding and doing better as well as there gas per mileage compared to United States. I currently driver a Ford Taurus and it's a flex-fuel vehicle which I purchased with my father about three years ago, and it has been running well compared to my brother, who has a Chevy Lumina? Yes, some sort of race addition or something. But as far as gas mileage, I like the bang for the buck, and I understand it does use ethanol as well, which is cheaper, but at the same rate it runs out quicker which isn't almost a great thing but.

 $$\operatorname{MR}.$$ MEDFORD: Maybe we should hear from your brother now.

MR. AKINPELU: Hi there. My name is Ayodeji Akinpelu, also a Wayne State student studying environmental science and biology, also geology. I believe this is a positive push to get, to get everyone, specifically the United States, to increase their gas per mileage. Even though California does have a higher standard compared to the rest if the United States, I believe that it's no excuse for, especially for Michigan, Detroit, you know, us being the Motor City where once was called Motor City now it's maybe called the agricultural capital of the

1 world.

2	Throughout the past couple of years I mean
3	the different corporations, GM, Ford, they have been
4	manufacturing some pretty good car, but pretty good
5	vehicles, not cars, but they always still lack when it
6	comes to MPG's. They can never actually, you know,
7	compare to the European counterparts. I mean Ford
8	finally has it right. Don't get me wrong, I'm not
9	trying advertise for Ford or anything like that, but
10	they actually have taken I guess a paradigm shift to
11	the point where they're not only looking at it from a
12	cost-effective standpoint, but also looking at it from
13	an economical standpoint and some more of an intuitive
14	aspect as well. Apart from that, apart from that,
15	they it's just a push in the right direction, you
16	know. It actually makes the automotive manufacturers
17	strive to hit that pinnacle because other European
18	markets such as Lexus, you know, such as BMW, such as
19	Mercedes Benz, they've already been hitting these
20	points, getting their cars that hit these miles per
21	gallons about decades ago, 20 or 30 years ago, and
22	that's with like Generation 2 or, or, the Generation 3
23	Mercedes M5. They've already been doing these
24	technologies. Why are we so slow? Why are we so slow
25	to catch on?

1	So I think Obama's actually in the right
2	direction, it may be a push, but I think it's a push in
3	the right direction.

MR. MEDFORD: Thank you very much.

Mr. Abdalla.

MR. ABDALLA: Good evening. I'm Ade Abdalla.

I'm the co-founder, president, CEO of Energy/Efficiency
Environmental Health Services and Walking on Water
Environmental Stewardship of Recreational Services.

Our mission is to establish a worldwide foundation and universal philosophy to mobilize humanity to recreate optimal ecological conditions for the enjoyment and preservation for Mother Earth. With that being said, naturally, I applaud your efforts. I'm in favor of President Obama's new proposed standards for the auto industry. I think this is a step in the right direction.

If you had an opportunity to go over to Hart Plaza, at the foot of Hart Plaza is a statute and it says Gateway to Freedom. And I think it's appropriate that you chose Detroit to start these hearings because imposing these standards on the auto industry is a step to help us free ourselves from the effects of importing so much oil and being dependent on oil while simultaneously doing stuff about carbon emissions.

1	I like to tell people that our organization's
2	vision and mission statement is based on the theology
3	of ecology that you will find in the first seven days
4	of creation in the Book of Genesis. If you take time
5	time to review it, you'll see during the first five
6	days God created the environment, and on the sixth day
7	he created man. So I tell people if we do not protect
8	the environment, if we do not maintain the environment,
9	then we cannot exist. So it's not a matter of going
10	green, it's a matter of common sense.
11	Now thank you for giving me a chance to
12	testify today and go on record in favor of these
13	improvements.
14	MR. MEDFORD: Thank you very much.
15	Mr. Johnson.
16	MR. JOHNSON: How are you doing?
17	MR. MEDFORD: Good. How are you?
18	MR. JOHNSON: Pretty good. Thank you for
19	inviting me. I know you guys have been here all day
20	but I'm really excited about you guys being here.
21	Because I wanted to let everybody in this room the
22	technology is here. I'm an entrepreneur, I've seen it,
23	I've driven it. I'd like to invite you all back in
24	June when we have our prototype running.

Right now in America did anyone know that we

had electric vehicles here 100 years ago, but it phased out because there were no standards to support it?

Industry and commercialization pushed it by the wayside. As a matter of fact, over 100 years ago diesels ran on peanut oil. The very first diesel engine made by Rudolph Diesel was ran by peanut oil, but those things were pushed to the side because there were no standards. There really wasn't any understanding of what those emissions are doing to the environment, but now there is understanding. Now there are a lot of exciting opportunities.

As a startup, I'm working with other startups and it's just so much energy and the technology is here form a large vehicles too to run on -- get up to 100 miles per gallon right at the Auto Show, if you get a chance to go over there. As a matter of fact, they started with the Hummer. I was in the military when they were working with it, 100 miles per gallon. The technology is there. And we have one car 150 miles per gallon, that's the Volt, and then the new Ford Fusion in at 100 miles per gallon. So the technology is there. So if the standards are pushing it, the standards are supporting it, then the companies will keep up. As a matter of fact, I like what one of the brothers said where we're lacking behind because we

1 have not kept up, there hasn't enough notice.

Right now China has been replacing the US as

the number one manufacturing, manufacturing production.

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Right now there they're up 18 million and we're just 5 reaching 12 million because of the crisis we had here. And Japan is number two. We're number 3. So we have a 6 7 lot of catching up to do, but these standards and other 8 incentives in place are forcing us to compete, forcing 9 us to catch up, forcing us to look at the new technology. And what it's doing with the big OEMs like 10 Ford and GM, they're working with the smaller 11 companies. I get a lot of calls from Ford and GM 12 13 engineers as we look at new technology. Ford and GM, they don't have the budget, the research and 14 development budget to look at every new technology out 15 16 there, but us smaller companies, we have the time, we 17 have the energy to develop these technologies. After 18 we prove the commercial ability of them, then Ford and 19 GM comes in and purchases or purchases them from us. So a really exiting environment and I thank you 20 gentlemen for coming here. 21 22 MR. MEDFORD: Thank you very much. Mr. Lombardo. 23 MR. LOMBARDO: Hello, my name is Dan Lombardo 24

and I'm a peace activist for creative nonviolence in

the Catholic Worker Tradition, and I'd like to make two points. My other, my other full-time occupation is being a laid off electrician. I'm a laid off construction electrician right now, and my first point is about the government mandates work in innovations need a push, for instance, light bulbs. I'm happy to report that I went to Home Depot the other day and they have LED light bulbs, and I think they work real well. I tried them out, they worked great. EPA has the Energy Star program that's helped us pick light bulbs and I appreciate your work on that. So I have governments around the world are also banning incandescent light bulbs, so that's why government mandates do work.

My second point is little different than you've heard. It's on our addiction to reducing our independence on oil to reduce the likelihood of future wars. And what I have here is an article from the New York Times, February 1st, 2006, and it's the day after the State of the Union Speech, and I'll read first line of the second paragraph. The most striking declarations Mr. Bush said America is addicted to oil. So I think what he meant by addicted, is by addiction he means we hurt ourselves and others. We hurt ourselves by contributing to climate change. I'm sure

you probably heard about global warming and all that so I thought I'd take a different approach to it. I'd like to focus on how it hurts other people.

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The control of oil is a major factor in the decision to go to war. And so I got another article here, it's from the Washington Post September 15th, 2002, and that's when the Bush Administration was trying to sell the war to us in September. The first paragraph goes, a US-led ouster of Iraqi President Saddam Hussein could open up a bonanza for American oil companies long banished from Iraq. Scuttling oil deals between Baghdad, Russia, France and other countries and reshuffling the world petroleum markets. That's according to officials. So that goes without saying I thing that oil companies are addicted to profits. And a little-known fact is that eight civilians are killed for every soldier killed. Our addictions to oil are killing civilians, and I have some pictures here. is war creates refugees, pictures of refugees here, and war creates destruction and psychological trauma. There's a picture of a little girl being traumatized. War creates physical trauma. Here's a picture of a little girl who's been burned and she's in her pajamas. Figure that out. War causes more psychological trauma. The soldier in this picture has blood on his foot, on

1	his boot, and there's a newly orphaned child with her
2	parent's blood splattered on her. That's a pretty
3	tough one. This one's tough too. War causes death.
4	Here are dead children in a homemade casket, a grieving
5	father with more caskets in the background. This one I
6	like a little bit better. The picture I like is a
7	picture of children that are apparently safe, although
8	I think it's Iraqi children. Little kid has a funny
9	look on his face.
10	So anyway, I'm concerned that you'll allow

So anyway, I'm concerned that you'll allow too many loopholes in these pretty good standards Obama has come up. My question is how many loopholes you'll allow in these in light of what it could be possibly do to children. Thank you.

MR. MEDFORD: Thank you very much. Okay.

Mr. Altman.

MR. ALTMAN: Thank you. I'm from Royal Oak,
Michigan, and thank you for the opportunity to speak in
favor of the proposed standards. I'm also a peace
activist, and as you might imagine a proposal that
would lead to more peaceful world, I'm for it.

In 2007, former Reserve -- Federal Reserve
Chairman Alan Greenspan, a Republican, wrote in his
book the Age of Turbulence: Adventures in a New World,
I'm saddened that it is politically inconvenient to

acknowledge what everyone knows. The Iraq war is largely about oil. But he wasn't alone in this belief. A UPI poll taken in the same year found that 32% of people thought the oil in Iraq was a major factor for going to war. Another 41% felt it was a factor, and only 24% felt it wasn't a factor at all. This is a stunning admission or statistic. It means that most Americans believe that we should go to war to feed our demand for oil, a demand that exceeds our capacity to produce the oil within our borders.

Today we know the cost of that decision to go to war. Nearly 4500 American soldiers dead, 32,000 wounded, tens, if not hundreds of thousands, with traumatic brain injury and posttraumatic stress disorder. According to the National Priorities Project website cost of the Iraq war is 800 billion dollars, but that's just the allocated funds.

Joseph Stiglitz, a Nobel Prize-winning economist, and Linda Bilmes, a Harvard professor, wrote book called The Three Trillion Dollar War: The True Cost of the Iraq Conflict. Three trillion dollars for a war. But those are just the costs to the United States. What about the cost to our coalition partners? What about costs to Iraq? A hundred thousand, over a hundred thousand Iraqis dead and over four million

Iraqis displaced. All told, the war has had a huge cost to the world, to the United States and the world.

But I have other questions. Is it moral to fight a war for oil? And what kind of nation would fail to take the steps within its power to reduce its consumption to better match it's productive capacity for oil such that it could avoid a future war for oil? We've just finished fighting what most would agree in part, or in large part, was a war for oil. You'd think that we would do everything in our power to avoid the "need to fight" such a war in the future.

I believe that these new standards in that they would potentially reduce the consumption of oil could lead to a more peaceful world, and I urge their adoption with one caveat, that is that the standards don't lead to the consumption of other scarce resources.

Thank you for the opportunity to testify today.

 $$\operatorname{MR.}$ MEDFORD: Thank you, Mr. Altman, and thank all the panelists.

I just have one small thing, and that's, Mr.

McMaster, the one thing that is a misperception by many
people about the standards that we're proposing is that
it will force people to drive certain kinds of

vehicles, and these standards are really written for every size vehicle. They're separated by light trucks as one set of standards with standards or targets of fuel economy is a change depending on the footprint or size of the vehicle, and the same set of standards -separate set of standards for passenger cars, and the derivation of the 54.5 comes from the best estimate that we have now on the combination of cars and trucks that people buy in the different size categories, but the actual standard that will be yielded at that time will depend on what people do decide to buy and, therefore, the compliance obligations for the manufacturers will be based on whatever people buy. So that trucks and cars in exactly the same variety that exists today, as long as consumers want to buy them, manufacturers will sell them and will be available.

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We've heard in other news stories that these standards will make people buy small cars, and I just wanted to make sure that you're aware that these standards set targets for fuel economy for every size vehicle and really is intended to preserve both consumer choice in the kind of vehicle that people choose to buy, improving fuel economy for each size, but I just wanted to make sure.

MR. McMASTER; can I have 30 seconds to

1	rognonda
L	respond?

2	MD	MEDFORD:	Yes.
4	IVIIC .	MEDFORD.	TED.

MR. McMASTER: Consumer preference for whatever size car and whatever gas mileage is pretty well demonstrated in the marketplace. When the Ford 150 was again this past 2011 the most popular American made car in the United States, that is a pickup truck, and it does have the EcoBoost and what have you in it now.

Secondly, Michigan is a natural resources rich state. We have considerable oil and gas deposits, and the Obama Administration has prohibited our drilling for known reserves, particularly under the Great Lakes from drilling from the shore.

Now the last thing is the president of -- or chairman of General Motors Atkinson is on record, I think foolishly, of saying that he is a proponent for increasing the price of gasoline to at least \$5 a gallon so that he can force people into smaller cars.

That's a despicable thing for a government-run auto industry to propose to the people who disagree with him substantially. Thank you.

MR. MEDFORD: Thank you. Thanks to everyone. Thank you for coming and thank you for your testimony.

I think we have in the audience now four more

1	people	so	if the	e rest	of	the	folks	waiting	would	come
2	up and	put	your	name	on :	your	tag.			

3 MR. MEDFORD: Miss Millan, you can you go.
4 Are you ready?

MS. MILLAN: Hello. My name is Italia Millan and I live in Auburn Hills, Michigan. I've worked for the auto industry for over a decade. My husband still works there. We know transportation plays a very important role in our economy. Also our and many other families depend on this industry to make a living. I was always proud of the work I did as an auto industry employee, but I must confess that I also felt guilty due to the fact that we didn't offer the consumers a vast array of fuel-efficient vehicles which had a smaller impact on our environment. After all, a healthy environment is a synonym of healthy communities.

Let's remember that in 2009 greenhouse emissions, including CO2, were finally recognized at pollutants dangerous to human health. Interestingly as was published by the EPA that in that same year mobile sources generated at least one third of all greenhouse emissions in the US, and this is a growing trend.

I limit my driving and I carpool when possible, but I cannot control what other people do. I

believe that besides people, businesses and the industry must also have a moral obligation and strive to offer the best products in every sense of the word that they can, and that the government must make sure social and environmental justice happens. I'm happy to see them on board with a stronger fuel-efficiency program.

When I decide to replace my car, I want my family and all the American public to have more options of fuel-efficient vehicles; therefore, I applaud and support President Obama's goal for a strong federal greenhouse gas and fuel economy program. I expect all vehicles, small, luxury, SUV's, pickups and even electric and hybrid which are called clean, but use coal-fired plant energy sources, to be held to these same strong standards. I believe this program will create more jobs, drive innovation and competitiveness up, help people save money on gas, especially during tough times, reduce our dependence to foreign oil and, most important, help curb down pollution.

Thank you for the opportunity to testify today and for taking my comments into consideration.

MR. MEDFORD: Thank you for your comments.

Mr. Hughes.

MR. HUGHES: Good evening. My name is Don

1 Hughes. I'm a resident of Auburn Hills, Michigan.

I've worked in the automotive industry for 14 years now and I applaud the Obama Administration for proposing this historic fuel economy/greenhouse standards that will reduce our dependence on oil and cut carbon pollution. I feel this is necessary for us to become competitive in a world market. Although strides are being made within the automotive industry, legislation such as this can help drive the industry to invest money and resources into this type of technology. And we all know that everybody is trying to save money, and the things that get prioritized are those that are regulated, and as much as we don't want to be regulated, sometimes it's necessary to fuel that innovation and invest that money.

In turn, I think this will create jobs, create new innovation, it will drive us to be leaders in the industry. If we don't improve these standards, we'll be driven out of the market by foreign competition. By setting these standards, we hold the industry accountable, make these changes happen, and ensure job security for the thousands of workers for years to come. Not only this, but this will also save money for consumers, reduce emissions making the world a cleaner place and reduce our dependence on foreign

oils.

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I want to thank you for taking my comments in consideration and allowing me the opportunity to speak.

4 MR. MEDFORD: Thank you for your comments.

Mr. Richardson.

MR. RICHARDSON: Hi. My name is Jim Richardson. I'm from Royal Oak, Michigan. First of all, I'd like to welcome you guys to our fair city.

MR. MEDFORD: Thank you.

MR. RICHARDSON: I've worked in the automotive industry for a long time. All of us have seen the shocks that sudden spikes in oil will cause. Back in the '70s if you remember the gas lines, a few years ago oil prices went up, crashed our economy. Right now there's many people out of work because of that. A couple ways that you can go through to take care of, reduce the reliance on oil thereby taking our economy and insulating it from those price shocks is one of two things: Reduce the demand for oil or find oil. There's only a certain amount of oil left on this planet. There's no way that you can flip a switch and automatically get more oil. That leaves us with reducing our consumption. Reducing the demand will be there and help insulate our economy from spikes in oil prices.

I really praise the Administration on coming up with these historic fuel standards and emission standards. They're long overdue. They should have been upgraded years and years ago. Maybe then we wouldn't be in the situation we're in right now.

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The new standards will reduce emissions from automobiles, which is one of the leading emitters of greenhouse gases by about two billion metric tons per year. That's equivalent to 474 coal-fired plants. What it will also do, it's also thought that these standards will go through and reduce oil consumption by 1.5 million barrels a day by the year 2030. In my opinion, that's fantastic. Number one, no one wants to have dirty air and I already mentioned about how oil affects our economy. To achieve these new standards, companies are going to have to come up with new innovations, and and new innovations are going to drive investment in companies. They're going to go through -- they're going to hire people. I had seen something where, and quite honestly I can't remember where I saw it, but over 450,000 are thought will be created based upon these new standards. That's a whole heck of a lot more than the Keystone XL Pipeline. I feel that the Administration should go through and set these standards and make them effective in July.

The one thing that I do question is I feel
there should be a cap on the amount of when they're
looking at emissions, electric vehicles, though they
emit nothing, the electricity still a lot of it comes
from coal-fired power plants. There should be a
mechanism in place when judging the amount of emissions
coming out of the vehicles that take in account the
electricity that's being generated from the coal-fired
power plants thereby reducing the amount of greenhouse
gases emitted into the atmosphere.

That's all I have to say. Thank you very much for letting me testify.

MR. MEDFORD: You're very welcome.

Mr. Linderman.

MR. LINDERMAN: I'm Leon Linderman. I don't represent any particular interest group, I just come as a citizen. I too want to welcome you and appreciate the opportunity to testify.

As we speak, we're facing a meltdown of polar icecaps and other weather-related changes. The threat to human and animal life as well as vegetation around the world. The new standards will help but for me they raise critical additional questions, which I now want to share with you as a way to perhaps change your perception of the problem or encourage you to consider

it anew as bigger and more dangerous to the planet.

Do the standards go far enough to counter the threats? Do they raise the MPG standard high enough and do so quickly enough? Do we need a national, a strong national program to organize and fund development of alternative energy sources like wind and solar? Are the standards comprehensive enough? Thus, it's not only important to increase MPG, but to reduce all greenhouse gas emissions from any and all sources. And in the handout that I -- that you had for us that I read today, I don't know if it addressed the danger of other greenhouse gases, or at least not very carefully, but I thought it only addressed the danger of CO2, or primarily addressed the danger of CO2 while ignoring the very real danger of other, of other greenhouse gas emissions.

Also, why wait until 2017 when threatening environmental degradation is already upon us? To require that the preponderance of the spike is achieved, what if a new administration 2012 or 2016 isn't attuned to the problem? I believe that America has the scientific and engineering ability to move ahead even more rapidly than this program seems to offer and that Americans want us to lead, lead in the world.

It seems to me that the great crisis of this new century is upon us; that we must bring much more of our natural and native resource fullness and inventiveness to the problem than we seem to be doing. Studies of the triple bottom line, people, profit and the planet, show that they're mutually reinforcing. So increasing our response toward a protectiveness -- response toward a protectiveness toward the environment will enhance our prosperity. Thank you.

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MR. MEDFORD: Thank you. Mr. Linderman, I just want to make sure that you understand there are standards that since the president came into office there are three sets of standards that have been published, the first one is for 2011 alone for fuel economy, and then jointly with EPA on greenhouse gases and fuel economy for '12 through '16, so those standards are just kicking in this year for '12 and go through '16, and '17 will pick up and continue those So there have been pretty aggressive fuel standards, fuel economy and greenhouse standards since 2011 right on now through these proposals for 2025. So I just wanted to make sure you're aware of that, and that these standards are really only about greenhouse gases and fuel economy for automobiles, specifically light passenger vehicles, which include trucks, light

1	trucks and passenger cars. But they're also we just
2	finished this past year in 2011 all set of fuel economy
3	and greenhouse gas regulations for heavy-duty trucks as
4	well. So it's not all greenhouse gas, it's not all
5	sources, but it is all sources for those that involve
6	the EPA side, light vehicles.
7	MR. SILVERMAN: If I could add. It does
8	regulate all the greenhouse gases emitted by these
9	vehicles, for example, air condition or refrigerants
10	are addressed by this proposal as well as CO2.
11	MR. LINDERMAN: But it's limited to vehicles.
12	MR. SILVERMAN: It's limited to vehicles.
13	MR. LINDERMAN: My contention is it's
14	aggressive, but not aggressive enough, given the
15	proportions of the problem.
16	MR. SILVERMAN: There is some permitting
17	being done now for individual stationary sources.
18	MR. MEDFORD: Finally Miss Hill.
19	MS. HILL: My name is Kimberly Hill and I'm a
20	policy manager for Detroiters Working for Environmental
21	Justice, and I would like to thank the EPA and all of
22	the other federal agencies that are represented here
23	today and for allowing us to be able to speak about
24	this very important issue.
25	Detroiters Working for Environmental Justice

appreciate certainly the EPA and the other agencies that are involved in this effort, and President Obama's commitment to clean energy in helping communities. This decision has far-reaching implications. Not only will it create more green jobs, but more importantly, it will significantly curb carbon pollution, which is the leading cause of global warming. This decision is particularly beneficial to many urban communities because of extreme and constant exposure to carbon pollution and high unemployment rates. Obama's proposed clean car standards would stimulate the creation of thousands of new clean energy jobs in Detroit and throughout Michigan, and in order to maximize this opportunity, we need to ensure that these standards are implemented as written without any loopholes.

Detroit has seen, as I'm certain that you've heard firsthand, what the collapse of an auto industry can do to a city. The urban revival in this city has received international coverage. We can and we will come back as a thriving and sustainable center of the Midwest, but we're going to need a healthier environment and new clean energy jobs, and for that, we're going to need for these clean car standards to be implemented.

1	And one of the things that I very briefly
2	wanted to state is the importance of the Environmental
3	Justice perspective heard earlier in these discussions,
4	and so it was good you had a diversity of panelists,
5	but it would be I think that there has to be more of
6	a concerted effort to make sure that Environmental
7	Justice organizations are also included in those
8	earlier discussions. So we're glad that many of you
9	are here, but as you can tell in the audience, there's
10	not too many people left. The reason that's important
11	is because of the far-reaching implications that
12	marginalize low income communities are the one that are
13	most impacted by these decisions. And so although we
14	appreciate the auto industry having some
15	representation, it is very important, and this is
16	certainly another issue that we perhaps can take up
17	with the automobile industry, but to make sure that
18	these particular cars are affordable. And so the
19	Environmental Justice community throughout the country
20	and I'm sure as you'll travel to other cities will
21	express this sentiment. Thank you.
22	MR. FRANCE: Thank you. We appreciate your
23	testimony, we appreciate you spending the evening with

25 (The proceeding was concluded at 7:33 p.m.)

us. Thank you.

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