

Roundtable A16: Running on Empty? Assessing the Prospects for Fuel Efficient, Electric or Hydrogen Vehicles

Discussion Leaders: Deron Lovaas, Vehicles Campaign Director NRDC; Michael Renner, Worldwatch Institute; Brad Markell, United Auto Workers; David Robertson, Canadian Auto Workers

Facilitator: Gene Carroll, Cornell ILR

Presentations

Deron Lovaas, Vehicles Campaign Director NRDC discussed the economic challenges faced in the US marketplace that are the result of sustained increases in the cost of oil. He further detailed how US economic security and environmental concerns have been significantly impacted by such changes in the marketplace. Specifically, he mentioned the growing trend/awareness of fuel efficiency as a high priority for consumers of vehicles in the US. In addition, Mr. Lovaas highlighted the importance of making fundamental changes in the overall consumption patterns of oil as source of fuel in the US, mainly due to Environmental, Security and Economic reasons. His proposed solutions included: increased oil efficient vehicle choices; making improvements in conventional technologies in order to increase automobile efficiency, specifically flex-fuel and hybrid/electric automobiles. Lovaas stated that the rush to utilize and implement bio-fuels (ethanol) as the best alternative is concerning due to the insufficiency of such alternative fuel sources to support the massive amounts of fuel required in the US. He further noted that the current infrastructure is incapable of handling US demands. Alternative fuels such as Ethanol and Hydrogen are not practical solutions for US alternative transportation needs due to storage and delivery problems. In conclusion, he raised the question of how to make vehicles policy a rational part of climate policy, and he proposed that implementing Cap and Trade, setting Performance Standards, and providing a Financing Package and increasing Domestic Manufacturing are key to making a significant change.

Brad Markell, International Representative in the UAW Research Department began by confirming his agreement with most of what Deron Lovaas previously stated. However, he added that regulations are required in order to move things forward in the auto industry. Although, of concern are the affects of the regulations. He raised the issue of Price Signals, particularly in regard to the demands of US consumers for fuel and bigger, faster, more comfortable vehicles. An issue he believes to have few ways around, for example: large GM trucks as top selling vehicles in the US. Mr. Markell suggested that gas taxes could be a potential solution to solving the problem with Price Signals, although it would have negative affects upon those who cannot afford it. With regard to more efficient vehicles, he also proposed that advanced conventional technology is the best solution, but highlighted the extensive process of turning over the entire US fleet of automobiles. However, in the meantime he suggested that advanced conventional improvements in the current vehicle fleet are necessary, as well as a long-term, steady rule to allow companies to make production adjustments that include substantial improvements. Concluded that there is crises in the US auto industry and a myth exists in the industry and in the media that things are okay, for example: new entries are doing well and only older cars are in danger. He said that the truth is that in the last 7 years, about 23% of jobs in the

US auto industry(300,000 jobs) have been lost. And that the sale of automobiles produced in the US as a contributor to economic growth is down significantly as a result in a crash/crises in the US auto industry. Finally, he mentioned that fuels and vehicles are a system, and in order to reduce greenhouse gas and the reliance on foreign oil, we need to switch to cleaner vehicles and fuels.

Michael Renner, Researcher for Worldwatch Institute began by introducing global figures on vehicle sales and production, stating that globally the fleet of passenger cars totals approximately 600 million, and the global fleet of trucks totals about 200-300 million. To further illustrate the sheer magnitude of vehicles around the world, he presented statistics that revealed 50 million new cars and 18.5 million light trucks are produced, which totals about 60-70 million new vehicles. In contrast, he raised the issue of current job cuts in the auto industry and explained that growth in production is not necessarily good for workers because it does not predict that there will actually be additional jobs. Shifting to global vehicle consumption, the major consumers of vehicles: the US; EU; Japan; and now China are contributing to rapidly increasing production and use of vehicles, the impact of which will continue to affect fuel consumption, economic stability and of course the environment. Current rates of population and industrial growth in China and India, the impact will only be more severe. Mr. Renner shifted his focus back towards the US, which has approximately 28% of the world's vehicle fleet, and according to US government statistics consumes about 44% of motor gasoline in the world. He described the unique driving structure of the US as problematic because it requires people to travel significantly longer distances for reasons such as employment. Land use policies and structures in the US are comparatively much different and alternative travel choices are limited; thus, the US dependency upon vehicles for transportation. In terms of fuel economy in the US, he states that no real forward movement has occurred and there has been little done in terms of governmental policy initiatives to change this. Overall, the US is far behind the EU and Japan in terms of fuel economy and policy. Citing examples such as that of most vehicles produced in the US not being able to be sold in China due to their inability to meet their higher fuel economy standards, despite the contrasts in the two countries with respect to economics and industry. In conclusion, he explained how most improvements in fuel economy/efficiency in the US have been offset by the actual size and weight of the cars produced; therefore, the US must begin to think about vehicle characteristics as an important factor to consider, particularly around the issues of performance versus efficiency.

David Robertson, Director of Work Organization and Training at the Canadian Auto Workers Union Began by introducing four markers for his brief presentation, which included: markets; his union; technology; and public policy issues. According to Mr. Robertson, given that national vehicle markets are different, he posed the question: what does having different national characteristics of markets say about our strategies? He went on to state that we must 'disrupt an emerging and disturbing equation that: green cars = small cars = imports = lost jobs.' He described his union not only as autoworkers, but as 16 different sectors. Changed focus and illustrated that the car is emblematic of our culture and environment and recently gets all of the negative attention and focus related to harming the environment, despite the fact that he claims other industries, particularly energy are significantly more damaging to the environment. Mr. Robertson declared that Canada does not have the capacity implement Ethanol in gas stations as an alternative fuel source, and reiterated that the problem is the narrow focus on the car as the

problem. He suggested that solutions must be consummate with problems. He went on to further make suggestions that involved adopting policies that support mass and public transit, and as his union members say 'green strategies should not equal pink slips.' In conclusion, he posed the challenge to unions as being finding a way to reduce their environmental footprint at the same time they pursue economic development, and that when the time comes for to move to erratic, rapid competitive technology development that we ensure products are domestically produced. In addition, he noted that free-trade and life cycle issues must be included in public policies and in future coalitions between workers and environmentalists to include trade.

Discussion

The first question to begin the discussion was raised by a participant concerning the safety of hydrogen fuel injection. Various respondents reaffirmed the safety and importance of hydrogen; however, there was some agreement on difficulties with the underdevelopment of infrastructure and lack of storage for hydrogen.

Danny Schechter (conference filmmaker) stated that current debt and profit issues at GM have given rise to questions and concerns about the company's decisions on investment in new technologies and lending practices. Responses included defenses and explanations of undesirable investments by GM, which many consider to have been potential causes of debt and profit losses.

Lynn Hinkle, a member of a Minnesota task force working to initiate policy around the utilization of plug-in hybrid electric vehicles and union participation mentioned the importance of conducting green manufacturing feasibility studies to determine future investments and best practices. He suggested that the demand side of green manufacturing should be primed in order to boost the supply side of the green market. He went on to further highlight the necessity of unions taking part in early negotiations and at bargaining tables during upcoming decisions about the implementation of green manufacturing.

Participant Jennifer Crill proposed questions to the CAW and UAW about whether they will consider getting involved in more cooperative efforts related to the supply and demand side of alternative vehicles and fuels. A UAW member responded that auto unions desire to be involved in whatever methods will lead to starting the processes of engaging in environmental and employment benefits. The respondent described joint efforts with NRDC working towards such dually-beneficial goals, such as the introduction of policies and bills that create subsidies for green manufacturing. A CAW member stated that in Canada issues of ensuring that green manufacturing for vehicles and components are kept domestic is a national policy debate. In addition, he stated that the largest challenge for North American auto makers will be to keep green manufacturing domestic. Also, he raised the issue of implementing end-of-life vehicle recycling and that responsibilities for this practice must be extended to the original producers. He concluded by illustrating that the current technological debates about best green/alternative vehicles are significantly affecting choices available to consumers deciding between hybrid, clean diesel and flex-fuel vehicles, describing this as a volatile period of change for consumers in terms of choices.

An unnamed participant asked the group about what the differences are in global uses of alternative fuels, specifically between Brazil and the United States. The consensus among the responding participant answers was that variations in global markets and demands are the main reasons for differences, as well as infrastructure, production and investments in technology. The remainder of the discussion primarily focused upon issues and debate among the participants related to the differences in auto manufacturers Toyota and GM, specifically around issues of: job loss and creation; production and sales of green vehicles; managerial decisions, Research and Development; quality and design issues; market share; and the simultaneous production of large vehicles that are not fuel efficient.

In conclusion, members restated the need for policy to be technology and revenue neutral and that trade should be a mandatory component in discussion on labor and environmental issues. In addition, incentives must be involved in both the supply and demand side of automobile production of more efficient vehicles.