

Final Report of the Clean Car & Energy Efficiency Working Group

Presented to Gov. Rod R. Blagojevich
April 30, 2007

The Clean Car and Energy Efficiency Working Group (“Working Group”) was appointed by Illinois Governor Rod Blagojevich to recommend specific policies to achieve the goals of the Governor’s Energy Independence Plan, announced in August, 2006.

The Working Group focused on measures that could help meet the major goals of the Energy Independence Plan related to automobiles and energy consumption. Those goals include:

- Improve air quality, reduce greenhouse gas emissions that lead to global warming, and make Illinois more energy efficient by reducing motor fuel consumption in Illinois by 10% by 2017.
- Increase investment in public transportation through the proposed capital budget, and improve coordination among transit agencies to achieve better service.
- Provide incentives to promote carpooling and car sharing and encourage biking and walking by incorporating bike and pedestrian lanes into IDOT road projects.
- Promote efforts to reduce suburban sprawl by encouraging new development near public transit stations.
- Conserve energy by improving the energy efficiency of Illinois’ homes, businesses, and public buildings.
- Adopt an Energy Efficiency Portfolio Standard to greatly increase investments in energy saving programs and technologies that will reduce energy use, cut utility bills, and improve reliability of the energy grid.
- Establish revolving funds to support energy efficiency investments by local governments and businesses.
- Adopt an energy-efficient statewide residential building code.

The Working Group met three times between October 2006 and January 2007. Participants were invited by the Governor. (See attached list of members.)

To organize its meetings, the Working Group focused on three categories of recommendations: Mobile Source Strategies, Promoting Driving Alternatives, and Energy Efficiency Measures Programs.

The Working Group recommends the following policies and programs to help meet the goals outlined in the Energy Independence Plan. These recommendations were broadly supported by the members of the Group during our discussions. However, they are not necessarily presented as unanimous recommendations; they are recommendations of the Group as a whole, and not those of any specific member or set of members.

Mobile Source Strategies

1. Adopt an Illinois Clean Car Program Consisting of California LEV II and Pavley Vehicle Emissions Standards

The federal Clean Air Act allows states to adopt vehicle emissions standards that are cleaner than those established by the U.S. Environmental Protection Agency. The Act does not allow states to develop their own unique standard, but only to opt for the cleaner “California” standard (so-called because California was the first state to develop its own standard) or accept the federal default standard.

Illinois should adopt the California standards for its passenger vehicle fleet. Doing so will reduce emissions of smog-forming, toxic, and greenhouse gas emissions, significantly reduce fuel consumption, and save drivers money at the gas pump.

The California vehicle emissions standards consist of (1) the Low Emissions Vehicle II (LEV II) standards for smog-forming pollutants, particulate matter, and toxic chemicals, and (2) the “Pavley” standards for greenhouse gas emissions (named for the California state legislator who initiated the legislation that added greenhouse gas limits to the LEV II Program), and (3) the Zero Emission Vehicle (ZEV) standards, which require auto manufacturers to sell a certain percentage of zero or extra-low emission vehicles (U.S EPA has ruled that states do not have to adopt the ZEV standards as part of the California program).

Currently twelve states (CA, CT, MA, MD, ME, NJ, NY, OR, PA, RI, VT, and WA) have adopted the cleaner car standard.

If Illinois were to join these states in adopting the LEV II and Pavley standards for passenger vehicles sold in our state, we could achieve substantial progress toward the goals set forth in the Energy Independence Plan. According to the Illinois EPA, the California standard, if implemented in Illinois in car model year 2011, would reduce emissions of volatile organic compounds (VOCs) by 4.0 tons per day and emissions of nitrous oxides (NOX) by 6.6 tons per day. These pollutants are the major contributors to Illinois’ ozone pollution problems. According to the California Air Resources Board (CARB), fuel consumption and associated greenhouse gas emissions will fall 18% by 2020 and 27% by 2030 in California. According to Illinois EPA, applying those reductions to Illinois translates into approximately 1.2 billion fewer gallons of fuel consumed by 2030.

The California Air Resources Board has estimated that compliance with the new vehicle standards will add approximately \$1000 to the price of an average vehicle. Auto manufacturers contend the added cost is closer to \$3000 per car. Drivers would begin to recoup these costs immediately through fuel savings, potentially recouping the entire cost in as little as three years, depending on the final actual cost and the cost of fuel.

Ford Motor Company, a member of the working group, does not support this recommendation. Ford points to USEPA model data that suggest relatively minor reductions in the emissions of some pollutants (not including greenhouse gases) from the LEV II standards, and contends that programs aimed at retiring older vehicles would be faster and more cost-effective strategies for reducing vehicle emissions in the short term. Ford does support pursuing other near term actions to significantly reduce criteria emissions, including programs aimed at retiring older vehicles, providing consumers with incentives to purchase advanced technology vehicles such as hybrids, and implementing programs that promote fuel efficient driving or eco-driving. In addition, increased access (through expanded infrastructure) and use of alternative fuels, such as 85% ethanol fuel (E85), would offer significant reductions in greenhouse gas emissions across the entire Illinois vehicle fleet, once a large number of flex fuel vehicles are deployed.

2. Implement a Diesel Emissions Reduction Program

According to the American Lung Association of Metropolitan Chicago, diesel exhaust triggers over 19,000 asthma attacks, nearly 1,200 heart attacks, and 878 premature deaths every year in Illinois. In addition, the burning of a gallon of diesel releases more than 22 pounds of carbon dioxide pollution, almost 13% more than from a gallon of gasoline.

Many truckers run their engines for long periods of time at truck stops and other rest points to heat, cool, or power other equipment in their cab. All of these functions could be powered by electricity rather than the truck's engine. The electricity can come either from the truck stop, through making plug-ins available to truckers (truck stop electrification), or by adding an Auxiliary Power Unit (APU) on board the truck to provide electrical power. APUs offer the benefit of being portable, so they could displace diesel fuel at locations other than truck stops (while trucks are waiting in line, for instance).

Illinois could promote both fuel savings and emissions reductions by providing a tax credit for the purchase of an APU for a limited period of time, to encourage truckers to quickly adopt this new technology. Structuring the credit as an income tax credit would allow the incentives to be focused on Illinois businesses. In addition, Illinois should encourage further electrification of truck stops in the state.

Another source of diesel emissions are railroad locomotive engines. There are estimated to be 400-500 diesel commuter and freight locomotive engines operating in the Chicago area alone, so significant fuel savings and emissions reductions may very well be achievable from those engines as well.

3. Educate Drivers About Basic Steps To Help Improve Fuel Economy

Drivers can realize significant improvements in fuel economy by making sure their vehicles are properly maintained and by driving efficiently. Maintaining proper tire pressure, for instance, is a simple step that can reduce fuel use and resulting emissions.

Illinois should explore opportunities to educate drivers about these and other fuel-saving practices in situation where it encounters motorists, including:

- Vehicle emissions testing
- Various activities of the Secretary of State involving drivers' licenses and vehicle registrations
- Communications of the Illinois State Toll Highway Authority

Ford Motor Company educates drivers on many of these practices with its Green Driving Tips, which Ford is willing to share with the State.

Promoting Driving Alternatives

4. Implement A "Complete Streets" Policy To Integrate Bicycle and Pedestrian Use and Safety Into Road and Highway Planning

While 33% of Americans do not drive an automobile, transportation planning often focuses solely or primarily on moving vehicles quickly and safely. Several states, including Oregon, Virginia, and South Carolina, have adopted "Complete Streets" policies that direct transportation planners and engineers to consistently design with all users in mind. This helps ensure that streets and roads work for drivers, transit riders, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities. According to the Chicagoland Bicycle Federation, such design practices have been shown to reduce crashes by 28%.

The Illinois Department of Transportation should implement a "Complete Streets" policy. Senate Bill 314, which is currently before the General Assembly, would accomplish this and should be supported.

5. Develop a State Public Transportation Plan

The Illinois Department of Transportation (IDOT) has just recently begun the process of preparing a Statewide Transportation Plan, incorporating all modes. The relevant goals of the Energy Independence Plan should be incorporated as goals of the Transportation Plan.

Within this Plan, IDOT should work with Illinois' regional transit agencies and the public to create a State Public Transportation Plan, and establish a regular schedule for updating it. Such a plan, which Illinois has never had, would coordinate and better support the transit planning occurring in the state's metropolitan areas.

In addition to supporting intraregional transit planning, the State Transportation Plan should also include efforts to improve interregional transit service, especially passenger rail service. According to IDOT, Illinois now has the second largest state-supported Amtrak service in the country, and service statewide was effectively doubled in October, 2006. With ridership growth of close to 70% statewide in just the first four months of the expanded service, this is a positive trend that should continue.

Finally, IDOT and IEPA should coordinate to develop metrics to measure the emissions and fuel use impacts of the State's transportation sector, to help quantify reductions achieved, and to guide planning efforts toward the greatest possible efficiencies.

6. Increase investment in public transportation statewide

In Northeastern Illinois, the RTA, CTA, Metra and Pace "Moving Beyond Congestion" Strategic Plan identified a need of at least \$400 million in additional funding annually to operate mainline and paratransit service, and an additional \$10 billion in new state or local capital funding over the next five years to maintain, enhance and expand transit service, as well as improve coordination among transit agencies to achieve better service; in Downstate Illinois, an additional \$53 million is needed annually to operate service, and an additional \$305 million in capital funding is needed over the next five years.

7. Implement pricing incentives/disincentives

The Working Group explored congestion pricing as a strategy to shift some travel demand to off-peak times, avoid highway congestion and reduce pollution. The Illinois State Toll Highway Authority (ISTHA) has a modest congestion pricing experiment in place for trucks and has the physical capacity and a toll-payment mechanism that could be deployed to implement additional congestion pricing approaches for both cars and trucks. Moreover, there are opportunities for clear cost savings for ISTHA and drivers by attempting congestion pricing strategies to reduce peak travel demand in order to avoid hundreds of millions of dollars of road widening capital costs.

The ISTHA should explore additional revenue-neutral congestion pricing measures both for cars and for expanding the current limited experiment for trucks. For example, it would be sensible to start in those locations where there are plans to spend hundreds of millions for tollroad widenings that are principally justified by peak tollway demand. Flattening out demand through pricing mechanisms could help to avoid the costs of tollroad widenings as well as alleviate congestion and thereby save many hours of drivers' time and avoid pollution from start-and-stop driving. Specifically, opportunities to implement congestion pricing should be considered as alternatives to or components of expansions planned in the near future, including projects on I-90 and I-55.

Energy Efficiency

8. Adopt a statewide, energy-efficient residential building code

In 2004, the Illinois General Assembly enacted a statewide energy efficient building code for commercial and multifamily building construction and substantial rehab projects. Illinois should now enact a statewide residential energy efficiency building code. Forty-two states have already adopted minimum statewide building codes that require energy efficient practices and materials in new residential construction. According to the Department of Commerce and Economic Opportunity, the payoff to consumers from an energy efficient building code would be immediate, with any increased costs in a new home more than offset by energy savings from the first month of ownership. House Bill 1842, currently before the Illinois General Assembly, would accomplish this goal, and should be supported.

9. Establish a state revolving loan program for energy efficiency investments

Illinois should support public and private investment in energy efficiency with revolving loan programs, funded as part of a capital spending plan.

10. Establish an Energy Efficiency Portfolio Standard for Illinois electricity suppliers

Illinois should require gas and electric utilities to [implement](#) efficiency programs sufficient to achieve specific load reduction targets.

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Efficiency investments help ratepayers by reducing overall average electricity and natural gas costs, as the Illinois Commerce Commission has found, and by helping individuals and businesses cut utility costs by reducing energy consumption. A 2005 study by the University of Illinois at Chicago found that every \$1 invested in energy efficiency generates \$2 in direct benefits to businesses and consumers through reduced energy bills.

The Illinois General Assembly is currently considering Senate Bill 1184, the Affordable and Clean Energy Standards Act, which would create an Energy Efficiency Portfolio Standard with the goal of reducing current electricity and natural gas load by 1% by 2012, and 2% by 2015. SB 1184 also creates a Renewable Energy Portfolio Standard of 10% renewable energy by 2015, and 25% by 2025, which is consistent with the goals of the Energy Independence Plan. SB 1184 should be supported.

11. Provide increased state funding for energy efficiency programs

There are three existing state funds that will sunset in 2007 unless extended by the General Assembly - the Energy Efficiency Fund, the Clean Coal and Renewable Energy Trust Fund, and the LIHEAP Supplemental fund. All three should be renewed by the General Assembly and funded at increased levels. LIHEAP, which currently focuses on home weatherization, should be targeted to energy efficiency. In addition, a portion of the funds from the portfolio standard should be allocated to supplement weatherization funding through LIHEAP, as is proposed in Senate Bill 1184.

Clean Car and Energy Efficiency Working Group

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