



## WISCONSIN LEGISLATIVE COUNCIL INFORMATION MEMORANDUM

### Recommendations of the Governor's Task Force on Global Warming

On July 24, 2008, the Governor's Task Force on Global Warming approved an extensive set of policy recommendations designed to reduce the emissions of greenhouse gases (GHGs). The recommendations include goals for statewide reductions in GHG emissions by 2014, 2022, and 2050. In addition to a number of over-arching recommendations, specific recommendations relate to:

- Energy Conservation and Efficiency
- Electric Generation and Supply
- Transportation
- Agriculture and Forestry
- Industry
- Regulation of GHG Emissions

This summary of the task force's recommendations is intended to inform members of the Legislature of the scope of the recommendations. For details of the recommendations, see the full task force report at:

[http://dnr.wi.gov/environmentprotect/gtfgw/documents/Final\\_Report.pdf](http://dnr.wi.gov/environmentprotect/gtfgw/documents/Final_Report.pdf)

Governor Jim Doyle created the Governor's Task Force on Global Warming on April 5, 2007 by Executive Order 191<sup>1</sup>, and charged the task force to do the following:

1. Present viable, actionable policy recommendations to the Governor to reduce greenhouse gas emissions in Wisconsin and make Wisconsin a leader in implementation of global warming solutions.

---

<sup>1</sup> Executive Order 191 is reproduced in Appendix 1.

2. Advise the Governor on ongoing opportunities to address global warming locally while growing our state's economy, creating new jobs, and utilizing an appropriate mix of fuels and technologies in Wisconsin's energy and transportation portfolios.

3. Identify specific short-term and long-term goals for reductions in greenhouse gas emissions in Wisconsin that are, at a minimum consistent, with Wisconsin's proportionate share of the reductions that are needed to occur worldwide to minimize the impacts of global warming.

The task force consisted of 29 members<sup>2</sup> representing diverse interests, including energy providers, large industrial energy users, labor, consumer and environmental advocates, academics, the Legislature,<sup>3</sup> and others. The task force co-chairs established working groups to develop recommendations within specific subject areas and a technical advisory group to assist the task force and its work groups. The task force contracted with the World Resources Institute and ICF International to model GHG reductions and economic costs associated with policy options. The task force selected policy recommendations after reviewing the work groups' recommendations and the modeling results.

On July 24, 2008, the task force approved its final report on a vote of Ayes, 26; and Noes, 3.

The recommendations of the task force are extensive and detailed. The following summary provides an overview of those recommendations.

## **GOALS**

The task force recommends the following goals for the reduction of GHG emissions in Wisconsin:

- A reduction of emissions to 2005 emissions levels by 2014.
- A 22% reduction from 2005 emissions levels by 2022.
- A 75% reduction from 2005 emissions levels by 2050.

The task force report describes these goals as “Wisconsin’s proportionate share of reductions needed worldwide to minimize the impacts of global warming.” It states that the goals are “challenging, but achievable, provided there is the political will to act promptly ....”

---

<sup>2</sup> A list of task force members is shown in Appendix 2.

<sup>3</sup> From the Legislature, Senator Jeff Plale, Chair of the Senate Committee on Commerce, Utilities, and Rail, and Representative Phil Montgomery, Chair of the Assembly Committee on Energy and Utilities, served on the task force.

The report states that the goals should be re-evaluated regularly, “based on current science, progress and technology.”

### **ENERGY CONSERVATION AND EFFICIENCY**

The task force report includes extensive policy recommendations related to the consumption of energy in the heating, cooling, and lighting of buildings and related energy uses, including the following:

#### ***INVESTMENTS IN ENERGY CONSERVATION AND EFFICIENCY***

With regard to the Focus on Energy program, the state’s principal energy conservation and efficiency program, the report recommends the following:

- Establishing aggressive new energy conservation and efficiency targets and funding.
- Expanding the program to serve households that use non-regulated heating fuels, such as liquid propane and fuel oil.

#### ***CODES AND STANDARDS***

The report recommends creation of the following mandatory codes and standards:

- State-of-the-art building codes.
- Appliance efficiency standards.
- Efficient lighting standards for rental dwellings.

The report also calls for a legislative study of the advisability of residential lighting standards to be imposed retrospectively (i.e., requiring the retrofitting of existing homes).

#### ***PUBLIC BUILDINGS***

The task force recommends that the state and its agencies and universities lead by example by tracking their GHG emissions, establishing emissions reduction goals, and implementing plans to meet those goals.

It also recommends the following to facilitate energy savings by school districts:

- Make necessary changes to the school funding formula to allow school districts to retain savings from investments in energy conservation or efficiency.
- Assist school districts in the identification and implementation of energy conservation and efficiency projects.

### ***TARIFFS AND RATES***

The report calls for innovations in energy utility tariffs and rates to promote energy savings, including:

- Removal of disincentives to efficiency and conservation investments by utilities.
- Creation of rate designs that provide price signals to customers regarding their energy consumption patterns and their contributions to utilities' peak load demands.

### ***ELECTRIC GENERATION AND SUPPLY***

The task force recommends a number of specific policies and several studies relating to electric generation and supply.

#### ***WIND FACILITY SITING***

The task force recommends legislation under which the Public Service Commission (PSC) would develop uniform standards for the siting of large and small wind energy systems.

#### ***STRATEGIC ENERGY ASSESSMENT (SEA)***

The task force recommends that the PSC reopen its current SEA docket to require that electric utilities submit information regarding their GHG emissions and current, planned, or potential actions to reduce those emissions.<sup>4</sup>

### ***RENEWABLE ENERGY RESOURCES***

#### ***Renewable Portfolio Standard (RPS)***

The task force recommends extensive revisions to Wisconsin's RPS. It would increase the standards to require that, by the dates specified, the following percentages of electric power sold by Wisconsin utilities be derived from renewable resources:

- 10% by 2013.
- 20% by 2020, not less than 6% of total sales being from Wisconsin-based resources.
- 25% by 2025, not less than 10% of total sales being from Wisconsin-based resources.

The task force also recommends that the definition of "renewable resources" used for the RPS be expanded, that limits on the banking and use of credits be removed, and that the administration and enforcement of the RPS be revised in a number of ways.

---

<sup>4</sup> This recommendation applies only to the current SEA and appears to be an interim measure, pending the implementation of a cap-and-trade program described elsewhere in the report.

### ***Other Renewable Resources Recommendations***

To further promote the development of renewable energy resources, the task force recommends the following:

- Creation of tax incentives for customer participation in voluntary utility renewable resource programs for schools and other public facilities.
- Development of tariffs to facilitate the development of small-scale, end-user renewable energy systems.
- Development of tariffs to provide market-based pricing options for customers to support utility investments in renewable resources beyond the requirements of the RPS.

### ***NUCLEAR POWER GENERATION***

To the current statute that limits the authority of the PSC to issue a certificate of public convenience and necessity (CPCN) for construction of a nuclear power plant, the task force recommends the following:<sup>5</sup>

- Add a requirement that “the plant must be built to meet Wisconsin needs at a cost that is reasonable and advantageous to customers in comparison to alternatives, taking consideration of [GHG] emissions reductions benefits.”
- Replace the current requirement that there is an operating nuclear waste disposal facility with a requirement that there is a nuclear waste plan for the plant that the PSC finds is “economic, reasonable, stringent, and in the public interest, given the safety and other risks presented by such waste.”

The report specifies that these changes would not take effect until the task force’s recommendations for enhanced energy efficiency programs and expanded RPS are in place.

### ***STUDIES***

The task force recommends that studies be conducted related to the following topics:

- The economic, legal, geologic, and engineering hurdles related to geologic carbon sequestration.
- The technical and economic potential for developing wind energy on Lakes Michigan and Superior.
- Changes to the regional transmission system that would facilitate increased use of renewable and low-carbon sources of electric generation.

---

<sup>5</sup> This description includes the two principal elements of a complex policy proposal. For the full proposal, see the task force’s report.

- “[R]ate mitigation strategies designed to incent utility investments in high fixed cost, low carbon and GHG reduction projects while lowering total costs for customers.”

## **TRANSPORTATION**

The transportation sector is the second largest source of GHG emissions. The following recommendations address these emissions:

### ***VEHICLE TECHNOLOGIES AND POLICIES***

#### ***California Emissions Standards***

The task force recommends that Wisconsin adopt vehicle emission standards developed by the State of California. The standards apply to most new non-commercial vehicles. Application of the standards requires approval by the Environmental Protection Agency (EPA). The EPA has refused to give this approval, and several states have sued over that refusal. Consequently, while Wisconsin could adopt the California standards, it could not enforce them unless this litigation is resolved in favor of the states.

The task force also recommends that the state and the Janesville community work with General Motors (GM) on a plan to convert GM’s Janesville plant to the production of high-efficiency vehicles.

#### ***Off-Road Vehicles***

The task force recommends a number of measures to reduce emissions from off-road vehicles, including improved fuel efficiency, use of alternate fuels, use of alternate refrigerant gasses, and reduced idling. It recommends that voluntary measures be applied to the private sector and that mandatory measures be applied to the public sector.

#### ***Freight Idling***

The task force recommends prohibiting truck idling for more than five minutes except in a number of specified situations, such as when stopped in traffic, under extreme temperatures, and when engine power is required.

#### ***Purchase of Alternative-Fuel Vehicles***

To reduce the use of non-renewable motor fuels, the task force recommends:

- Education and incentives to encourage individuals to purchase electric, hybrid electric, and plug-in hybrid vehicles.
- Legislation to require that, by 2012, 25% of the delivery vehicles, light trucks, and passenger vehicles operated by the state and its largest cities be plug-in hybrid vehicles. It proposes that the state reimburse cities for 50% of the incremental cost of complying with this requirement.

### ***Speed of Travel***

Regarding speed of travel, the task force recommends:

- Strict enforcement of the current 65 mile-per-hour speed limit.
- Study of possible future lowering of this limit.
- Support and recognition for voluntary speed reduction policies by businesses and others.

### ***TRANSPORTATION FUELS***

To promote the use of E-85 (85% ethanol) and other low-carbon fuels, the task force recommends the following:

- Set the goals of 500 outlets in Wisconsin offering E-85 by 2015 and 50% of all outlets offering E-85 by 2020. To meet these goals, the task force recommends legislation to establish pricing incentives that make the price of E-85 competitive with regular unleaded fuel.
- Create a low-carbon fuel standard (LCFS), which would function much like the existing RPS for electric power. It would require that “providers” of fuel ensure that specified percentages of their fuel sales be low-carbon fuels, and would allow the creation, banking, and trading of LCFS credits. The report does not specify to whom the requirement would apply, for example, to refiners, wholesalers, or retailers of fuel.

### ***TRANSIT AND COMMUNITY DEVELOPMENT***

#### ***Evaluation of Transportation Projects***

To promote the development of infrastructure for energy efficient transportation, the task force recommends that the Department of Transportation (DOT) be required, in evaluating proposed transportation infrastructure projects, to estimate the impact of each project on passenger miles traveled and GHG emissions over the life of the proposed infrastructure.

#### ***Energy Efficient Communities***

The report includes an extensive list of recommendations intended to reduce individuals’ vehicle miles traveled (VMT), addressing the following topics, among others:

- Special transportation support for areas zoned for traditional neighborhood design.
- Safety requirements for pedestrians, bicyclists, and transit vehicles.
- Parking policies.
- “Multimodal” accessibility, including pedestrian and bicycle accessibility.

- Incentives for local governments to allow compact development and redevelopment.

### ***Transit and “Travel Demand”***

To reduce travel demand through enhanced transit, the task force recommends:

- An intercity rail initiative to advance development of high-speed passenger rail connecting Chicago, Milwaukee, Madison, Eau Claire, and Minneapolis.
- A transit trust fund to subsidize local rail projects, such as the proposed Dane County 2020 project and the Kenosha-Racine-Milwaukee project, up to 50% of project cost.
- Regional transit authorities, by which local governments could fund regional transit projects with a sales tax of up to 0.5%.
- Voluntary transportation demand management programs, by which employers would use several methods to reduce the use of single-passenger vehicles for workplace travel.

## **AGRICULTURE AND FORESTRY**

The task force’s recommendations related to agriculture and forestry include policies that would reduce direct GHG emissions, promote alternative fuels, and remove carbon dioxide from the atmosphere.

### ***BIOMASS AND BIOFUELS***

To increase the use of biomass and biofuels for electricity, heat, and transportation, the task force recommends the following:

- Provide incentive payments to growers of biomass crops through an energy crop reserve program.
- Provide financial and other support to growers and aggregators of biomass for such purposes as purchase of specialized equipment and development of infrastructure.

To promote the use of biomass fuels by governmental units, the task force recommends the following:

- Establish a goal to meet 25% of the energy needs of state facilities with biomass by 2025.
- Exclude from school districts’ revenue limits and municipalities’ levy limits the cost of biomass systems, fuel, and maintenance and the cost of purchasing energy derived from biomass.

The task force makes a number of additional recommendations related to streamlining regulation of new biofuels technologies and promoting biomass fuels through educational programs and other means.



## ***FORESTRY***

The task force makes the following recommendations regarding forestry:

- Promote afforestation and reforestation through specified revisions to the managed forest law, expansion of the forest landowner grant program, and increased education and assistance activities.
- Create a program to prevent forest loss through parcelization or conversion to non-forestry uses. The program would use state and federal funds for the purchase of conservation easements and provide technical assistance to local governments.
- Provide incentives for private landowners to manage their forests to increase their carbon capture potential, utilizing existing programs, such as the forest land owner grant program, and a new carbon sequestration tax incentive program.
- Promote urban forestry through a public-private collaborative tree planting and management initiative, expansion of the urban forestry grant program, and other activities.

## ***LIVESTOCK***

Livestock are a source of both GHG emissions and of waste that can be used to produce alternative fuels. The task force makes the following recommendations regarding livestock:

- Implement programs to improve ruminant nutrition and thereby reduce methane emissions by ruminants.
- Promote on-farm production of electricity or biogas from animal waste through tax incentives, financial and technical assistance, education, research and development, and other mechanisms.
- Reduce nitrous oxide and carbon dioxide emissions by mandatory nutrient management plans, accompanied by increased state cost sharing for plan implementation.

## ***SOILS AND VEGETATIVE COVER***

The task force recommends increasing carbon storage in soils and vegetative cover by doing the following:

- Set a goal to increase carbon stores in agricultural soils by 10% over 25 years. The goal would be met by adoption of low- or no-tillage, cover cropping, incorporation of organic matter, and other agricultural practices, supported by cost sharing and other state support.
- Encourage private land owners to grow energy crops or to maintain vegetative cover by a number of tax incentives and a new carbon conservation reserve program.

- Investigate carbon storage in prairie systems and financial incentives for prairie restoration and creation.

## **INDUSTRY**

### ***INDUSTRIAL ENERGY EFFICIENCY***

To increase the efficiency with which industries use energy, the task force recommends the following:

- Provide regulatory and financial incentives for efficiency improvements to industrial boilers and other industrial energy uses.
- Provide grants for industrial energy audits and for implementation of audit recommendations.

### ***INDUSTRIAL FUEL SWITCHING***

The task force recommends the following to increase the amount of nonwood biomass and noncommercial forest waste used as industrial boiler fuel:

- Set a goal of recovering and using 50% of forest residue as fuel.
- Providing grants, loans, and technical assistance to loggers for developing the facilities and capacity to collect and transport these materials.
- Providing grants, loans, and technical assistance to owners of industrial boilers for developing the facilities and capacity to use these materials.

### ***ENERGY INTENSITY REDUCTION***

The task force recommends that the DNR explore, as part of the Green Tier Program, creation of voluntary, sector-wide programs to reduce the energy used per unit of out-put. A goal would be set for the sector; those that fail to meet the goal would pay a fee, while those that exceed the goal would receive a rebate from the fee revenues, a design sometimes called a “feebate.”

### ***GREEN JOBS TRAINING***

The task force recommends that the Department of Workforce Development conduct a study of future worker training needs for the emerging “green jobs” sector, and related matters.

## **REGULATION OF GHG EMISSIONS**

The task force concluded that a cap-and-trade program to regulate GHG emissions is an essential part of an over-all climate change policy, but that a Wisconsin-only program is not advisable. It recommends that the State of Wisconsin advocate for a national cap-and-trade program with certain features to protect the interests of the state while continuing to participate in development of a Midwestern program.

Pending creation of a national or regional cap-and-trade program, the task force recommends creation of a system to register “offset credits” for voluntary reductions in GHG emissions, to be usable in a future cap-and-trade program. It also recommends a number of voluntary programs to pursue, pending development of a national or regional program.

## **OVERARCHING POLICIES**

### ***POLICY EVALUATION AND DATA COLLECTION***

The task force report emphasizes the continuing need to “accurately determine the state’s GHG emissions by sector, measure progress and model the probable impacts of actions to reduce emissions.” It recommends that a single agency be given the task to:

- Evaluate the impact of existing policies and proposed new policies.
- Oversee improved data collection.
- Report regularly to policy makers and the public on the state’s progress toward meeting the goals.

### ***VOLUNTARY EMISSIONS REDUCTIONS***

The report states that substantial changes in consumer and business behavior are required to meet the emissions reduction goals and that there is a large interest on the part of individuals to do so. The task force recommends an initiative to educate the public regarding behavioral changes that they can make and to provide expertise, training, and funding to facilitate those changes.

### ***RESEARCH AND DEVELOPMENT***

The report calls for additional state and federal funding for research into both emissions reduction and adaptation to climate change. It suggests that Wisconsin become a leader in the areas of renewable resources and carbon capture and sequestration from new electric generation.

## **OTHER RECOMMENDATIONS**

The task force makes additional recommendations relating to the following topics:

- Co-generation of electricity and heat.
- Water conservation.
- Paper recycling.
- Recovery of untreated wood wastes.
- Enhanced recycling.

- Electronics reuse and recycling.
- Reduced landfilling of food wastes.

**This memorandum is not a policy statement of the Joint Legislative Council or its staff.**

**This memorandum was prepared by David L. Lovell, Senior Analyst, on August 15, 2008.**

---

---

**WISCONSIN LEGISLATIVE COUNCIL**

One East Main Street, Suite 401 • P.O. Box 2536 • Madison, WI 53701-2536

Telephone: (608) 266-1304 • Fax: (608) 266-3830

Email: [leg.council@legis.state.wi.us](mailto:leg.council@legis.state.wi.us)

<http://www.legis.state.wi.us/lc>

**Executive Order 191**

**Relating to the Creation of the Governor's Task Force on Global Warming**

**WHEREAS**, a recent study by over 600 scientists from 40 countries reported the level of greenhouse gases in the world's atmosphere, such as carbon dioxide, are at their highest levels in over 650,000 years and world temperatures are estimated to increase by as much as 11.5 degrees Fahrenheit by the end of the century; and

**WHEREAS**, according to the National Academy of Sciences, today's temperatures are the highest they have been in over 2,000 years; and

**WHEREAS**, greenhouse gas emissions grew by 20 percent in the United States and by 26 percent in Wisconsin over the last decade; and

**WHEREAS**, there is broad scientific consensus on the need to reduce greenhouse gas emissions by 60 to 80 percent by 2050 in order to stabilize the climate and avoid the most serious effects of global warming; and

**WHEREAS**, failure to reduce greenhouse gas emissions could raise Wisconsin temperatures, increase the severity of droughts, further reduce water levels in Lake Michigan, destroy wetlands, harm croplands and forests, and harm public health, among other damaging effects; and

**WHEREAS**, many private businesses, individuals and municipalities throughout the United States are taking steps to reduce greenhouse gas emissions, improve energy efficiency and increase the use of renewable fuels; and

**WHEREAS**, the reduction of greenhouse gases along with increases in energy efficiency and the use of renewable energy will create new jobs and save Wisconsin citizens and businesses millions of dollars while significantly improving our quality of life;

**NOW, THEREFORE, I, JIM DOYLE**, Governor of the State of Wisconsin, by virtue of the authority vested in me by the Constitution and the laws of this State, and specifically by Wis. Stat. § 14.019, do hereby:

1. Establish the Governor's Task Force on Global Warming (the "Task Force"); and
2. Direct the Department of Natural Resources, with the assistance of the Public Service Commission, to lead an effort to establish an inventory of greenhouse gas emissions by sector and source type in Wisconsin along with an estimate of the same emissions for the year 1990; and
3. Provide that the Task Force will include up to 29 members of stakeholders including representatives from the farm, forestry, pulp and paper industry, automotive industry, electric utilities, environmental organizations, the university research community and other critical sectors; and
4. Provide that members of the Task Force shall be appointed by the Governor to serve at the pleasure of the Governor; and
5. Provide that there will be two (2) co-chairpersons of the Task Force and that these co-chairpersons shall be designated by the Governor from among the Task Force's membership; and
6. Provide that members of the Task Force may serve on the Task Force through designees; and
7. Provide that the Task Force shall have the following mission:

a. Present viable, actionable policy recommendations to the Governor to reduce greenhouse gas emissions in Wisconsin and make Wisconsin a leader in implementation of global warming solutions; and

b. Advise the Governor on ongoing opportunities to address global warming locally while growing our state's economy, creating new jobs, and utilizing an appropriate mix of fuels and technologies in Wisconsin's energy and transportation portfolios; and

c. Identify specific short term and long term goals for reductions in greenhouse gas emissions in Wisconsin that are, at a minimum consistent with the Wisconsin's proportionate share of the reductions that are needed to occur worldwide to minimize the impacts of global warming;

8. Require the Task Force to submit a final report on its findings and recommendations to the Governor on or before December 31, 2007, and that the Task Force shall dissolve when its final report is accepted by the Governor.

**IN TESTIMONY WHEREOF**, I have hereunto set my hand and caused the Great Seal of the State of Wisconsin to be affixed. Done at the Capitol in the City of Madison this fifth day of April in the year two thousand and seven.

---

JIM DOYLE  
Governor

By the Governor:

---

DOUGLAS LA FOLLETTE  
Secretary of State

## **Appendix 2**

### ***Members of the Governor's Task Force on Global Warming***

#### **Task force co-chairs:**

- Tia Nelson, Executive Secretary, Board of Commissioners of Public Lands
- Roy Thilly, President and CEO, Wisconsin Public Power, Inc.

#### **Task force members:**

- Daniel Ariens, Ariens
- Forrest Ceel, IBEW 2150
- Jeff Crawford, Forest County Potawatomi Community
- Kristine Euclide, Madison Gas & Electric
- Jonathan Foley, UW-Madison
- Jon Geenen, United Steel Workers
- Emily Green, Sierra Club
- Charlie Higley, Citizens Utility Board
- Steve Hiniker, 1000 Friends of Wisconsin
- Mary Jean Huston, The Nature Conservancy
- Scott Johnson, SC Johnson
- Margi Kindig, Citizen
- Gale Klappa, We Energies
- Gary Malkus, General Motors - Janesville
- C. David Myers, Johnson Controls
- Representative Phil Montgomery
- Bill Oemichen, Wisconsin Federation of Cooperatives
- Senator Jeff Plale
- Keith Reopelle, Clean Wisconsin
- Tom Scharff, NewPage

- **Henry Steuber, General Electric - Oil & Gas Division**
- **Susan Stratton, Energy Center of Wisconsin**
- **Barbara Swan, Wisconsin Power and Light**
- **Michael Swenson, Xcel Energy - NSP Wisconsin**
- **John Vrieze, Dairy Business Association**
- **Larry Weyers, Integrys Energy Group**
- **Lynn Wilson, Plum Creek Timber**