



**WISCONSIN STATE LEGISLATURE ...  
PUBLIC HEARING - COMMITTEE RECORDS**

**2009-10**

(session year)

**Assembly**

(Assembly, Senate or Joint)

**Special Committee on Clean Energy Jobs...**

**COMMITTEE NOTICES ...**

- Committee Reports ... **CR**
- Executive Sessions ... **ES**
- Public Hearings ... **PH**

**INFORMATION COLLECTED BY COMMITTEE FOR AND AGAINST PROPOSAL**

- Appointments ... **Appt** (w/Record of Comm. Proceedings)
- Clearinghouse Rules ... **CRule** (w/Record of Comm. Proceedings)
- Hearing Records ... bills and resolutions (w/Record of Comm. Proceedings)
  - (**ab** = Assembly Bill)                      (**ar** = Assembly Resolution)                      (**ajr** = Assembly Joint Resolution)
  - (**sb** = Senate Bill)                              (**sr** = Senate Resolution)                              (**sjr** = Senate Joint Resolution)
- Miscellaneous ... **Misc**

c. For the years 2011, 2012, 2013, and 2014, each electric provider may not decrease its renewable energy percentage below the electric provider's renewable energy percentage required under subd. 2. b.

d. For the year 2015, each electric provider shall increase its renewable energy percentage so that it is at least 6 percentage points above the electric provider's baseline renewable percentage.

e. For each year after 2015, each electric provider may not decrease its renewable energy percentage below the electric provider's renewable energy percentage required under subd. 2. d.

SECTION 84. 196.378 (2) (b) 1. of the statutes is amended to read:

196.378 (2) (b) 1. ~~Total retail electric sales~~ The total amount of electricity that an electric provider sold to retail customers or members in a year shall be calculated on the basis of an average of an the electric provider's retail electric sales in this state during the prior 3 years.

SECTION 85. 196.378 (2) (b) 1m. of the statutes is created to read:

196.378 (2) (b) 1m. The amount of electricity derived from hydroelectric renewable resources that an electric provider may count toward satisfying the requirements of par. (a) 2. shall be all electricity provided by hydroelectric power that the electric provider purchased in the reporting year plus all of the following:

a. The average of the amounts of hydroelectric power generated by facilities owned or operated by the electric provider for 2001, 2002, and 2003, adjusted to reflect the permanent removal from service of any of those facilities and adjusted to reflect any capacity increases from improvements made to those facilities on or after January 1, 2004.

b. The amount of hydroelectric power generated in the reporting year by facilities owned or operated by the electric provider that are initially placed in service on or after January 1, 2004.

SECTION 86. 196.378 (2) (b) 3. of the statutes is repealed.

SECTION 87m. 196.378 (2) (b) 4. of the statutes is repealed and recreated to read:

196.378 (2) (b) 4. A wholesale supplier may sell credits that it creates and may aggregate and allocate the credits that it creates among its members or customers. A member or customer may sell credits or portions of a credit allocated to the member or customer by the wholesale supplier.

SECTION 88. 196.378 (2) (b) 5. of the statutes is created to read:

196.378 (2) (b) 5. An electric provider that purchases renewable energy from a renewable energy supplier may use an allocated share of the renewable energy sold by the renewable energy supplier to comply with a requirement under par. (a) 2. or to create a credit under sub. (3) (a), provided that the cost of the renewable energy is included

in the price the electric provider paid the renewable energy supplier.

SECTION 89. 196.378 (2) (c) of the statutes is amended to read:

196.378 (2) (c) No later than April 15 annually, or another annual date specified by the commission by rule, an electric provider shall submit a report to the ~~department~~ commission that identifies the electric provider's renewable energy percentage for the previous year and describes the electric provider's compliance with par. (a) 2. and the electric provider's implementation plans for future compliance. Reports under this paragraph may include certifications from ~~wholesale suppliers~~ renewable energy suppliers regarding the sources and amounts of renewable energy supplied to an the electric provider. The ~~department~~ commission may specify the documentation that is required to be included with reports submitted under this paragraph. The commission may require that electric providers submit the reports in a proceeding, initiated by the commission under this section relating to the implementation of s. 1.12, or in a proceeding for preparing a strategic energy assessment under s. 196.491 (2). No later than 90 days after the commission's receipt of an electric provider's report, the commission shall inform the electric provider whether the electric provider is in compliance with par. (a) 2.

SECTION 90. 196.378 (2) (e) of the statutes is repealed and recreated to read:

196.378 (2) (e) An electric provider, or a wholesale supplier for its members, may request that the commission grant a delay for complying with a deadline specified in par. (a) 2. The commission shall hold a hearing on the request and, if requested by the electric provider or wholesale supplier, treat the matter as a contested case. The commission shall grant a delay if the commission determines that the applicant has demonstrated good faith efforts to comply with the deadline and that any of the following applies:

1. Notwithstanding reasonable efforts to protect against undesirable impacts on the reliability of an electric provider's system, compliance with the deadline will have an undesirable impact on the reliability of the applicant's system.

2. Notwithstanding reasonable efforts to protect against unreasonable increases in rates of the applicant's ratepayers or members, compliance with the deadline will result in unreasonable increases in rates of the applicant's ratepayers or members, including increases that are due to the discontinuation of federal renewable energy tax credits or other federal policies intended to reduce the acquisition costs of renewable energy.

3. Notwithstanding reasonable efforts to obtain required approvals, the applicant cannot comply with the deadline because the applicant or a supplier has experienced or will experience delays in receiving required sit-

ing or permitting approvals for renewable energy projects.

4. Notwithstanding reasonable efforts to secure transmission service, the applicant cannot comply with the deadline because the applicant faces transmission constraints that interfere with the economic and reliable delivery of renewable energy to the applicant's system.

**SECTION 91.** 196.378 (2) (f) of the statutes is created to read:

196.378 (2) (f) A wholesale electric cooperative for its members or a municipal electric company for its members may delay compliance with a deadline specified in par. (a) 2. for any reason specified in par. (e) 1. to 4. A wholesale electric cooperative or a municipal electric company that delays compliance with a deadline specified in par. (a) 2. shall inform the commission of the delay and the reason for the delay, and shall submit information to the commission demonstrating that, notwithstanding good faith efforts by the wholesale electric cooperative or municipal electric company and its members, the members cannot meet the deadline for the stated reason.

**SECTION 92.** 196.378 (2) (g) of the statutes is created to read:

196.378 (2) (g) 1. In this paragraph, "energy consumer advocacy group" means a group or organization that advocates on behalf of its members' interests regarding the cost, availability, and reliability of energy or regarding utility regulation.

2. An energy consumer advocacy group may request that the commission grant to an electric provider that serves one or more members of the group a delay for complying with a deadline specified in par. (a) 2. The commission shall hold a hearing on the request and, if requested by the energy consumer advocacy group, treat the matter as a contested case. The commission shall grant a delay if the commission determines that the utility has demonstrated good faith efforts to comply with the deadline and that any of the conditions in par. (e) 1. to 4. apply.

**SECTION 93.** 196.378 (3) (a) of the statutes is renumbered 196.378 (3) (a) 1. and amended to read:

196.378 (3) (a) 1. ~~An~~ Subject to subd. 2., an electric provider that provides total renewable energy to its retail electric customers or members in excess of the percentages specified in sub. (2) (a) 1. ~~to 6.~~ 2. may, in the applicable year, create a renewable resource credit and sell to any other electric provider ~~a the~~ renewable resource credit or a portion of ~~a the~~ renewable resource credit at any negotiated price. ~~Alternatively, an~~ An electric provider that creates or purchases a renewable resource credit or portion may use ~~a renewable resource~~ the credit or portion of ~~a renewable resource credit~~ in a subsequent year, as provided under par. (c), to establish compliance with sub. (2) (a) 2. The commission shall promulgate rules that establish requirements for the creation and use of a renewable resource credit created on or after January 1,

2004, including calculating the amount of a renewable resource credit, and for the tracking of renewable resource credits by a regional renewable resource credit tracking system. The rules shall specify the manner for aggregating or allocating credits under this subdivision or sub. (2) (b) 4. or 5.

**SECTION 94.** 196.378 (3) (a) 2. of the statutes is created to read:

196.378 (3) (a) 2. The commission shall promulgate rules for calculating the amount of a renewable resource credit that is created from a renewable facility placed into service before January 1, 2004. The rules shall provide that the amount of a renewable resource credit created on or after January 1, 2004, from such a renewable facility, except a renewable facility owned by a retail customer of an electric provider, is limited to the incremental increase in output from the renewable facility that is due to capacity improvements made on or after January 1, 2004.

**SECTION 95.** 196.378 (3) (b) of the statutes is amended to read:

196.378 (3) (b) The commission may promulgate rules that establish requirements and procedures for a sale under par. (a) 1.

**SECTION 96.** 196.378 (3) (c) of the statutes is created to read:

196.378 (3) (c) A renewable resource credit created under s. 196.378 (3) (a), 2003 stats., may not be used after December 31, 2011. A renewable resource credit created under par. (a) 1. or 2., as affected by 2005 Wisconsin Act ... (this act), may not be used after the 4th year after the year in which the credit is created, except the commission may promulgate rules specifying a different period of time if the commission determines that such period is necessary for consistency with any regional renewable resource credit trading program that applies in this state.

**SECTION 97.** 196.378 (4m) of the statutes is created to read:

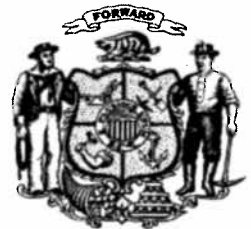
196.378 (4m) **ADDITIONAL RENEWABLE RESOURCES REQUIREMENTS.** (a) The commission may not impose on an electric provider any requirement that increases the electric provider's renewable energy percentage beyond that required under sub. (2) (a) 2. If an electric provider is in compliance with the requirements of sub. (2) (a) 2., the commission may not require the electric provider to undertake, administer, or fund any other renewable energy program. This paragraph does not limit the authority of the commission to enforce an electric provider's obligations under s. 196.374.

(b) An electric utility may, with commission approval, administer or fund a program that increases the electric utility's renewable energy percentage beyond that required under sub. (2) (a) 2. The commission may not order an electric utility to administer or fund a program under this paragraph.





**SECTION 98.** 196.378 (4r) of the statutes is created to read:

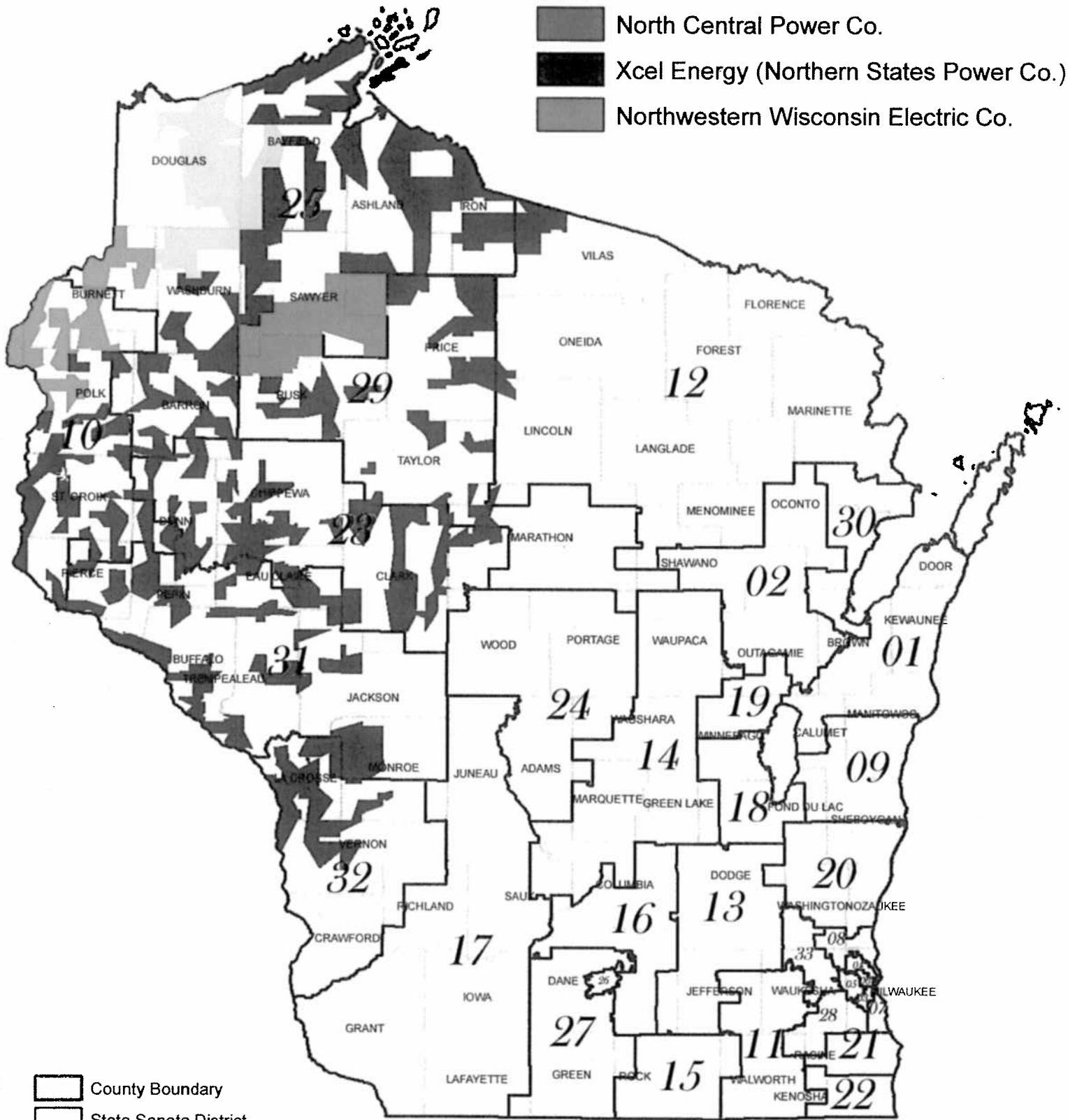


# WISCONSIN STATE LEGISLATURE



### Select Utility Service Territories

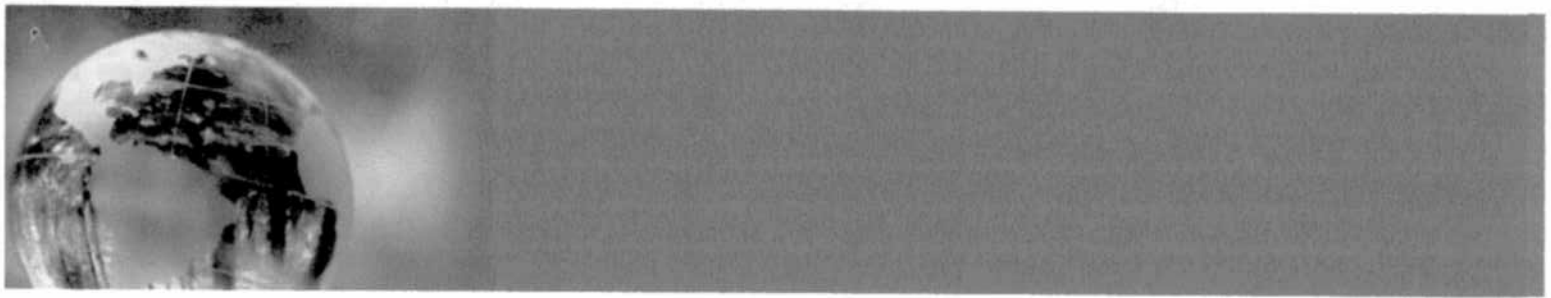
-  Dahlberg Light & Power Co.
-  North Central Power Co.
-  Xcel Energy (Northern States Power Co.)
-  Northwestern Wisconsin Electric Co.



WI State Senate  
Wisconsin Electric Service Utility Territories







## 2. About Greenhouse Gases and Climate Change

Greenhouse gases keep the earth at a comfortable temperature, allowing most of the energy from the sun to pass through the atmosphere and warm the earth while blocking much of the outward radiation from the earth. However, increasing concentrations of greenhouse gases in the atmosphere are cause for concern. The most recent report from the Intergovernmental Panel on Climate Change (IPCC) cited “unequivocal” evidence that the world is now warming due to human activity, and that “most of the warming is very likely (odds 9 out of 10) due to greenhouse gases” (IPCC 2007b).

### Greenhouse Gases Compared to Criteria Air Pollutants

Greenhouse gases are different than the criteria air pollutants that have been regulated by the EPA since 1970. Criteria pollutants, which include ozone, nitrogen dioxide, sulfur dioxide, carbon monoxide, lead, and particulate matter, are released in the atmosphere from fuel leaks, secondary reactions, or undesired byproducts

during combustion. While these pollutants cause health problems and contribute to smog and acid rain, they do not directly contribute to climate change. The amount of criteria air emissions depends on several variables, including fuel characteristics, combustion conditions, and the use of pollution control equipment, and it is sensitive to maintenance and operational practices (EPA 2008).

In contrast, GHGs currently are not federally regulated. Unlike criteria pollutants, the most prevalent GHG emission — carbon dioxide (CO<sub>2</sub>) — is a necessary byproduct of fossil fuel combustion. The amount of carbon dioxide released depends not on leaks or side reactions, but on the amount of carbon in the fuel and the amount of fuel consumed. While chemically reactive criteria air pollutants stay in the air for days or months, greenhouse gases are nonreactive and remain in the atmosphere for decades to centuries (Rubin and Rao 2002). The three GHGs of primary concern for the purposes of this study are CO<sub>2</sub>, methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). The IPCC has identified several

Table 2.1. Important Differences Between Carbon Dioxide and Criteria Air Pollutants

	Carbon dioxide	Criteria pollutants
Source of emissions	• Necessary byproduct of combustion	• Fuel leak or undesired byproduct of combustion
Regulation	• Currently unregulated at federal levels in the United States	• Federally regulated by the Clean Air Act
Quantity released	• Depends mainly on carbon content of fuel and amount of fuel consumed	• Depends on many factors, such as side reactions or leaks
Scale of impact	• Global	• Local or regional
Lifetime in atmosphere	• Decades to centuries	• Days to months

other greenhouse gases, such as hydrofluorocarbons (HFCs) and sulfur hexafluoride, but these are not considered in this report because they are not products of fossil fuel combustion.

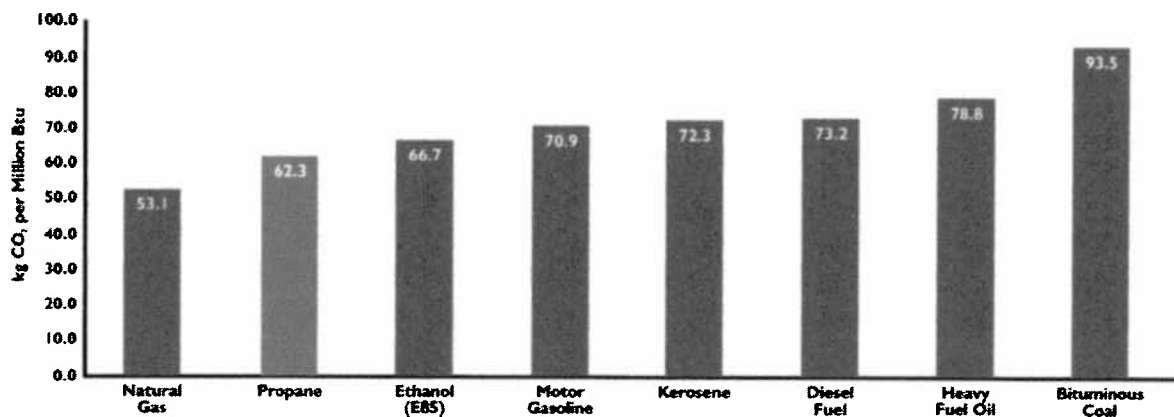
## Greenhouse Gas Emissions from Fuel Combustion

In general, lighter hydrocarbons release less CO<sub>2</sub> during combustion than heavier hydrocarbons because lighter hydrocarbons consist of fewer carbon atoms per molecule. The mass of CO<sub>2</sub> released per British thermal unit (Btu) of fuel — the “carbon content” — is a good first-order indicator of the CO<sub>2</sub> emissions comparison between fuels. The carbon content for eight common fuels is shown in Table 2.2.

While it is a good indicator, carbon content represents only one component of the CO<sub>2</sub> emissions equation. The amount of fuel consumed plays an equally important role. Fuel consumption varies by fuel type and technology for each application. For example, since compression (diesel) engines are generally more efficient than spark-ignition engines, part of the CO<sub>2</sub> emissions disadvantage of diesel compared to other fuels is offset. (Further details for estimating CO<sub>2</sub> emissions are provided in the Methodology section.)

Small amounts of CH<sub>4</sub> and N<sub>2</sub>O are also emitted during combustion, though they represent a much smaller portion of the human-caused greenhouse gases compared to CO<sub>2</sub>. In the United States, CH<sub>4</sub> and N<sub>2</sub>O together represent less than 1 percent of the total CO<sub>2</sub>-equivalent emissions from stationary combustion sources (EPA 2008).

Figure 2.1. End-Use CO<sub>2</sub> Emissions for Various Fuels



Source: EIA 2007  
End-use emissions estimates based on chemical composition of the fuel with 100 percent combustion.

Table 2.2. CO<sub>2</sub> Released per Btu

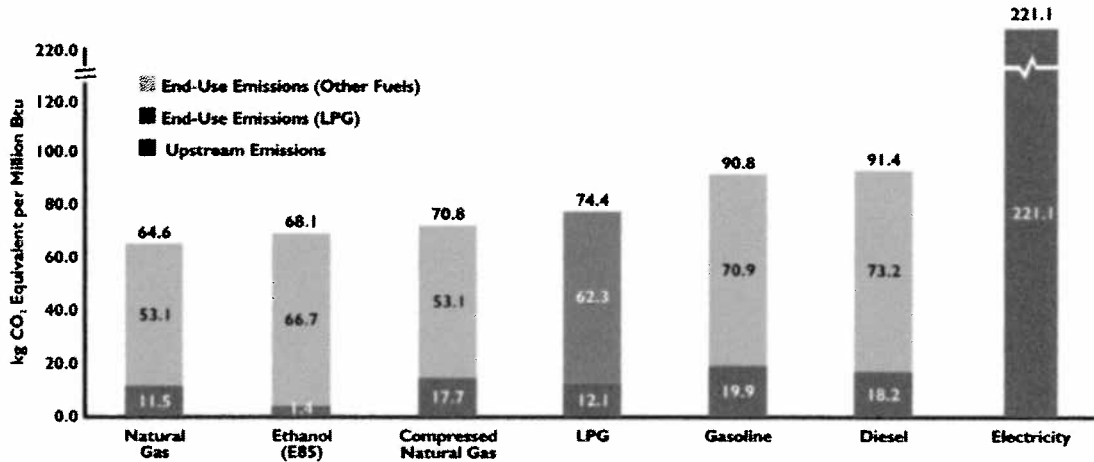
Fuel Type	kg CO <sub>2</sub> per million Btu
Natural Gas	53.06
Propane	62.30
Ethanol (E85)	66.70
Motor Gasoline	70.88
Kerosene	72.31
Diesel Fuel	73.15
Heavy Fuel Oil	78.80
Bituminous Coal	93.46

Estimates based on chemical composition of the fuel with 100 percent combustion, and based on average speciation of transportation fuels, except kerosene, heavy fuel oil, and bituminous coal, which are based on average speciation for stationary combustion use.  
Source: EIA 2007

The greenhouse gas footprint of propane is relatively small compared to other fuels in terms of total emissions and emissions per unit of energy. Propane has the lowest on-site emission rate of the major energy sources, with the exception of natural gas (see Figure 2.1). In terms of life-cycle greenhouse gas emissions, propane produces significantly lower emissions than gasoline, diesel, and electricity on a per-Btu basis (see Figure 2.2). Actual life-cycle emissions levels depend on the nature and efficiency of the end-use application and therefore must be estimated on an application-specific basis.



Figure 2.2. Total Greenhouse Gas Emissions for Various Fuels



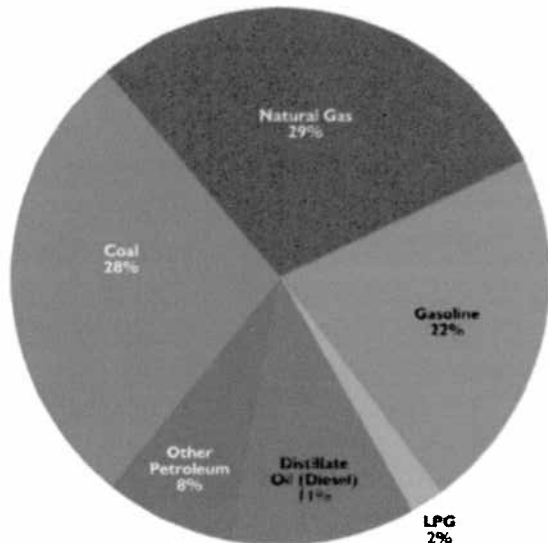
Sources: EPA 2009, GREET 1.8c

End-use emissions estimates based on chemical composition of the fuel with 100 percent combustion.

Actual life-cycle emissions vary by application; in many cases, electricity provides more useful energy on a per-Btu basis.

Propane represents a small but important part of the U.S. energy sector. Figure 2.3 shows the contribution of the major fuels with propane representing approximately 2 percent of energy consumed in the United States in 2007.

Figure 2.3. Shares of U.S. Energy Consumption (2007) (Total: 78,823 trillion Btu)



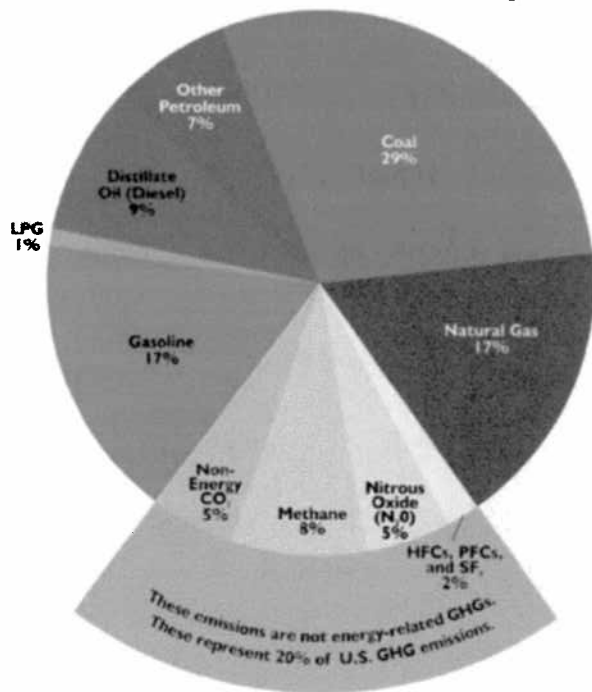
Source: EPA 2009 (Table A-10)

Because of propane's relatively low GHG emission rate, its share of GHG emissions is smaller than its share of energy supply. Figure 2.4 shows the relative contribution to total U.S. GHG emissions by fossil fuel combustion and from other sources. Greenhouse gas emissions from fossil fuel combustion represent 80 percent of total emissions, while propane combustion represents only 1 percent of total U.S. GHG emissions.

The remaining balance of emissions (20 percent) is from industrial processes that emit CO<sub>2</sub> directly (e.g., cement kilns), methane (e.g., landfills and natural gas leaks), nitrous oxide (e.g., agricultural fertilizer), and fluorine-containing halogenated substances (e.g., hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF<sub>6</sub>] from refrigerants and industrial processes).

Figure 2.5 illustrates the relative contribution to total energy-related CO<sub>2</sub> emissions for the United States in 2007. Although propane contributes approximately 2 percent of the U.S. energy supply, its share of energy-related CO<sub>2</sub> emissions is just more than 1 percent. Coal, the highest-emitting major fuel, represents 28 percent of the U.S. energy supply while generating 37 percent of energy-related CO<sub>2</sub> emissions.

Figure 2.4. Shares of Greenhouse Gas Emissions (2007) (Total: 7,150 million metric tons CO<sub>2</sub>)



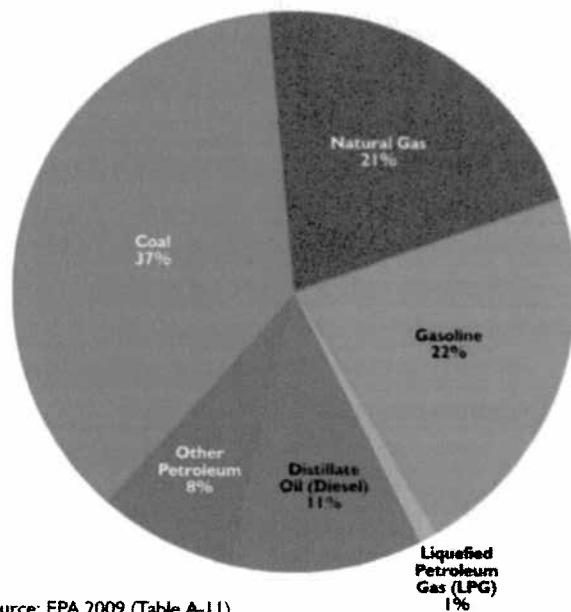
Source: EPA 2009 (Table ES-2)

### Propane's Effect on Greenhouse Gas Emissions

Propane is not a direct greenhouse gas when released into the air. Propane vapor is unstable in the atmosphere — it is chemically reactive and commonly removed by natural oxidation in the presence of sunlight or knocked down by precipitation. It is also removed from the atmosphere faster than it takes for it to become well mixed and have impacts on global climate. Current measurements have not found a global climate impact from propane emissions.<sup>1, 2</sup>

When used as a fuel, propane does emit CO<sub>2</sub> and small amounts of N<sub>2</sub>O and CH<sub>4</sub>. Upstream extraction and production of fuels such as propane from natural gas or crude oil generates greenhouse gas emissions, and end-use combustion of any hydrocarbon releases CO<sub>2</sub> as discussed in the previous section. However, compared to conventional fuel supplies, propane generates fewer GHG emissions in almost every application. At the point of use, propane has a lower carbon content than gasoline, diesel, heavy fuel oil, or ethanol (Table 2.2). Natural gas (methane) generates fewer CO<sub>2</sub> emissions per Btu than propane, but natural gas is chemically

Figure 2.5. Shares of Energy-Related Greenhouse Gas Emissions (2007) (Total: 5,735 million metric tons CO<sub>2</sub>)



Source: EPA 2009 (Table A-11)

stable when released into the air, producing a global warming effect 25 times that of CO<sub>2</sub>. This means that 1 kilogram of CH<sub>4</sub> produces the same effect as 25 kilograms of CO<sub>2</sub>.

With propane's short lifetime in the atmosphere and low carbon content, it is advantageous when compared to many other fuels in many applications.

### Upstream vs. End-Use Emissions

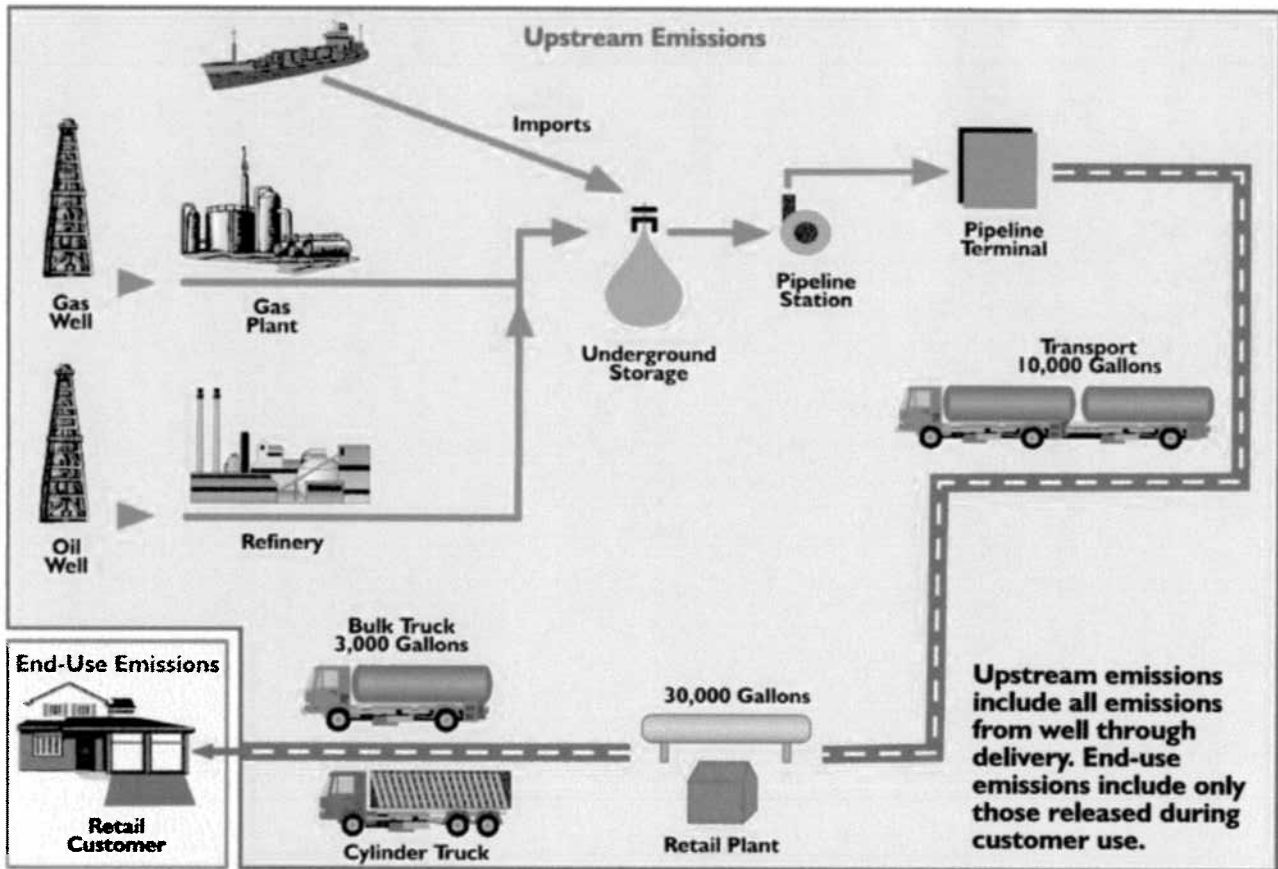
When quantifying the greenhouse gas emissions that result from the use of energy, it is important to distinguish between the emissions released at the location where the energy is consumed and the emissions released as a result of extracting, processing, and transporting a refined and usable energy product to that location. The fuel life cycle begins where the raw feedstock is extracted from the well or mine and ends where the fuel is consumed to power a vehicle, appliance, or other technology.

Emissions released at the point of use are termed "end-use emissions," while those emissions that occur along the delivery pathway are termed "upstream emissions." Upstream emissions include all emissions resulting from

1. The Intergovernmental Panel on Climate Change (IPCC) reports that "Given their short lifetimes and geographically varying sources, it is not possible to derive a global atmospheric burden or mean abundance for most VOC from current measurements." VOCs explicitly include propane (IPCC TAR 2001).

2. While VOCs participate in the formation of tropospheric ozone, the climate effect from ozone is not highly understood by scientists and is not one of the six greenhouse gases being considered for regulation by Congress.

Figure 2.6. Upstream Supply Chain



Source: Energy Information Administration 2008

the recovery, processing, and transport of fuel to the point of delivery to the end user.

Energy use during the recovery, processing, and transport of fuels is not the only source of upstream emissions. Other production processes also release greenhouse gases. For example, the growing of crops for biofuels production requires the application of nitrogen fertilizer, which causes the formation of nitrous oxide, while natural gas refining causes the release of fugitive emissions of methane. The emissions from these processes have been quantified by the Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model, developed by Argonne National Laboratory on behalf of the U.S. Department of Energy, making it a valuable tool for comparative life-cycle analyses of fuel systems.

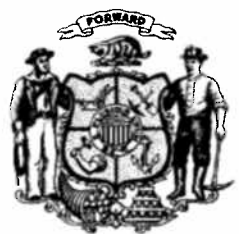
The inclusion of upstream emissions in an analytical

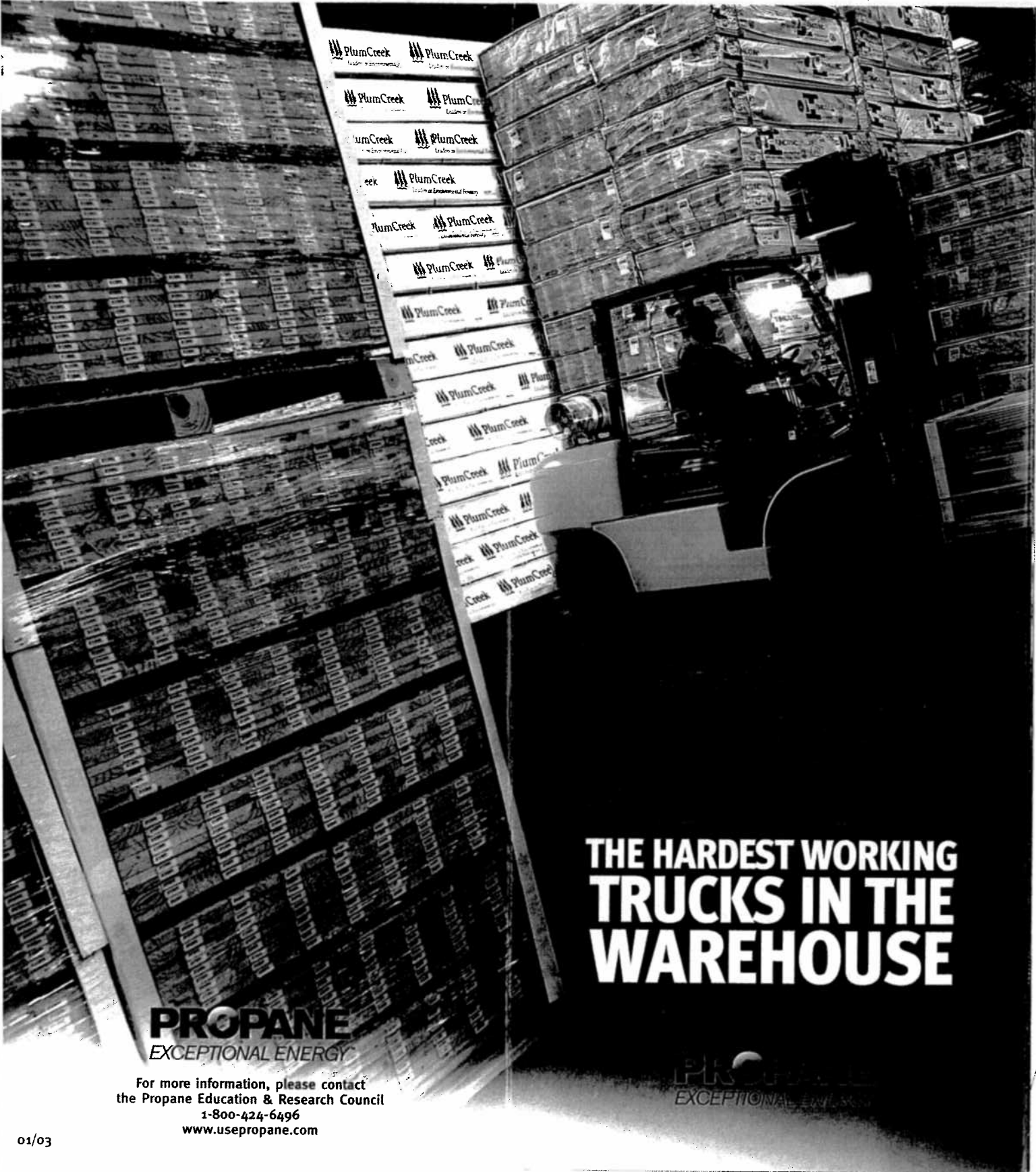
comparison of different fuel options can have a significant impact on the results. Limiting the comparison to end-use emissions only, for example, can give the impression that electricity, with zero end-use emissions, is an energy source with no greenhouse gas emissions. Limiting the analysis to end-use emissions would therefore mask the large fraction of upstream emissions caused by the combustion of fossil fuels for the purpose of electricity generation.

This analysis is intended to give a full life-cycle estimate of greenhouse gas emissions resulting from the use of propane and other fuels for specific applications. By reporting upstream and end-use emissions separately, this report intends to provide a better picture of the impacts of different fuels and a more useful and informative data set than would be provided by aggregating emissions or restricting the analysis to end-use emissions only.



# WISCONSIN STATE LEGISLATURE



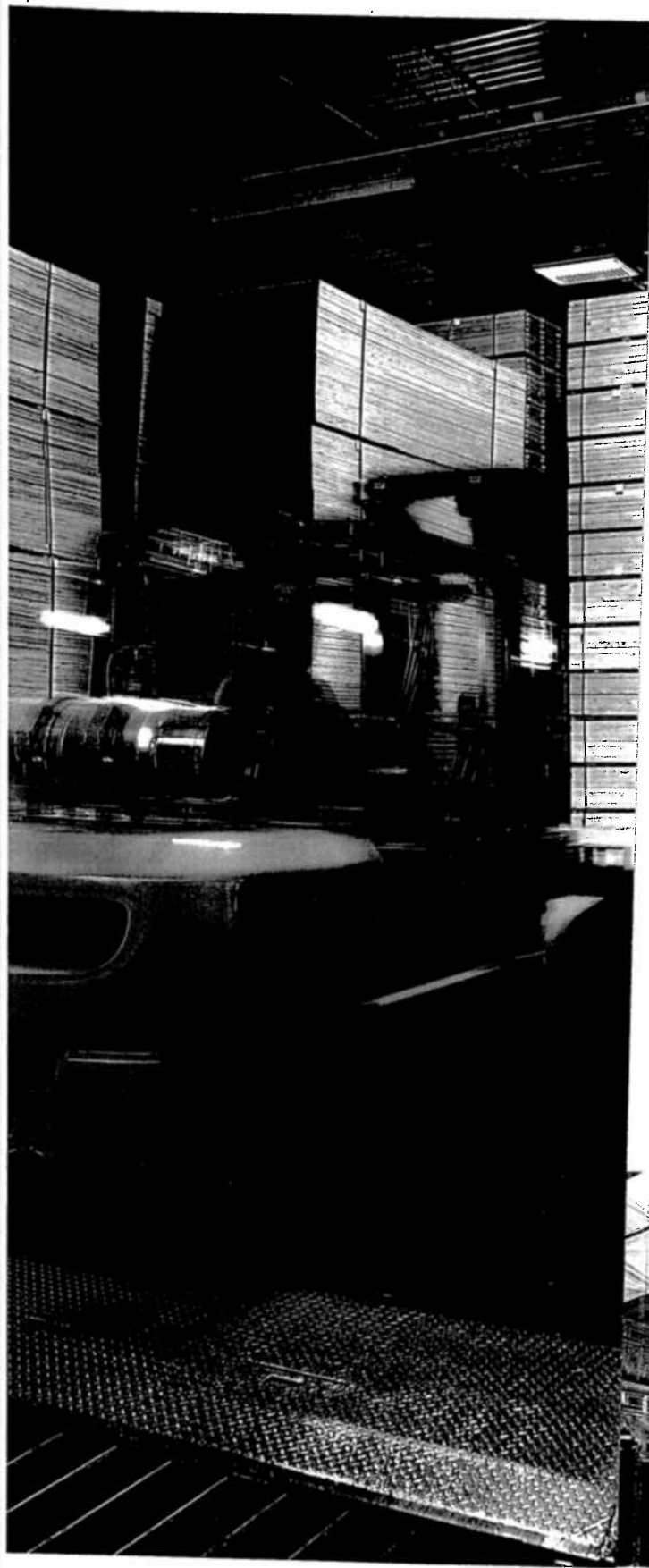


# THE HARDEST WORKING TRUCKS IN THE WAREHOUSE

**PROPANE**  
EXCEPTIONAL ENERGY

For more information, please contact  
the Propane Education & Research Council  
1-800-424-6496  
[www.usepropane.com](http://www.usepropane.com)

**PROPANE**  
EXCEPTIONAL ENERGY



**CLEAN. POWERFUL. ECONOMICAL.**

Nationwide, 80% of all internal combustion forklifts used in warehouses are fueled by propane — and with good reason. Propane forklifts provide greater power and lift capability than electric forklifts. They have lower emissions than gasoline or diesel models. And they have much lower infrastructure costs than CNG. When you look at the big picture, propane forklifts are the best all-around choice for improved warehouse productivity and a healthier bottom line.

**PROPANE FORKLIFTS:  
THE BEST ALL-AROUND CHOICE**

<b>PROPANE</b> <small>EXCEPTIONAL ENERGY</small>	PROPANE	CNG	Electric	Gasoline	Diesel
Low Greenhouse Gas Emissions	YES			NO	NO
Low Infrastructure Costs	YES	NO	NO	NO	
Consistent Power	YES		NO		
Total Energy Efficiency	YES			NO	
Low Unit Costs	YES	NO	NO		NO
Low Maintenance	YES				NO
8-hour Operating Time	YES	NO	NO		
Lift Load Capacity greater than 82 fph	YES		NO		
Max Speed greater than 9.4 mph	YES		NO		
Refueling less than 5 minutes	YES		NO		





# PROPANE DOES IT ALL FOR LESS

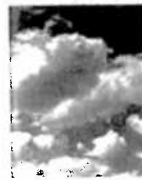
**LESS DOWN TIME** Anytime a forklift isn't on the move, it's costing you money. Which is why propane forklifts are designed to refuel quickly. It takes less than 5 minutes to switch tanks and refuel a propane forklift. CNG can take up to 6 hours to refill. Electric batteries take up to 8 hours to recharge. Propane forklifts also deliver more consistent power than electric lifts — hauling heavier loads and finishing jobs faster.

**“The easy switch-in and switch-out of propane tanks versus battery changing and re-charging had an immediate impact on our productivity and efficiency numbers. And equally important, our warehouse personnel preferred propane because forklifts using propane don't lose power like electric ones do. Propane keeps them moving.”**

*Dwayne Dagenhart  
Manager – Equipment Utilization,  
Overnite Transportation*

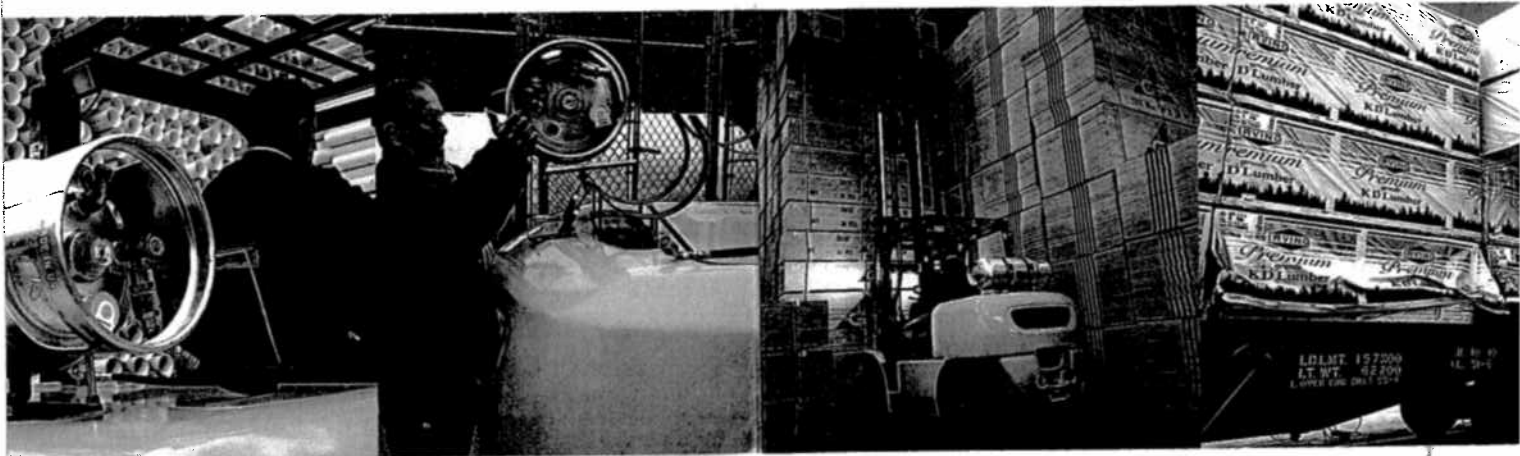
**LOW INITIAL COSTS** CNG refueling stations can cost more than \$40,000. Gasoline and diesel filling stations average over \$15,000. And the average electric station costs \$3,000, with additional batteries that can add up to as much as \$3,200 per forklift. Propane beats them all with low or no cost fueling options — cylinder exchange/cylinder floats programs and on-site retailer fills are two options that require no up-front costs. The original purchase of a propane-powered forklift can cost thousands less, too. And that cost can drop even lower when you realize properly maintained propane forklifts can last over a decade.

**LOWER OPERATING COSTS** Propane engines are clean burning so they need fewer oil changes, keeping maintenance costs low. And since reduced deposits mean less wear, propane engines can last longer than gasoline engines. Refueling a propane forklift is also much less expensive than replacing rechargeable batteries which can cost up to \$3,000 per year in labor and equipment use.



# HELPING YOU BREATHE EASIER

Propane is one of the cleanest fuels you can use, producing far fewer greenhouse gases than gasoline or diesel fuel. That's why it was named an Alternative Fuel in the 1990 Clean Air Act and in the 1992 Energy Policy Act. As air quality standards get tougher in 2004 and 2007, it's important to know that you'll be prepared with propane.

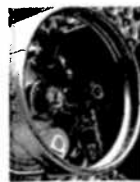


**CLEAN BURNING** Propane is clean burning, non-toxic and safe to use indoors. In fact, propane burns so clean, it's FDA approved for many food processing plant operations. Propane can also be used in warehouses requiring permanent air conditioning.

**LOW EMISSIONS** Propane produces low levels of carbon monoxide, hydrocarbons and nitrogen oxides (NO<sub>x</sub>). And properly maintained propane forklifts not only meet, but beat State, Federal, OSHA and EPA emission standards. It's a sure thing — well maintained propane forklifts with new computer-controlled systems and 3-way catalytic converters obtain nearly zero emissions.

**NO TOXIC SPILLAGE OR EVAPORATION** A propane forklift carries its fuel in a sealed, pressure-tight system. This eliminates the toxic spillage and evaporation found with gasoline and diesel refueling, which can be a significant source of secondary pollution.

**YOUR PROPANE SUPPLIER CAN HELP** To maximize your emissions control, talk with your propane supplier. Many offer computerized emissions services to control air/fuel mixtures, reduce emissions and increase efficiency. They also have the resources to keep you up to date on emissions requirements and safety information.



# TOUGH, RUGGED AND POWERFUL

Of course, reduced costs and cleaner air don't come at the expense of performance. For every situation, propane is the answer:

**POWER AND TORQUE** For pushing, pulling, lifting and loading, propane handles the heavy loads and beats electricity.

**DRIVING SPEEDS** Propane powered trucks run at speeds topping 10.5 mph — faster than electric.

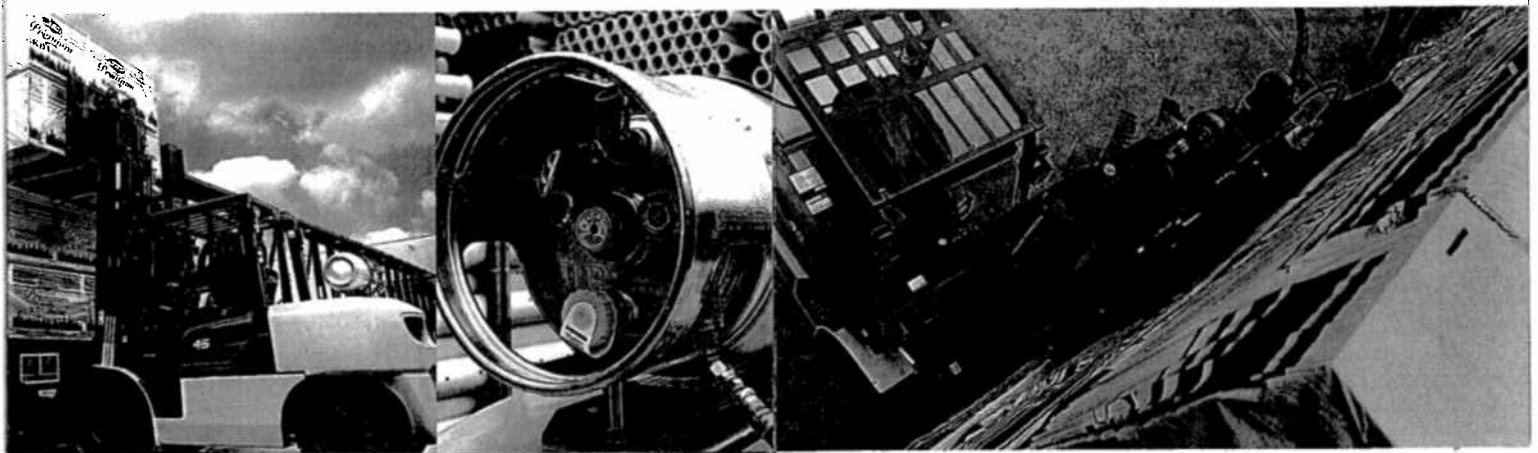
**INDOOR/OUTDOOR USE** Propane forklifts are powerful and clean enough to perform inside and outside the warehouse.

**ROUGH SURFACES** Unpaved, gravel surfaces and steep grades are easily handled in a propane forklift.

**24/7 OPERATION** Propane can operate up to a full shift on one tank of fuel. And power outages can't stop the work.

**“The main reason we switched our forklift fleet from diesel to propane was the air quality that our dock associates work in everyday. The elimination of exhaust soot and the improved cleaner air in our facilities are welcome signs of the healthier environment that propane provides. With propane, you can actually see the difference.”**

*Steve Maxson  
Vice President – Preventative Maintenance, Averitt Express*







Research and  
Development

Our  
MISSION  
Is GROWTH

**PROPANE**  
EXCEPTIONAL ENERGY®

# PERC Research and Development

The primary objective of the Propane Education & Research Council's (PERC) research and development mission is to invest in new technologies and foster industry practices that bring innovative products and services to customers, improve the productivity and economic vitality of the industry, and provide greater value to propane consumers.

## R&D Goals

PERC R&D initiatives focus on the development of new, safe, and efficient propane utilization technology to help maintain and improve consumer lifestyles and give Americans better energy choices. PERC R&D investigates and creates technologies to:

- **Expand the market applications of propane as a fuel**
- **Increase off-season load**
- **Increase productivity and operating efficiency**
- **Improve service reliability to customers**
- **Improve safety**

## Advisory Committees— Leading the Way

**The Research and Development Advisory Committee (RDAC)** leads the Council's efforts to research and develop propane-related technologies. Led by industry volunteers, RDAC is responsible for directing PERC's investments in developing new technologies that can expand the market for propane while reducing operating costs, improving safety, and increasing customer reliability and service.

**The Agriculture Advisory Committee (AAC)** pursues technology development for propane agriculture applications. As the third-largest retail propane market in the U.S., the agriculture sector receives at least 5 percent of the funds collected by PERC for agriculture-related programs and projects. The AAC oversees PERC's efforts to actively seek innovative solutions that help farmers keep productivity high and operating costs down while increasing propane sales to balance propane's seasonal business cycles.

**The Engine Fuel Advisory Committee (EFAC)** pursues technology development to promote the use of propane as an engine fuel. The propane industry recognizes the importance of the engine fuel market, which accounts for 13 percent of the total non-chemical propane used in the United States. EFAC specifically seeks programs that increase off-season demand, undertaking a comprehensive approach to the market through projects that encourage the development, commercialization, and marketing of propane-related engine technologies for stationary, off-road, and over-the-road applications.

*RDAC, AAC, and EFAC all work closely together where their mission areas overlap.*



## Agricultural Technology

Propane is a cost-effective, clean, portable, high-energy fuel that can help farmers reduce costs, increase productivity, and meet increasingly stringent environmental standards. The agricultural sector has come to rely on propane to the point where it represents 10 percent of total propane sales and helps balance the propane industry's seasonal business cycles. PERC focuses on the development of propane technologies that offer farmers exceptional value in refueling, soil sanitization, power generation, and converting waste materials to value-added products.



## Distributed Power Generation

High energy prices and power shortages encourage consumers to seek cost-effective alternative sources for heat and power. Distributed power generation technologies are decentralized energy systems that offer consumers reliable sources for heat and power that lower energy costs and reduce emissions while expanding the propane industry's share in energy markets and balancing off-season demand. PERC focuses on the development, demonstration, and commercialization of propane-fueled generator sets, fuel cells, and micro-turbines.



## Distribution and Production

Advances in efficiency and fuel quality management in production, at the bulk plant, and during propane distribution position the industry to provide high-quality propane to any consumer who demands it. PERC focuses on the development of best practices for propane production and processing to ensure that the industry can respond to increasing demand for propane and that propane fuel can meet the energy, reliability, environmental, and cost requirements of current and future propane applications.



## Engine Fuel

Propane is widely used in engine fuel applications due to its energy-efficient alternative to gasoline and diesel fuel. The use of propane can help fleet managers, farmers, commercial mowers, and equipment users contain costs and meet increasingly stringent emissions regulations. Abundant opportunities also exist for propane to expand their share of this market. PERC focuses on the development and emissions testing of over-the-road and off-road engines. Fuel systems are also investigated to increase consumer access to propane.

## Storage

Tank and container designs and specifications affect how propane equipment is configured and used. The continued development of a variety of storage technologies offers consumers safe storage and convenience in refueling and enables further market expansion into residential, commercial, and remote applications. PERC focuses on the development, demonstration, safety testing, and commercialization of new materials and designs for propane cylinders and tanks. In addition, PERC supports the development of new technologies that enhance the protection of downstream propane equipment and appliances, and also works to improve inventory management.



## Thermally Activated Technologies

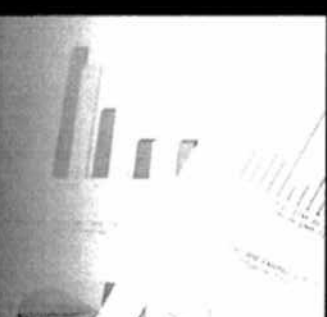
Thermally activated technologies transform heat for useful purposes such as heating, cooling, and humidity control, offering consumers a more cost-effective and energy-efficient alternative to traditional methods. These technologies can also further solidify and grow existing residential markets, generate off-season sales, and improve infrastructure efficiencies. PERC supports the development, demonstration, and commercialization of cost-effective and energy-efficient thermally activated technologies such as desiccant dehumidification, combined heat and power, pool heating, power generation, and gas cooling.



# PERC &D

## Fuel Studies

The propane industry provides consumers a high quality fuel and ensures that the fuel quality meets the demands of new technologies. Continuous studies of fuel composition and its effects on the durability, emissions, and performance of propane fuel systems are critical to successful technology adoption and integration within all energy markets. PERC performs fuel studies that focus on emissions, fuel parameters, and fuel analysis.



## Planning and Collaboration

Planning, collaboration, worldwide technology coordination, and communications help PERC carry out its research and development mission. Strategic planning helps PERC identify key opportunities to address consumer energy concerns and prioritize R&D investments to meet strategic goals. Collaboration with research institutions, government partners, universities, manufacturers, and marketers helps PERC leverage co-funding for R&D priorities, while worldwide collaboration fosters the exchange of innovative ideas to advance propane R&D on a global scale. Communications and marketing activities report on and publicize propane research and development achievements that help build industry awareness of new propane technologies.





# Taking Action

PERC actively works to achieve its goals by investing in new and more efficient propane technologies and communication with both industry members and the public. The Council receives funding by an assessment or "check-off" on each gallon of odorized propane gas, and redistributes these resources to fund programs and projects that enhance the future of propane technology and the industry as a whole.

## R&D Projects

PERC's research and development efforts focus on developing innovative propane utilization technologies that create or expand propane use into new markets to better serve consumers and increase year-round load and off-peak demand.

Areas of focus include: Agricultural Technologies, Distributed Power Generation, Distribution and Production, Engine Fuel, Fuel Studies, Storage, Thermally Activated Technologies, and Planning and Collaboration. For an overview of R&D activities, see center pages.

## Trade Show Exhibits

As a part of its R&D initiative, PERC participates in trade shows or exhibitions in which the propane industry showcases and demonstrates new and current propane technologies to target homeowners, homebuilders, farmers, forklift operators, fleet managers, and other propane-related consumer groups. Participating in trade shows enables PERC to communicate directly with target audiences, increasing their awareness of propane technologies and creating an ongoing dialogue about the value of propane to ultimately increase sales.

## Publications

PERC produces publications such as fact sheets, project reports, and press releases to communicate its progress in the advancement and development of new and efficient propane technologies through its R&D initiative.

- **Fact sheets** provide an easy-to-understand overview of significant PERC-sponsored R&D projects. These publications are geared toward a general audience with the purpose of raising awareness of propane-related technologies.
- **Project reports** provide a detailed explanation of the research methods, data, and conclusions of significant PERC-sponsored R&D projects. Written by researchers, these publications help to increase collaboration and improve technology transfer within the industry.
- **Press releases** provide the latest news and announcements from PERC R&D, including newly released studies, successful development or demonstration of technologies, and other R&D events.





**PROPANE**  
EXCEPTIONAL ENERGY®

For up-to-date information on  
propane research and development, visit:  
[www.propanecouncil.org/rd](http://www.propanecouncil.org/rd)

Propane Education & Research Council  
1140 Connecticut Ave. NW, Suite 1075  
Washington, DC 20036

Telephone: (202) 452-8975  
Fax: (202) 452-9054

© 2007 PERC



## What your energy bill is funding

Since 2002, nearly \$166 million collected on utility bills for state energy programs has been diverted to other accounts.

### Transfers from energy efficiency programs:

FISCAL YEAR	AMOUNT	TRANSFERRED TO:
2002-'03	\$8,365,600	General fund
2003-'04	\$17,600,000	County and municipal aid payments
2004-'05	\$20,000,000	County and municipal aid payments
2004-'05	\$236,800	Earned Income Tax Credits
2004-'05	\$9,232,000	Wisconsin Works (W-2)
2005-'06	\$18,185,300	General fund
2005-'06	\$954,500	Department of Health and Family Services
2006-'07	\$9,232,000	Wisconsin Works (W-2)
2006-'07	\$16,949,400	General fund
2006-'07	\$954,500	Department of Health and Family Services
2006-'07	\$9,232,000	Wisconsin Works (W-2)
<b>TOTAL</b>	<b>\$110,942,100</b>	

### In 2006, Legislature passes fix to prevent raids from energy efficiency programs. Transfers came instead from low-income energy assistance and weatherization fund:

FISCAL YEAR	AMOUNT	TRANSFERRED TO:
2007-'08	\$9,232,000	Wisconsin Works (W-2)
2008-'09	\$9,232,000	Wisconsin Works (W-2)
2009-'10	\$9,139,700	Wisconsin Works (W-2)
2010-'11	\$9,139,700	Wisconsin Works (W-2)
<b>TOTAL</b>	<b>\$36,743,400</b>	

### In June, Legislature passes surcharge now hitting utility customers:

FISCAL YEAR	AMOUNT	TRANSFERRED TO:
2009-'10	\$9,139,700	District attorneys
2010-'11	\$9,139,700	District attorneys
<b>TOTAL</b>	<b>\$18,279,400</b>	

**OVERALL TOTAL: \$165,964,900**



## **Utility surcharge could make some ratepayers hot**

### **Money diverted to pay for district attorneys**

By Thomas Content of the Journal Sentinel

Posted: Oct. 16, 2009

The latest reason that utility bills are going up around the state has nothing to do with keeping the lights on.

A new surcharge on utility bills, tacked on as part of the budget that was passed in June, will be used to pay the salaries and benefits of district attorneys in counties across Wisconsin.

The prosecutors are being paid from a fund originally designed to help poor people pay their utility bills and weatherize their homes. The extra fee, which hits We Energies customers in December, is the latest in a series of budget maneuvers that have sent a total of \$166 million from electricity ratepayers to non-energy-related state government purposes since 2002.

Low-income advocates are already worried about the next state budget, and will be holding strategy sessions within weeks to determine how to prevent such a move from happening again. The Legislature, they say, can't seem to resist raising any kind of fee - even those for programs helping the poor - to help balance the state budget.

"The bottom line is this is turning utilities into collectors for other things, and it's bypassing what the law was supposed to do," said Bob Jones, public policy director with the Wisconsin Community Action Program. "If it's not DAs, what's it going to be, something else?"

He added, "Low-income households are being punished, and utility customers are being punished."

Gov. Jim Doyle and Wisconsin lawmakers praised themselves in 2006 when they passed a bill that stopped budget raids on utility customers' bills. That legislation halted the diversion of \$111 million in funds for energy efficiency to help balance the state budget.

But the diversions continued - only the state tapped a different pot of money, the funds designed to help the poor pay utility bills or weatherize their homes.

We Energies will collect more than \$6 from every residential customer over the next two years for district attorney salaries, utility spokesman Brian Manthey said. Factories, the utility's largest customers, will pay about \$400 each over the next two years to fund DAs, he said.

We Energies will collect \$4 million this fiscal year for that purpose, or 12% more than the \$32 million for low-income energy assistance and weatherization programs that it would have collected without the new surcharge.

The new diversion of funds appears to have been an unintended consequence of a legislative move to halt similar budget transfers from the state's Focus on Energy program.

At the time, the Focus on Energy money was protected and it was believed that lawmakers wouldn't tap the low-income funds. They would be too leery of being perceived as taking money from the poor, several people actively involved in energy policy legislation recalled last week.

"At that time, no legislator would go after that," said Charlie Higley, executive director of the Wisconsin Citizens' Utility Board.

But it happened one year later, with the energy funds going to the Wisconsin Works, or W-2 program, and it's happening again with the funds for the prosecutors.

A Journal Sentinel review of budget documents prepared by the Legislative Fiscal Bureau shows the amount of money being raised from utility customers for non-energy uses essentially doubled, from \$18.3 million in the last budget to \$36.7 million.

And it's happening at a time when the effects of the recession are making it harder for people on fixed incomes to make ends meet. The Social Development Commission, which administers utility-bill energy assistance to poor families in Milwaukee County, processed 48,000 aid applications last year, said Deborah Blanks, SDC executive director.

### **Need could jump**

With unemployment up sharply over the last year, the number of people getting energy assistance could jump by 10% or 20% this winter, she said.

"We're finding people who never thought that they would need energy assistance are coming to us for that support," Blanks said. "In tight budget times, the Legislature and leaders really have to look at ways to cover a broad spectrum of costs. At the same time, my concern is for the people who need it most, in terms of energy assistance to keep their houses warm during difficult, harsh Wisconsin winters."

Dan Schoof, deputy secretary of the state Department of Administration, said Doyle's proposed budget tried to fix the funding gap for energy assistance in this budget.

That proposal would have allowed full funding for low-income energy aid, but then would have tacked on another \$9.14 million for W-2. The Legislature went in a different direction, choosing to allocate that extra funding to county district attorneys.

The budget law requires that the fee be collected for two years - and not be carried over to the next budget, in 2011-'13.

## **Broader problem**

Republican lawmakers see this as an example of a broader problem - with the budget raising fees on everything from cell phones to power bills to help fund state government and avoid raising taxes per se.

"This thing for DAs is very, very irritating thing for constituents, and I totally agree with them," said state Sen. Robert Cowles (R-Green Bay), who led the Senate's work on the 2006 bill that halted diversions of energy efficiency funds.

Funding district attorney salaries as part of a charge meant to keep the lights on "is absurd," Cowles said. "There's no nexus. There's no connection. It should be coming from the (state's) general fund."

Of the state's five investor-owned utilities, only one - Wisconsin Public Service Corp. - included a description in monthly statements that explained the new fee would pay district attorney salaries.

## **Federal funds**

Schoof, of the Department of Administration, noted that the state has ample funds available for weatherization, thanks to a big jump in federal funding through the American Recovery and Reinvestment Act.

"I don't think anyone is suggesting right now that there are not enough resources for weatherization in the next two years, with the dollars that have come through with the stimulus bill," he said.

Low-income energy advocates welcome the federal stimulus dollars, but say giving money to W-2 and now district attorneys isn't helping poor people pay utility bills. Statewide, the amount of money paid out in energy assistance fell by 3.5% last year even as the number of people receiving energy aid jumped 17%.

The utility bill surcharge for district attorneys is required by law to end on June 30, 2011. But Jones, of WisCAP, said the budget-writers could keep the surcharge alive in the future.

"If I want to pay for DA costs, that's a legitimate cost but I shouldn't be paying that on my electric bill any more than I should be paying for that when I go to the grocery store."



# News & Views

NEWS • JOE CONASON • POLLS • TAKING LIBERTIES • ESPRESSO

expressmilwaukee.com

**“IF WE ARE GENERATING 25% OF OUR ENERGY FROM RENEWABLE SOURCES, AND WE’RE ALSO INVESTING IN EFFICIENCY AND CONSERVATION, WE’RE NOT GOING TO NEED ANY NEW POWER PLANTS, WHETHER THEY RELY ON FOSSIL FUELS OR NUCLEAR POWER,” BLACK SAID.**

## Wisconsin Clean Energy Bill Moves Ahead

Will green technology save the state’s economy and environment?

BY LISA KAISER

**S**upporters of a proposed clean energy bill promise that not only will the new green energy standards help the environment, but that they will also help the state’s bottom line.

If passed by the state Legislature, the proposed Clean Energy Jobs Act would increase the amount of electricity to be generated by renewable energy, change building codes, implement new energy standards for appliances and cars sold in the state, revise the state’s requirements for new nuclear power plants, and require the state Department of Transportation (DOT) to consider greenhouse gas emissions when planning a new transportation project.

The bill, built on recommendations from the Governor’s Task Force on Global Warming, would require 25% of the state’s energy to be produced from renewable sources by 2025 and encourage businesses

and residents to conserve energy and increase energy efficiency measures.

Taken together, the bill’s provisions would cut the state’s greenhouse gas emissions 22% by 2022 and 75% by 2050.

The bill will be introduced in the state Legislature after the winter break, and supporters would like to deliver it to the governor’s desk by April 22, 2010, the 40th anniversary of Earth Day.

### No More Coal Plants

Rep. Spencer Black (D-Madison), who supports the bill, said that the state’s overall economic health would improve if our reliance on fossil fuels sourced from other states and countries is lessened.

“Wisconsin has no oil wells, no coal mines, no gas fields,” Black said. “That means \$20 billion a year leaves the state economy to purchase fuels from other states and nations. That’s the biggest single commodity drain on the state economy.”

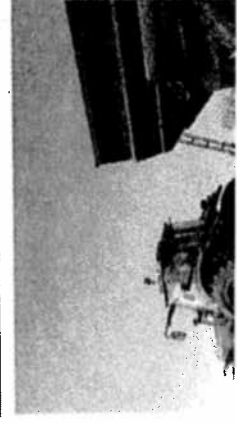
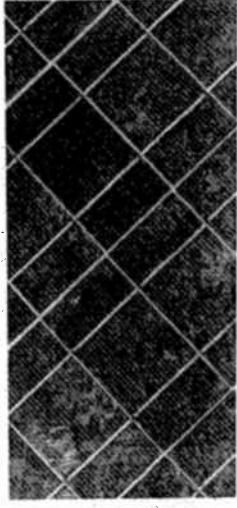
To increase investment in the state, the bill requires at least 40% of the utilities’ renewable energy sources to be generated within Wisconsin—for example, from solar, wind or biomass.

“By diversifying our sources of energy and not relying on fossil fuels, which are going to be increasingly expensive, and as laws and treaties increase the cost of carbon-intensive fuels, it’s smart for us economically to invest” in renewable energy sources in Wisconsin, Black said. “I think energy is going to cost more in the future, but I think this will keep those cost increases down over the long term.”

Black said that the conservation and energy efficiency requirements would hold back energy consumption and eliminate the need to build a new coal-fired power plant, like We Energies’ \$2.3 billion plant in Oak Creek, or a new nuclear power plant.

GREEN continued on next page >>

Conservation keeps cost down

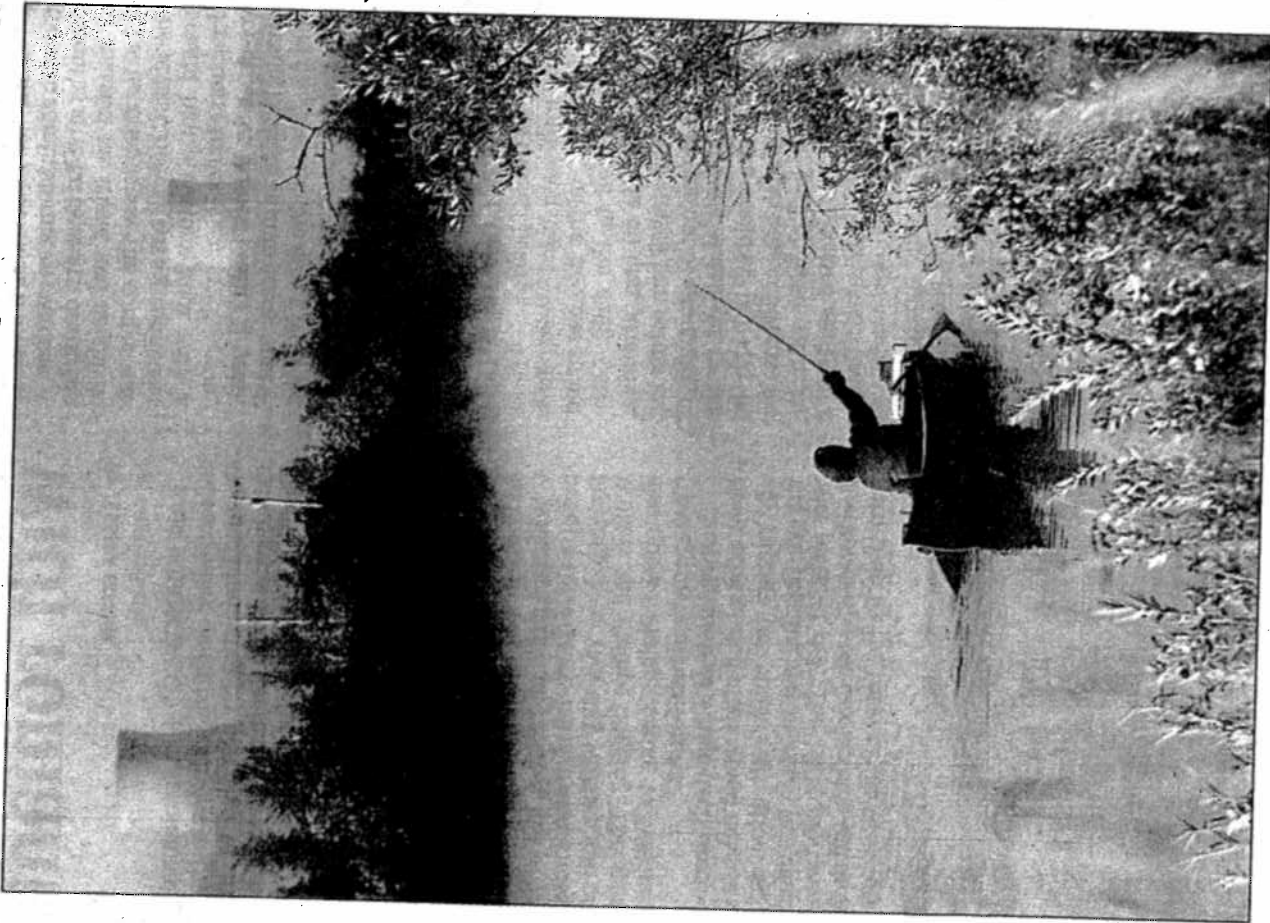








Lobbying efforts, global warming fears portend new reactors.



DEAN J. KOEPFLER - Tacoma (Wash.) News Tribune  
Cooling towers rise out of the Grays Harbor County mist near Elma, Wash. The Obama administration soon may guarantee loans to build nuclear reactors to generate electricity.

# A U.S. NUCLEAR RENAISSANCE?

By JUDY PASTERNAK  
For McClatchy Newspapers

WASHINGTON — The Obama administration soon may guarantee as much as \$18.5 billion in loans to build nuclear reactors to generate electricity, and Congress is considering whether to add billions more to support an expansion of nuclear power.

These actions come after an extensive, decade-long campaign in which companies and unions related to the industry have spent more than \$600 million on lobbying and nearly \$63 million on campaign contributions, according to an analysis by the Investigative Reporting Workshop at American University.

Nuclear power generates about 20 percent of America's electricity, but many existing reactors are aging and no new plant has been authorized since the 1979 incident at Three Mile Island, when small amounts of radiation were released and authorities feared for days that a huge surge might escape. That's in part because it can cost as much as \$8 billion to build a nuclear plant, and in part because the problems of nuclear waste and safety remain unresolved.

But the issue of climate change remains unresolved, too, and as the nation struggles to rebound from a deep recession, building nuclear reactors increasingly looks to some like a big jobs program.

The industry, capitalizing on both developments, argues nuclear energy must be part of any effort to curb carbon emissions.

Its longtime foes — environmentalists, labor unions, Democrats — increasingly agree. "This is nuclear's year," said House Majority Whip Jim Clyburn, D-S.C., who in recent years has become one of the industry's champions on Capitol Hill.

Democratic Sen. Barbara Boxer of California, who chairs the Senate Environment and Public Works Committee, has pledged the climate bill that's making its way through Congress will include government help for the nuclear industry. Sen. Lindsey Graham of South Carolina says he'd provide a much-sought Republican vote for the bill if its energy provisions include help for the nuclear industry.

Some Republicans, who historically have been friendlier to nuclear power, are pushing a plan to build 100 reactors over the next 20 years. The industry considers the forthcoming \$18.5 billion in guarantees a down payment on a more ambitious expansion.

Getting to this point has taken lots of time and money, and the debate over the safety and economics of nuclear electricity is far from settled.

During the Bush administration, the nuclear industry got more in electricity-related research and development funding than coal and other fossil fuels did combined, and Congress approved the loan guarantees.

More recently, the industry has been reaching out to Democrats, among them Clyburn. His state is among the nation's leading nuclear-power producers. President Barack Obama's home state of Illinois is the biggest, and he and some of his closest political allies have long relationships with Exelon Corp., the country's biggest nuclear power company.

The industry also has begun to build ties to important labor unions.

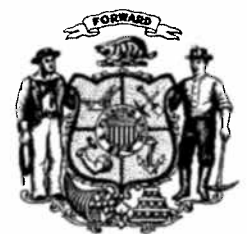
Judy Pasternak, formerly a reporter for the Los Angeles Times, reported and wrote this article under contract with the Investigative Reporting Workshop.

1-24-10 WJSJ





WISCONSIN STATE LEGISLATURE



## Environment

# No nukes for now

*The new energy bill might actually make it more difficult to build new*

By LAVILLA CAPENER  
and MIKE IVEY  
*The Capital Times*  
mivey@madison.com

**T**he new clean energy bill trumpeted by Gov. Jim Doyle has been called everything from a forward-thinking green initiative to a jobs-killing mandate that would cripple the Wisconsin economy.

One thing it's not, however, is a green light for nuclear power.

While the measure does modify the state's quarter-century moratorium on nuclear plant construction, enough obstacles remain that make it doubtful a new facility would be built here anytime soon. This comes despite the fact that nuclear power does not create global warming carbon emissions — unlike burning coal, which accounts for 70 percent of Wisconsin's homegrown electricity.

"I think it's fair to say anyone who wants nuclear energy will be very disappointed with this bill," says Scott Manley of Wisconsin Manufacturers & Commerce, the state's largest business lobby.

Dubbed the Clean Energy Jobs Act, the measure would require that 25 percent of the state's energy come from wind, solar, biomass or other renewable sources by 2025. It also toughens building codes to increase energy efficiency, restricts idling of diesel trucks to reduce pollution and raises vehicle emissions standards to match many other states, including California.

The bill is based largely on the recommendations from Doyle's Task Force on Global Warming, a broad group that included utilities, environmentalists, businesses and labor unions. The task force issued its final report in July 2008, with the goal of exploring how Wisconsin could reduce its contribution to global warming and develop a clean energy economy.

Media reports have routinely credited the task force with easing the way toward



'I think it's fair to say anyone who wants nuclear energy will be very disappointed with this bill.'

— Scott Manley,  
*Wisconsin Manufacturers  
& Commerce*

nuclear power by deleting a provision in Wisconsin's nuclear moratorium law that requires the development of a federally licensed long-term disposal facility before construction of a nuclear power plant.

The much-discussed Yucca Mountain federal disposal site in Nevada has yet to move forward despite years of debate.

But the new Wisconsin bill still mandates that any nuclear facility here have a waste disposal plan. That and other provisions in the bill, experts say, make it unlikely any new nuclear plant would open in Wisconsin in the foreseeable future.

One of the state's biggest nuclear power proponents admits the Doyle-backed bill does little to advance the cause. One reason, says Michael Corradini, UW-Madison professor of nuclear engineering and nuclear physics, is that there are three new coal-fired electric-generating facilities under construction: two near Milwaukee and another near Wausau.

"With those new coal plants coming online now, I don't see a need for any more substantial amounts of baseload electricity for at least 10 years," he says.

Roy Thilly, president of Wisconsin Public Power Inc., says the bill is purposely neutral on the issue of nuclear power. "It's not anti-nuclear or pro-nuclear," says Thilly, who co-chaired the task force. "It's a carefully

constructed package that needs to appeal to both ends of the political spectrum."

**W**isconsin has two nuclear power facilities that have operated quietly and safely since the 1970s, providing about 20 percent of the state's electricity. These plants are licensed to continue operating until at least 2030.

Wisconsin's existing nuclear moratorium was passed in 1983 at the height of anti-nuclear sentiment following the 1979 partial meltdown at the Three Mile Island Generating Station in Pennsylvania. In 27 years, the requirement that a federally licensed and operating waste storage facility be built before a nuclear plant could be constructed has never been met.

And Doyle's energy bill tacks on several new conditions that would need to be met before a new plant was built. For starters, the Legislature must pass and fully fund measures to achieve the renewable energy targets, and it would have to be shown that any proposed nuclear facility would be more economically feasible than the alternatives. A permanent waste facility would have to be built, and the nuclear power generated at a new plant would have to be used by Wisconsin customers only.

The head of the Citizens Utility Board thinks the act will actually make it more

# es for now

night actually make it more difficult to build new nuclear power plants



'I think it's fair to say anyone who wants nuclear energy will be very disappointed with this bill.'

— Scott Manley,  
Wisconsin Manufacturers  
& Commerce

nuclear power by deleting a provision in Wisconsin's nuclear moratorium law that requires the development of a federally licensed long-term disposal facility before construction of a nuclear power plant.

The much-discussed Yucca Mountain federal disposal site in Nevada has yet to move forward despite years of debate.

But the new Wisconsin bill still mandates that any nuclear facility here have a waste disposal plan. That and other provisions in the bill, experts say, make it unlikely any new nuclear plant would open in Wisconsin in the foreseeable future.

One of the state's biggest nuclear power proponents admits the Doyle-backed bill does little to advance the cause. One reason, says Michael Corradini, UW-Madison professor of nuclear engineering and nuclear-physics, is that there are three new coal-fired electric-generating facilities under construction: two near Milwaukee and another near Wausau.

"With those new coal plants coming online now, I don't see a need for any more substantial amounts of baseload electricity for at least 10 years," he says.

Roy Thilly, president of Wisconsin Public Power Inc., says the bill is purposely neutral on the issue of nuclear power. "It's not anti-nuclear or pro-nuclear," says Thilly, who co-chaired the task force. "It's a carefully

constructed package that needs to appeal to both ends of the political spectrum."

Wisconsin has two nuclear power facilities that have operated quietly and safely since the 1970s, providing about 20 percent of the state's electricity. These plants are licensed to continue operating until at least 2030.

Wisconsin's existing nuclear moratorium was passed in 1983 at the height of anti-nuclear sentiment following the 1979 partial meltdown at the Three Mile Island Generating Station in Pennsylvania. In 27 years, the requirement that a federally licensed and operating waste storage facility be built before a nuclear plant could be constructed has never been met.

And Doyle's energy bill tacks on several new conditions that would need to be met before a new plant was built. For starters, the Legislature must pass and fully fund measures to achieve the renewable energy targets, and it would have to be shown that any proposed nuclear facility would be more economically feasible than the alternatives. A permanent waste facility would have to be built, and the nuclear power generated at a new plant would have to be used by Wisconsin customers only.

The head of the Citizens Utility Board thinks the act will actually make it more

difficult to build a new nuclear plant simply because of the high cost of building a facility.

Executive Director Charlie Higley says the focus of the clean energy bill is on renewable electricity and energy efficiency rather than building new generating facilities. "The bottom line is we are using too much energy to begin with, and these investments in renewable energy will help us save money," says Higley.

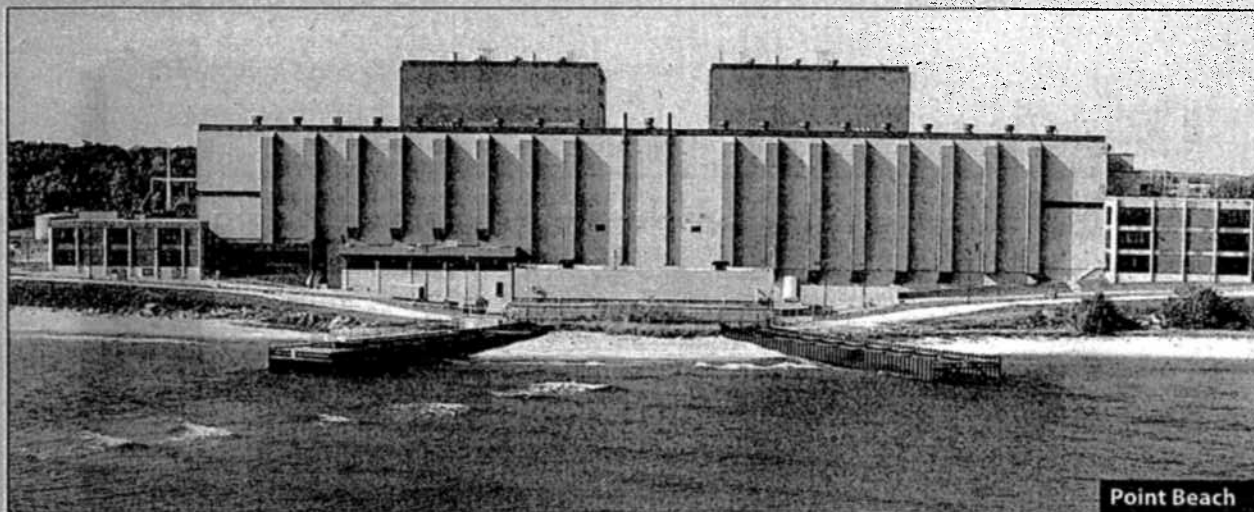
Tia Nelson, co-chair of the global warming task force, agrees. She says the bill is about Wisconsin doing its part to address climate change and become more energy-independent. "Personally, I think nuclear power is a distraction from the pressing matter before us: Namely, how does Wisconsin, in the near and midterm time horizon, reduce climate change risks and become more energy-independent?" Nelson says.

Republican leaders Rep. Mike Huebsch, R-West Salem, and Rep. Phil Montgomery, R-Green Bay, have introduced a stand-alone bill to repeal Wisconsin's nuclear moratorium every session since 2003. Huebsch says he doesn't expect his current bill to pass with Democrats in control of the Legislature, but he does genuinely believe nuclear power is the solution to Wisconsin's reliance on polluting fossil fuels.

"Nuclear energy is one of those things I have thought for some time would be the answer for future energy needs in our country and frankly around the globe," he says.

But as much as Huebsch would like to see the moratorium lifted, he's not supporting the Clean Energy Jobs Act. "It's clear the way this was drafted there was no intent of seeking any Republican input or Republican votes," Huebsch says. "I think it's got an uphill battle."

Huebsch says that although he is the ranking member of the Energy and Utilities Committee and on the Natural Resources Committee, he was not contacted or asked to give input on the bill. "It's clear they're



Point Beach

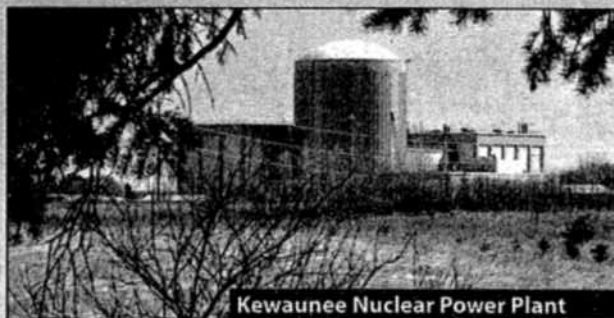
## Debating the merits

Wisconsin has two nuclear power plants: a pair of generating units at Point Beach, near Manitowoc; and the Kewaunee plant, located in Carlton, about 35 miles southeast of Green Bay. One of the Point Beach units went into commercial service in 1970 and is the third oldest plant in the nation. The Kewaunee plant went on line in 1974.

The two facilities have had a few problems with their water systems throughout the years. In 2002, a problem was found at Point Beach with the system that cools the reactors. The Kewaunee plant was taken off line in February 2005 for a design weakness but is back in operation.

Still, opponents of nuclear power argue it remains dangerous and costly, and that renewable sources are a better choice environmentally.

Peter Bradford, who from 1977 to 1982 served as commissioner of the federal Nuclear Regulatory Commission, thinks the United States shouldn't worry about where its electricity will come from in the coming de-



Kewaunee Nuclear Power Plant

acades. He says policymakers had similar concerns in the 1970s, but natural gas ended up filling the void.

"You don't need a vision," says Bradford, who visited Wisconsin to support the state's moratorium on nuclear power plants. "What you need is a set of the right principles, not the gift of prophecy."

Bradford also argues that a safe, long-term method for nuclear waste storage has yet to be invented.

Tia Nelson, co-chair of Gov. Jim Doyle's Task Force

on Global War power grow and shrinks, it is not nuclear energy.

"We know this is more dangerous today," says Neely, a late U.S. senator.

But proponents argue it is effective, safe and

"In terms of cost, nuclear has an edge," says a Madison professor of physics.

Rep. Mike Huesch, who supports nuclear power, says relying on old technology is not the best solution.

"It is a manager's job to deal with natural gas and the atmosphere," he says.

Huesch, who supports Wisconsin's nuclear moratorium, says building a new non-nuclear power plant is a costly construction.

"A large portion of our electricity comes from nuclear power, and we have to maintain it," he says.

Huesch says the state's investment in nuclear power is a costly investment to the state.

"Governor Doyle has been one of the best at dealing with global warming, but did not have an alternative plan," he says. "I think that

doing this on their own, and it's going to make a more challenging final project," Huesch says.

Huesch says because the task force was such a fragile coalition of a broad range of groups, if any part of the compromise is altered, the alliance will fall apart. He claims the tenuous nature of the compromise is why the two most moderate Democrats in the Legislature — Rep. Jim Soletski, D-Green Bay, and Sen. Jeffrey Plale, D-South Milwaukee — are sponsoring the bill with two of the most liberal, Rep. Spencer

January 20-26, 2010

Black, D-Madison, and Sen. Mark Miller, D-Monona.

But Higley thinks the Clean Energy Jobs Act stands a good chance of passing the Legislature in one piece as intended even without much GOP support. "We are hopeful that the Legislature will agree and implement policy," said Higley. "They are the right policies for Wisconsin."

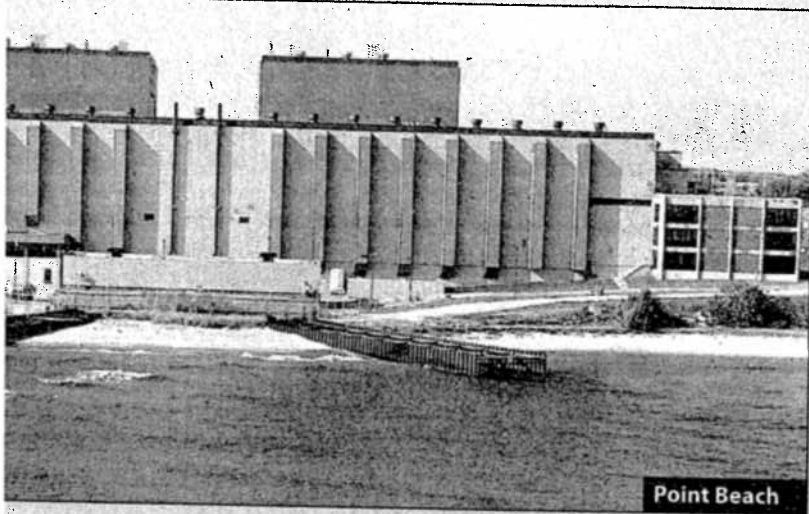
Higley also served on the task force and says the recommendations were a compromise between the utilities who wanted to repeal the moratorium entirely and en-

vironmental groups that were against a repeal. He warns if key parts of the recommendations change, some environmental groups could remove their support.

"If there is any weakening, like if the efficiency and renewables provisions are not strong enough, or if other changes are made to the nuclear moratorium that weakens the compromise, then it's possible that groups could end up not supporting the bill," Higley says.

Wisconsin Public Service Commission spokesperson Teresa Weidemann-Smith





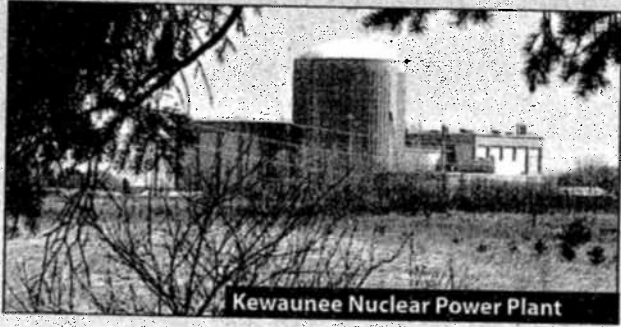
Point Beach

## the merits

ower plants: Point Beach, Waunakee plant, east of Green Bay, into commercial plant in the area in 1974.

problems with the system. In 2002, a decision was taken to address the weakness but it remains unclear if it remains a viable resource as a primary energy source.

erved as a primary energy source. The Wisconsin Public Service Commission is worried about the coming de-



Kewaunee Nuclear Power Plant

decades. He says policymakers had similar concerns in the 1970s, but natural gas ended up filling the void.

"You don't need a vision," says Bradford, who visited Wisconsin to support the state's moratorium on nuclear power plants. "What you need is a set of the right principles, not the gift of prophecy."

Bradford also argues that a safe, long-term method for nuclear waste storage has yet to be invented.

Tia Nelson, co-chair of Gov. Jim Doyle's Task Force

on Global Warming, says that as the costs of nuclear power grow and the price tag for renewable sources shrinks, it is not fiscally smart for the state to invest in nuclear energy.

"We know that nuclear power is more expensive and more dangerous than any other alternative before us today," says Nelson, daughter of Gaylord Nelson, the late U.S. senator who founded Earth Day.

But proponents of nuclear power argue it is a cost-effective, safe and clean alternative to fossil fuels.

"In terms of environmental factors, I do think that nuclear has an edge," says Michael Corradini, UW-Madison professor of nuclear engineering and nuclear physics.

Rep. Mike Huebsch, R-West Salem, says opponents of nuclear power who argue the waste is dangerous are relying on old data from the 1970s. He says the U.S. has the technology to store and recycle nuclear waste.

"It is a manageable challenge, and it's certainly better to deal with the waste that way than with coal and natural gas and oil, which is just pumped into the atmosphere," he says.

Huebsch, who is a co-author of a bill to repeal Wisconsin's nuclear power moratorium, says the costs of building a new plant would be comparable to a non-nuclear power plant if activists didn't try to stop construction.

"A large portion of the cost of building new nuclear plants relies on the delays, litigation and the impact the environmental groups have on trying to stop nuclear power, and they've been doing this for 30 years," he says.

Huebsch says the Task Force on Global Warming's recommendations for energy efficiency will be more costly to the state than investing in nuclear.

"Governor Doyle said we would be in the forefront or be one of the national leaders in reducing greenhouse gases, but did not have any idea of the impact it would have on our already struggling economy," Huebsch says. "I think that was reckless and dangerous."

— Lavilla Capener

Black, D-Madison, and Sen. Mark Miller, D-Monona.

But Higley thinks the Clean Energy Jobs Act stands a good chance of passing the Legislature in one piece as intended even without much GOP support. "We are hopeful that the Legislature will agree and implement policy," said Higley. "They are the right policies for Wisconsin."

Higley also served on the task force and says the recommendations were a compromise between the utilities who wanted to repeal the moratorium entirely and en-

vironmental groups that were against a repeal. He warns if key parts of the recommendations change, some environmental groups could remove their support.

"If there is any weakening, like if the efficiency and renewables provisions are not strong enough, or if other changes are made to the nuclear moratorium that weakens the compromise, then it's possible that groups could end up not supporting the bill," Higley says.

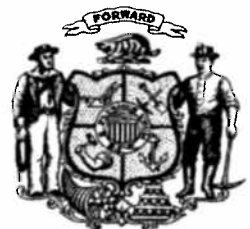
Wisconsin Public Service Commission spokesperson Teresa Weidemann-Smith

says nuclear's future is uncertain. The last time the PSC received an application for a nuclear power plant was August 1978, but it was eventually withdrawn.

"Whether a new nuclear plant ever gets built in Wisconsin will depend on our future energy needs, the availability of other power generation options, what form federal energy legislation takes, and whether the economics of a new nuclear plant make sense for Wisconsin," Weidemann-Smith says.



# WISCONSIN STATE LEGISLATURE



# Market watch

Visit at [www.jsonline.com/business](http://www.jsonline.com/business).

## Top Losers Industrials



## NASDAQ and American Stock Exchange

Wkl chg	Pct chg	Top Losers	Last	Wkl chg	Pct chg
+1.87	+89.0	SearchM un	6.25	-3.90	-38.4
+5.33	+87.1	ReadyMix	2.10	-.92	-30.5
+2.86	+54.9	ExideTc	5.41	-2.32	-30.0
+18.70	+44.2	AeroViron	24.15	-9.92	-29.1
+1.10	+41.5	PhaseFwd	10.60	-4.02	-27.5
+.86	+39.8	ParkBcp h	5.10	-1.85	-26.6
+4.83	+38.2	LithiaMot	5.82	-1.98	-25.4
+1.98	+37.5	CapBNC	3.11	-1.05	-25.2
+1.70	+36.9	PECO II rsh	3.75	-1.24	-24.8
+2.11	+32.4	Labophm g	2.00	-.62	-23.7
+3.26	+31.5	Hurray!	2.70	-.83	-23.5
+.71	+31.4	NetSuite	12.16	-3.63	-23.0
+1.78	+28.4	MoSys	3.55	-.94	-20.9
+.85	+28.3	SpiritAero	17.01	-4.44	-20.7
+2.74	+27.8	Toreador	10.07	-2.54	-20.1
+.85	+27.4	Santarus	3.77	-.93	-19.7
+1.16	+26.3	CreditAcc	42.79	-10.43	-19.6
+.58	+25.8	DoubleTake	8.22	-1.99	-19.5
+1.53	+25.3	GenCorp	4.51	-1.09	-19.5
+.51	+25.2	NIVS INT n	2.94	-.69	-19.0

## and companies with extensive local operations

High	Weekly Low	Last	Fri Chg	Wkly Chg	Wkly %Chg	Yrly EPS	52-wk %Chg
8.84	24.96	25.24	+2.1	-.12	-.5	+2.12	+8.2
7.35	15.93	16.30	-.01	-.47	-2.8	+0.10	+9
1.89	30.12	30.70	+1.0	-.50	-1.6	+0.66	+8.9
9.99	19.14	19.38	-.04	-.48	-2.4	+1.86	+23.8
1.29	1.01	1.06	+0.2	-.19	-15.2	-14.13	-36.6
7.40	24.56	24.95	+0.9	-.88	-3.4	-0.11	+18.7
2.98	12.09	12.55	+2.6	-.16	-1.3	-1.25	-16.6
2.81	30.18	30.92	-.81	-.51	-1.6	+4.14	+23.6
7.95	32.58	36.66	+0.4	-1.13	-3.0	+1.80	+53.9
6.75	6.27	6.37	+0.3	-.31	-4.6	+0.29	-22.8
0.48	47.47	48.62	+1.7	-.09	-.2		+98.9
6.93	27.09	27.84	+3.0	-.22	-.8	+1.45	+26.3
9.75	8.42	9.10	+1.5	+3.5	+4.0	-10.17	+604.7
6.64	26.91	27.79	+3.9	-.47	-1.7	+1.18	+30.3
6.81	15.92	16.30	-.14	-.23	-1.4	+0.57	+15.4
1.70	10.00	10.37	-.18	-.36	-3.4	-6.62	+288.3
7.44	47.81	50.63	-.46	-1.75	-3.3	+3.93	+234.6
5.22	21.56	22.66	-.33	-1.03	-4.3		+168.9
1.76	.66	.70	+0.4	-.06	-7.8	-3.86	-40.1
5.23	41.88	42.56	-.72	-.34	-.8	+2.49	+64.3
8.39	17.53	17.75	-.05	+1.2	+7	+1.55	-7.3
1.17	48.33	49.82	-.05	-.13	-.3	+3.11	+36.0
0.57	18.51	19.07	-.26	-.75	-3.8	-2.85	+115.8
7.12	41.79	45.15	-.12	+3.61	+8.7	+2.23	+43.9
4.15	22.74	23.04	-.50	-.52	-2.2	+1.38	+42.3
0.15	9.80	9.80	-.35	-.35	-3.4	+0.60	-16.5
7.54	44.80	45.73	+0.3	+6.9	+1.5	+3.11	+34.3
3.64	39.93	40.73	-1.20	-.84	-2.0	+1.61	+38.1
7.03	15.25	15.79	-.25	-.29	-1.8	+1.03	+47.9
2.40	2.15	2.18	+0.1	-.13	-5.6	-2.89	+10.2
3.70	21.81	22.57	-.12	-.17	-.7	-.025	+81.8
2.71	40.73	41.28	-.49	-.57	-1.4	-2.00	+4.4
1.10	37.03	38.30	-.05	-.64	-1.6	+2.24	+60.4
9.97	27.35	28.06	-.41	+2.3	+8	+0.91	+136.8
0.80	10.61	10.80	+1.9	+1.9	+1.8	-1.06	+41.8

## Business Issues John Torinus

# Mandates not always such a healthy choice

Democrats at all levels do love their mandates.

The mandate to purchase individual coverage was part of the reason health care insurance reform has crashed in Congress, but don't think it's going away. Forcing young healthy people into insurance pools is how the funds will be raised to cover people with pre-existing conditions.

The "healthies" would pay for the "unhealthies," which insurance companies would be mandated to include in their plans. The two mandates are inextricably linked.

Now, the Democrats in the Wisconsin Legislature are showing their zest for mandates as they push a sweeping energy agenda. To cut down on carbon emissions, they propose to mandate that 25% of the state's power come from alternative energy sources by 2025.

The top-down edict would carry an enormous price tag that would be paid by users of electricity. One estimate of the capital costs is \$16 billion over the next 15 years, which is about equal to the current investment in power generation in the state.

That number is derived from a price of \$2.5 million per megawatt of construction and a 25% renewable share that would equal 6,400 megawatts by 2025.

The irony is that the state is estimated to have 30% excess capacity at present. That has resulted from the slowdown in the economy and from new power plants coming on line in Oak Creek and Weston.

In the old days of the 1980s and 1990s, utilities projected about a 3% annual increase in energy use every year for as far as the eye could see. But the "new normal economy" sees no

such increases.

Indeed, We Energies reported that customer power use dropped 8% in 2009. That's a recessionary effect, but some consumption reduction may prove permanent.

Those stubborn facts do not deter the environmentalists in the Legislature. They simply recast their bill as a "green jobs bill." They and Gov. Jim Doyle assert that the 25% mandate will result in 15,000 green jobs.

It's hard to follow the logic or math of that calculation. You would think that the substitution of alternative energy for coal energy would be neutral vis-a-vis jobs, namely that every job gained on the green side would be lost on the black side.

Even more inexplicable is the absence of any visible economic model for the massive energy conversion. When a business is undertaking a major change in direction, such as a major acquisition, financial models are run to look at every variable, contingency and outcome. Modeling is tricky business because the assumptions are everything. But at least decision-makers in business have some guidance on the costs and returns on their plans.

Not so in the Legislature. Just slap on a mandate and damn the economic consequences. I won't get into the environmental argument about global warming and Wisconsin's wee role in global carbon emissions.

But to demand an economic model for what the 25% edict will mean for individual and business ratepayers seems irrefutably prudent. I've commented before that the smart guys who push these mandates must have taken rhetoric in place of math in college.

Numbers matter. We all

want environmental improvement, but the ways and means of getting there are all important. Like health care, we need sensible ways to pay for societal improvements.

The 23 business groups who oppose the global warming bill maintain that per capita energy costs will rise by more than \$1,000 per year by 2025.

The better approach to health care coverage and carbon reduction is collaborative. Government should work with energy companies and with consumers to devise new business models and technologies to cut costs as the transitions are made.

Sen. Ted Kanavas put it best. He has no problem with a goal of changing the mix of fuels in Wisconsin, but he added, "It has to happen naturally — not be forced."

The government at the state and national levels would be better off investing heavily in new energy sources, including safer nuclear, because carbon reduction will depend in the end on the development of new technologies.

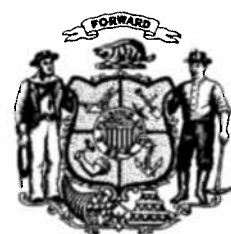
That kind of investment, along with the right set of incentives, would make the shift away from coal more affordable. The intelligent decisions that underpin a marketplace would help make the shift less painful.

Does anyone really think that the broad-brush mandate approach won't be very expensive and very painful? Electric rates in this state shot up more than 50% in the last decade. We can't stand a lot more of that kind of inflation.

*John Torinus is chairman of Serigraph Inc. of West Bend and a founder of BizStarts Milwaukee, a nonprofit organization dedicated to fostering entrepreneurship in southeastern Wisconsin. Contact him at [torcolumn@serigraph.com](mailto:torcolumn@serigraph.com).*



# WISCONSIN STATE LEGISLATURE







## New Wind Farms in the U.S. Do Not Bring Jobs

Millions Have Been Invested in Wind Farms, but That Hasn't Brought Jobs

By JONATHAN KARL

Feb. 9, 2010—

Despite all the talk of green jobs, the overwhelming majority of stimulus money spent on wind power has gone to foreign companies, according to a new report by the Investigative Reporting Workshop at the American University's School of Communication in Washington, D.C.

Nearly \$2 billion in money from the American Recovery and Reinvestment Act has been spent on wind power, funding the creation of enough new wind farms to power 2.4 million homes over the past year. But the study found that nearly 80 percent of that money has gone to foreign manufacturers of wind turbines.

### So Where Are the Jobs?

"Most of the jobs are going overseas," said Russ Choma at the [Investigative Reporting Workshop](#). He analyzed which foreign firms had accepted the most stimulus money. "According to our estimates, about 6,000 jobs have been created overseas, and maybe a couple hundred have been created in the U.S."

Even with the infusion of so much stimulus money, [a recent report by American Wind Energy Association](#) showed a drop in U.S. wind manufacturing jobs last year.

Sen. Chuck Schumer, D-N.Y., called the flow of money to foreign companies an outrage, because the stimulus, he said, was intended to create jobs inside the United States.

"This is one of those stories in Washington that when you tell people five miles outside the Beltway, or anywhere else in America, they cannot believe it," Schumer told ABC News, "It makes people lose faith in government, and it frankly infuriates me."

Matt Rogers, the senior adviser to the Secretary of Energy for the Recovery Act, denied there was a problem.

"The recovery act is creating jobs in the U.S. for American workers," said Rogers, "That is what the recovery act is about, that is what it is doing. Every dollar from the recovery act is going to create jobs for the American workers here in the U.S."

### How Did This Happen?

Several of the large European turbine manufacturers had limited manufacturing facilities in the United States, but there was nothing in the stimulus plan that required that the turbines, or any other equipment needed for the wind farms, be made here, said Rogers. There are strict "Buy America" provisions in the

Recovery Act, but this Green Energy Stimulus initiative turned the existing tax credits into cash grants, bypassing the "Buy America" provision.

Iberdrola, one of the largest operators of renewable energy worldwide, is based in Spain and has received the most U.S. stimulus dollars -- \$577 million. It buys some of its turbines from another Spanish manufacturer, Gamesa, which has a U.S. connection. Gamesa has two facilities to manufacture turbine blades in Pennsylvania, but the company said the market forced it to temporarily lay off nearly 100 workers.

Eric Sheesley was one of those laid off from the Gamesa plant before Thanksgiving. "When we're employing other countries, we can't feed our kids at home. It gets hard you know." Sheesley had a glimmer of hope when a letter arrived this week telling him to report back to work next week.

One reason so much money is going overseas is that there is not much of a wind power industry in the United States -- only two major American manufacturers make wind turbines: General Electric Energy and Clipper Wind based in Carpinteria, Calif. Even those companies do a significant amount of their manufacturing overseas. General Electric told ABC News that GE's Renewable Energy business has 3,000 employees around the world, 1,350 here in the United States.

Schumer said the way to revitalize the domestic wind power industry and to create green jobs is to require that at least some of the turbine equipment to be made in the United States.

### **An American Farm With Chinese Jobs**

Perhaps the most controversial wind project is one that has yet to receive stimulus money.

A Chinese company called A-power is helping to build a massive \$1.5 billion wind farm in West Texas. The consortium behind the project expects to get \$450 million in stimulus money.

Walt Hornaday, an American partner on the project, said it would create some American jobs. "Our estimation," he said, "is that we are going to have on the order of 300 construction jobs just within the fence of the project."

But that's in addition to 2,000 manufacturing jobs -- many of them in China.

Lauren Reynolds, a reporter at ABC's San Diego affiliate 10 News, paid a visit to the vacant office of A-power.

To read more about how wind energy companies in San Diego are forced to spend their federal stimulus dollars abroad, go to today's San Diego Tribune and the Watch Dog Institute's Web page.

Copyright © 2010 ABC News Internet Ventures



THE MILWAUKEE JOURNAL  
LUCIUS NIEMAN · HARRY J. GRANT  
Founder 1882 1916-1963

MILWAUKEE · WISCONSIN  
**JOURNAL SENTINEL**

THE MILWAUKEE SENTINEL  
SOLOMON JUNEAU  
Founder 1837

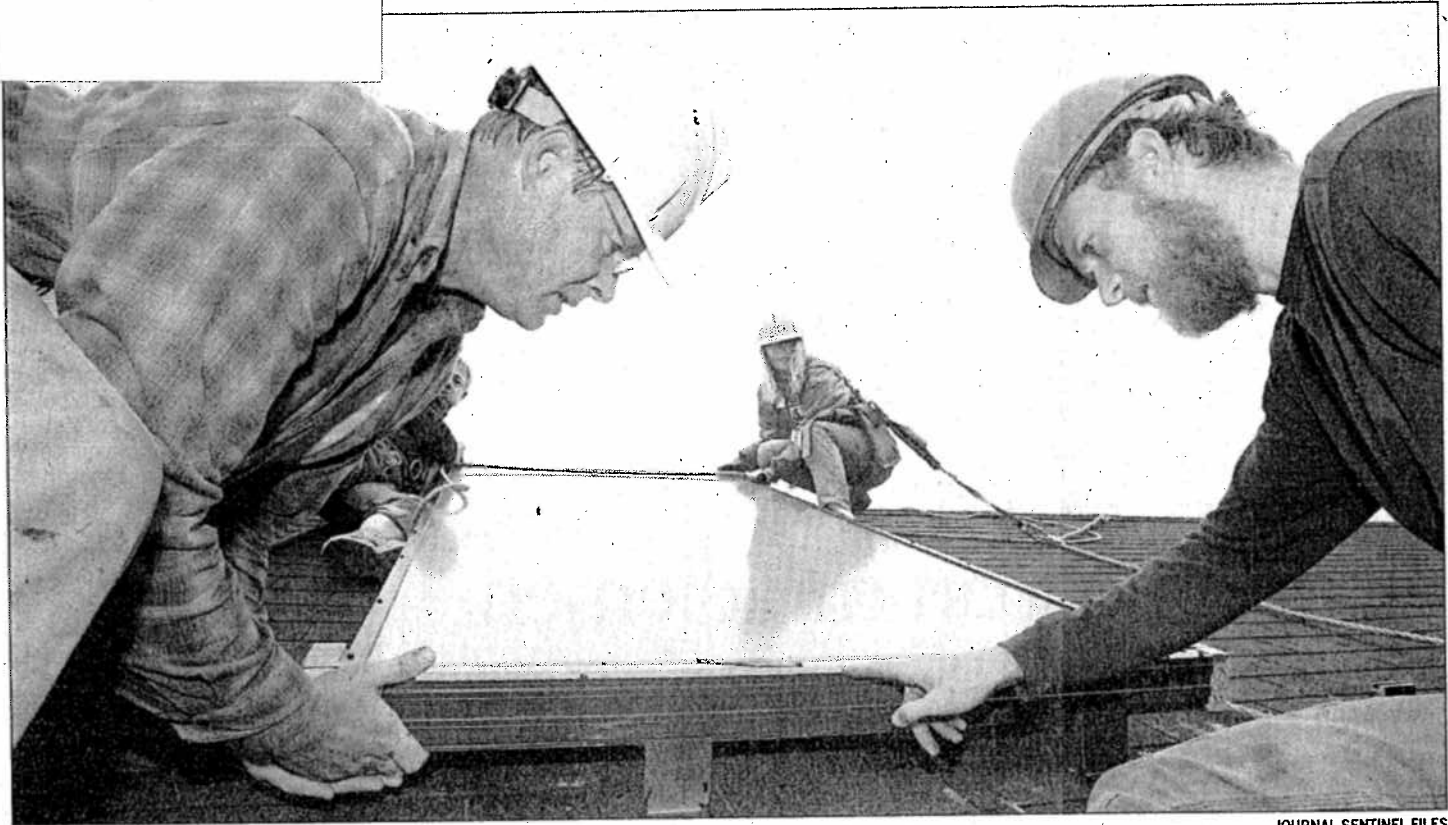
ELIZABETH BRENNER, *Publisher*    MARTIN KAISER, *Editor*

O. RICARDO PIMENTEL, *Editorial Page Editor*    DAVID D. HAYNES, *Deputy Editorial Page Editor*    ERNST-ULRICH FRANZEN, *Associate Editorial Page Editor*

## EDITORIALS

[JSOnline.com/opinion](http://JSOnline.com/opinion)  
[JSOnline.com/blogs/acrosstheboard](http://JSOnline.com/blogs/acrosstheboard)

*If in case  
you wish  
to have*



JOURNAL SENTINEL FILES

Will the Clean Energy Jobs Act create "green" jobs in Wisconsin, or will thousands of jobs be lost because of the mandates?

CLEAN ENERGY

# This act is not just about jobs; it's about the future

It's about whether the quality of our future is seriously diminished by climate change. Wisconsin must do its part. Tweak it, but approve the Clean Energy Jobs Act.

The tone and tenor of the debate over the Clean Energy Jobs Act was determined the moment the legislation was named.

Supporters built into the name what they, not unreasonably, believed would be one of the bill's principal virtues: job creation. But, with recession-induced trauma still fresh in everyone's minds, it is simply too easy and expedient — facts be damned — to call virtually any new legislation a jobs killer, from health care reform to even a jobs bill.

We believe the jobs will be there, but it is important at this juncture to recognize that this bill is not really intended as an economic stimulus measure. In very real terms, it is an attempt at economic and environmental reinvention — done with the specter of climate change and all its effects looming.

Yes, climate change, with humanity as a major contributor, is real. But even if you don't believe that, there is little to no downside to a future in which a good portion of our energy comes from renewable sources — 25% by 2025 — and no downside to a future in which energy efficiencies mean we are doing the same or more with less energy.

The reinvention comes in two other goals: growing new technologies and fostering energy independence. Doing this will have far more enduring effects on those bottom lines in the future than any short-term benefit derived from doing nothing now to cushion today's corporate bottom lines.

On jobs, there are two dueling studies cited most often on whether the Clean Energy Jobs Act will actually create jobs.

One is by researchers at Michigan State University and the University of Southern California for the Center on Climate Strategies, the results of which are similar to findings by various state agencies. It forecasts a net increase of more than 16,200 new jobs in Wisconsin by 2025. It predicts a boost to the state's economy of \$4.85 billion total "in net present value" from 2011 to 2025.

The other study was done by the Wisconsin Policy Research Institute. It contends that policies *similar to those in the bill* would kill 43,000 Wisconsin jobs. The problem: It did not model the actual policies in the bill.

The Michigan study is more believable. Our guess is that some jobs will be lost and some will be gained, but we believe that in the end there will be a net gain. The Michigan study, after all, looked at what's in the bill. Those who disagree with its conclusions will likely pin their doubts on the fact that the study was commissioned by the state, whose governor has made passage of this legislation one of his key goals for the remainder of his term. He is not running for re-election.

But we invite the critics to read the study and, if they're going to criticize, to focus instead on the assumptions built in and the methodology.

Here's one assumption we're making: Whether or not Congress ever enacts some form of carbon tax (it should), the cost of carbon will continue to rise.

Already, the Environmental Protection Agency has said greenhouse gases pose a danger to public health, which led to a decision in December to regulate carbon dioxide emissions. This is another way of saying that the cost of diminishing resources — fossil fuels — will continue to rise and that even the cost of a resource touted as plentiful — coal — will as well.

You want to talk about job killers? Energy dependence, rising energy costs, inefficiencies allowed to continue unfettered, environmental changes wrought by climate change — these are viruses deadlier than anything government could impose.

The Clean Energy Jobs Act, including its requirement for low-carbon fuels, is a hedge the state should enact against that.

And even if you don't believe that the Clean Energy Jobs Act will result in lower utility rates over time (predicated on some form of carbon tax), does any-

one think all those maladies above won't also result in higher rates?

The efficiencies alone in this bill should compel approval. The state will develop new building codes for residential, commercial, agricultural and its own buildings.

This is not to say that this bill can't be improved. The bill would allow construction of new nuclear plants, no longer requiring a site for long-term disposal of spent nuclear fuel to be developed before a nuclear plant could be built. However, the bill also requires that power generated from any new nuclear plant built in the state be used only in Wisconsin. This is unworkable. Wisconsin electricity is part of a larger pool of Midwestern electricity.

The bill also says that if any part of the nuclear measure is determined to be unconstitutional, all of the nuclear changes go away. That's like having a loaf of bread with a bad slice at the end but throwing the entire thing away.

Other tweaks will be necessary as well. Worried about whether the state's utilities can meet that 25% by 2025? It's a realistic goal. But we also know that the bill provides for delays if the price gets too hefty. In any case, let the energy savings created by efficiencies count toward the renewable energy goal.

This bill is said to be dead. If so, it will be in fine company. The same is said of other legislation — on Milwaukee Public Schools governance, for instance.

We hope it isn't true. We hope this Legislature doesn't share with its counterparts on the Potomac that syndrome that affects the ability to accomplish much of anything — if the issue is important and excites passions.

At bottom, this bill is about just such a topic; climate change — doing our part to moderate its effects. Broader federal legislation would be preferable, but it would be irresponsible for the state to wait.

Change the bill to cushion impact and cost where advisable. But deal with it.

Is the Clean Energy Jobs Act a good thing for Wisconsin? E-mail your opinion to [jsedit@journalssentinel.com](mailto:jsedit@journalssentinel.com) to be considered for publication as a letter to the editor. Please see letters guidelines.

# ANOTHER

# VIEW

BY TED KANAVAS

## State energy bill offers suicide economics

The Legislature in Madison is debating a \$15 billion utility rate hike, under the guise of "green jobs," to satisfy the ideological musings of the far left.

This complex piece of legislation known as the Clean Energy Jobs Act is an incredibly expensive solution in search of a problem. Wisconsin has a surplus of energy, not a deficit. We don't need politicians forcing us to play their game and sticking us with the price of admission.

This bill's authors believe Wisconsinites have to stop global warming. Not the world, not Americans — Wisconsinites. They must think Wisconsin's air stops at its borders. If that were true, our efforts could bear fruit. But it isn't.

We are foolish to act alone. If we pass this bill, Wisconsin will become the Midwest's economic pariah. High taxes and stiff regulations mixed with high energy costs — it's suicide economics.

It is this warped way of thinking that has given us the unrealistic "25 in 25" standard.

The bill requires that 25% of Wisconsin's energy is produced from renewable sources by 2025.

In order to meet that goal, the bill sharply increases residential and commercial utility rates so energy companies can fund construction of windmills and other sources of clean energy. The bill also implements strict restrictions of greenhouse gas emissions by tying Wisconsin's motor vehicle fuel standards to those of California.

How the authors arrived at this "25 in 25" figure, I'm not sure. It appears to be an arbitrary number. When it comes to public policy though, I don't believe in arbitrary.



Kanavas

*According to the Wisconsin Policy Research Institute, reaching the bills objectives will cost the average Wisconsinite \$1,012 a year in income.*

These numbers are in fact very significant for you and me. According to the Wisconsin Policy Research Institute, reaching the bill's objectives will cost the average Wisconsinite \$1,012 a year in income.

I believe we need to take a more practical approach to energy policy. We need a balanced mix of energy sources. We need to invest in clean coal technologies, expand our natural nuclear power, leverage our natural gas resources and embrace our proximity to Canadian oil.

How we use each of these resources should depend upon the technology we have available. We cannot force ourselves to meet an arbitrary renewable fuels standard focusing on windmills, for example, if we don't have the technology to store the energy for the days when the wind isn't blowing.

I support a shift to a more renewable fuel model, but it should happen naturally. We don't need to be hit over the head with a blunt object in order to move forward.

When the appropriate technologies become available and the open market develops a way to create sustainable jobs and make a profit, our renewable energy needs will be satisfied.

Sen. Ted Kanavas, a Republican, represents Wisconsin's 33rd Senate District.





## Economic growth depends on changes to energy act

As our nation begins to transition toward increased clean energy generation, Wisconsin has a great opportunity to play a leadership role in this emerging industry. But time is running short for the Wisconsin Legislature to pass meaningful legislation that would ensure our state is positioned to take advantage of these opportunities.

In the summer of 2008, the Governor's Task Force on Global Warming issued a final report on its recommendations for reducing Wisconsin's impact on global warming while growing our state's economy and creating new jobs. That report was the catalyst for the Clean Energy Jobs Act, which was discussed through much of 2009 before being formally introduced in the Legislature in January of this year.

The job creation vision for the bill is a good one. But the implementation leaves much to be desired.

Many members of the Wisconsin Business Council are perfect examples of the economic opportunity that exists in the clean energy and conservation sectors. Our

**PHILLIP H. PRANGE**  
Guest  
commentary



members are among the nation's leaders in providing global industrial solutions that conserve energy, utilize alternative fuels, and create jobs.

But there are provisions in the bill that will make doing business in Wisconsin harder for these and other companies should the legislation pass in its current form. It's crucial that legislators start working to re-focus the bill in a way that ensures our state sees the economic development that the bill promises.

However, as the debate over the Clean Energy Jobs Act continues in Madison, the window for action is shrinking by the day. There are just a few opportunities left for action, and given the complexity and scale of the bill, and the number of industries that have a stake in the outcome, the chances of passing legislation before

the end of this legislative session are becoming increasingly bleak.

Make no mistake: If the bill is able to promote clean energy and conservation efforts in a way that recognizes the needs of Wisconsin's different industries, it will be a boon for our state's economy and create new jobs.

We need to strip away those parts of the bill that will hinder that job growth and generate legislation that is capable of passing through both houses of the legislature.

Now is the time for leadership on the Clean Energy Jobs Act. The opportunity to capitalize on clean energy growth is there, but legislators need to focus on finding a bipartisan compromise, getting to the root of what needs to be done to secure Wisconsin's economic future, and implementing legislation in a way that makes sense for Wisconsin businesses.

Let's not let this opportunity pass us by.

Phillip H. Prange is the president and chief executive officer of the Wisconsin Business Council. Web site [www.wibusiness.org](http://www.wibusiness.org).



Stable energy prices create certainty for utilities and consumers and provide security against unpredictable fuel cost increases.

The Clean Energy Jobs Act is a smart policy that will improve our economy and make us more competitive. An Enhanced Renewable Portfolio Standard (E-RPS), providing for 25 percent of our electricity from renewable energy resources by 2025, will keep us on pace with neighboring states.

Policies that encourage renewable energy development would allow many more farmers and businesses to install renewable energy systems. While many residents are interested in installing a system, a lack of consistent utility programs prevents them from securing financing for their projects.

Programs that support small-scale renewable energy included in the Clean Energy Jobs Act would establish a standard statewide buyback rate set by the Public Service Commission.

Two economic studies, one conducted by the Department of Commerce, the Public Service Commission, and other state agencies and the other conducted by an independent policy research institute, demonstrate that the Clean Energy Jobs Act will result in a minimum net increase of 15,000 new jobs and provide nearly \$5 billion of new investment in our state by 2025 by reducing our dependence on out-of-state energy sources.

Guy Selsmeyer is president of Northern Biogas.

## Guest commentary

# Businesses support Clean Energy Jobs Act

BY GUY SELSMEYER

One sector of the Wisconsin economy, renewable energy, continues to create jobs, despite the economic recession. Already this year, three new businesses in renewable energy manufacturing have made headlines, creating nearly 1,000 manufacturing jobs in Wisconsin in the next few years.

It is therefore perplexing that we continue to hear claims from certain interest groups that policies encouraging renewable energy generation will eliminate jobs in Wisconsin. Renewable energy business see firsthand the potential for new job creation in the renewable energy industry.

Northern Biogas provides design and construction services for anaerobic digestion. Along with various other benefits, anaerobic digesters produce energy from local, organic resources such as livestock manure. Wisconsin spends \$16 billion annually to import fossil fuels such as coal, oil, and natural gas from out-of-state.

Fortunately, our state has an abundance of natural resources, such as woody biomass, solar, wind, and livestock manure, in addition to other energy sources such as food processing waste and landfill gas. Unlike traditional energy sources plagued with volatile fuel prices, there are no fuel costs associated with wind and solar, while biomass and biogas use locally produced fuel with no or low costs.

# OPINION

Contact Opinion page editor Warren Bluhm at (920) 431-8341 or [wbluhm@greenbaypressgazette.com](mailto:wbluhm@greenbaypressgazette.com) ■ Green Bay Press-Gazette

Tuesday, March 9, 2010 ★

A-6