



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

2005-06

(session year)

Senate

(Assembly, Senate or Joint)

**Committee on Natural Resources and
Transportation...**

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**

Senate

Record of Committee Proceedings

Committee on Natural Resources and Transportation

Senate Bill 41

Relating to: the definition of biodiesel fuel and the labeling, advertising, and promoting of biodiesel fuel and biodiesel fuel blends for sale.

By Senators Cowles, Kapanke, Harsdorf, Brown, Lassa, Miller, Olsen, Risser and Wirch; cosponsored by Representatives Ott, Nerison, Montgomery, Freese, Gronemus, Hahn, Ballweg, Hines, Loeffelholz, Petrowski, Musser, Towns, Ainsworth, Albers, Bies, Krawczyk, Molepske, Kestell, Nelson, Vrakas, Townsend and Lehman.

February 02, 2005 Referred to Committee on Natural Resources and Transportation.

March 17, 2005 **PUBLIC HEARING HELD**

Present: (4) Senators Kedzie, Stepp, Wirch and Breske.
Absent: (1) Senator Kapanke.

Appearances For

- Todd Stuart — Office of Senator Rob Cowles
- Robert Karls — Wisconsin Soybean Association
- Jaime Derr — Wisconsin Soybean Association and the National Biodiesel Board
- Keith Ripp, Lodi — Ripp Farms
- Robert Derr, Marshall
- Royce Myers, Racine

Appearances Against

- None.

Appearances for Information Only

- None.

Registrations For

- Al Ott — Representative, 3rd Assembly District
- Beata Kalies — Wisconsin Federation of Cooperatives
- Sabrina Gentile — Wisconsin Farm Bureau
- Erin Roth — American Petroleum Institute and the Wisconsin Petroleum Council

Registrations Against

- None.

April 21, 2005

EXECUTIVE SESSION HELD

Present: (5) Senators Kedzie, Stepp, Kapanke, Wirch and
Breske.

Absent: (0) None.

Moved by Senator Wirch, seconded by Senator Breske that **Senate
Amendment 1** be recommended for adoption.

Ayes: (5) Senators Kedzie, Stepp, Kapanke, Wirch and
Breske.

Noes: (0) None.

**ADOPTION OF SENATE AMENDMENT 1 RECOMMENDED,
Ayes 5, Noes 0**

Moved by Senator Breske, seconded by Senator Wirch that **Senate
Bill 41** be recommended for passage as amended.

Ayes: (5) Senators Kedzie, Stepp, Kapanke, Wirch and
Breske.

Noes: (0) None.

PASSAGE AS AMENDED RECOMMENDED, Ayes 5, Noes 0

Matt Phillips
Committee Clerk

Vote Record

Committee on Natural Resources and Transportation

Date: 4-21-05

Moved by: Breske

Seconded by: Wirch

AB _____ SB 411 Clearinghouse Rule _____
 AJR _____ SJR _____ Appointment _____
 AR _____ SR _____ Other _____

A/S Amdt _____
 A/S Amdt _____ to A/S Amdt _____
 A/S Sub Amdt _____
 A/S Amdt _____ to A/S Sub Amdt _____
 A/S Amdt _____ to A/S Amdt _____ to A/S Sub Amdt _____

Be recommended for:
 Passage Adoption Confirmation Concurrence Indefinite Postponement
 Introduction Rejection Tabling Nonconcurrence

Committee Member	Aye	No	Absent	Not Voting
Senator Neal Kedzie, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Cathy Stepp	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Dan Kapanke	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Robert Wirch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Roger Breske	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totals:	<u>5</u>	<u>0</u>	_____	_____

Vote Record

Committee on Natural Resources and Transportation

Date: 4-21-05

Moved by: Wirch

Seconded by: Breske

AB _____ SB 41 _____ Clearinghouse Rule _____
 AJR _____ SJR _____ Appointment _____
 AR _____ SR _____ Other _____

Amdt 1 _____
 A/S Amdt _____ to A/S Amdt _____
 A/S Sub Amdt _____
 A/S Amdt _____ to A/S Sub Amdt _____
 A/S Amdt _____ to A/S Amdt _____ to A/S Sub Amdt _____

Be recommended for:
 Passage Adoption Confirmation Concurrence Indefinite Postponement
 Introduction Rejection Tabling Nonconcurrence

Committee Member	Aye	No	Absent	Not Voting
Senator Neal Kedzie, Chair	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Cathy Stepp	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Dan Kapanke	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Robert Wirch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Senator Roger Breske	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totals:	<u>5</u>	<u>0</u>	_____	_____

Motion Carried Motion Failed



Chairman's Notes: Senate Committee on Natural Resources and Transportation

April 21, 2005

✓ Assembly Bill 18 – Ainsworth/Olsen

Summary: This bill permits motor trucks having a gross weight rating of more than 26,000 pounds to be equipped with a flashing or rotating amber light that may be operated only when the motor truck is upon a highway having a maximum speed limit of more than 35 miles per hour and is traveling ten or more miles per hour below the speed limit, stopped, or backing up. Current law generally prohibits (with various exceptions such as safety vehicles) any vehicle from displaying any flashing or rotating light.

- ✓ What types of trucks would utilize this provision?
- How often would this be utilized – (we don't want them to become common place, thereby having motorists ignore flashing safety lights)

✓ Assembly Bill 38 – Friske/Olsen

Summary: This bill changes the penalty for persons who violate operating restrictions under a probationary license or an instruction permit. Under this bill, a person holding a probationary license or instruction permit who violates these operating restrictions must forfeit \$50 for a first offense and not less than \$50 nor more than \$100 for each subsequent offense. In addition, DOT must provide notice of the conviction to any adult sponsor of the person.

- ✓ Have any young adults that have violated the graduated drivers license law been given any jail time as a result of their offense.
- ✓ Are the organizations that supported passage of the graduated driver's license law supportive of this change?

✓ Assembly Bill 169 – Van Roy/Cowles

Summary: (As Amended) Creates an exception to the current law prohibition against operating double-decked buses. Also creates an exception to height restrictions. In order to qualify, the vehicles must have a closed roof and obtain the approval of the officer in charge of maintenance of each highway on the proposed route. The officer may not grant approval unless the vehicle clears all obstruction along the route by at least 6 inches and the operator agrees to accept liability for any damages.

- Under the bill, do local governments have the ability to prevent double-deck buses from operating in their jurisdiction, or must they allow them if they meet the criteria spelled out in the substitute amendment. Would it make sense to allow the governing body of a city, village, town or County to have the ability to make the determination as to whether or not double deck buses are allowed, instead of the officer in charge of maintenance?
- What would be the penalty if a double-deck bus that has the authority to operate on a proposed route veer off of that proposed route? Will drivers be notified that the law requires them to stay on the authorized route? Should we include such a provision in the bill?
- After a route is approved, does the "officer in charge of maintenance" have the authority to rescind that approval if something were to change? Should there be any type of periodic route check to ensure the route still meets the clearance requirements? (i.e. New power lines, trees growing over a roadway, new structure has been built, etc.)
- For State Patrol Would the state patrol inspect all double deck buses prior to operation? Is there periodic inspection as well, such as once a year or once every few years?
?

Senate Bill 61 – Breske/Hines

Summary: This bill permits consecutive monthly registration of a motor truck, trailer, or truck tractor used exclusively to transport calcium chloride liquid.

- Can you tell the committee what calcium chloride liquid is used for, and the rationale for allowing them to register monthly?
- How many trucks across the state would this affect? What would the resulting revenue loss to the state be?

Senate Bill 139/Assembly Bill 209 – Harsdorf/Lothian/Suder

Summary: This bill directs the Department of Transportation to designate and, upon receipt of sufficient contributions from interested parties, mark the route of USH 14 in this state from the Wisconsin-Illinois border to Madison as the "Ronald Reagan Highway."

- The bill indicates that signs will not be erected until the state has received sufficient funds to cover the cost of erecting and maintaining them. Do you have any idea what this would cost, and if there are individuals out there that are willing to provide these contributions?

EXECUTIVE SESSION

Because all of the Committee members are not present, I would like to ask for unanimous consent to leave the roll open until 5:00 today for the absent members to vote.

Senate Bill 39 (With SSA 1)

Senate Bill 39 is authored by Senator Leibham and Representative Petrowski, and relates to creating a school transportation bio-diesel fuel cost assistance program.

We have a substitute amendment pending that has been drafted by the author of the bill. Legislative Council has prepared a memo on the Amendment which each of you should have received. Leg. Council, would you like to describe the Substitute amendment for the committee please.

- **MOTION TO ADOPT SSA 1 TO SB 39**
- **SECOND**
- **DISCUSSION**
- **ROLL CALL**

- **MOTION FOR PASSAGE OF SB 39 AS AMENDED**
- **SECOND**
- **DISCUSSION**
- **ROLL CALL**

Senate Bill 41 (With SA 1)

Senate Bill 41 is authored by Senator Cowles and Representative Ott, and relates to providing a definition of bio-diesel fuel and prohibits the mislabeling of bio-diesel fuel.

There is a simple amendment that has been introduced by the bill's author. The amendment establishes a July 1, 2007, effective date for the bill.

- **MOTION TO ADOPT SA 1 TO SB 41**
- **SECOND**
- **DISCUSSION**
- **ROLL CALL**

- **MOTION FOR PASSAGE OF SB 41 AS AMENDED**
- **SECOND**
- **DISCUSSION**
- **ROLL CALL**

Senate Bill 45

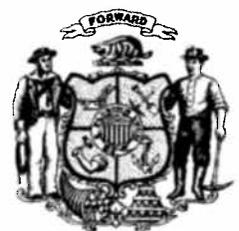
Senate Bill 45, authored by Senator Zien and Representative Suder, increases the maximum permissible overall length of the combination of vehicles from 60 feet to 65 feet if the middle vehicle in the three-vehicle combination is equipped with brakes.

- **MOTION FOR PASSAGE OF SB 45**
- **SECOND**
- **DISCUSSION**
- **ROLL CALL**

DO NOT GAVEL THE EXEC. SESSION CLOSED!



WISCONSIN STATE LEGISLATURE



ROBERT L. COWLES
Wisconsin State Senator • 2nd Senate District

**Senator Cowles Testimony Regarding SB 41/AB 71
Senate Natural Resources and Transportation Committee
March 17, 2005**

Good Morning Mr. Chairman:

Thank you for the opportunity to speak today. I will be testifying in favor of SB 41, a bill to create a statutory definition of biodiesel fuel products.

I am the Senate of this bill, and it is my aim to assure consumers of the integrity of the product when they purchase biodiesel.

This bill is about making sure Wisconsin consumers know exactly what they are purchasing when they choose to buy biodiesel fuels. As we see increases in the use of this type of fuel, creating a standard definition is an important step to take.

Biodiesel is a clean burning alternative fuel that is produced from domestic renewable resources such as vegetable oil or animal fat. Diesel fleet managers across the country are increasingly concluding that biodiesel is their lowest cost strategy for compliance with state and federal clean air requirements.

Biodiesel is a small, but growing industry. In 1999, 500,000 gallons were sold nationwide. In 2003, 25 million gallons were sold in the U.S.

The Legislature will focus on promoting the use of alternative fuel sources this session in an effort to reduce our dependence on foreign oil, create jobs, and preserve our natural resources. This will involve both large-scale initiatives and taking basic steps like providing statutory definitions of alternative fuels such as biodiesel.

SB 41 creates statutory definitions of the terms "biodiesel" and "biodiesel blend" when they are used for labeling and advertising purposes. Under the bill, if fuel is labeled or advertised as "biodiesel," that fuel must be 100% biodiesel. In addition, if fuel is labeled or advertised as a "biodiesel blend," that fuel must be at least 2% biodiesel.

SB 41 is modeled after a Nebraska law, 2004 Legislative Bill 918. That law, and SB 41 do not create a mandatory labeling requirement.

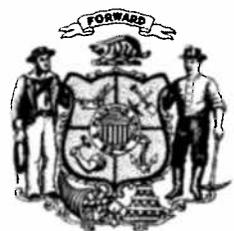
The bill had an amendment added to keep the fiscal impact to a minimum. SA 1 pushes back the effective date to January 2007 in order to give the Department of Commerce some time to prepare for the use of biofuels. The Department had anticipated the need to purchase new IROX diesel analyzers sometime soon.

In conclusion, this bill is meant to be fiscally neutral, and be pro-consumer. The creation of these statutory definitions will provide Wisconsin consumers with an additional guarantee that they know what they are getting when they purchase biodiesel.

Thank you, and I can take any questions that you may have.



WISCONSIN STATE LEGISLATURE



Testimony of Jamie Derr in Support of Senate Bills 39 and 41
Senate Committee on Natural Resources and Transportation
March 17, 2005

Support for Senate Bill 39, the School Bus Biodiesel Bill

- *Biodiesel has positive health effects.* School buses are one of the largest mass transit programs in the United States. Currently, the vast majority of school buses are fueled with #2 diesel fuel. Pollution from diesel fuel has health implications for everyone, especially children. Diesel exhaust contains significant levels of small particles, known as fine particulate matter, which are fine particles that are so small that several thousand of them could fit on the period at the end of this sentence. Fine particles pose a significant health risk because they can pass through the nose and throat and lodge themselves in the lungs. These fine particles can cause lung damage and premature death. They can also aggravate conditions such as asthma and bronchitis. Children are more susceptible to air pollution than healthy adults because their respiratory systems are still developing and they have a faster breathing rate. B20 (a blend of 80% petroleum diesel fuel and 20% biodiesel) reduces emissions of particulate matter by about 10 - 12 percent.
- *Biodiesel has positive environmental effects.* Diesel exhaust also contains pollutants that contribute to ozone formation (or smog), acid rain, and global climate change. Tests show the use of biodiesel in diesel engines results in substantial reductions of unburned hydrocarbons and carbon monoxide.
- *Biodiesel is more expensive than petroleum diesel – this bill opens the door to federal funding to compensate school districts for using B20.* The B20 blend costs about 15 to 30 cents per gallon more than regular diesel fuel. SB 39 permits the Dept. of Public Instruction to seek federal money from EPA's Clean School Bus USA program to fund the purchase of biodiesel blend fuel for Wisconsin school buses.

I have attached a fact sheet regarding biodiesel emissions studies as well as information about past EPA grants that have gone to school districts for B20 purchases.

Support for Senate Bill 41, Statutory Definitions of Biodiesel and Biodiesel Blend

I also support SB 41, which creates statutory definitions of "biodiesel" and "biodiesel blend." As use of biodiesel and biodiesel blends grow in Wisconsin, it is important for consumers to have confidence in the product. These definitions provide that certainty.

I understand that the Department of Commerce needs time to purchase or update equipment needed to test this fuel, accordingly, I also support a delayed effective date for this legislation, if needed.

Jamie Derr, Marshall, Wisconsin
Member, National Biodiesel Board
Member, Wisconsin Soybean Association



HEALTH EFFECTS TESTING

HISTORY

In June 2000, representatives of the U.S. Congress announced that biodiesel had become the first and only alternative fuel to have successfully completed the Tier I and Tier II Health Effects testing requirements of the Clean Air Act Amendments of 1990. The biodiesel industry invested more than two million dollars and four years into the health effects testing program with the goal of setting biodiesel apart from other alternative fuels and increasing consumer confidence in biodiesel.

TESTING

The first tier of health effects testing was conducted by Southwest Research Institute and involved a detailed analysis of biodiesel emissions. Tier II was conducted by Lovelace Respiratory Research Institute, where a 90-day sub-chronic inhalation study of biodiesel exhaust with specific health assessments was completed.

RESULTS

Results of the health effects testing concluded that biodiesel is non-toxic and biodegradable, posing no threat to human health. Also among the findings of biodiesel emissions compared to petroleum diesel emissions in this testing:

- The overall ozone (smog) forming potential of the speciated hydrocarbon exhaust emissions from biodiesel is 50% less.
- The exhaust emissions of *carbon monoxide* (a poisonous gas and a contributing factor in the localized formation of smog and ozone) from biodiesel are 50% lower.
- The exhaust emissions of *particulate matter* (recognized as a contributing factor in respiratory disease) from biodiesel are 30% lower.
- The exhaust emissions of *sulfur oxides and sulfates* (major components of acid rain) from biodiesel are completely eliminated.
- The exhaust emissions of *hydrocarbons* (a contributing factor in the localized formation of smog and ozone) are 95% lower.
- The exhaust emissions of *aromatic compounds* known as PAH and NPAH compounds (suspected of causing cancer) are substantially reduced for biodiesel compared to diesel. Most PAH compounds were reduced by 75% to 85%. All NPAH compounds were reduced by at least 90%.

SIGNIFICANCE

The health effects testing results provide conclusive scientific evidence using the most sophisticated technology available to validate the existing body of testing data. The comprehensive body of biodiesel data serves to demonstrate the significant benefits of biodiesel to the environment and to public health. This will lead to increased consumer confidence and increased use of biodiesel. Since the majority of biodiesel is made from soybean oil, a promising new market is materializing for soybeans.



BIODIESEL EMISSIONS

Biodiesel is the first and only alternative fuel to have a complete evaluation of emission results and potential health effects submitted to the U.S. Environmental Protection Agency (EPA) under the Clean Air Act Section 211(b). These programs include the most stringent emissions testing protocols ever required by EPA for certification of fuels or fuel additives. The data gathered complete the most thorough inventory of the environmental and human health effects attributes that current technology will allow.

EPA has surveyed the large body of biodiesel emissions studies and averaged the Health Effects testing results with other major studies. The results are seen in the table below.

AVERAGE BIODIESEL EMISSIONS COMPARED TO CONVENTIONAL DIESEL, ACCORDING TO EPA		
Emission Type	B100	B20
Regulated		
Total Unburned Hydrocarbons	-67%	-20%
Carbon Monoxide	-48%	-12%
Particulate Matter	-47%	-12%
Nox	+10%	+2%
Non-Regulated		
Sulfates	-100%	-20%*
PAH (Polycyclic Aromatic Hydrocarbons)**	-80%	-13%
nPAH (nitrated PAH's)**	-90%	-50%***
Ozone potential of speciated HC	-50%	-10%

* Estimated from B100 result

** Average reduction across all compounds measured

*** 2-nitroflourine results were within test method variability

(more)

The overall ozone (smog) forming potential of biodiesel is less than diesel fuel. The ozone forming potential of the speciated hydrocarbon emissions was 67 percent less than that measured for diesel fuel.

Sulfur emissions are essentially eliminated with pure biodiesel. The exhaust emissions of sulfur oxides and sulfates (major components of acid rain) from biodiesel were essentially eliminated compared to diesel.

Criteria pollutants are reduced with biodiesel use. Tests show the use of biodiesel in diesel engines results in substantial reductions of unburned hydrocarbons, carbon monoxide, and particulate matter. Emissions of nitrogen oxides stay the same or are slightly increased.

Carbon Monoxide -- The exhaust emissions of carbon monoxide (a poisonous gas) from biodiesel are on average 47 percent lower than carbon monoxide emissions from diesel.

Particulate Matter -- Breathing particulate has been shown to be a human health hazard. The exhaust emissions of particulate matter from biodiesel are about 47 percent lower than overall particulate matter emissions from diesel.

Hydrocarbons -- The exhaust emissions of total hydrocarbons (a contributing factor in the localized formation of smog and ozone) are on average 67 percent lower for biodiesel than diesel fuel.

Nitrogen Oxides -- NO_x emissions from biodiesel increase or decrease depending on the engine family and testing procedures. NO_x emissions (a contributing factor in the localized formation of smog and ozone) from pure (100%) biodiesel increase on average by 10 percent. However, biodiesel's lack of sulfur allows the use of NO_x control technologies that cannot be used with conventional diesel. Additionally, some companies have successfully developed additives to reduce No_x emissions in biodiesel blends.

Biodiesel reduces the health risks associated with petroleum diesel. Biodiesel emissions show decreased levels of polycyclic aromatic hydrocarbons (PAH) and nitrated polycyclic aromatic hydrocarbons (nPAH), which have been identified as potential cancer causing compounds. In Health Effects testing, PAH compounds were reduced by 75 to 85 percent, with the exception of benzo(a)anthracene, which was reduced by roughly 50 percent. Targeted nPAH compounds were also reduced dramatically with biodiesel, with 2-nitrofluorene and 1-nitropyrene reduced by 90 percent, and the rest of the nPAH compounds reduced to only trace levels.

The Official Site of the National Biodiesel Board

BIODIESEL

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 • Fuel Fact Sheets
 • Biodiesel Basics
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SCHOOL BUSES

School Buses

"We are a school bus fleet. We have 32 buses, and we have used about 80,000 gallons of B20 in the last year. We decided to make the switch to biodiesel because we were worried about the health of our students, staff and the public from breathing diesel exhaust. Everyone in our school district now breathes easier now that we are running B20."

Wayne Hettler, St. Johns, MI

School buses are one of the largest mass transit programs in the United States. Every school day, some 440,000 yellow school buses transport more than 24 million children to and from schools and school-related activities. At the current time, the vast majority of the school buses are powered by heavy-duty diesel engines and consume conventional #2 diesel fuel (although a small share of school bus engines now in use are designed for gasoline).

Anyone who has ever had to sit in traffic behind a diesel-fueled bus will understand concerns about children who ride buses to and from school each day. Pollution from diesel vehicles has health implications for everyone, especially children. The use of biodiesel can reduce that threat. Because it works in any diesel engine with few or no modifications, biodiesel offers schools a relatively inexpensive option for an immediate solution to air quality concerns. As a result, several thousand school buses in the US are running on blends of biodiesel and reporting success:

Medford, New Jersey School District

Medford, New Jersey School District began using B20 in 1997. According to Joe Biluck, Director of Operations and Technology, the fuel has performed well even in temperatures as low as eleven degrees below zero.

"Biodiesel offers the best option to increase our reliance on domestic, renewable fuels while producing significant results in terms of emission reduction," said Biluck. "Biodiesel's primary attraction is its ease of integration coupled with the fact it is a technology that is not capital intensive and can be applied to older units as well as today's vehicles."



Olympia, Illinois School District

Olympia, Illinois School District began using a B2 blend in August 2002 in all 33 of its school buses and about 20 operation and maintenance support vehicles such as lawnmowers, pickup trucks and tractors. The 377 square mile school district is the second largest school district in the state after Cook County outside Chicago. The buses travel 4,000 miles a day, or an average of 600,000 miles a year.

"We're thrilled to be using biodiesel - a fuel that can be used in all our diesel vehicles with no engine modifications," said Trent Keller, Transportation Director for the Olympia School District. "because of the size of our district and the fact that our bus engines run 200,000 miles before they are traded in, performance and safety are very important to us. Our buses have been running beautifully with biodiesel."

Market Reports:

Market News:

- [EPA Clean School Bus Grants to Fund Biodiesel Programs in Five States](#)
- [EPA Clean School Bus Grant to Fill Colorado School Buses with Biodiesel](#)
- [Back to School with Biodiesel](#)

Visitors who viewed this page also viewed:

- [Biodiesel for Kids \(pdf\)](#)
- [Medford, NJ School District](#)
- [Bondurant-Farrar School District](#)

Clark County, Nevada School District

On May 22, 2003 Frank Giordano, Coordinator of Vehicle Maintenance for the **Clark County School District**, accepted a National Partners Award from the US Department of Energy. The award was given to Giordano for the district's use of biodiesel in more than 1,200 school buses operating in Clark County, Nevada.

Arlington County, Virginia School District

Last year, Arlington County, Virginia began using B20 in the county's 500 diesel-powered vehicles, including 120 school buses, according to Ric Hiller, chief of the equipment division. "We started using biodiesel in our school buses because we saw an opportunity to kill two birds with one stone: clean the air and use a renewable fuel," said Hiller. "We're very pleased with biodiesel so far."

Biodiesel is a homegrown solution to the problem of dirty school buses and its widespread use could immediately benefit the health of children, while at the same time helping to protect the environment, boost domestic energy security, increase farm income, and create jobs. The schools districts across the country that are already using biodiesel are true leaders and should serve as examples for others.

July 18, 2004 News Article: Three Arkansas School Districts Pleased with Alternative Fuels

Use of a biodiesel fuel blend in 149 school buses operated by the three districts in Pulaski County has worked out well, officials say. The districts participated last year - and plan to do so again in the upcoming school year - in a pilot program that reimburses them for the extra costs of using a blend of fossil fuel and vegetable oil. Use of the fuel is intended to reduce reliance on non-renewable fossil fuels. The biodiesel mix used last year by the Little Rock, North Little Rock and Pulaski County districts is a blend of 80 percent standard diesel fuel and 20 percent soy-based oil. It costs about 20 cents more per gallon than regular diesel fuel.

But some of that extra cost was offset in a surprising way, said Mike Martello, transportation director for the Little Rock district. "We noticed something that we didn't think was going to happen," Martello said. "We actually got a little bit better fuel economy on the biodiesel than we did with the regular." Martello said his operation had no problems using the biodiesel fuel. "It makes us less dependent on foreign oil, obviously," he said. The Little Rock district used the blend this year in 103 magnet-school buses, more than a third of its fleet. "The only disadvantage I can think of is the cost," Martello said. "But as long as we are reimbursed for the increase in the cost it is tremendous advantage, I think, to the school districts to be able to use the fuel."

Reimbursement came from the Arkansas Energy Office, a division of the state Economic Development Department. The rebates are available to help other Arkansas school districts offset the costs of experimenting with the fuel, according to Energy Office director Chris Benson. Gov. Mike Huckabee says he hopes other districts will take advantage of the program.

"It shows the state's support for our agricultural economy, air quality, and smart use of energy resources," Huckabee said.

Other interesting links:

Brochure: [Biodiesel for Decisions Makers](#)

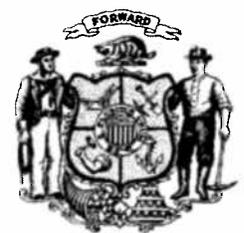
Information and activities to teach students about biodiesel fuel: [Alternative Fuels Biodiesel \(Teacher Guide and student worksheets and activities\)](#).

[EPA's Clean School Bus USA](#) -- The goal of Clean School Bus USA is to reduce both children's exposure to diesel exhaust and the amount of air pollution created by diesel school buses.

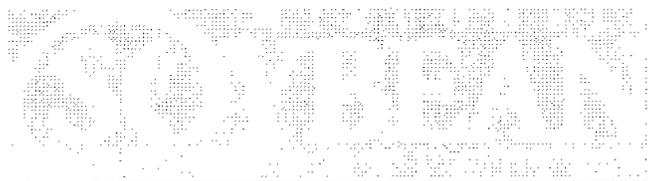
[Kentucky Clean Fuels Coalition](#) -- Kentucky has recently added several school bus fleets to its list of biodiesel users.



WISCONSIN STATE LEGISLATURE



FACTS ABOUT BIODIESEL



COMMONLY ASKED QUESTIONS ABOUT BIODIESEL

What is biodiesel?

Biodiesel is the name of a clean burning alternative fuel produced from domestic, renewable resources. Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend. It can be used in compression-ignition (diesel) engines with no major modifications. Biodiesel is simple to use, biodegradable, nontoxic, and essentially free of sulfur and aromatics.

Is biodiesel used as a pure fuel or is it blended with petroleum diesel?

Biodiesel can be used as a pure fuel or blended with petroleum in any percentage. B20 (a blend of 20 percent by volume biodiesel with 80 percent by volume petroleum diesel) has demonstrated significant environmental benefits with a minimum increase in cost for fleet operations and other consumers.

Is biodiesel approved for use in the United States?

Biodiesel is registered as a fuel and fuel additive with the Environmental Protection Agency (EPA) and meets clean diesel standards established by the California Air Resources Board (CARB). Neat (100 percent) biodiesel has been designated as an alternative fuel by the Department of Energy (DOE) and the US Department of Transportation (DOT).

How do biodiesel emissions compare to petroleum diesel emissions?

Biodiesel is the only alternative fuel to have fully completed the health effects testing requirements of the Clean Air Act. The use of biodiesel in a conventional diesel engine results in a substantial reduction in unburned hydrocarbons, carbon monoxide, and particulate matter as compared to emissions from diesel fuel. In addition, the exhaust emissions of sulfur oxides and sulfates (major components of acid rain) from biodiesel are essentially eliminated compared to diesel.

Of the major exhaust pollutants, both unburned hydrocarbons and nitrogen oxides are ozone or smog forming precursors. Based on engine testing, using the most stringent emissions testing protocols that are required by EPA for certification of fuels or fuel additives in the U.S., the overall ozone forming potential of the speciated hydrocarbon emissions from biodiesel was nearly 50 percent less than that measured for diesel fuel.

Can biodiesel help mitigate "global warming"?

A 1998 biodiesel lifecycle study, jointly sponsored by the U.S. Department of Energy and the U.S. Department of Agriculture, concluded biodiesel reduces net carbon dioxide emissions by 78 percent as compared to petroleum diesel. This is due to biodiesel's closed carbon cycle. The CO₂ released into the atmosphere when biodiesel is burned is recycled by growing plants, which are later processed into fuel.

Does biodiesel cost more than other alternative fuels?

When reviewing the high costs associated with other alternative fuel systems, many fleet managers have determined biodiesel is their least-cost-strategy to comply with state and federal regulations. Use of biodiesel does not require major engine modifications. That means operators

keep their fleets, their spare parts inventories, their refueling stations and their skilled mechanics. The only thing that changes is air quality.

Where can I purchase biodiesel?

Biodiesel is available in many Wisconsin locations. (See location list and map attached.)

BIODIESEL PERFORMANCE

Biodiesel offers similar power to diesel fuel.

Successful alternative fuels fulfill environmental and energy security needs without sacrificing operating performance. Operationally, biodiesel performs very similarly to low sulfur diesel fuel in terms of power, torque and fuel without major modifications to engines or infrastructure.

Biodiesel provides significant lubricity improvement over petroleum diesel fuel. In January 2001, the U.S. EPA finalized a rule that will require that sulfur levels in diesel fuel be reduced from 500 ppm to 15 ppm, which equates to a 97% reduction by 2006.¹ The EPA, the petroleum industry and equipment manufacturers all recognized during the rulemaking process that the refinery changes necessary to meet this requirement will also dramatically reduce lubricity of the fuel. Lubricity is the characteristic in diesel fuel necessary to keep diesel fuel systems properly lubricated. Fuel that lacks lubricity can cause premature wear or malfunction. Biodiesel is uniquely positioned to address the problems presented by requiring usage of ultra low-sulfur diesel fuel because biodiesel has no sulfur and currently meets the 2006 standard. Moreover, biodiesel offers superior lubricity even in very low blends. For example, a 1% blend of biodiesel can improve lubricity by as much as 65% according to tests done by Stanadyne Automotive Corp.

Biodiesel is compatible with engine components. The recent switch to low sulfur diesel fuel has caused most OEMs to switch to components suitable for use with biodiesel. In general, biodiesel will soften and degrade certain types of elastomers and natural rubber compounds over time. Therefore, manufacturers recommend that natural or butyl rubbers not be allowed to come in contact with pure biodiesel. The effect is lessened with biodiesel blends.

Biodiesel in cold weather. Cold weather can cloud and even gel any diesel fuel, including biodiesel fuel. As a result, diesel fuel is reformulated during cold weather months to prevent this problem. A 5 percent biodiesel-petroleum diesel blend will also be reformulated during winter months and, as a result, will perform similarly to standard diesel fuel.

¹ See Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements, 40 CFR Parts 69, 80, and 86, available online in the Federal Register at <http://www.epa.gov/fedrgstr/EPA-AIR/2001/January/Day-18/a01a.pdf>.

FARMER USE OF BIODIESEL

How much do farmers stand to gain from biodiesel's potential to improve soybean value?

The economic benefits of using biodiesel are shown to accrue to farmers, local communities, end users and the nation as a whole.

- A study conducted by AUS Consultants shows that realizing a national goal of 4 percent renewable fuel use by 2016 would increase soybean production from 51 million bushels in 2002 to 318 million bushels in 2016. Soybean prices would increase an average of 60 cents per bushel.
- A study completed in 2001 by the U.S. Department of Agriculture's Office of Energy Policy and New Uses in conjunction with the Economic Research Service (ERS) found that an average annual increase of the equivalent of 200 million gallons of soy-based biodiesel demand would boost total crop cash receipts by \$5.2 billion cumulatively by 2010, resulting in an average net farm income increase of \$300 million per year.

SUMMARY OF FEDERAL INITIATIVES

EPA Rule, "Control of Air Pollution from New Motor Vehicles: Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements," 40 CFR Parts 69, 80, and 86

In January 2001, the EPA finalized a rule that substantially reduces the allowable level of sulfur in highway diesel fuel by mid-2006. The rule requires a 97 percent reduction in the sulfur content of diesel fuel. As a result, diesel vehicles will achieve gasoline-like exhaust emission levels. The new fuel must be available at retail stations by September 1, 2006.

The process of removing sulfur from diesel harms the fuel's lubricity. Biodiesel is a natural choice for restoring the lubricating properties of diesel fuel necessary to prevent premature wear and tear on the engine. Independent studies show even low blends of biodiesel can restore the necessary lubricity of diesel. "Since biodiesel is compatible with existing diesel technology, it can be used immediately and seamlessly as a clean-burning, no-sulfur alternative fuel or lubricity additive," said Joe Jobe, executive director of the National Biodiesel Board. "Biodiesel is an excellent choice for a lubricity additive because it has the added benefits of being cleaner burning, domestically produced and renewable."

Tests performed by Stanadyne Automotive Corp., one of the top diesel fuel injection equipment manufacturers, show blending just one percent biodiesel into petroleum diesel can increase lubricity by up to 65 percent. Noting that some sort of lubricity additive will be required for ultra low-sulfur diesel, Stanadyne submitted a letter to the Environmental Protection Agency (EPA) during the comment period of the on-road low sulfur rule suggesting that EPA consider adding biodiesel to all ultra low-sulfur diesel produced in the U.S.

Biodiesel is a cleaner-burning fuel registered with the EPA as both a fuel and fuel additive. It can be made from any fat or vegetable oil, such as soybean oil, and has similar horsepower, fuel economy and performance to conventional diesel. Biodiesel is the only alternative fuel to have fully completed the Health Effects testing requirements of the Clean Air Act. Those test results show it is non-toxic, biodegradable and free of sulfur.

Energy Policy Act of 1992 (EPAct)

The Energy Policy Act of 1992 (EPAct) was amended in 1998 to include biodiesel as an option for vehicle fleets to meet a portion of their annual Alternative Fuel Vehicle (AFV) acquisition requirements. Previously biodiesel blended fuels and blended fuel vehicles were entirely excluded from EPAct programs. The 1998 amendments established actual fuel use as a means for the EPAct program to meet its goals of helping our nation reduce its dependence on imported petroleum.

Biodiesel has become a popular choice with EPAct-covered fleet managers because it is so easy to use. Since biodiesel works in existing diesel engines and performs similarly to diesel, the transition to biodiesel is seamless. According to the Congressional Budget Office, biodiesel is also the lease-cost option among alternative fuels that comply with EPAct because biodiesel uses existing diesel infrastructure. EPAct-covered fleets using B20 include NASA, Yellowstone National Park, USDA, Florida Power & Light, several state transportation departments and many United States military bases.

Executive Order 13149

The executive order entitled Greening the Government Through Federal Fleet and Transportation Efficiency was issued on April 21, 2000. This executive order was issued to ensure that the Federal Government exercises leadership in the reduction of petroleum consumption through improvements in fleet fuel efficiency and these of alternative fuel vehicles and alternative fuels. In order to achieve these goals, agencies should:

- Continue to meet AFV requirements under EPAct;
- Use alternative fuels in AFVs the majority of the time;
- Use biodiesel in diesel-powered vehicles;
- Increase the average EPA fuel economy rating of their light-duty vehicle acquisitions by at least 1mpg by 2002 and 3 mpg by 2005; and
- Improve fleet efficiency.

Each federal agency operating 20 or more vehicles within the United State is required to reduce its entire fleet's annual petroleum consumption by at least 20 percent by the end of FY2005 (as compared to their FY1999 consumption levels). In addition, each agency shall use alternative fuels to meet a majority of the fuel requirements of those motor vehicles by the end of FY2005. Executive Order 13149 applies to all on-road vehicles including light, medium and heavy duty vehicles.

BIODIESEL EMISSIONS

Biodiesel is the first and only alternative fuel to have a complete evaluation of emission results and potential health effects submitted to the U.S. Environmental Protection Agency (EPA) under the Clean Air Act Section 211(b). These programs include the most stringent emissions testing protocols ever required by EPA for certification of fuels or fuel additives. The data gathered complete the most thorough inventory of the environmental and human health effects attributes that current technology will allow. EPA has surveyed the large body of biodiesel emissions studies and averaged the Health Effects testing results with other major studies. The results are seen in the table below.

AVERAGE BIODIESEL EMISSIONS COMPARED TO CONVENTIONAL DIESEL		
Emission Type	B100	B20
<u>Regulated</u>		
Total Unburned Hydrocarbons	-67%	-20%
Carbon Monoxide	-48%	-12%
Particulate Matter	-47%	-12%
NOx	+10%	+2%
<u>Non-Regulated</u>		
Sulfates	-100%	-20%*
PAH (Polycyclic Aromatic Hydrocarbons)**	-80%	-13%
nPAH (nitrated PAH's)**	-90%	-50%***
Ozone potential of speciated HC	-50%	-10%

* Estimated from B100 result

** Average reduction across all compounds measured

*** 2-nitrofluorine results were within test method variability

The overall ozone (smog) forming potential of biodiesel is less than diesel fuel. The ozone forming potential of the speciated hydrocarbon emissions was 67 percent less than that measured for diesel fuel.

Sulfur emissions are essentially eliminated with pure biodiesel. The exhaust emissions of sulfur oxides and sulfates (major components of acid rain) from biodiesel were essentially eliminated compared to diesel.

Biodiesel Distributors and Retailers in Wisconsin
DRAFT – WORK IN PROGRESS

Conserv FS
4304 S. Beaumont Ave.
Kansasville, WI 53139

Danco Prairie FS Cooperative
5371 Farmco Dr.
Madison, WI 53704

Edward H. Wolf & Sons
414 Kettle Moraine Dr. South
Slinger, WI 53086

Larsen Cooperative Co.
8290 County Road T
Larsen, WI 54947

New Horizons Supply Co-op
770 Lincoln Ave.
Fennimore, WI 53809

Northern FS, Inc.
401 E. Centralia
Elkhorn, WI 60119

Jefferson Farmco
119 E Preuner St
Jefferson, WI

Countryside Cooperative
514 E Main
Durand, WI 54736
(delivery only)

Pehler Oil Co.
Dodge, WI

Cooperative Plus Inc.
400 N. Dodge Street
Burlington, WI 53105

Condon Oil/Condon Transport
126 E Jackson Street
Ripon, WI 54971

Isha Enterprises
1361 N. 36th Street
Milwaukee, WI

Quarry Mart Mobil
N52 W23206 Lisbon Road
Sussex, WI

Woodland County Store
S5340 State Rd. 27
Augusta, WI

Renewable Alternatives
1235 Kimps Ct.
Green Bay, WI 54313

Progressive Farmers Cooperative
1221 W. Grant Street
De Pere, WI 54115

Arlington Farmco
1310 Highway I
Arlington, WI

Armco Energy Services, LLC
4011 Hounds Trail
Racine, WI 53402

Landmark Services Cooperative
203 W. Cottage Grove Road
Cottage Grove, WI 53527

Halron Oil
1618 State Street
Green Bay, WI

United Coop
N7160 Raceway Road
Beaver Dam, WI 53916

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UW-MADISON FILLS UP ON LESS-POLLUTING BIODIESEL MIX

MADISON - The University of Wisconsin-Madison's diesel-burning fleet of vehicles will be the first in Wisconsin to fill its tanks with a blend of ultra-low sulfur diesel and a soybean-based biodiesel fuel in the campus's effort to improve air quality.

"This new fuel mix will result in significant reductions in the emissions of a number of pollutants," says Chancellor John D. Wiley, noting that the campus will begin using the ultra-low sulfur diesel more than a year before federal regulations require it. "This is an important part of our commitment to achieve the best air quality possible."

Biodiesel is a clean-burning alternative fuel produced from domestic, renewable resources, and contains no petroleum. Ultra-low sulfur diesel is formulated to reduce particulates and a variety of other emissions.

The two fuels will be mixed to allow a 20 percent concentration of biodiesel in the fleet's fuel. The biodiesel in the university's fuel mix means that its physical plant fleet will get better emission reductions than other fleets even after federal regulations require the use of ultra-low sulfur diesel.

Rob Kennedy, senior transportation planner for the university, says the new fuel blend will lead to a 15 percent reduction in particulate matter, also known as soot.

In addition, use of the new mixture will result in a 13 percent reduction in hydrocarbons, an 8 percent cut in carbon monoxide and a 16 percent decline in emissions of carbon dioxide, the primary gas responsible for global warming.

"The new fuel mix will also enable the university to achieve reductions that are two or three times greater for many of the same pollutants, in combination with the exhaust filters found on the newer trucks in the university fleet," Kennedy says.

Kennedy adds that while some institutions are using either ultra-low sulfur diesel or biodiesel, none in Wisconsin are using the alternative fuels together.

The university is a founding partner in the Dane County Clean Air Coalition, which has brought together government agencies and businesses to voluntarily help reduce emissions and avert stricter regulation that accompanies higher ozone levels.

Last month, UW-Madison offered to pay for a \$20,000 gas-can exchange program as part of an agreement to offset emissions at the new West Campus Cogeneration Facility, and in its continuing commitment to control the release of ozone-causing pollutants.

The university is working with Dane County and the city of Madison on that program, which will distribute 4,400 environmentally friendly gas cans to homeowners. That program could prevent the emission of 46.7 tons of volatile organic compounds countywide during the next five years.

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- Dennis Chaptman, (608) 262-9406, dchaptman@wisc.edu

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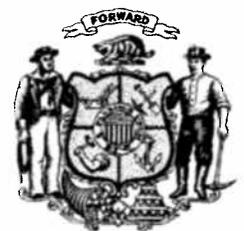
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WISCONSIN STATE LEGISLATURE



5841

Call for world to turn away from oil

■ International Energy Agency seeks more conservation

By Kevin Morrison and Javier Blas in London

The rapid rise in global oil demand should lead the industrialised world to promote alternatives to oil and energy conservation, the International Energy Agency said yesterday.

The warning, from the west's energy-policy adviser, signals a sharp turnaround by the IEA, which has previously tried to cool oil markets by blaming prices on speculators and short-term supply disruptions.

"The reality is that oil consumption has caught up with installed crude and refining capacity," the Paris-based agency said. "If supply continues to struggle to keep up, more policy attention may come to be directed at oil demand intensity in our economies and alternatives."

The agency's view carries special weight because it was created in the mid-1970s after the Arab oil embargo to advise consuming governments about energy security and how to conserve oil and protect their economies from price fluctuations.

Any revival of talk about energy efficiency is likely to alarm the Organisation of the Petroleum Exporting Countries, which meets next week in the Iranian city of Isfahan.

The IEA's warning comes at a time when prices are close to record nominal levels. Brent, Europe's benchmark oil price, hit a record high of \$54.30 a barrel this week. Brent was yesterday trading at \$53.25 a barrel, up 59 cents on the day. US benchmark crude prices were 66 cents higher

at \$54.20. In its March report, the IEA raised its 2005 global oil demand growth forecast by 290,000 barrels a day, to 1.81m b/d, because of higher demand in the US and China, the world's two largest oil consumers. The higher forecast gave average daily consumption for 2005 of 84.3m b/d.

At the same time, the world's spare refining capacity has shrunk as demand for oil products has grown faster than the addition of new capacity.

In the lead-up to yesterday's public comments, the IEA has privately begun debating with OECD governments about energy efficiency. "We will try to drive the attention of governments to energy efficiency," said an agency official.

The agency also plans to release a report next month entitled "Saving Oil in a Hurry" which will cover, among other issues, the topic of energy efficiency in consuming nations.

Energy analysts said a new drive on energy efficiency could be difficult because most of the increase in oil consumption is in transportation, where there are few economic alternatives.

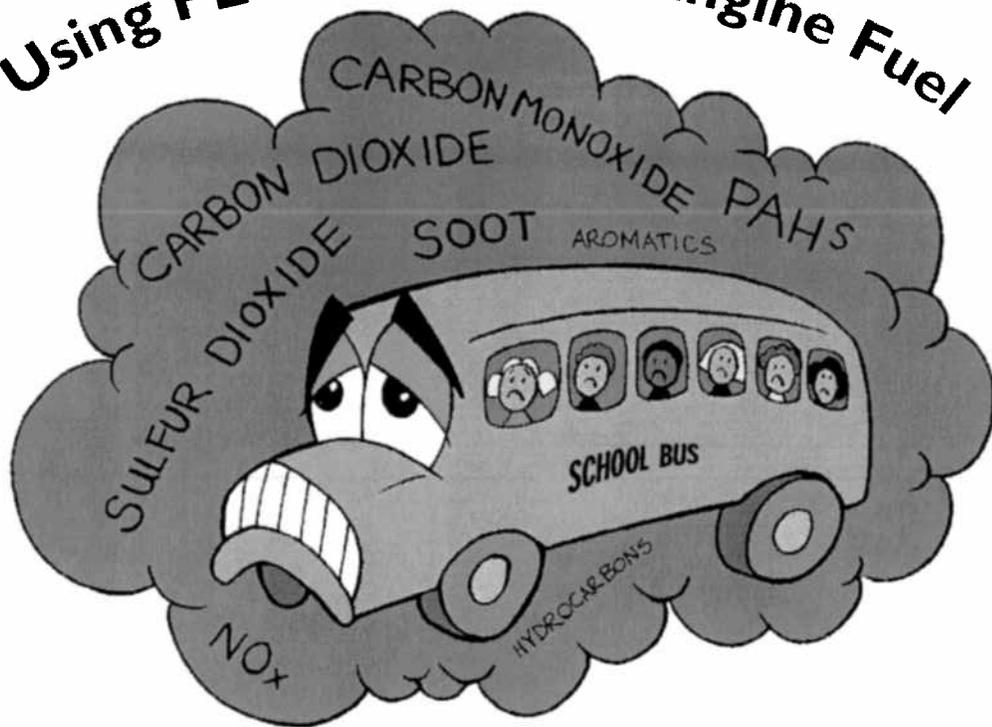
In the 1970s and 1980s the focus was on the industrial sector, which contributes a small proportion of the current increase in oil demand.

The IEA's emphasis on energy efficiency was endorsed yesterday by George W. Bush, US president, who said conservation was a key part of his proposed energy bill.

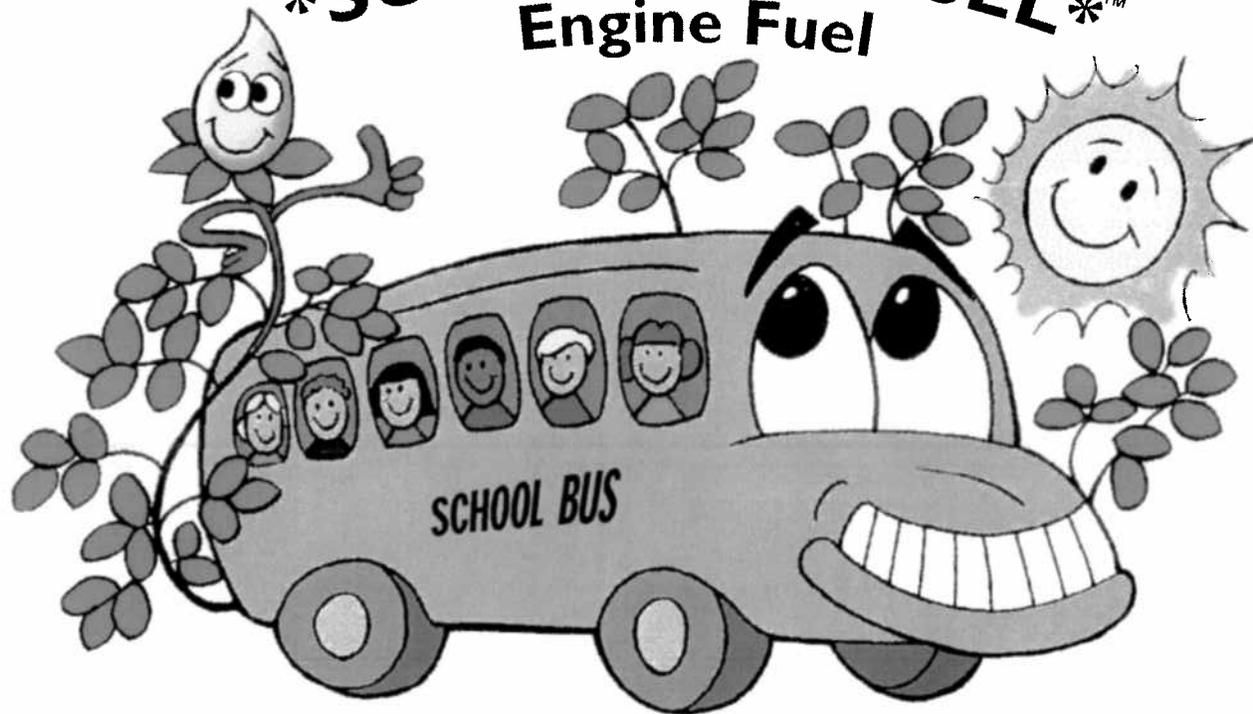
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FLEETS

More fleets experience benefits of biodiesel

More fleets across North America are warming up to clean, renewable biodiesel. Here is a look at a few fleets that have made the switch recently:

On Dec. 10, the Vancouver Island Biodiesel Evaluation Study (VIBES) began to test B20 in various public and private fleets including postal services, school districts and the city of Victoria, British Columbia. Seventeen diesel vehicles will use approximately 400,000 liters (105,668 gallons) of B100 over the next six months, according to Kees Schaddelee, Wise Energy's senior managing partner. Wise Energy, a Victoria consulting firm specializing in biodiesel project and market development, is managing the project. An emissions tracking network will be set up for the fleets to account for their current and future emissions reductions resulting from the use of biodiesel. Vancouver Island-owned Columbia Fuels will be distributing the biodiesel blend to the participants. More information about the project can be found at www.vibesproject.ca.

The city of Bangor, Maine, is switching to biodiesel as part of a resolution for hazardous waste and clean water complaints by the U.S. EPA. Violations of federal hazardous waste management and water quality laws were discovered during a 2001 EPA inspection. In order to meet EPA stipulations, Bangor will now use B20 in its entire diesel fleet of about 100 vehicles. "It's a new, exciting fuel we are going to use," Bangor Equipment Director Bob Dawes said. He said the city would start using B20 this spring to work out any problems that might occur before the next winter season. Dawes added he doesn't foresee any problems other than possibly changing a few fuel filters. World Energy Alternatives will provide the fuel through Irving Oil Co. Dawes said he typically uses around 200,000 gallons of fuel per year.



Several Pima County, Ariz., school districts will be switching to B20 as early as February through what they believe is the first cooperative fuel agreement of its kind in the United States, according to Colleen Crowninshield, Clean Cities Coordinator for the Pima Association of Governments. The agreement is expected to allow participating district schools to have access to lower cost B20. Crowninshield said six schools are already committed to the agreement, and three more are considering it. She said an intergovernmental agreement is being developed for schools outside the district that may be interested in joining the program. World Energy will supply the biodiesel.

Up to 16 school districts in Colorado's Front Range will be using World Energy-supplied B20 in their school bus fleets. The project, called "Clean Yellow Fleets for Blue Skies," will install pollution-control equipment and provide funding for biodiesel in the districts. Most of the fleets switched to biodiesel in October, said Sarah O'Keefe, program manager for the Regional Air Quality Council (RAQC). The RAQC and the districts received \$400,000 worth of funding through an EPA Clean School Bus grant. A second round of funding from the Federal Highway Administration is expected later this year.

-Staff Report

IL Clean School Bus Program to Include Biodiesel

Illinois Governor Rod Blagojevich kicked off his "Illinois Clean School Bus Program" in November, a program intended to significantly reduce emissions from existing diesel-powered school buses.

The program includes assisting Illinois school districts in implementing cleaner fuels like biodiesel, replacing existing buses with cleaner models, and retrofitting existing buses with advanced emission control technologies. "This program...will help create a healthier learning environment and cleaner air, and also provide an economic boost to the Illinois companies that are developing clean-diesel technology and fuels that use soybeans grown and processed in Illinois," said Governor Blagojevich.



"Studies have shown that children are particularly susceptible to diesel emissions, and our goal through this program is to dramatically improve the environment our children are exposed to each school day," said Illinois EPA Director Renee Cipriano.

According to the Governor's office, approximately 24 million students nationwide are transported each day by school buses, the largest mass transit program in the United States. At least 70 percent of the approximate 18,500 school buses in Illinois are powered by diesel fuel. As a result, thousands of Illinois school children are potentially exposed to particulate matter emissions resulting from the combustion of diesel fuel.

Funding for the program has been initially provided by a supplemental environmental project, under terms of an Illinois EPA enforcement case. This initial funding is restricted to twenty-four counties in the State. Additional information on the Illinois Clean School Bus Program is available through the Illinois EPA by calling 217-524-4947.

Michigan School District Reports B20 Saves Money

The first Michigan school district to switch its entire bus fleet to B20 has logged one million miles on the alternative fuel, and maintenance records reveal that the district has saved money as a result.

The district's 31 school buses, including 13 powered by Cummins, 2 powered by Mercedes, and 16 powered by International, have achieved this milestone "with no challenges and no modifications," according to Wayne Hettler, garage foreman and head mechanic. The district also uses B20 in nine support vehicles including a foodservice truck and a Toro Diesel 3-wing mower.



Part of the incentive leading to the switch to B20 was the receipt of a grant in 2003 through the Michigan Department of Consumer and Industry Services which funded St. Johns for the incremental cost difference of the B20. Even though the grant ended in December of 2003, Hettler's been able to show his staff and the school board that they are still saving money by using B20. The main cost savings is on the extended intervals between oil changes.

"I'm convinced that we are able to extend the oil changes because the B20 burns cleaner and isn't dirtying the oil as quickly," said Hettler. "We're using oil analysis to determine the oil change times. We solely credit biodiesel for cleaning up the oil, thus saving the district the costs of oil, filters, labor and the like. We have our records for each bus before a single drop of biodiesel was ever put in the tank, up through our present usage. I challenge other fleets to 'read' their fleet records and make these cost-saving changes after switching to B20."

Hettler also reports an increase in miles per gallon, and improved lubricity, leading to longer fuel pump life. "Prior to April '02 we averaged one fuel pump change in our fleet per year. We haven't had to change any fuel pumps since April '02," he said.

According to the Michigan Soybean Promotion Committee, Hettler has used the oil from more than 15,000 bushels of soybeans to fuel his fleet with biodiesel. "There is much less smoke at the B20 level and both the mechanics and bus drivers have noted the difference, not to mention the kids," Hettler said. "We're using soy biodiesel for the health benefits for all of us, the environment, and to support America's soybean farmers."

State energy task force suggests targets for use of renewable sources

BY TODD RICHMOND
Associated Press

MADISON — The state should more than double its reliance on energy from renewable sources over the next decade, the governor's energy task force recommended Wednesday.

Energy from renewable sources currently makes up about 4 percent of the state's energy use, according to the final report from the Governor's Task Force on Energy Efficiency and Renewables. The task force said the state can reach 10 percent by 2015 by requiring utilities to increase sales of electricity produced from renewable sources.

Most of the state's electricity from renewable sources comes from hydropower, the report said. Utilities can meet the 10 percent goal by using more wind power and manure digesters, said task force chairman Lee Cullen.

"Cow power," Cullen said. "It's more and more attractive."

Gov. Jim Doyle named the task force in September 2003, weeks after the Northeast suffered through one of the worst blackouts in U.S. history. He asked the group, which included state lawmakers and representatives from the energy and construction industries, to come up with ways of improving energy conservation.

Cullen said utilities could save money on fuel costs by using more renewables.

"Wisconsin doesn't have any fossil fuels. Every dollar we spend on fossil fuels goes out of the state," he said.

The goal would be to raise the percentage of energy from renewable sources to 6 percent by 2010 and 10 percent by 2015.

Deb Mirasola, a spokeswoman for Dairyland Power Cooperative in La Crosse, said in an interview that the utility already produces 19 megawatts from wind power and is planning to produce 2.25 megawatts or so from three manure digesters, which use methane gas to generate energy.

But she was vague on whether

GOVERNOR'S ENERGY TASK FORCE RECOMMENDATIONS

NEW JUICE: Governor's task force wants to increase energy from renewable sources to 10 percent of the total by 2015, from the current 4 percent.

WIND, COWS: The group says utilities can reach that mark by using more wind power and manure digesters.

RUNNING WATER: Right now Wisconsin's main renewable resource is hydropower.

the utility could meet the standards suggested in the task force's report.

"We've certainly demonstrated we support both renewable energy sources and conservation," she said. "We don't know the exact cost or availability of the renewable sources to meet the needs of the plan."

The task force's other recommendations included:

- Encouraging research on manure digesters in rural Wisconsin.

- Creating a bio-fuel coordinator position at the Department of Agriculture, Trade and Consumer Protection.

- Requiring state agencies to buy at least 10 percent of their electricity from renewable sources by 2006 and at least 20 percent by 2010.

- Updating the state's building codes to maximize energy efficiency.

- Building new state buildings with at least 20 percent more energy efficiency than required in current code.

The changes could be enacted through a mix of executive orders from the governor and legislative action.

Doyle spokeswoman Melanie Fonder said the governor is still reviewing the report.