lines or other facilities during a drawdown of the Strategic Petroleum Reserve. The President's authority to issue rules and orders expired on September 30, 1994.

8

## BIODIESEL FUEL USE CREDIT

The Energy Policy Act of 1992 authorized programs to reduce consumption of petroleum motor fuel by promoting the use of re-placement fuels and alternative fuels. Title III sets forth mandatory requirements for Federal fleet acquisitions of alternative fueled vehicles. Title V provides for separate regulatory mandates for the purchase of alternative fueled vehicles which apply to: (1) alternative fuel providers; (2) State government fleets; and (3) private and municipal fleets. These mandates set forth annual percentages of new light duty vehicle acquisitions which must be alternative fueled vehicles. Title V also allows for credits for alternative fueled vehicles acquired beyond what is legally required. These credits may be sold and used by other persons or fleets subject to an alternative fueled vehicle acquisition mandate.

Biodiesel is a renewable diesel fuel substitute that can be made by chemically combining any natural oil or fat with an alcohol such as methanol or ethanol. Methanol has been the most commonly used alcohol in the commercial production of biodiesel. In Europe, biodiesel is widely available in both its neat form (100 percent biodiesel, also known as B-100) and in blends with petroleum diesel. Most European biodiesel is made from rapeseed oil (a cousin of canola oil). In the United States, initial interest in producing and using biodiesel has focused on the use of soybean oil as the primary feedstock, mainly because the United States is the world's largest producer of soybean oil. Biodiesel fuel would be used largely in medium and heavy duty vehicles, such as buses and trucks, and also in marine vessels. It has limited potential for light duty vehicles.

Section 301(2) of the Energy Policy Act defines "alternative fuel" by listing various fuels. The definition also gives DOE discretion to add a fuel to this list if the Secretary determines, by rule, that it (1) is substantially not petroleum; (2) would yield substantial en-ergy security benefits; and (3) would yield substantial environ-mental benefits. Biodiesel—either neat biodiesel or blends—is not one of the fuels listed in section 301(2). However, DOE determined in 1996 that neat biodiesel is an alternative fuel. The National Biodiesel Board petitioned DOE to issue a rulemaking determining that a biodiesel blend (B-20) that is, by volume, 80 percent petro-leum and 20 percent biodiesel, is an alternative fuel. Last March, DOE announced it would issue a notice of proposed rulemaking addressing the petition by May 1998. No such rule, however, was issued. At hearings held by the Subcommittee on Energy and Power in July 1998, DOE promised to issue the proposed rule with-in days. Again, no rule was issued. DOE has floated various approaches that might be taken in a rule, including limiting B-20 as an alternative fuel for use in heavy duty vehicles, making use of biodiesel mandatory, and establishing a credit ratio for alternative fueled vehicles that use biodiesel. However, DOE still has taken no action on the petition.

According to a May 1998 analysis by the National Renewable Energy Laboratory (NREL), use of biodiesel has some significant advantages. First, it would reduce U.S. dependence on foreign oil. The U.S. transportation sector relies almost exclusively on petroleum, and biodiesel would replace petroleum. Second, biodiesel reduces greenhouse gas emissions. According to the NREL report, "[d]isplacing petroleum diesel with biodiesel in urban buses is an extremely effective strategy for reducing  $CO_2$  emissions." Third, biodiesel would help reduce air pollution and related health risks. Biodiesel substantially reduces some pollutants—particulates, carbon monoxide, and sulfur dioxide. The Environmental Protection Agency targets these three emissions because they pose public health risks, especially in urban areas. Biodiesel increases hydrocarbon life cycle emissions, but lowers tailpipe emissions. Biodiesel increases NO<sub>x</sub> emissions slightly. Fourth, biodiesel benefits the domestic economy, by reducing spending on foreign oil imports.

mestic economy, by reducing spending on foreign oil imports. Section 502 of the Energy Policy Act directs DOE to establish a program to promote the development and use of domestic replacement fuels in light duty motor vehicles. The Act provides this program "shall promote the replacement of petroleum motor fuels with replacement fuels to the maximum extent practicable." Section 502 directs DOE to determine the technical and economic feasibility of achieving the goals of producing sufficient replacement fuels to replace 10 percent of the projected consumption of motor fuel in the U.S. by 2000, and 30 percent in 2010. Section 502 left it to DOE, in consultation with other Federal agencies, to determine the appropriate program elements to achieve these replacement fuel goals. Section 301(14) defines the term "replacement fuel" as "the portion of any motor fuel" that is derived from any one of a list of specific fuels, including "fuels (other than alcohol) derived from biological materials." Twenty percent of biodiesel blend is derived from biological materials, so that portion appears to meet the definition of "replacement fuel."

It is clear DOE will not achieve the replacement fuel goals established in section 502. DOE estimates actual use of replacement fuel in 1996 was only 3.1 percent of total highway motor fuel—2.9 percent was oxygenates blended into gasoline and 0.2 percent was alternative fuel use. This compares to the targets of 10 percent in 2000 and 30 percent in 2010. DOE estimates alternative fueled vehicle sales would have to grow to between 35 and 40 percent of total light duty vehicle sales by 1999 and stay at that level to meet the 2000 goal. The Department concedes that this is extremely unlikely to occur. DOE estimates Federal, State, and local alternative fueled vehicle programs could displace about 3 percent of light duty vehicle motor fuel use in 2010, and replacement fuels in the form of oxygenates could account for an additional 4.8 to 6.7 percent of fuel use. It appears replacement fuel use in 2010 will account for 10 percent or less of motor fuel use—far short of 30 percent.

10 percent or less of motor fuel use—far short of 30 percent. One reason the DOE alternative fueled vehicle programs are failing to reduce consumption of petroleum motor fuel is that the Energy Policy Act programs do not require use of alternative fuel in alternative fueled vehicles. Under section 301(3) of the Act, "alternative fueled vehicles" is defined to include dual fueled vehicles capable of operating on petroleum motor fuel. This reflects a recognition by Congress that alternative fuels would not be available to all covered vehicles all the time. The Energy Policy Act mandates pur-

chases of alternative fueled vehicles. However, it does not mandate that these vehicles actually use alternative fuels. Although the Act has succeeded in boosting the number of alternative fueled vehicles in the U.S. by more than 60 percent between 1992 and 1998—twothirds of alternative fueled vehicles in 1996 were dual fueled vehicles, and many of these vehicles largely use petroleum motor fuel.

There is a need for a comprehensive review of the effectiveness of the alternative fueled vehicle programs authorized by the Act. These programs have spurred development of alternative fueled vehicles. However, they have also failed to reduce consumption of petroleum motor fuel, since many alternative fueled vehicles use petroleum motor fuel, not alternative fuel.

The bill does not designate biodiesel blend as an "alternative fuel" under EPAct. Instead, it embraces an alternative approach that allocates credits for use of biodiesel fuel in blends with diesel fuel. In particular, the bill provides that credits for use of biodiesel fuel may be substituted for the acquisition of alternative fueled vehicles by fleets and covered persons required to purchase alternative fueled vehicles. This approach encourages greater use of a replacement fuel, displaces use of petroleum motor fuels, and may lead to approaches that encourage greater use of alternative fuels by alternative fueled vehicles.

# HEARINGS

The Subcommittee on Energy and Power held a hearing on September 16, 1997, on energy conservation and export promotion programs authorized by the Energy Policy and Conservation Act and Energy Conservation and Production Act and proposed amendments to the National Energy Conservation Policy Act. The Subcommittee received testimony from: The Honorable Elizabeth Anne Moler, Deputy Secretary, U.S. Department of Energy; Mr. Wayne Curtis, Chief, Office of Human Services, Division of Economic Opportunity, Illinois Department of Commerce and Community Affairs, on behalf of the National Association for State Community Services Programs; Ms. Cheryl DeVol-Glowinski, Director, Office of Energy Policy, Indiana Department of Commerce, representing the National Association of State Energy Officials; Mr. David Bradley, Executive Director, National Community Action Foundation; and Mr. S. Lynn Sutcliffe, President and CEO, SYSCOM Enterprises, on behalf of the National Association of Energy Services Companies.

The Subcommittee also held a hearing on July 21, 1998, on H.R. 2568, the Energy Policy Act Amendments of 1997. The Subcommittee received testimony from: Mr. Thomas Gross, Deputy Assistant Secretary for Transportation Technologies, Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy; Mr. Jim Gay, President, National Biodiesel Board; Mr. Russell Teall, Chairman, Biodiesel Development Corporation; Mr. John Campbell, Corporate Vice President, AG Processing, Inc.; Mr. Robert Sellers, Maintenance Supervisor, Kansas City Area Transportation Authority; Mr. Gilbert Sperling, General Counsel, Natural Gas Vehicle Coalition.

	By fiscal years, in millions of dollars						
and the second second second	1998	1999	2000	2001	2002	2003	
SPENDING SUBJ	CT TO APP	ROPRIATION					
Spending Under Current Law:	17						
Budget Authority 1	156	0	0	0	0		
Estimated Outlays	158	116	31	· 8	.0		
"Such Sums" Authorizations Projected at the 1998 Level							
Proposed Changes:							
Authorization Level <sup>2</sup>	0	158	148	148	148	14	
Estimated Outlays	0	40	119	140	148	14	
Spending Under H.R. 4017:	1.8						
Authorization Level 2	156	158	148	148	148	14	
Estimated Outlays	158	156	150	148	148	14	
"Such Sums" Authorizations Adjusted for Inflation	3		1.00				
Proposed Changes:							
Authorization Level <sup>2</sup>	0	161	155	158	162	16	
Estimated Outlays	0	41	123	147	158	16	
Spending Under H.R. 4017:							
Authorization Level 1	156	161	155	158	162	16	
Estimated Outlays	158	157	154	155	158	16	

<sup>1</sup>The 1998 level is the net amount appropriated for that year. <sup>2</sup>The estimated net authorization declines in 2000 because of estimated savings from increased use of biodiesel fuel in government vehi-

<sup>2</sup>The estimated net authorization declines in 2000 because of estimated savings from increased use of biodiesel fuel in government vehicles.

Basis of estimate: For purposes of this estimate, CBO assumes that appropriations will be provided near the beginning of each fiscal year and that outlays will follow historical trends for the affected programs. In the absence of specified authorization for these activities, we assume that the amounts appropriated for fiscal year 1998 represent the level of funding currently needed to carry out the functions outlined in the bill. The one exception to this approach is the estimate for CORECT, which did not receive an appropriation for fiscal year 1998. In that case, we based our estimates on the President's request for 1999 of \$2 million, which is the amount DOE estimates would be needed to fund the authorized activities. The table shows two alternative sets of authorization levels for fiscal years 1999–2003: one without an adjustment for anticipated inflation and a second that includes an adjustment for inflation.

In addition, H.R. 4017 would give managers of motor vehicle fleets for federal agencies credit for purchasing an alternatively fueled vehicle if they switch from diesel to biodiesel and diesel fuel mixtures to operate their existing vehicles. Biodiesel fuel is a diesel-fuel substitute made from renewable materials (such as vegetable oils) and can be used in convention diesel engines. Under the Energy Policy Act, federal vehicle fleet managers are directed to procure about 15,000 alternatively fueled vehicles (AFVs) annually. These vehicles are generally more costly to acquire and operate than comparable conventional vehicles. The premium paid for alternative fuel vehicles depends on the type of fuel used and ranges from 2 percent to 200 percent above the cost of a conventional vehicle. Based on information from DOE, CBO estimates that, under current law, federal agencies will spend about \$35 million per year to cover the additional cost of acquiring AFVs that are capable of operating with either compressed natural gas, liquefied-petroleum gas, methanol, ethanol, or electricity.

Although biodiesel fuel is more expensive than conventional diesel fuel, agencies could save money if they chose to use biodiesel fuel mixtures in existing vehicles instead of purchasing the types of alternatively fueled vehicles they have acquired in the past. Because agencies would incur no additional capital costs, using biodiesel fuel mixtures in conventional vehicles would be significantly less expensive than acquiring and operating many types of AFVs. H.R. 4017 would limit the amount of credit that could be generated by use of biodiesel mixtures to 50 percent of AFV purchases. Thus, savings from this provision could total nearly \$20 million annually if federal fleet managers were able to achieve the maximum amount of biodiesel credits allowed. For purposes of this estimate, CBO estimates that such savings would average about \$10 million a year beginning in fiscal year 2000, assuming that appropriations are reduced by a corresponding amount.

Finally, extending and expanding the use of ESPCs could reduce future spending on energy services, but CBO estimates that these changes would have no net effect on federal outlays over the 1999– 2003 period. The ESPC program, which under current law will expire in 2000, allows agencies to use some of the funds appropriated for energy expenses for investments in measures that reduce energy consumption. Because of the way these contracts are structured, EPSCs have no net effect on agency spending until after the payback period for the investment, typically about 15 years. At that point, appropriations for energy services may be lower than they otherwise would be if the investments were not made. Hence, CBO estimates that implementing these provisions would not change the amounts authorized for energy expenses in the near term and would not result in any significant savings to the federal government until after 2003. Other provisions of the bill would not have a significant effect on federal spending.

Pay-as-you-go-considerations: The Balance Budget and Emergency Deficit Control Act specifies pay-as-you-go procedures for legislation affecting direct spending or receipts. The provision regarding use of biodiesel fuel mixtures in federal vehicles could affect direct spending for agencies, such as the Bonneville Power Administration and the Tennessee Valley Authority, that have direct spending authority. CBO estimates, however, that any effect on direct spending for such agencies would not be significant.

rect spending for such agencies would not be significant. Estimated impact on State, local, and tribal governments: H.R. 4017 contains no intergovernmental mandates as defined in UMRA and would impose no costs on state, local, or tribal governments. The bill would authorize the appropriation of such sums as may be necessary for fiscal years 1999 through 2003 for energy conservation programs that provide assistance to states. The Weatherization Assistance Program provides funds to states to make improvements in energy efficiency for low-income households. This program received about \$125 million or fiscal year 1998. The bill would also authorize funds for the State Energy Conservation Program, which funds the development and implementation of statewide energy conservation plans. Appropriations for this program are about \$30 million in fiscal year 1998.

Estimated impact on the private sector: This bill would impose no new private-sector mandates as defined in UMRA.

Subparagraph (D) corrects the heading for section 543. Paragraph (2) corrects a spelling error in section 216(d)(1)(C). Paragraph (3) makes technical corrections to section 251(b)(1). Subparagraph (A) corrects a punctuation error, inserting a close parenthesis after "National Housing Act." Subparagraph (B) corrects a spelling error. Paragraph (4) corrects the U.S. Code reference in section 266, striking the reference to title 17 and replacing it with a reference to title 15. Paragraph (5) corrects a spelling error in section 551(8).

## Section 6. Materials allocation authority extension

This section strikes section 104(b)(1) and makes a conforming change to paragraph (2), providing the President with permanent authority to issue rules or orders under section 101(c) of the Defense Production Act of 1950.

## Section 7. Biodiesel fuel use credits

Subsection (a) adds a new section 312 to the Energy Policy Act of 1992 (EPAct). Subsection (a) of section 312 provides for credits for use of biodiesel fuel. Paragraph (1) of that subsection directs DOE to allocate one credit to a fleet or covered person for each qualifying volume of the biodiesel component of fuel containing at least 20 percent biodiesel purchased after the date of enactment of this section for use by the fleet or covered person in vehicles operated by the fleet or covered person weighing more than 8,500 pounds. Paragraph (2) bars allocation of credits for purchase of biodiesel under two circumstances. First, subparagraph (A) bars allocation of credits for use in alternative fueled vehicles. This assures that fleets or covered persons that operate vehicles capable of operating on neat biodiesel do not receive credits for use of biodiesel in those vehicles. DOE has determined that neat biodiesel fuel is an alternative fuel, and vehicles warranted by their original equipment manufacturer or a certified converter to operate on neat biodiesel qualify as alternative fueled vehicles. Allocation of credits for use of biodiesel in alternative fueled vehicles would create an inconsistency with respect to other alternative fuels, since use of alternative fuels in other alternative fueled vehicles does not generate credits. Second, subparagraph (B) bars allocation of credits for purchase of biodiesel that is required by Federal or State law.

Paragraph (3) grants DOE authority to lower the 20 percent biodiesel requirement in paragraph (1) for reasons related to cold start, safety, or vehicle function considerations. These are the same grounds provided in section 301(2) of EPAct upon which DOE is authorized to lower the nonpetroleum content of methanol, ethanol, and other alcohols. Paragraph (4) requires that fleets and covered persons seeking a credit under section 312 provide written documentation to DOE supporting the allocation of a credit.

Subsection (b) of new section 312 governs the use of credits. Paragraph (1) directs DOE, for the year in which the purchase of a qualifying volume of the biodiesel component of fuel is made, to treat that purchase as the acquisition of one alternative fueled vehicle the fleet or covered person is required to acquire under titles III, IV and V of EPAct. Paragraph (2) provides that credits allocated under subsection (a) may not be used to satisfy more than 50 percent of the alternative fueled vehicle requirements of a fleet or covered person under titles III, IV and V of EPAct. This limitation does not apply to a fleet or covered person that is a biodiesel alternative fuel provider described in section 501(a)(2)(A) of EPAct.

Subsection (c) provides that a section 312 credit is not considered a credit under section 508. Credits issued by DOE may only be used by the fleet or covered person that earned the credits and only in the year the credit is issued, so they cannot be traded or banked. Subsection (d) directs DOE to issue a rule by January 1, 1999, establishing procedures implementing this section. Subsection (e) directs DOE to collect such data as are required to make a determination whether average annual alternative fuel use exceeds 450 gallons. Subsection (f) provides definitions of key terms used in section 312. The term "qualifying volume" is defined to mean 450 gallons of biodiesel. DOE is authorized to increase this amount by rule to an amount equal to the average use of alternative fuels by fleets and covered persons if it determines that average annual alternative fuel use exceeds 450 gallons.

Subsection (b) of section 7 makes a conforming change to the EPAct table of contents, adding an item relating to the new section 312.

# CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

# ENERGY POLICY AND CONSERVATION ACT \*

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Energy Policy and Conservation Act".

### TABLE OF CONTENTS

Sec. 2. Statement of purposes.

Sec. 3. Definitions.

# TITLE I-MATTERS RELATED TO DOMESTIC SUPPLY AVAILABILITY

### TITLE III-IMPROVING ENERGY EFFICIENCY

## PART A-AUTOMOTIVE FUEL ECONOMY

[Sec. 301. Amendment to Motor Vehicle Information and Cost Savings Act.

## ["TITLE V—IMPROVING AUTOMOTIVE EFFICIENCY

### ["PART A-AUTOMOTIVE FUEL ECONOMY

run	F 0 +	D C		
"Sec.	501	1 101	ini	tione
Dec.	001.	DET	1111	01011

- ["Sec. 502. Average fuel economy standards applicable to each manufacturer.
- ["Sec. 503. Determination of average fuel economy.
- ["Sec. 504. Judicial review. ["Sec. 505. Information and reports.

- ["Sec. 506. Labeling. ["Sec. 507. Unlawful conduct. ["Sec. 508. Civil penalty. ["Sec. 509. Effect on State law.

# ADDITIONAL VIEWS OF REPRESENTATIVES MARKEY, WAXMAN, PALLONE, DEGETTE, AND FURSE

While all of us would support a clean reauthorization of the Energy Policy and Conservation Act, we have concerns about the Shimkus amendment that was adopted during the Committee's markup. Though some of us were willing to support the underlying legislation despite adoption of the amendment, others felt that the amendment raised sufficient policy concerns to lead us to oppose the bill. All of us agree, however, that while the Shimkus amendment represents an improvement over the original Shimkus bill (H.R. 2568), this legislation raises significant concerns which must be addressed if it is to avoid a negative impact on efforts to promote development of cleaner alternative fueled vehicles and reduce our nation's dependence on imported oil.

We note that one of the primary goals of the Energy Policy Act of 1992 ("EPAct" or "the Act") was to enact a comprehensive national energy policy that strengthens U.S. energy security by reducing dependence on imported oil. Currently, the United States consumes seven million barrels of oil more per day than it produces. Section 502 of the Act establishes goals of a 10 percent displacement in U.S. motor fuel consumption by the year 2000 and a 30 percent displacement in U.S. motor fuel consumption by the year 2010 through the production and increased use of replacement fuels. Section 504 of the Act allows the Secretary to revise these goals downward. According to the latest projections by the Energy Information Administration, the transportation sector will consume 15.8 million barrels per day of petroleum in 2010. Of this total, about 9.2 million barrels per day of petroleum are projected to be used by light duty vehicles. The Energy Information Administration also estimates that 60 percent of our total petroleum demand will be imported in 2010.

Significant gains in displacing petroleum motor fuel consumption by the year 2010 are expected to occur by replacing gasoline with alternative fuels such as electricity, ethanol, hydrogen, methanol, natural gas and propane, in a portion of the U.S. car and truck population, which is projected to be in excess of 200 million vehicles in the year 2010. Currently, alternative fueled vehicles comprise a small fraction of the total U.S. vehicle stock. To enable the Act's displacement goals to be met, alternative fueles must be readily accessible and motor vehicles that operate on these alternative fuels must be available for purchase. Thus, two important elements of reducing petroleum motor fuel consumption are: a nationwide alternative fuels infrastructure and the availability of alternative fueled vehicles for purchase at a reasonable cost by the general public in a wide variety of vehicle types and fueling options. Under EPAct, a motor fuel must meet three requirements to be considered to be an alternative fuel. First, it must foster substantial environ-

(35)

mental benefits. Second, it must be substantially non-petroleum. Third, it must promote energy security goals of the Act.

While we share the stated concerns of some supporters of the Shimkus amendment that many alternative fueled vehicles acquired in response to EPAct do not actually operate on /alternative fuels, we must point out that neither H.R. 2568 nor the Shimkus amendment adopted by the Committee addresses this shortcoming in current law.

The original Shimkus bill, H.R. 2568, would have designated a fuel mixture that contained 80 percent petroleum and 20 percent biodiesel (B-20) as an alternative motor fuel under EPAct. Since any diesel-fueled vehicle is capable of operating on the biodiesel fuel known as B-20, and since EPAct defines an alternative fueled vehicle as one which is capable of operating using an alternative fuel, H.R. 2568 would have transformed every diesel vehicle in America into an alternative fueled vehicle. Even if such vehicles did not use biodiesel fuel (which they would be unlikely to do, as B-20 costs 20-28 cents per gallon more than traditional petroleum diesel), they would have been considered an alternative fueled vehicle for the purposes of EPAct. This would have created a huge loophole in the law which would have undermined our national policy of seeking to promote investment in natural gas, electric, or other alternative fueled vehicles and would have undermined much of the private sector investment in such vehicle technologies that has occurred since EPAct's enactment in 1992.

We note that the Shimkus amendment adopted by the Committee takes a different approach from H.R. 2568, and one which represents an improvement over the original bill. The amendment would allow the Secretary of Energy to allocate credits for each qualifying volume of the biodiesel fuel purchased for heavy vehicles to satisfy EPAct requirements imposed on certain covered persons and fleets. We were pleased that the sponsors agreed to make certain modifications in this amendment, such as striking the transferability of these credits, making certain modifications in the definition of biodiesel that clarifies that it covers only fuel substitutes produced from non-petroleum renewable resources, and making certain clarifications in the DOE authority to lower the percentage of qualifying biodiesel volume for reasons relating to cold start, safety and vehicle function considerations. While these changes have helped to improve the amendment, we still have significant concerns about the language adopted by the Committee.

First, we question whether it makes sense to allow biodiesel fuel to be used to meet up to 50 percent of the alternative fueled vehicle requirements under EPAct. The purpose of the alternative fuels program was to create incentives for private sector investments in new and more environmentally benign technologies which could meet our nation's long term energy and transportation needs without reliance on imported oil—much of which comes from the Middle East. The Shimkus amendment could undermine this important energy security goal by reducing by up to half the number of alternative fueled vehicles acquired in this country each year. Congress decided in 1992 to encourage the shift from petroleum by first getting alternative fueled vehicles on the road so that the infrastructure for alternative fuels could be supported. Allowing use of a fuel which is 80% petroleum to displace the acquisition of vehicles which don't rely on petroleum-based fuels will do little to help the U.S. achieve energy independence from oil imports. In fact, according to DOE staff, switching every single diesel vehicle in the United States to B-20 would only displace 4.2% of petroleum usage.

Second, alternative fuels under EPAct are required to foster substantial environmental benefits. It is our understanding that NOx emissions, a leading source of health-threatening smog, are not reduced in biodiesel blends with less than 35 percent bio-mass derived fuel. Moreover, we note that diesel-fueled vehicles are the source of more than 40 percent of the pollutants from motor vehicles and are also the primary transportation source of fine particulate matter (PM), which has been determined to be a major public health problem. Additionally, in August 1998 the California Air Resources Board designated diesel particulates as carcinogenic toxic air contaminants. The decision means that California state regulators must examine strategies to limit human exposure to the chemicals and illustrates the growing consensus on the need to further reduce dangerous diesel emissions.

Allowing a fuel which is largely petroleum-based to receive credits to meet up to 50 percent of the alternative fuels requirements of EPAct will complicate efforts to achieve the fundamental purposes of the alternative fuels program. Therefore, if this legislation moves forward, we would be far more comfortable if biodiesel credits were limited to a much lower level of between 20 to 30 percent.

Third, we have concerns about the definition of "qualifying volume" of biodiesel fuel. Under the amendment, a minimum of 450 gallons of biodiesel fuel qualifies for one credit. We think this quantity is far too low. Under current law, the purchase of an alternative fueled vehicle—which may serve in a fleet for an average of 5 or 6 years—is worth one credit. Under the Shimkus amendment, a vehicle which burns 450 gallons of biodiesel per year would receive one credit for every year it is in service, or 5–6 credits.

The practical impact of this difference is that credits will be more easily, cheaply, and plentifully generated through the use of biodiesel than through acquisition of alternative fueled vehicles. Consider that over a lifetime of 6 years, a natural gas dedicated vehicle could consume up to 4800 gallons of alternative fuel. The B-20 heavy-duty vehicle would consume 12,000 gallons of B-20, which would equate to only 2,400 gallons of biodiesel. The dedicated natural gas vehicle would get 1 credit. The B-20 vehicle could claim 1 credit per year, or 6 credits total over the same time frame. Also, a heavy-duty dedicated natural gas vehicle that consumes 12,000 gallons of natural gas over 6 years would also get 1 credit. This is a perverse policy result.

To equate a biodiesel credit with a dedicated alternative fueled vehicle on a strict energy basis, therefore, the qualifying volume would need to be set at 4800 gallons. However, since many alternative fueled vehicles are not dedicated, but dual-fuel, they consume much less. The Department of Energy informs us that most dual-fuel natural gas vehicles consume an alternative fuel 50% of the time. Thus, we believe a much higher qualifying volume, such as 2250 gallons, would be appropriate so that biodiesel credits do

not entirely displace investment in cleaner alternative fueled vehicles. We also note that to maintain the integrity of this credit system, the Department of Energy may need to collect fuel use records from fleets using biodiesel.

When Congress enacted the alternative fuels provisions of EPAct, it recognized that vehicles had to come first—and that requiring fuel use would steer many fleets to "avoid" the program. Now that the U.S. is manufacturing significant numbers of alternative fueled vehicles, we must continue working to create a sound and viable refueling infrastructure. While some of us considered offering amendments to address our concerns regarding the Shimkus amendment, we decided not to do so at the Committee markup in the hope that we could continue to work with the sponsors of the amendment to address these issues. We appreciate the willingness of the sponsors of the amendment to work with us to address our concerns, and we are hopeful that a compromise can be reached to address these concerns as best as possible.

C

ED MARKEY. FRANK PALLONE, Jr. DIANA DEGETTE. HENRY A. WAXMAN. ELIZABETH FURSE.