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Hoosier Environmental Council Biofuels Policy

In order to achieve the critical goals of reduced fossil fuel usage and energy independence, the Hoosier Environmental Council (HEC) supports development of a comprehensive strategy toward meeting energy demands for transportation that utilizes a broad base of tactics including biofuels, increased fuel efficiency, conservation, improved public transportation, and development of more pedestrian friendly communities.

However, we do not support the use of grain ethanol to achieve these goals because large scale grain ethanol production is not sustainable given the long-term impacts on the environment and our food supply. Other sources of biofuels such as biodiesel, cellulosic ethanol, and biobutanol hold greater potential for meeting the nation's energy needs and have a smaller environmental footprint than grain ethanol. Our organization supports further work toward developing these types of biofuels. HEC believes biofuel production facilities must be held to standards to prevent degradation of our air and water resources.

Brief Statement of Problem

Overview- State leaders are promoting the production of biofuels from corn and soybeans as a major part of Indiana's economy. Public support for biofuels is being driven by promises of energy independence, reduction in use of fossil fuels, and improvements in environmental quality. Most biofuel production in Indiana will be ethanol, and a number of plants are being built or will be built to produce ethanol from grain. While there are some environmental benefits created by ethanol and biodiesel, environmental concerns result from growing the grain, and from the production of the biofuels. The industry is also estimated to be only two to three years away from the development of cellulosic ethanol, which will be a more efficient and less environmentally harmful method of producing biofuels. There has been little discussion, at least at the state level, of a comprehensive policy on energy for transportation that would include other methods for addressing energy needs such as fuel efficiency technology, conservation, and increased public transportation infrastructure. We cannot achieve the goal of energy independence through biofuels alone, as demonstrated by the heavy strain on corn supplies being created by current levels of ethanol production. Only a comprehensive strategy that includes a variety of tactics will truly achieve this important goal.

Environmental Impact

Positive

- By 2050, biofuels could reduce carbon dioxide emissions in the US by 1.7 billion tons per year.¹
- Biofuels and biofuel blends can lead to lower emission rates of sulfur, particulate matter, carbon monoxide, and toxics than gasoline and diesel.²

¹ Natural Resources Defense Council

² US Environmental Protection Agency

- Cellulosic ethanol could utilize current waste materials such as crop wastes and industrial wastes such as wood pulp.
- Biodiesel can be produced by recycling waste food oils.

Negative

- The ethanol production process can produce emissions of nitrogen oxide, sulfur dioxide, particulate matter, volatile organic compounds, and carbon dioxide.³ In addition, many of the proposed Indiana plants will be powered by coal-fired boilers that will be a significant source of air pollution. Odor problems have also been reported at existing ethanol plants.
- Biofuel production plants also raise concerns with water quantity and quality. These plants will be a major user of water supplies. It takes between 3.5 to 6 gallons of water to produce 1 gallon of ethanol.⁴ Since biofuel facilities filter out pure water for use in the ethanol production, their water discharge contains high levels of dissolved solids and chlorides.⁵
- The growing of corn and soybeans solely to produce biofuels could lead to increased amounts of land being placed in agriculture and thus loss of habitat. Farmers are expected to grow an additional 12 million acres in corn nationwide in 2007 to keep up with ethanol demand. The rising corn prices may also result in land currently enrolled in the Conservation Reserve Program, which sets aside some farmland for important conservation projects, being returned to production. Increased use of grain crops for energy may also compete with their use as a food source.
- Use of cornstalks and other crop residues for cellulosic ethanol production may result in serious loss of soil nutrients over time and contribute to further erosion and evaporation of moisture from the soil.

Solutions

In order to achieve the goal of reduced fossil fuel use and energy independence, the state and the nation must adopt a comprehensive strategy to meet energy demands for transportation. HEC will work to educate the public and policy makers on the need for such a strategy and support initiatives toward achieving such a policy. On the issue of biofuels specifically, HEC policy must balance the possible environmental benefits from biofuel use with the possible environmental impacts from production of biofuels. HEC can accomplish this by promoting the development of more efficient methods of biofuel production over traditional ethanol production and other methods for addressing oil demand. HEC can also work with local citizens living in areas with proposed ethanol plants to ensure that the plants' permits have adequate standards and safeguards in place to protect air quality and water supplies.

To accomplish this policy, HEC will:

³ Nebraska Department of Environmental Quality. 2006. Air Quality and Ethanol Production

⁴ Minnesota Department of Natural Resources

⁵ Iowa Environmental Council. 2006. Biofuels in Iowa

- Publicly promote the need for a comprehensive strategy to meet oil demand that would include renewable fuels, fuel efficiency technology such as hybrid vehicles, public transportation, and pedestrian friendly communities.
- Publicly support initiatives at the state and federal level to develop cellulosic ethanol and biodiesel.
- Support raising the federal Corporate Average Fuel Economy (CAFE) standards, which establishes the average miles per gallon a manufacturer must meet for their fleet of vehicles.
- Develop a guide for citizens concerning possible environmental issues with biofuel plants and recommendations for standards and requirements that should regulate the facilities.
- Consider becoming a state supporter of the 25x25 initiative, which is a national movement to supply 25% of the nation's energy from renewable sources by 2025.