

can be derived from starch- and sugar-containing feedstocks such as grains and root crops. Expanded ethanol production could increase domestic demand for agricultural products by offering a market for substandard crops, crop residues and crop surpluses.

Although the Standing Committee expressed reservation at the time about the cost-efficiency of a methanol-ethanol blend, subsequent work by the Department of Energy, Mines and Resources indicated in January 1986 that a blend of 5% methanol and 3% ethanol could be attractive if ethanol prices were relatively low. While the cost of producing ethanol tends to exceed the cost of gasoline, it can be made quite competitive by mixing it with methanol which is currently 40% of the cost of ethanol. Methanol cannot be used in gasoline without ethanol as a co-solvent due to technical difficulties in engine performance.

About 2.5 million tonnes of grain per year would be required to generate the ethanol for this blend to be added to all gasoline currently marketed in Canada. Methanol blends are now sold commercially in Ontario and western Canada but only in small volumes by independent gasoline marketers.

There are two pilot projects under consideration by the Department of Regional Industrial Expansion's Industrial and Regional Development Program for the manufacture of ethanol from grain. The timing of the phase-out of lead will affect the success of these experiments since the viability of these plants is dependent on the ability of proponents to secure markets for the fuel ethanol.

The governments of British Columbia, Alberta, Manitoba and Ontario are ready to or have announced their intention to offer provincial fuel tax exemptions for gasoline containing ethanol.

It may take the years before lead is to be phased out in 1992 to perfect the technology for introducing fuel ethanol production on a broad basis. The Department of Energy, Mines and Resources currently has funding for demonstration projects that will expire in March 1988.

6.5 The Committee recommends that funding by the Department of Energy, Mines and Resources, Bioenergy Development Program be assured beyond March 1988 so that the commercial viability of fuel ethanol be established before 1992.

The Committee understands that the Minister of Energy, Mines and Resources will be releasing policy guidelines on the use of fuel ethanol in the fall of 1987. Given the fact that the petroleum industry will have to make decisions about octane enhancers in the near future, it needs to be certain that oxygenates can meet octane requirements before expenses are incurred in finding alternative solutions.

6.6 The Committee urges the Minister of Energy, Mines and Resources to support the use of fuel ethanol as an octane enhancer and to provide direction to the petroleum industry in its replacement of this use of lead.