The "up front" costs of moving to alcohol blends in gasoline do not appear to be inordinately high. However, the variance in estimates given by witnesses suggests that more detailed evidence should be collected before an assessment is made. The Committee was also advised that refining costs would be affected by the introduction of alcohol blends, and that these costs would vary from refinery to refinery.

## 2. Ongoing Costs: Alcohol Additives

At time of writing, the least-cost octane enhancers are derived from petroleum. TBA is a good example. Since December 1985, petroleum prices have plummeted. However, the gap between petroleum-derived octane enhancers and ethanol is sufficiently large that petroleum prices could return to their previous highs and ethanol would still be more expensive.

Consideration of ethanol blends therefore requires a marked reduction in the production costs of ethanol.

## 3. Financing the Ethanol Alternative

The issue of subsidies was thoroughly discussed by the Committee. Start-up incentives for retail outlet conversion were considered as well as temporary assistance to refiners to cover cost differentials due to ethanol purchase and blending.

The range of price increases required to cover blending costs, as quoted by different witnesses, is so wide as to be inconclusive. The Committee was told that gasoline refiners would require additional revenue of from less than one cent per litre to two cents per litre in order to cover the extra costs of the ethanol blend.

This spread is not alarming when expressed in cents per litre. Put in aggregate terms, however, the increased cost to the consumer could be anywhere from $\$ 300$ million to $\$ 660$ million per year, based on the above quotes multiplied by the volume of gasoline purchased nationally in 1984. The Committee cannot recommend government expenditures of this magnitude, due to budget constraints. Any cosolvent must be economically competitive when introduced.

Whether or not subsidies are given, the ultimate burden of this cost will be borne by the public. If a subsidy were paid to the refiners so that gasoline prices remained unchanged, other taxes would have to be raised. If the Federal Government were to lower gasoline taxes so that prices remained the same, again, other taxes would have to be increased to replace the lost revenue.

These options do not directly pass on the added costs to gasoline consumers. Rather, they allow gasoline purchasers a price break at the expense of the wider tax-paying population. Such a change in income distribution obliges those who do not buy gasoline to subsidize those who do.

Another possibility is to require refiners to absorb the increased costs out of profit. Like other fiscal directives, this option would present enforcement difficulties and costs. At

