

Incentives

Economic conditions in a market economy may not be conducive to an adequate or timely development of alternative energy forms and systems. The role of government in creating appropriate incentives for alternative energy research, development and commercialization is discussed in the following pages. The problems with and the effectiveness of subsidies aimed at producers and consumers of energy and at potential consumers of conservation technology are dealt with in the context of market and implicit (social) energy prices.

The recommendations in this Report are based on the realization that while the present energy situation is undergoing change it is not in a state of crisis. It is certainly not imperative to map out our future under "war-time" conditions. Canada does have diverse energy options and although we must take action now, we do have the opportunity to consider the cost implications of our choices. Since incentives cost money, we must take the time to consider the cost implications of our best options. There are unique circumstances where specific government involvement is appropriate and in this section we set out some of these special features and indicate the kind of government response that we think they require.

In mixed economies the public sector plays the role of influencing market decisions for the promotion of social well-being. The maze of taxes and subsidies which influences energy consumption and production decisions in Canada today is clear enough indication that government intervention is not only complex but extensive as well. Since the market mechanisms in our economy still produce less than perfect results in many cases, one could advocate stepped-up intervention in just about every market. Nonetheless, there are those who also argue convincingly that the government should leave the market to itself because they have complete faith in the "competence of markets and the incompetence of administrators." Unfortunately, extreme attitudes of this sort are rarely helpful in the resolution of problems. Striking a balance between these two views is probably the best approach in the formulation of an alternative energy policy.

If the economy functioned perfectly in the use of all resources (natural resources, capital and labour), then

The Canadian Economic System

A mixed economy is an economic system like Canada's where both the government and the private sector have important roles to play. Both private and public corporations exist and the government intervenes through the use of laws, regulations and other methods which modify the workings of the market in favour of protecting the public interest.

there would be little need for government incentives to promote energy efficiency or the commercialization of alternative energy sources and technologies — correct market signals would lead to resource allocations which maximize society's well-being. This would be true because producers and consumers would make decisions which take into account the total social implications of their actions. For example, car drivers would perhaps make different decisions about the amount of driving they do if they were to bear the cost of the environmental pollution they cause by driving their cars, the ultimate cost of recycling their cars, and if they had to account for the increase in market power that OPEC gains to raise future prices when more and more imported oil is demanded today. Individuals do not consider all of these costs simply because everybody in society shares them; those who impose the burdens do not pay the full cost personally. If we could add up all these costs we would arrive at the price for energy which accounts for all the costs to society of oil production and consumption (the socially optimal energy price).

The energy market does not account for all costs and this inadequacy has not been overlooked by the public sector. In fact, there is a complex and detailed incentive and regulatory framework already set up in the energy market. The list of available government tools which can, and do, influence energy production and consumption decisions is a long one. It includes grants; subsidies; income tax credits; income tax deductions; low-cost loans; guaranteed loans; taxes on fuel; price ceilings; price deregulation; and protective tariffs, to name only a few. Programs and incentives already over-