and the economic, are not contradictory but are rather complementary in the long run. They seem to be contradictory in some short-term considerations, but surely if we are here to be responsible, we are here to consider what is the right thing to do in the long run.

Priority in energy use should be given to the satisfaction of basic human needs such as food, shelter, health, clean air and water. Human dignity also demands the widest possible participation in policy decisions which seek to meet these requirements. We must consider not just the consumers of the present but the consumers of the future who are voiceless in this debate because they do not yet exist. Their interests ought to be represented more often than they are.

The other voiceless are fellow creatures, the animals, the birds, the fish, creation in general. In this respect, I would like to suggest some guidelines for an energy policy. The first thing we must say about any energy policy is that it must be safe. It must be protective of the human and natural environment and not threatening irreversible global damage. It must be appropriate to human nature, not requiring infallibility or error-free performance from humans or machines.

It must be flexible, that is to say capable of timely change, even reversibility, during development and use in order to adapt to unpredictable events such as unexpected health hazards. It must be non-destructive of the other necessities of life, for instance not taking good agricultural land out of production or polluting necessary water supplies. It must be resource saving, using renewable energy resources rather than non-renewable resources, for instance water power rather than oil. It must be resilient, capable of absorbing shocks, for instance oil embargoes or severe winters without causing major social disruptions. It must be fair, capable of having its benefits and costs allocated fairly to all, including future generations, for instance, not requiring one group to suffer genetic damage in order that another group may have electricity. It must be comprehensible, capable of being understood, with information freely available, so that those citizens who wish can participate responsibly in energy decisions. It must be non-violent, difficult to use directly or indirectly as a weapon, for instance, not able to be easily made into a nuclear bomb. It must be employment producing, not replacing jobs with energy-intensive machinery, especially in areas of high unemployment. It must be pluralistic, assuring a diversity of options, cultures, lifestyles and opportunities, and encouraging a scale that permits choice and control by the users, by Canadians. It must be appropriate, most nearly matched to the society to be served by any particular energy format, for instance, small scale and local where the need is mainly in small communities, and producing the kind of energy most nearly matched to the work to be done, for instance, electricity for telecommunications and solar for hot water. Finally, it must be aesthetic, pleasing to the senses and enjoyable to work with.

These are the kinds of guidelines we must look at. We must support efforts to conserve energy and to use it more efficiently. Not using energy unnecessarily is the safest and cheapest energy resource that we have. Continued education about the necessity for and practical ways of saving energy is needed. Laws and regulations deterring conservation and recycling of materials should be changed.

We must support publicly-funded energy-conserving projects designed in a way that will provide new skills and jobs for the unemployed. Such projects include winterization and insulation of homes, small scale appropriate energy technologies and public transportation, something promised by the Liberals in every election campaign as far back as we can think of, but never delivered.

We must support programs to limit fuel consumption that do not rely primarily on raising prices, which place an intolerable burden on the poor, the elderly and those on fixed incomes. We must support increased government research and development funding, subsidies and other incentives to expand the practical application of appropriate energy technologies based on energy renewable resources, such as solar energy, including wind and water.

We need to support a national energy policy which in the long run does not rely on long-term large increases in the burning of coal, particularly if it is to continue to be burned by companies that refuse to use existing technologies to scrub their emissions. Besides increased health and safety risks to workers and the general public from using more coal, extensive burning of fossil fuels may cause irreversible damage to the world's atmosphere, changing weather patterns and so threatening food production and the continued habitability of large areas of the earth.

However, we realize that some increase in coal use over the short term will be necessary in order to avoid increased use of nuclear energy and economic dislocation caused by severe energy shortages. Coal can be used as a transitional fuel until such time as we are able to bring onstream more of the soft energy options in a more comprehensive way.

Finally, we must support a national energy policy which will not need to utilize nuclear fission. Secure handing of nuclear wastes over thousands of generations and the safe operation of nuclear plants require that humans and machines operate without error. This is simply impossible over the long-run and is one of the reasons why we must abandon this option. Human beings are not infallible. They will make mistakes, and machines will fail. The result may be irreversible damage to the environment or to the human genetic pool.

These are some of the general guidelines which should be seriously looked at by the government. It should see if it could break out of the energy model which has prevailed in this country over so many decades. If it is nothing else, the National Energy Program is a colossal failure of the imagination. We need to think critically about the ways in which we have regarded energy use, consumption and production. The National Energy Program simply does not do that. It commits us to drilling more holes in the Arctic, ceaselessly and endlessly, trying to find the last drop of oil so that we can bring it to the consumer before the next election campaign. This kind of short-term policy will, in the long run, leave the whole country and indeed the whole globe bankrupt.