Coal Liquefaction

(29) Coal liquefaction should not be adopted as a long-term energy option for Canada. In the shorter term, however, a limited number of coal liquefaction projects aimed primarily at export markets could be accepted — with stringent environmental safeguards — to earn foreign exchange, to generate skilled employment and technological expertise, and to provide a supplementary source of synthetic fuel for domestic use in an emergency.
(p. 146)

District Heating

(30) The Committee recommends that district heating should be considered as an energy-conserving technology for new subdivisions, communities and industrial parks.

(p. 150)

Co-generation

(31) The Committee encourages Canadian utilities to look more favourably upon co-generation and to devise means for promoting the broader use of this technology, possibly through joint ownership of such systems with industrial partners. (p. 154)

Small-Scale Hydro

(32) The Committee recommends that financial assistance be extended to isolated communities which rely upon diesel-generated electricity to enable them to install small hydro units where an appropriate site exists. The Committee further recommends that this technology be vigorously promoted for its export potential.

(p. 156)

Fuel Cells— Hydrogen

(33) The Committee recommends that research on fuel cells be funded as part of a commitment to developing a hydrogen economy for Canada. In particular, the development of fuel cells for the transportation sector should be given high priority as their use promises to substitute for transportation fuels, to reduce vehicle exhaust emissions and to develop a market for hydrogen.

(p. 159)

Fusion

(34) The Committee recommends that the program of expenditures proposed by the NRC Advisory Committee on Fusion-Related Research be adopted by the Federal Government. For the five-year period from fiscal year 1980-81 to 1984-85, this represents an expenditure of approximately \$54 million (in constant 1979 dollars). An independent review should be carried out in the third year of the program and after five years to determine its effectiveness.

(p. 169)

Geothermal Energy

(35) The Committee recommends that Federal expenditures on geothermal energy be sufficiently large to accomplish at least the following: to define the size of the geothermal resource in Canada; to promote development of this energy form, especially for space heating; and to determine the feasibility of extracting thermal energy from hot, dry rocks. (p. 177)

Heat Pumps

- (36) The Committee recommends that heat pump use in suitable community recreation complexes be encouraged and that all three levels of government investigate the potential for financial assistance in this regard.

 (p. 181)
- (37) Governmental and industrial R&D in Canada should continue to refine heat pump technology. Emphasis should be placed upon penetrating commercial, residential and industrial markets and upon seeking the most effective marrying of heat pumps with other energy technologies. (p. 182)