for electrical conversions, 33,583 for wood, 2,310 for propane and 846 for other types of conversions. In October 1983 agreement was reached on the terms of a jointly-funded \$125,000 feasibility study on the use of propane and natural gas as oil substitutes in Northwest Territories.

In February 1983 the federal government announced two natural gas contribution programs, components of a federal program to encourage the use of alternative fuels for vehicles. The natural gas fueling station contribution program provided a taxable contribution of up to \$50,000 to be extended to 125 fueling station operators who would sell natural gas to the public. The natural gas vehicle program was designed to encourage the use of natural gas in vehicles by contributing \$500 toward the estimated \$1,800 cost of converting a vehicle for natural gas use.

## 11.2.3 Conservation

In October 1982 a remote communities demonstration program (RCDP) was announced. It would contribute to the cost of technical studies and projects to demonstrate methods of reducing oil dependence in remote communities not served by an electrical grid or natural gas pipeline. It was estimated that 268 communities and 137,000 citizens could benefit from the program.

CHIP. A Canadian home insulation program (CHIP) has assisted almost 2 million households to make their homes more energy efficient. CHIP grants totalled more than \$570 million by May 1983, based on grants of up to \$500. The program also helped to increase public understanding of the importance of energy conservation in all its applications.

In mid-1982, a federal contract of \$490,000 was awarded for a pilot study to test and refine elements of a super energy-efficient (SEE) housing demonstration program. This program was expected to assist in the construction of up to 300 energy efficient houses across Canada during a two-year period ending in 1984. In September 1983 there were 270 builders selected across Canada to build such homes, designated R-2000, under the second phase of the SEE program.

Federal-provincial projects. Federal funds of \$113 million were made available over the five-year period 1979-84 for federal-provincial demonstration agreements. These projects have covered many conservation applications in industry, and in the building and transportation sectors.

A 1982 report of the Canadian industry program for energy conservation (CIPEC) indicated an overall improvement in energy efficiency of 15.4%. This was achieved during 1972-82 mainly by low capital cost measures. Industry previously exceeded its 1980 goal of 12% and remains committed to its goal of 23% for 1985.

Energy R&D. The federal commitment to energy R&D was reaffirmed, A \$31 million increase in federal funds brought the 1983-84 allotment for this type of research to \$333 million. The office of energy research and development in the federal department of energy, mines and resources (EMR Canada) served as the secretariat to an interdepartmental panel on energy R&D. In May 1982 a \$40 million increase in R&D funding was announced, bringing to \$288.8 million the total federal energy R&D budget for 1982-83.

11.2.4 Legislation

During 1982 Parliament passed eight new acts giving legal authority to initiatives of the NEP. These were: an act to amend the Petro-Canada Act; an act to amend the Department of Energy, Mines and Resources Act; an act respecting petroleum incentives and Canadian ownership and control determination and the amending of the Foreign Investment Review Act; an act respecting energy monitoring and the amending of the Energy Supplies Emergency Act, 1979, and the Oil Substitution and Conservation Act; an act respecting motor vehicle fuel consumption standards; an act to amend the Petroleum Administration Act and to enact provisions related thereto; an act to amend the Canada Business Corporations Act; and an act to amend the National Energy Board Act.

The Energy Administration Act (EAA) approved by Parliament in 1982, provided legislative authority to certain existing petroleum taxation measures, including the Canadian ownership special charge (which provides the federal government with revenue for public acquisition of petroleum interests); and the transportation compensation fuel recovery charge (to cover the extra transportation costs of moving domestic crude oil from Montréal to Atlantic refineries). In addition, the EAA raised the ceilings of the oil export charge and the petroleum compensation charge (PCC) and broadened the scope of the PCC, enabling implementation of a blended price system.

In mid-1982 Parliament passed legislation to establish the Co-operative Energy Corp. (Co-Enerco), an association of co-operative financial and marketing institutions actively participating in the Canadian oil industry. Up to \$100 million were being provided by the federal government for a five-year period ending in 1987, to match investment funds generated by participating co-operative organizations.

11.2.5 Renewable energy sources

Public and private sector activity in renewable energy development has been increasing and received a major boost with the introduction of the NEP. Federal expenditures for renewable energy programs for 1982-83 were estimated at \$28.5 million, with \$34 million allotted for 1983-84. These funds would be available for research, development and demonstration projects involving renewables other than large-scale hydroelectric power.