

efficient engines. We can generate electricity through industrial waste heat. And, as Iceland does, we might do a lot more with district heating. For example, why have one furnace in every home, or apartment building—when one large furnace could heat whole districts? Whole districts can be heated. While we do not have the sources of geothermal heat that Iceland does, a cheap source of energy for them, certainly, we have other sources of heat supply which we could use and spread around throughout districts. In Canada only universities and large institutions have district heating.

About 50 per cent of the housing which will be used in the year 2000 has not yet been built. If Canada is really serious about energy conservation and efficiency, we have to investigate other methods, such as district heating. We need not be confined to oil or geothermal. Other countries are developing different thermal fuels, but in my view Canada is not.

The Gulf Tower in Calgary, a highrise office building, has a tremendously efficient system. It probably uses one fifth of the energy needed for other Calgary office buildings. Methods can be found. If you can decrease by 80 per cent the energy needed for space heating and replicate that over and over as new buildings are built, that is a much more sensible approach than continue the energy binges we have been on for years and years.

We have not encouraged efficiency, but we should. The cost of improving energy productivity and efficiency is relatively modest, while the benefits in increased savings in energy, not to mention the jobs that could be created in alternative energy industries, are immense. It has been said many times that the cheapest barrel of oil is the barrel that we can save. One hears that statement day in and day out whenever one talks to people involved in energy, even government people or people from NRC or EMR. However, we do not see this theme translated into positive programs. There are the pilot programs, certainly, but there is no real push or a battle to try to build more efficient buildings through changes in the building code, for instance. We should be looking at approaches of the kind I have just outlined. If the energy corporation that is contemplated in the bill can help do this and get us moving faster, then I think we can support the bill.

Biomass, solar, low-head hydro and wind all have futures as possible energy sources. We have not yet scratched the surface on the supply side. We are told that with appropriate design, passive solar coupled with insulation can save 85 per cent of the space heating costs and hot water costs in homes. I believe there is only one place in Canada—I believe it is the city of Brantford although I am not certain—which has a solar subdivision where the locations of houses are so arranged that each one has light and an opportunity to absorb as much of the solar heat as possible. That sort of project is not yet in full swing, and it will take a long time, I agree.

However, biomass already supplies 3 per cent of Canada's energy needs. That is about as much as what nuclear does. Of course, in Ontario the mute proportion is much larger, since few other sources are available and nuclear has been overbuilt.

Renewable Energy

As I see it, the major impediment to the more widespread use of renewables is attitude that we tend to subsidize certain kinds of energy components and not others. We subsidize the nuclear industry tremendously.

Mr. Crosby: There are others to be heard!

● (1750)

Mr. Rose: The hon. member should not worry about it; I will give him plenty of time. I am going to talk until one minute to six because I do not want to talk the bill out. I will give the hon. member one minute to make his remarks.

I think there is probably a good deal more we can do here, but renewables do need support. The alternative energy industry needs a great deal more support than it has been getting in the past. The parliamentary secretary mentioned what has been done in the last five years. When was the energy crisis, anyway? It was more than six or seven years ago, and what we have done in the last five years is extremely modest and nothing to shout about in my opinion. We have, however, made a start.

I have just returned from a tour with the alternative energy committee task force. We toured western Canada and central Canada and took some trips abroad as well. We also went to northern Europe. We are able to see a great many things. I would like to mention some developments which are occurring in such places as Sweden, Ireland and Iceland. The hon. member should certainly be interested in hearing about that in some detail, even though it might take a little time. I would be very pleased to relate some of my experiences in those exotic, out-of-the-way and non-Canadian places.

Let us first deal with the situation in Canada. The committee found that the provincial governments are showing little or no interest in alternative energy. We visited the capitals of Quebec and Ontario and the four western provinces. Not one of those provinces expects renewables, except hydroelectricity, to provide much more than 2 per cent, 4 per cent or maybe 5 per cent of its total energy needs by the year 2000. That does not sound to me like any great enthusiasm or push on the part of the provinces for much more emphasis on renewables. Provinces could use more renewables and still use more total energy, in which case the percentage dependence on renewables would not change very much. I understand that. We could still be employing a good deal more effort, but I do not think those provinces seriously feel that renewables are viable at the moment. And they may not be; I do not know, but I can give some figures from Ontario. In its book called "Energy Security for the Eighties, a Policy for Ontario" the province of Ontario says it expects that the renewables, including energy from waste, forest, industrial by-product heat, solar, wind, wood, direct burning, liquefaction of coal to gas and that sort of thing, will amount to only 5 per cent of the total energy budget needs of the province by 1995.

If we take that 5 per cent and apply it to a year, it amounts to ten days, so Ontario does not expect renewables to amount to much. Looking at investment figures, it appears that