

this field right now. If we spent a proportionate amount, we should be spending \$200 million a year, not just \$1.4 million per year, as was mentioned.

Mr. Drury: That should be \$1.4 billion.

● (2130)

Mr. Hamilton (Qu'Appelle-Moose Mountain): That is \$1.4 billion for every research program in every department. I am simply saying that on top of these regular programs in the United States, they voted an additional \$2 billion for research into new modes of energy. When we got the figures from the Standing Committee on Natural Resources and Public Works last year, it came to less than \$200,000 for new modes of energy.

I happened to be in cabinet at the time the question of CANDU came up. It was that cabinet in 1958, looking at all the evidence, that decided to set up for Canadian scientists an \$87 million research program to produce nuclear energy power and electrical energy in competition with what the Americans and the British had done. That \$87 million has now risen to \$1 billion. That is one program where Canada took the lead and still has it. I can say that with some assurance because I have been interested in this for some time.

What I am pointing out to the minister is that I am not even asking for this tremendous, exaggerated expense which the Americans have. I want to propose just one simple thing. The Science Council of Canada Report No. 23 of March 1975 asks the minister to look at this program and the council's views on action which should be commenced now and continued into the future if we, as Canadians, are to keep our energy options open.

I quote this to the minister, although I know he has read it, and suggest that this information be put into the public domain. If any other member of the government were just to read this report, they would see it does not suggest huge expenditures. The report suggests using information that is available. It suggests a little more effort to try and pull this knowledge together to make it available to the public.

I will just run through some of the point which they make. I will just take two pages of the report dealing with renewable energy. The first is biomass. The report states:

—a tremendous multiplication of the energy now obtainable from an acre of land could be realized from the growth of algae—

That is that little green stuff. It states:

—the energy from this source could presently compete with oil at \$11 a barrel—

With that dirty, green slime on our water, we could produce energy cheaper than we can buy it. All we have to do is get started. To give the government credit, last year they gave \$34,000 to get the algae experiment started at the University of Manitoba. I thank them for it. It took a long time. That is one example.

Turning over the page, it suggests there should be coordination of all this work on biomass. I again quote:

An incipient focal co-ordination point exists in the form of the Biomass Energy Institute in Winnipeg.

There would be no expense for the government. Utilize these scientists who have tried for 30 years to get governments and corporations to listen to them. Ask these people

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in Winnipeg. They are leading the world. We should keep this up. Do not let NASA get ahead of us.

The third point deals with waste. I do not want to go into this in detail. The leader in this field is the Alberta agriculture department. They talk about taking our so-called manure, rather than waste, removing the methane from it and improving the quality of the fertilizer. To come to figures, they quote from the report done by the conference in Regina.

Take a ton of common manure and put it on to a wheat field. The value of the ton of manure is \$2.50. Take the same ton of manure, remove the methane gas, and it is worth \$37.50; \$30 for the methane and the fertilizer is worth three times as much, \$7.50. Take the same ton of manure, put it into a purified form and recycle it back through the animal as animal feed, and it is worth \$130 a ton. All of this is information which is available. I am simply saying no one is doing the job of getting the information out except myself, because I yap all the time about it.

The fact remains that I am not asking the minister for very much. I will just skim through the report. It talks about an apartment block being designed in Toronto, of all places, providing its hot water by burning its own garbage.

Why does the minister not tell the House about Canwell? This was mentioned three years ago by the Minister of National Revenue (Mr. Basford) when he was Minister of State for Urban Affairs. What is Canwell? It is a joint operation between Central Mortgage and Housing Corporation and the Ontario Research Foundation to take all the sewage from apartments. It takes the fluid part, cleans it up and sends it back. It takes out the solid parts, lets them sit over night, changes them into an energy form. The energy is used to cool the place in the summer and heat it in the winter. Why are the people of Toronto not told about it? Look what it would save them. I know why they are not told. They are terrified that, with the mentality of the people of Toronto, if they were ever told they were drinking their own sewage they would leave the city.

This is done in England. In some hotels in England which cost \$45 a night for a room you have the privilege of drinking your own sewage. The same is true in Germany. Someone has to let the people know there are ways of utilizing this stuff in a way that is productive.

I see my time is running out and I would like to get down to the simplest things, what I call the mundane forms of renewable energy; all known, all understood. At the present price level, heat pumps are now back. What is a heat pump? It has been used for 45 years on a commercial basis. It is the same as a fridge. There are 3,000 in use in Ontario alone and several hundred thousand in the United States. In almost a full page ad in the *Globe and Mail* last month, they advertise "the amazing heat pump". This ad tells the people of Ontario to get rid of their gas furnaces and oil furnaces and use a heat pump. The ad says that the heat pump is the same as a fridge. It simply takes the heat out of the air and pumps it into the house. When it is hot in the house, it pumps the heat outside. It costs \$30 to \$40 to year to operate. The United States congress voted \$137 million to set up one person in each county in the United States not only to explain heat pumps and other things like solar furnaces, solar heating,