

with electricity with only a small degree of government encouragement.

Another estimate in a study conducted by Middleton Associates—"Canada's Renewable Energy Sources: An Assessment of Potential"—revealed that the lifetime cost of a space and water heating system using short-term storage—solar—would be \$6,105 as opposed to an electric space and water heating system costing \$8,400. However, we must understand that the sun continues to shine, and once a solar heating system is set up, the cost over the years is written off, whereas an electrical system is paid for every day.

Other comparisons are also favourable. Heat pumps have an initial capital cost of approximately \$3,000 and can save \$375 a year on a \$500 heating bill in the United States. They are not quite as efficient here because we have more days when the temperature gets down below -10 Centigrade. That problem can be overcome by placing a small water storage facility in the basement or outside, as long as it is fully insulated. By taking heat from water, efficiency can be even greater than what I have just indicated.

It is worthwhile to look at what is being done by the government of the United States. President Carter's energy plan would allow a person using solar energy to have a tax credit of \$2,000. Despite its opposition to the plan the House of Representatives recommended that that be increased to \$2,150. The Senate agreed that that should be allowed not only for homes but for businesses as well. The government of the United States takes this matter very seriously. Those incentives will soon be in place. That opportunity exists here in Canada, and I hope in the budget which is coming up the Minister of Finance (Mr. Chrétien) will include it. It would be much more beneficial to Canadians than providing some additional mortgage money through CMHC. We have a long way to go in this area, but perhaps adopting the hon. member's motion would help.

● (1632)

It is true that for some purposes renewable energy resources are just—

The Acting Speaker (Mr. Ethier): Order, please. I regret to interrupt the hon. member but his allotted time has expired.

Mr. Stanley Knowles (Winnipeg North Centre): Mr. Speaker, I intend to speak for only a minute or two and in doing so express the hope that the House will pass this motion before this hour expires. As the hon. member for Wetaskiwin (Mr. Schellenberger) has indicated, once you raise the subject of energy in any form, almost anything is in order in that field. The motion before us this afternoon, however, is a very narrow one. It asks for one particular provision and I hope we can see fit to agree to it. I feel I cannot get to my feet on an occasion such as this, faced as I am with a member who is showing a great deal of persistence, without commending him for acting in that way. He has stuck with the subject of solar energy and has already had something improved by the House. He is back at it again today and I hope the House will support his motion.

Use of Solar Energy

I think I have to make a slight correction with respect to something he said at the beginning of his speech. If I heard him correctly he said that passing this motion would direct Central Mortgage and Housing Corporation to make certain adjustments. I point out that the passing of the motion merely expresses the view of this House that the government should give that kind of direction to Central Mortgage and Housing Corporation. That is the way things work around here. If the motion were passed—and I hope it is passed unanimously—then woe betide the government that does not pay some attention to the opinion expressed by the House.

I commend the hon. member for sticking with this subject and I hope we support him this afternoon.

Mr. Maurice Harquail (Parliamentary Secretary to Minister of State for Urban Affairs): Mr. Speaker, the hon. member for Davenport (Mr. Caccia) has suggested that the government consider the advisability of directing Central Mortgage and Housing Corporation to make appropriate changes in its lending policy regulations to provide incentives to builders and developers who incorporate in their building plans the use of passive solar energy designs and/or solar energy systems for space and water heating.

This suggestion by the hon. member is worth, in my view, serious consideration because solar energy is one of the sources to be utilized in our continuing efforts to reduce our dependency upon energy sources which are irreplaceable. It is my intention now, Mr. Speaker, to place before the House some of the practical considerations that affect policy making in the area and then to set out the current thoughts of the government on the subject.

First, to enable hon. members to understand the subject more clearly, a distinction has to be made between active solar heating and passive solar heating. The former involves the reception of solar heating energy by solar panels, thermal storage, the input of electrical energy to drive pumps, fans and the like, distribution systems, and so on. Passive solar heating is defined as the contribution accruing to the domestic space heating load by virtue of glazing, which transmits solar heating energy directly into living space.

I mention the distinction, Mr. Speaker, between active and passive solar heating, in order to emphasize that the solar energy applications can range from the simple use of glazing for passive solar energy purposes to more complex solar energy installations.

I recognize that passive solar heating will not obviate the need for a conventional heating system capable of meeting the total heating requirement. No storage of heat is involved in passive systems and so, if there is no sunlight, the benefits are substantially reduced. Even so, there are no barriers that I am aware of to the designing of a house to benefit from such passive solar energy techniques.

I was pleased to be informed that considerable effort has been made to develop knowledge of the more complex active solar systems. There remains much that still requires investigation. Concerted efforts by CMHC and other federal agencies