



Several lumber companies in British Columbia burn hog fuel to power their mills. Bark, sawdust and waste wood are hogged (chopped up), and moisture is pressed out. Left, the prepared hog fuel comes out of the press at the MacMillan Bloedel mills at Port Alberni. Right, hog fuel is piled outside the British Columbia Forest Products mill at Crofton on Vancouver Island.

generator at the company's pulp and lumber complex in Mackenzie, British Columbia, will produce 20 megawatts of electricity.

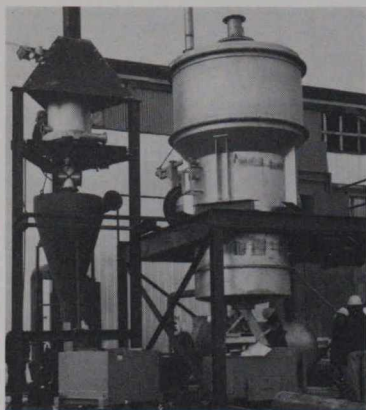
Lamb-Cargate Ltd. of Vancouver, with help from the Department of Energy, Mines & Resources, is building a pilot system to produce gas from waste wood to fuel a lumber-drying kiln.

The five MacMillan Bloedel mills in Port Alberni, British Columbia, produce 325,000 tons of waste wood a year and use it to supply 65 per cent of their energy needs. Until 1975, the waste was incinerated or used as landfill. Now it is pressed dry and burned to produce steam that in

turn produces electricity. It replaces about 250,000 barrels of oil a year.

With improved forest management—planned thinnings, culling and the cultivation of special tree species—the amount of available fuel could be enormously increased. The best-developed concept is for tree farms of short rotation hardwoods. The trees would grow to a few inches in diameter and be cut down every three to eight years. They would resprout from the stumps, producing trees for three to five successive harvests.

Canadian companies are also experimenting with processes to convert wood to methanol,



Left, waste wood is converted to flammable gas in Saskatchewan Forest Products' fluid bed gasifier at Hudson Bay. Bottom left, natural fermentation will create methane in this 23,000-gallon anaerobic digester. Below, large straw bales are burned to dry grain and heat buildings.

