

In 1992, Fairfield Energy Venture had annual operating expenses of \$12 million, \$9.4 million of which was spent in the state's economy. Of the in-state expenditures, more than \$7 million stayed in Fort Fairfield and the surrounding area. This includes \$1.7 million in wages and salaries paid to plant employees and more than \$938,000 paid to the local and state governments in property taxes, fees, and licenses.

A 1994 Mainewatch Institute study found that, "From the start of the project it appears the town and local area have been winners. Local tradespeople were employed in the on-site construction; parts and supplies were purchased from local outlets whenever possible; and the influx of engineers, consultants, and temporary out-of-town workers provided substantial

benefits to local restaurants, gas stations, motels, and food stores."

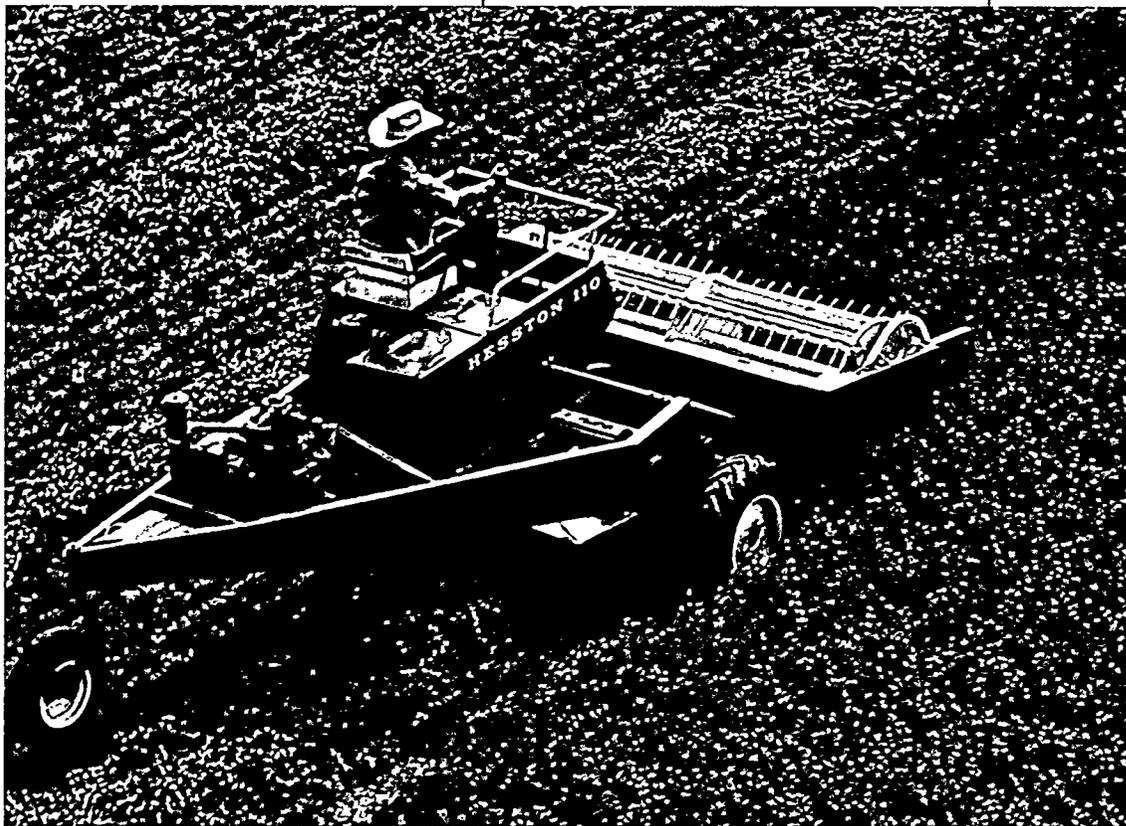
Fairfield Energy Ventures is also expanding the skill base of local workers. Only one of the plant's employees had any previous experience working in a power plant. The Mainewatch Institute study quotes Peter Powers, the plant's general manager, as saying, "All but one of our employees were Maine residents prior to being hired by the plant and all live in close proximity to the plant." Seven of the employees (including the general manager) had previously worked in the navy, and were able to make use of their training in steam propulsion. Many of the plant workers were hired at entry-level positions, and the company is committed to training them to help ensure job advancement and employment stability.

How It Works

Because plants and trees use sunlight to grow, biomass energy is actually a form of stored solar energy. Biomass energy can be converted to electricity in two ways:

Direct combustion involves burning the biomass in a boiler to heat water, then running the resulting steam through a turbine — the same process used in conventional coal-fired plants. Virtually all biomass electric plants today use conventional steam turbines.

Gasification involves converting the solid biomass to a gas that is then burned in a combustion turbine — potentially much more efficient, but still in the demonstration stage of development.



Harvesting alfalfa in Minnesota. Damaged crops can still be used as a biomass feedstock.

Warren Greiz, NREL/PIX03744