

## Powering the Future

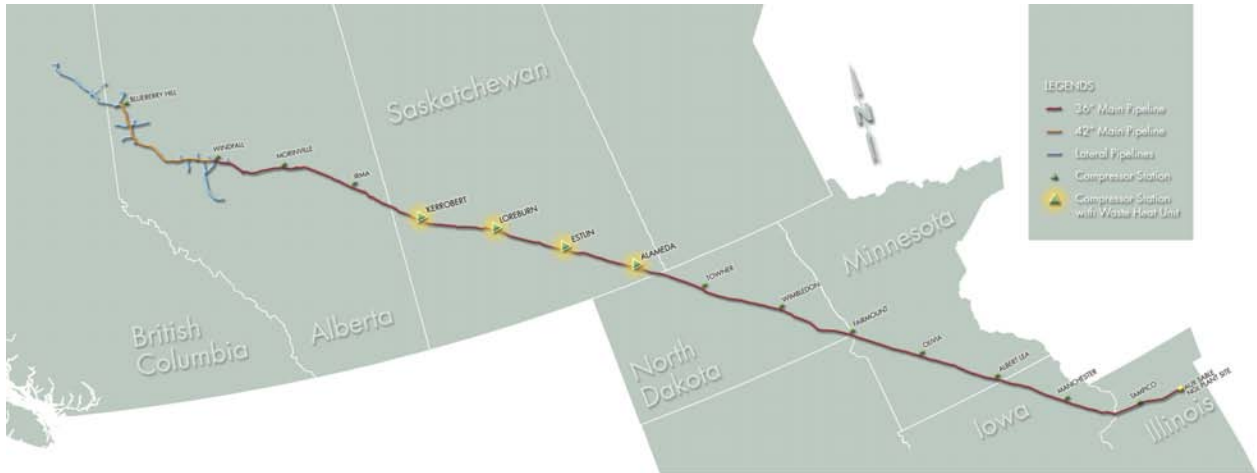
The Alliance Pipeline system transports high-energy, rich natural gas from northeastern British Columbia and northwestern Alberta through Saskatchewan, North Dakota, Minnesota, and Iowa to its terminus in Illinois. NRGreen Power, an entity related to Alliance Pipeline, is pursuing commercial development of electrical power generation along the Alliance system, and other industrial facilities.

At the same time that North American energy needs are increasing, environmental regulations are becoming more stringent. NRGreen Power is constructing waste heat units at Alliance's compressor stations that employ innovative technology to generate electricity from the heat emitted by the natural gas turbines. This heat would otherwise be released into the atmosphere. This method of producing electricity generates no greenhouse gas or other emissions – it is environmentally responsible energy production.



Each waste heat unit has three main components: a heat exchanger, a thermal oil loop and an energy converter. A unique feature of the 'waste' heat system is that it is entirely self-contained. Electricity leaves the station via transmission lines (owned by the power company) and goes to the power company's grid for distribution to customers.

# NRGreen Waste Heat Units



NRGreen has four units operational at Kerrobert, Loreburn, Estlin, and Alameda, Saskatchewan. Each of these units are capable of providing an average of 5 megawatts (MW) of energy per hour, enough to power the equivalent of 5,000 homes!

Waste heat units are well-suited to operate on Alliance's system. Unlike other sources of green energy, like wind or solar power, where the generation of electricity is intermittent, Alliance's compressor stations run 98.5% of the time. Waste heat power generation is helping to provide clean energy supplies to meet North America's energy demands for today and a smarter tomorrow.

For more information please visit  
[www.nrgreenpower.com](http://www.nrgreenpower.com)

