



Fact Sheet | Clover Bar Landfill Gas

Facility Details

Location: Alberta, Canada

Year Commissioned: 2005

Owned/Operated: 100/100

Located in Edmonton, Alberta, Clover Bar Landfill Gas is the only facility in the province which recovers landfill gas and uses it to generate renewable energy. The landfill gas is sourced from the City of Edmonton's Waste Management Centre, and the facility's energy output is purchased by the City of Edmonton.

Quick Facts

- This 5 MW facility reduces greenhouse gases by transforming them into electricity, producing enough renewable energy output to power approximately 4,600 homes annually
- Important source of registered and retired offsets in Alberta
- Landfill Gas
 - A natural byproduct of the decomposition of organic material in municipal solid waste in conditions where oxygen is not present
 - Created when organic material naturally decomposes in a landfill and creates methane, which is captured and burned to produce electricity
 - Contains roughly 50% methane (CH₄) and 50% carbon dioxide (CO₂), with less than 1% non methane organic compounds and trace amounts of inorganic compounds
 - Methane is a 28 times more detrimental greenhouse gas than carbon dioxide
 - Transforming methane into electricity allows it to be used as a resource rather than becoming a pollutant in the atmosphere

Fuel Type(s)



Landfill Gas

Owned Capacity

5 MW

Community Investment

At Capital Power, we contribute to the communities in which we operate with the aim of building a sustainable future for all. We engage our neighbours, consider their interests and build real relationships. Clover Bar Landfill Gas facility operates to contribute to the development of a sustainable, green economy. We aim to source supplies and services locally for our operations, as well as hire from the community. At Clover Bar Land Fill Gas facility:

- We pay approximately \$101,000 in property and linear tax each year, contributing annually to community tax bases, supporting the improvement of infrastructure, roadways, and community services.

We give back where we live and work by supporting local organizations and our employees' community participation through our corporate giving programs.

"As one of Capital Power's carbon offset projects, this facility is contributing to a low-carbon energy future by transforming methane gas into electricity – allowing it to be used as a resource rather than polluting the atmosphere."

Mike Taylor
 Plant Manager