

License or Sub-License

License or sub-license the Gasification Isle

Licenses or sub-licenses the gasification technology to preferred project developers. To learn more about being a potential license or sub-license partner, please contact BIOTECHWORKS-H2 with details about your project along with relative company information.

Included in the licensing or sub-licensing package

Gasifier and polisher
Process design package for gasification isle
Technology license or sub-license
Arranged Engineering support.

Gasification Isle Integration

Waste Reception and Processing

The project developer is responsible for ensuring feedstock is adequately prepared for the gasification process.

- Waste entering the gasifier should be between 0.5 and 2 inches (12mm to 50mm) in size.
- Feedstock up to 20% moisture typically does not require pre-drying.
- Ash content below 15% is best for efficiency.
- Feedstock lower heating value above 12-15 MJ/kg (dry basis) is ideal.
- Heterogenous waste streams including blends of different waste sources are acceptable.

Gasifier

We are the original equipment manufacturer (OEM) of the Gasifier. As part of this equipment package, a project developer would receive:

- Gasifier technology license or sub-license.
- Major equipment (vessels, feed equipment, and slag removal).
- Burners and oxygen/steam lances or sub-license.
- Automation and controls.
- Commissioning assistance and operator training.

Waste Heat Boiler or Syngas Quench

- Selection of waste heat boiler or direct quench will be based on project heat integration study.
- The waste heat boiler will be supplied by your vendor.
- The techno-economic analyses offered by our partner, as part of its engineering package, will support developers in making these decisions.

Multi-Stage Gas Cleaning

- The waste cleaning section removes tar and soot from the raw syngas exiting the gasifier.
- The multi-stage gas cleaning configuration is specified in Sierra Energy's process design package (PDP).
- The gas cleaning section uses commercially available equipment from 3rd party vendors.
- The soot removed from the syngas is recycled to the gasifier.

Syngas to End-Product Conversion

- The developer is responsible for the end-product technology.
- BIOTECHWORKS-H2 and our partner will work with the developer to ensure syngas meets required specifications.

- Common end-products include hydrogen, methanol, renewable natural gas, and electricity.

