Original & Innovative Application
• World’s first hydrothermal processing pilot system (HPPS).
• Demonstration of a process at a scale never before achieved. Previously, the process had been successfully demonstrated only at the lab scale.
• Avoids the need to dry the feedstock, which is an expensive step.

Future Value
• The use of biologically-produced fuel causes no net increase in greenhouse gases.
• Flexible design allows for a variety of feedstocks, including water treatment biosolids.

Social, Economic & Sustainable Design
• Using organic feedstock, HPPS produces fuels that can be used as is, or further refined for varied usage.
• No solvents or chemicals are used; only temperature and pressure.

Complexity
• High pressure (3000 psi) or high temperature (660 °F) are seen regularly; but seldom together at the same time.
• System needed to be designed to fit into standard ISO shipping containers.
• Each piece had to be separately specified, since a system of this size, temperature, and pressure had never been successfully built before.

Exceeding Client/Owner Needs
• Project was performed within a fixed-price contract.
• Functional Acceptance Testing successfully completed.
• Client was continually engaged, including weekly briefings during design, fabrication, and commissioning.