

Biomass supply chain risk

Managing biomass supply chain risk is a critical part of ensuring that a stationary heat facility always has adequate fuel supply.

Solid biofuel supply is not like purchasing electricity where quality of supply is regulated and so once it has been determined that there is adequate cable and transformer capacity for the facility, price is the only aspect that is negotiable. With solid biofuels the purchaser has to ensure that the fuel delivered also meets the specification for their boiler.

Supplier capability to source and deliver also has to be adequate so that the purchaser can be confident that supply will continue as specified for the term of the contract.

Risk applies to activities starting at harvest point and ending at plant gate.

This note applies to all sources of biomass including that of organic waste.

Risk categories are:

- a. Supplier risk (including credit-worthiness/problematic future solvency of supplier; supplier contracts; supply inventory; conflicts of interest/vested interest with competing market; supplier control over production and transportation; distance from the proponent; supplier's experience; supplier harvesting/collection/processing capacity; supplier motivation; human resource impacts);
- **b. Competitor risk** (including competitor influence on the feedstock market; competitors' competitive advantage);
- c. Supply chain risk (including feedstock availability; historical issues; non-weather based externalities; risks related to feedstock production, harvest, and collection; transportation; supply chain resiliency; climate and natural risks; political and social; sustainability and environmental concern; greenhouse gas (GHG) accounting system);
- d. Feedstock quality risk (including feedstock quality; specific feedstock quality variables);
- e. Feedstock scale-up risk (including feedstock scale-up); and
- **f.** Internal organisational risk (including feedstock cost margins; on-site inventory; internal feedstock yard operations; management and personnel).

Canada has published the standard CSA W209 *The Biomass Supply Chain Risk*. It provides requirements, recommendations and guidance for understanding the potential risks to biomass supply chains. A copy of the Standard is available at

https://www.csagroup.org/store/product/CSA%20W209:21/?utm_medium=LinkedIn&utm_source=social& utm_campaign=environment-6-9-2021