

ENERGY ROADBLOCK: INSUFFICIENT ELECTRICAL GRID INFRASTRUCTURE

Overview

Renfrew County faces significant challenges due to aging and insufficient electrical grid infrastructure. The grid system was designed decades ago for lower population densities and modest industrial demand. The current grid is operating near or at capacity in many areas, with limited ability to support any new or expanded development.

Background

- **Current Infrastructure is Outdated:** Renfrew County's electrical grid was designed decades ago and is now operating at or near capacity, limiting new development.
- **Growth is Being Stalled:** Businesses and investors cite grid limitations as a top barrier to expansion in advanced manufacturing, agriculture, and forestry.
- **Lost Opportunities:** Clean-tech, agri-tech, and bio-based manufacturing projects are bypassing Renfrew County due to insufficient grid capacity.
- **Impact on Forestry & Biomass Projects:** Innovative biomass initiatives and combined heat-and-power projects cannot supply surplus electricity to the grid because of capacity constraints. Several larger wood processing facilities are pursuing innovative biomass project investments using low-end material (pulpwood) and sawmill residues but are being hindered by insufficient electrical grid capacity:
 - Roseburg Forest Products (Pembroke MDF) is pursuing development of a Biomass Cogeneration investment alongside a new Heat Plant to mitigate the impact of rising electricity costs, which have contributed to increased production costs negatively impacting market competitiveness. **Total projected investment: \$135 million**
 - Golden Lake Power LP (Ben Hokum & Son Limited & CEM Engineering) is pursuing development of a Biomass Cogeneration facility. **Total projected investment: \$65 million**
 - Harvest Bioindustrial Group is pursuing the development of a bio-refinery located at Lavern Heideman & Sons sawmill.
- **Urgent Need for Action:** Upgrading grid infrastructure will unlock rural development, job creation, and support Ontario's clean energy and climate goals.
- **Agricultural Sector is Constrained:** Farmers face capacity limits and bureaucratic delays when connecting solar and biogas systems to Hydro One's network.
- **Substations at Full Capacity:** Key substations (Beachburg DS, Cobden TS) are maxed out, preventing even small-scale renewable projects.



- **Missed RNG Opportunities:** Natural gas lines stop in Beachburg, leaving nearby producers unable to connect and contribute RNG to Ontario's energy supply. There is significant interest in Renewable Natural Gas (RNG) development as a complementary option to on-farm biogas systems, however, limited natural gas lines leaves producers unable to connect.
 - *"We would love to take part in future Contract submissions to IESO for Solar and Biogas. At this time updates on the system are necessary in the Cobden-Eganville-Beachburg area and also enlarged connection to the transmission system is necessary. Without we are at a standstill. We need updates on our electrical and natural gas systems, even small "10KW systems" are now limited in our area." ~ Paul Klaesi, FEPRO Farms, Cobden*
- **Environmental & Economic Benefits:** RNG development reduces emissions, supports sustainability, and strengthens rural economies.
- **Call for System Extensions:** Expanding natural gas infrastructure will enable on-farm biogas and RNG projects, aligning with provincial energy priorities.

Request for Support

- Prioritize upgrading the electrical grid infrastructure and expanding the Renewable Natural Gas (RNG) infrastructure in Renfrew County and Eastern Ontario in support of residential and business growth in rural communities.
- Support the Township of Whitewater Region's request for advancing the magnesium mine and industrial park development.

