

# Low Carbon Energy

## Scrap Tires and the Lafarge Brookfield Plant

Lafarge and researchers from Dalhousie University are working together to replace fossil fuels with lower carbon fuels in the manufacture of cement. Research work indicates that scrap tires are a very promising lower carbon fuel for Nova Scotia. **This alternative source of fuel significantly lowers emissions as compared to the coal that's used now and provides local economic benefits .**

As new technologies emerge and new approaches to limiting our impact on the environment become more commonplace, it's very important for us to always lead with science, and do what's best for our health, our economy and our communities.

### Who we are

We are Nova Scotians. The Lafarge Brookfield Cement Plant manufactures Portland cement, approximately 200,000 tonnes of per year, a fine powder that is the primary ingredient in concrete. It is the only operating plant of its kind in Atlantic Canada and currently employs over 70 people; most of those being Colchester County residents.

Globally, Lafarge has committed to a 40% reduction in carbon by 2030 over 1990 levels and has already achieved a 20% reduction. In Brookfield, 30-35% of our fuels are already from lower carbon sources. Our scrap tire initiative will increase that to an industry leading level of 50%.

### Under a watchful eye

Before granting any permanent approvals, Dalhousie researchers and scientists from the provincial Department of the Environment will conduct a full scale test of this fuel source in order to confirm the positive lab scale combustion test results.

We have conducted multiple community consultations to gather feedback and provincial officials have received information and comments about the project from the community through their Environmental Assessment process.

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We are confident that lower carbon, locally sourced fuels will bring enormous environmental, community and economic benefits to our cement facility in Brookfield. It will mean that:

- scrap tires used as lower-emission fuel **will reduce greenhouse gas emissions by roughly 30%** for every tonne of coal replaced **and NOx emissions by 10-15%** ;
- **emissions from fossil fuel mining and processing are also conserved**;
- this low-emission solution will use 20 tonnes of scrap tires per day, roughly 400k of the 800k - 1 million tires generated in Nova Scotia every year;
- **no significant adverse effects**, other than a slight increase in truck traffic, are expected;
- **new jobs will be created** during the design, construction and operation stages;
- **all of these expectations will be measured by world-class scientists and the results shared.**

The staff of Lafarge Brookfield live in the community, raise their families there and are committed to operating the cement plant in accordance with the strictest environmental, health and safety standards.

This lower-emission initiative is the next important step in that stewardship.