12 December 2016

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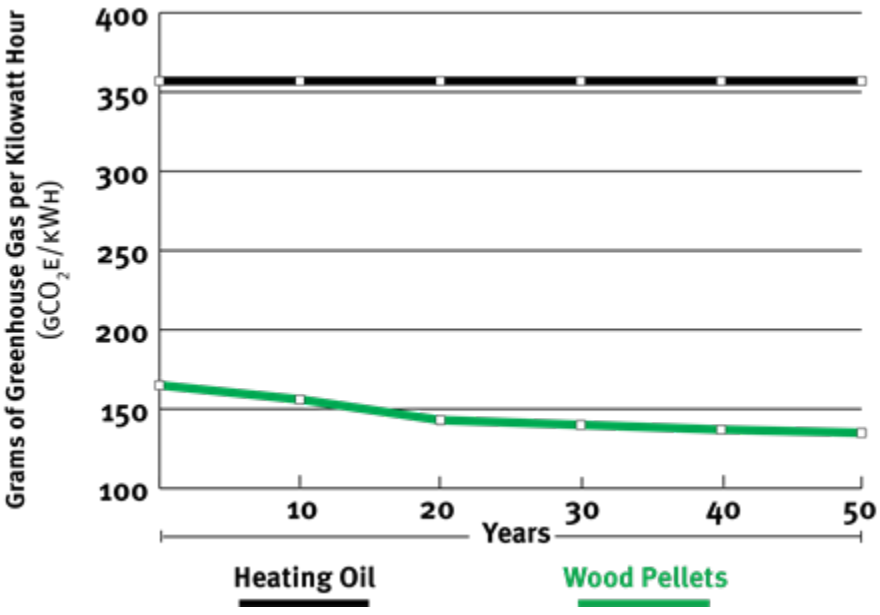
Wood Pellet Heat Reduces Carbon Emissions by More Than Half

10/11/2016

Analysis shows wood pellet fuel reduces greenhouse gas emissions by more than half over fossil fuels

The Northern Forest Center commissioned a study of the greenhouse gas impacts of heating buildings with state-of-the-art wood pellet boilers. The Spatial Informatics Group-Natural Assets Laboratory (SIGNAL) used data specific to the region's forest composition and harvest practices, and the pellet sourcing and manufacturing of 9 out of 10 Northern Forest pellet mills, all of which produce pellets exclusively for thermal (heat) generation.



The life-cycle analysis, which accounts for all greenhouse gas emissions from sourcing, processing, and transporting fuels, finds that:

- *On day one, using wood pellets for heat reduces greenhouse gas emissions by 54% compared to oil and 59% to natural gas.*

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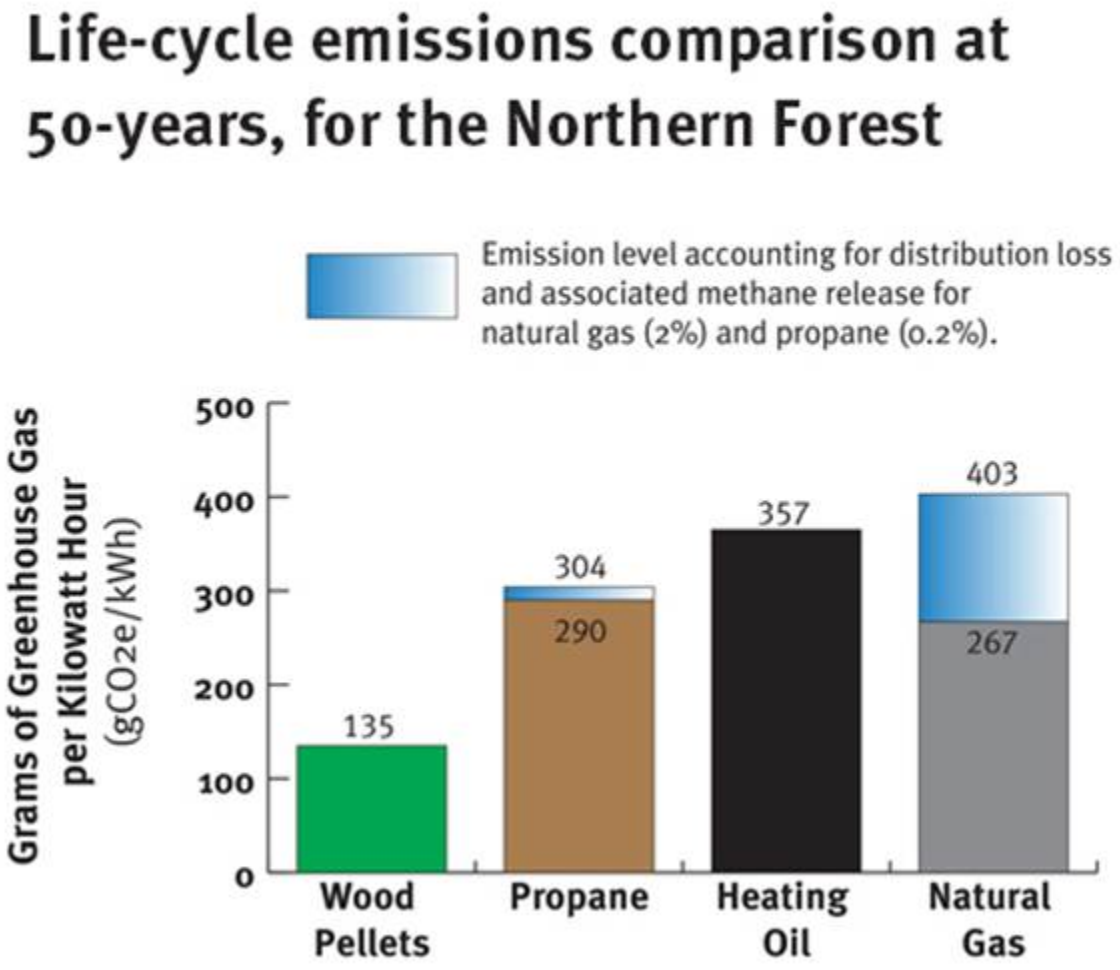
- *After 50 years, greenhouse gas emissions from pellets drop to 62% less than oil, 67% less than natural gas, and 56% less than propane.*

For more information, **take a look at a fact sheet summary**.

Analysis by: Thomas Buchholz, PhD. and John Gunn, PhD., Spatial Informatics Group-Natural Assets Laboratory (SIG-NAL)

Net Emissions Comparison



Almost half of pellet content recaptured from other uses

In 2015, the average Northern Forest- produced wood pellet was comprised of:

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- 44% sawdust and other byproducts of forest product manufacturing—wood that was cut for other purposes;
- 56% low-quality pulpwood and small trees, usually the byproduct of harvesting for higher value timber;
- Less than 1% from other sources, such as landscaping and municipalities.

Learn more about our work on Modern Wood Heat.

Take a look at our FAQ's.

Read the detailed Methodology here.

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