

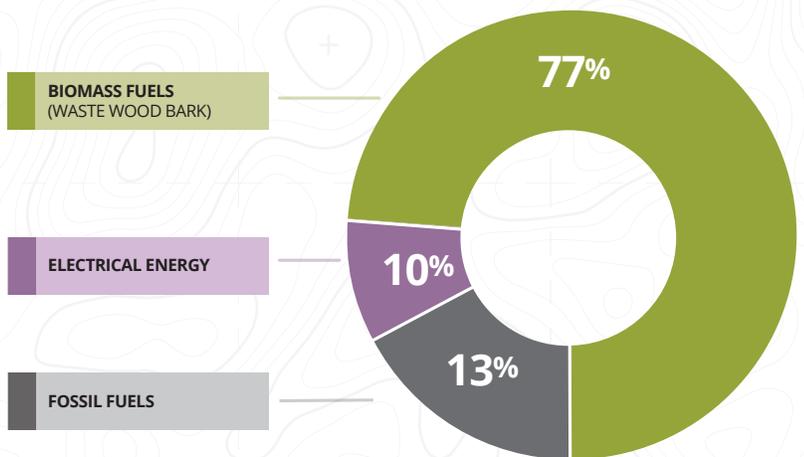


**PAPER  
EXCELLENCE**

**ENERGY  
LEADERSHIP**

Making pulp and paper is energy intensive. It takes a lot of energy to convert wood chips into fibres and even more energy to dry those fibres so they become pulp or paper. Paper Excellence does an incredible job of reusing and recovering energy, but we still need a great deal to operate the system. This energy is produced from three sources: biomass, fuel and electricity.

### ENERGY SOURCES



**85%** OF ENERGY CONSUMED BY PAPER EXCELLENCE COMES FROM RENEWABLE RESOURCES

We receive energy in the form of fuels or electricity. Fuels are burned to generate heat and make steam. Steam is used throughout the process to dry pulp and paper and make electricity. A steam turbine takes high pressure steam from the boilers and converts some of the energy to electricity while reducing the pressure to levels that can be used in the process. This electricity is both produced and consumed in the mill and any excess is sent back to the electrical grid.

There are two typical types of steam generating boilers at our mill sites:

**Recovery Boiler:** takes used pulping liquor from the Kraft process and simultaneously “recovers” the pulping chemicals and incinerates organic materials to produce high pressure steam. This chemical recovery process involves a lime kiln, which is the primary consumer of natural gas at our mills.

**Biomass Boiler:** burns primarily bark and other wood residues that are produced during the milling process and trucked and barged to our mills.



## ENERGY MANAGEMENT

Paper Excellence mills have control rooms that measure and track all the energy entering and flowing through our process in real time. Our operating crews are trained to monitor the use of energy and take steps to reduce when the process is operating outside of its targeted range. We use the data from our real time energy data to calculate what our greenhouse gas (GHG) impact will be.



Our Crofton facility is certified to ISO 50001:2018, which is the international standard for energy management systems.

**All our energy inputs are measured and tracked by our production systems. This data is then used to calculate our GHG emissions based on widely accepted intensity factors.**

