Environment

Thinking about tomorrow means preserving the environment for future generations by reducing pollution and waste.

Environment

When it comes to the environment, one of our principal objectives is to reduce our consumption of resources and ecological footprint. This involves adopting less energy-intensive practices and reducing pollution, notably in our transportation, food production and processing activities. It also means protecting natural resources such as water and regarding by-products as raw materials that we can reuse, recycle and recover.

Priority one: Reduce our energy consumption, greenhouse gas emissions and noise pollution.

PLANTS

Over the past five years, we've set up energy committees in each of our plants with the goal of reducing our energy consumption by 3% each year. In order to attain this objective, the first initiatives were aimed at putting methods into place to target the most efficient and cost-effective reduction initiatives.

Measurement and control tools. We've equipped all of our plants in Quebec with tools to analyze their electricity consumption, such as Visilec and Vigieligne. These tools are incredibly useful for establishing our electrical consumption profile, monitoring fluctuations in consumption and determining potential savings.

We've also acquired EnerNOC energy intelligence software for our plant in Red Deer, Alberta, and distribution centre in Saint-Bruno, Quebec, to help manage energy consumption peaks. The use of this technology helped us reduce our energy use during high-consumption periods.

Training. To sensitize the various stakeholders concerned by energy use in our facilities, we offered training on electrical and natural gas invoicing. This training has let us instruct controllers, maintenance heads and plant managers in the different variables that affect energy bills and in sound energy management practices at their location.

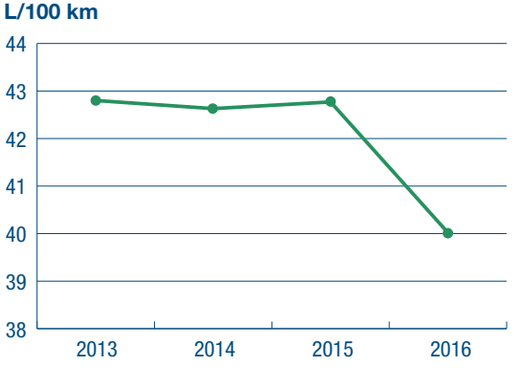
Energy assessment. In 2016, we conducted an in-depth energy review of our Sainte-Rosalie poultry processing facility. This pilot project, which will be rolled out to all our plants, lets us quantify all forms of energy used in each sector, improve energy management and bring corrective measures as required. For example, since 2016, we've been able to realize energy savings by identifying and reducing leaks in our compressed air circuits.

Greener processes. We aim to provide all our facilities with equipment that performs better, uses less energy and emits fewer pollutants. That's why we stay abreast of the latest equipment and manufacturing practices. From 2012 to 2016, we introduced a number of projects to improve our processes, some of which will be implemented in other plants over the next few years.

- Replace the CO_2 refrigeration system at our Sainte-Rosalie plant with an ammonia system that has less impact on climate change and lets us lower our CO_2 emissions by 15,000 metric tonnes per year.
- Replace water heaters with more efficient models.
- Plan for the conversion to LED lighting.

Transport. The transport of livestock and finished products is a major source of greenhouse gas emissions. So far, we've employed various technologies to reduce the fuel consumption of our transport fleet and substantially reduce GHG emissions. Between 2012 and 2016, our consumption of clear diesel fuel, used to power our vehicles, fell from 42.8 to 40.02 L/100 km, a reduction of 6.5%.

Fuel consumption (clear diesel)



Fleet management. In 2015, we began using Kolombo fleet management software to help reduce the number of empty trips and optimize travel. The installation of the latest management and geolocalization modules was completed in October 2016.

Power supply units. The installation of power sources, such as those at our Sainte-Rosalie facility in 2013 and Saint-Bruno distribution centre in 2015, lets us run our heating, ventilation or refrigeration units on electricity instead of dyed diesel, which is normally used as fuel for auxiliary electrical power. ↓ 15% (dyed diesel)

Fleet transformation. The addition of equipment to our tractor-trailers upon their renewal helps us reduce the environmental impact of our transportation activities.

- Install aerodynamic skirts on the sides of trailers to reduce drag and improve fuel efficiency. ↓ 4% (clear diesel)
- Purchase cabin heaters to keep drivers warm without having to run the engine. ↓ 1.4% (clear diesel)
- Install speed regulators that limit speeds to 95 km/h for local transport. ↓ 3% (clear diesel)

Rewards program. We evaluate the fuel efficiency gains from speed, engine speed, braking and engine idle for every driver and we reward those who adopt more fuel-efficient driving habits. This initiative returns very positive results: the proportion of drivers scoring 95% or more rose from 32% to 55% from 2015 to 2016.

SmartWay partnership. In 2014, Transbo, our principal transportation supplier, joined the SmartWay Transport Partnership, a program managed by Natural Resources Canada. Program members commit to keeping track of their fuel consumption and improving their mileage from year to year. Data gathered from members permits comparisons with the industry overall.

Noise attenuation. We make sure that our activities don't negatively impact the areas surrounding our facilities and we've implemented different measures to reduce noise created by these activities, such as installing silencers on air vents, acoustic screens and noise barriers.

At Sainte-Rosalie, where our poultry processing plant is located adjacent to a residential neighbourhood, we've taken particular care to reduce noise pollution that could inconvenience local residents.

- Addition of acoustic screens
- Insulating walls in compressor rooms
- Installation of silencers on chimneys
- Replacement of refrigeration equipment with low-speed versions
- Modification of ventilation louvres

ACTION PLAN

- Complete the energy assessments in all plants by 2020 to reduce energy consumption by an additional 20%.
- Install equipment to measure the energy consumption in producing steam and hot water as well as the consumption of natural gas.
- Adopt greener measures, such as the installation of more than 5,000 LED lights in 11 of our facilities in 2017.
- Evaluate sites for the purpose of installing power supply units for tractor-trailers.
- Complete the fleet transformation by installing cabin heaters, aerodynamic skirts and speed regulators on all tractor-trailers.
- Create an online toolbox for shippers promoting the adoption of fuel consumption reduction strategies.

Priority two: Reduce our water consumption.

ACTION PLAN

- Pursue water savings initiatives in our plants.
- Commission a study looking into the increased use of recycled waste water at our Saint-Esprit plant.

POTABLE WATER

In every plant, water savings committees have been given the mandate to record and monitor the consumption of potable water with the aim of determining the possibilities for reduced consumption targets at each plant. Over the past five years, the plants have put forth a number of different initiatives depending on their activities and the equipment renewal process.

- Install timers and optical instrumentation, including on production lines and sinks, for the automatic shut-off of water supplies.
- Use flow-limited nozzles on sprayers used by cleaning crews and implement inspection and replacement procedures for defective nozzles.
- Install low-flow shower heads on production lines.
- Install low-flow toilets when they're being replaced.
- Use closed-loop systems for cooling water.
- Install new ultrafiltration systems to increase the rate of reuse of salt water used to chill products manufactured in our bacon production facilities.

WASTE WATER

Most of our production facilities are equipped with waste water treatment equipment that relieves the pressure on municipal water filtration plants. We're also exploring treatment avenues in which the water would be recovered for our own use.

Tertiary water treatment. In 2012, we undertook steps to install tertiary waste water treatment equipment using membrane filtration in our hog slaughtering and butchering facility at Saint-Esprit. This project, which aims to recycle water into potable water without compromising production quality or food safety, enables savings of more than 500,000 litres of water per day, or about 30% of the plant's entire consumption.

In use since 2014, this system won the Conseil de la transformation alimentaire du Québec's prize for innovation in the Technology and Productivity Category/ Large Companies in 2014 as well as two awards at the Grands Prix du génie-conseil québécois in 2016.

Priority three: Reduce and recover by-products.

ORGANIC MATERIALS

For a number of years, Olymel has observed a “zero landfill” policy regarding non-edible meats and agrifood biosolids produced each year.

Non-edible meats consist of by-products of the slaughtering process, such as skin, bones, blood or fat, and leftover materials from our processing facilities such as breading, cooking oil and used vegetable oils. All these organic materials, approaching 250,000 tonnes per year, are recovered and reused by companies specializing in this area. They’re primarily converted into tankage, greases and oils.

Biosolids originate from our plants’ water treatment facilities. This sludge goes forward and undergoes biomethanization (47%), agricultural use (31%), composting (18%) and energy recovery (4%).

Project Jupiter. In 2016, we entered into an agreement with the Centre de traitement de la biomasse de la Montérégie (CTBM), in Sainte-Pie-de-Bagot, for the agronomic management of our biosolids and the operation of a bio-oil and tankage production plant, which we’ll build in 2017 on the CTBM site with an investment of $6 million. This agreement will allow us to process 100,000 tonnes of biosolids generated annually by our Quebec plants and redirect each type of biosolid to the proper processing method depending on their potential.

INORGANIC MATERIALS

Our waste product management policy is guided by the four “R”s (reduce, reuse, recycle and recover). In 2014, we adopted a purchasing strategy that favours the supply of materials in bulk to reduce waste materials used in packaging. In terms of reuse and recycling, programs are in place in most of our facilities for printer ink cartridges, dry and wet batteries, outdated electronics, paper and cardboard, and wooden shipping pallets.

PACKAGING

Over the last few years, we’ve instituted a packaging improvement process for all our private label and national brands to reduce their impact on the environment without compromising the quality and safety of the food products themselves. We’ve endeavoured to increase the potential of packaging to be recycled and to reduce its weight, which lets us optimize transport and reduce waste materials.

Here are just a few of the projects completed or in progress for the 2012-2016 period:

- Reduce the thickness of flat cardboard used in the manufacture of small boxes (24 pts to 18 pts). ↓ 27% (weight)
- Reduce the strength of 5-kg bacon boxes (ECT 40 to ECT 32). ↓ 14% (weight)
- Replace certain cardboard combo packaging with wire baskets. ↓ 31% (weight)
- Replace 18-kg waxed cardboard boxes for refrigerated foods with unwaxed recyclable boxes.
- Eliminate PVC in packing films, because it’s difficult to recycle.
- Use low-VOC printer’s ink and replace UV varnish with a solvent-free, water-based varnish.
- Improve palletization to reduce the number of tractor-trailers on the road.