Choosing more responsible paper hygiene products

Your practical guide



Harmonizing environmental responsibility and paper hygiene products: it all starts with informed choices!

Cascades PRO®: A Cascades brand specializing in hygiene and tissue solutions for commercial and professional needs.



Proactively sustainable since our early days, we have made the circular economy an integral part of our DNA.

Doing more with fewer resources: It is not just a slogan. It is a philosophy that we strive to apply at every stage in the life cycle of our products.

Our goal? Helping you make informed choices that empower you to take an active role in your ecological transition.

For us, offering responsible products is not a marketing opportunity. Rather, it is the result of meaningful initiatives within our business model and innovative processes since 1964.

At Cascades PRO, our expertise is an asset we want to share with our customers.

That is why we have created this practical guide—to help you select the best hygiene products that meet your criteria, while demonstrating how Cascades PRO products make a real difference for you, your customers, and your employees.

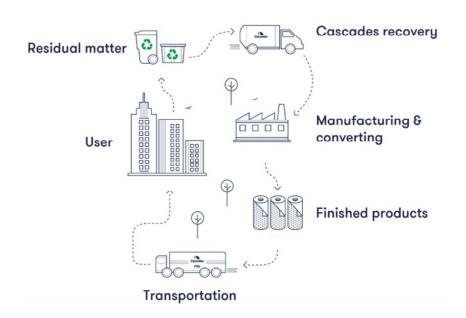
To learn more about our sustainability initiatives, consult our latest report: <u>Cascades</u> Sustainability Report

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Lite-cycle assessment a pillar of eco-design

A true scientific method, the **life-cycle assessment** is the most reliable and objective way of evaluating the environmental, social, and economic impacts associated with all stages of a product's life. This process covers both raw material extraction and product end of life, including materials processing, manufacturing, distribution, use, repair and maintenance (source: International Reference Centre for the Life Cycle of Products, Processes and Services – CIRAIG).

At Cascades PRO, we pay attention to every stage of the life cycle (this is how we ensure the <u>eco-design</u> of our products).



Your practical guide - 2024



The art of choosing raw materials

Virgin fibre, recycled fibre, and bleaching

Cascades PRO®

Virgin fibre, recycled fibre, and bleaching

Several types of fibres are used in the manufacturing of paper hygiene products, two of which are the most commonly used.

Virgin fibre

generally derived from wood chip residues.

The type of wood selected for virgin fibre influences the properties of the final product. Long fibres from softwoods, such as black spruce, are used to reinforce the product. Short fibres from hardwoods, such as maple and white birch, give the product softness, volume, and absorption. In general, bathroom tissue made from virgin fibre is designed using a blend of these two types to combine all those properties and offer a high-quality finished product.

Of course, the use of virgin fibres in the manufacturing of hygiene products creates demand for forest products. To avoid putting pressure on forests, the ideal solution is to use recycled fibres. If virgin fibre is required for technical reasons, it is essential to choose inputs from certified or controlled sources.





Recycled fibre

from previously used paper and cardboard.

Paper and cardboard from recovery centres (post-consumer sources) and paper and cardboard from industries, businesses, and institutions (post-industrial sources) are used to make recycled products. To be able to reuse them to manufacture new products, pulp made from recycled fibre must go through a series of steps: purification, screening, washing, and refining. Using recycled materials, such as office paper and old corrugated cardboard, helps minimize the environmental footprint, as its processing uses less water, energy, and chemicals than the production of virgin wood pulp.

01 The art of choosing raw materials

To manufacture white products that meet market requirements, pulp made from recycled fibre needs to be de-inked and bleached.

The bleaching step increases the whiteness of the de-inked pulp. For this step, Cascades PRO uses sodium hydrosulfite in the presence of steam. Unlike chlorinated processes, this one is gentler on nature and generates no toxic chlorinated by-products.

Recycled or virgin: which fibre to choose?

A recycled fibre requires fewer natural resources for processing than a virgin fibre. In fact, according to generic data from the Environmental Paper Network, the use of 100% recycled fibres in the manufacturing of tissue products would reduce water consumption by 47% compared to the use of virgin fibres.

Over the last six decades, we have become experts in the manufacturing of products made from recycled fibres. That is why today over 70% of Cascades PRO tissue products are made from 100% recycled fibres.

If the use of these fibres is essential, we source from suppliers whose virgin fibres comes from FSC-certified forests or from sources that are not FSC-certified but meet certain responsible management criteria and are verifiable. To meet market demands for fibre traceability, FSC also offers certification for 100% recycled fibres. You will thus see a logo that includes the mention 'Recycled'. If the product contains a mix of recycled and virgin fibers, you will see a logo with the mention 'Mixed'.



Keep an eye out for certifications!





FSC®

There are several forest traceability certifications. The Forest Stewardship Council® (FSC®) is most widely recognized, notably for its rigour and the inclusion of social criteria in land management. This certification guarantees that virgin fibre comes from forests managed according to strict rules. It also enables us to meet our customers' objectives in terms of esponsible sourcing of forest resources.

Green Seal®

Green Seal®—certified products are made from 100% recycled fibre, with a requirement for post-consumer fibre content. Green Seal® also certifies that the products are manufactured with respect for resources, using less water and energy and without the use of chlorine in the bleaching process.





Toward more responsible manufacturing

Thoughtful use of resources

Cascades PRO®



There are two key components in the design and manufacturing of a paper hygiene product: water and energy.

Innovative practices help us use these resources wisely in the manufacturing chain.



Water

Fibre pulping processes require water. As this is a precious resource, it is essential to implement processes and control systems in the manufacturing chain to help reuse wastewater and mitigate water network imbalances.

Energy

Water means drying. And drying means energy. Two sources are required in a paper manufacturing plant: thermal energy and electrical energy. As with water, it is important to use our energy resources wisely, since they not only draw on our natural resources—renewable or not—but also generate greenhouse gas emissions, which are at the root of climate change.



Choose packaging with a purpose!



Product packaging

Beyond the product itself, choosing ecodesigned packaging is of the utmost importance. There are several important indicators to consider in the selection process. Check the manufacturing, the composition of inputs, the methods and place of manufacture of the packaging, and its recyclability in the markets where it will be used.





Taking concrete actions across the entire production chain

At Cascades, our commitments translate to

Water consumption **4.7 times** lower than the industry average: the equivalent of almost 26,000 Olympic-sized swimming pools!

Energy consumption **41% lower** than the average in the North American paper industry. The cherry on top? 58% of our consumed energy is renewable.⁵

Residual materials are recycled at a rate of 68%. In other words, these materials have been reused in other operations.

How do we achieve these results?

Cascades has been committed to the circular economy for 60 years to reduce resource consumption and preserve ecosystems. This model allows us to assess and quantify our impacts through eco-design, responsible consumption and sourcing, and the optimization of operations across our manufacturing chain.⁶

Keep an eye out for certifications!





Green-e®

manufacture our Green-e-certified products.

UL ECOLOGO®

certified products have a low environmental impact thanks to the required environmental performance standards, with multiple life-cycle criteria.

Bonus questions:

What resources are used for the manufacturing of my bathroom tissue, kitchen roll towel or hand towel?

How is my product packaged?



Sustainable distribution channels

Freight transport and greenhouse gas emissions

Cascades PRO®



Transporting the goods you buy inevitably involves greenhouse gas emissions

In 2019, road transport accounted for 21 % of Canada's total GHG emissions.⁷ So how can you reduce GHG emissions from your transportation fleet?

Optimizing secondary packaging

Eliminates technical voids. This method maximizes the volume-to-use ratio when packing products and maximizes the quantity of products contained in a cardboard box or on a pallet when distributing or delivering goods.

Reducing empty kilometres

This means optimizing the routes of the transportation fleet. The aim is to reduce the number of kilometres travelled between plants and delivery sites, particularly when trucks are returning to their point of departure.



Distributing with less pollution: Is it magic? No, excellence!

Having a center of excellence in logistics is the key factor in helping our company reduce its carbon footprint.

The distribution of our products is reflected in concrete commitments, wherever possible:

- Reduce empty kilometres;
- Define optimal routes;
- Reduce transport costs;
- Coordinate product delivery and raw material pick-up

These initiatives are effective for all our road transport activities, and even promote the circular economy. As many of our customers are also suppliers of waste paper and cardboard, we aim for better synchronization of our movements to coordinate the delivery of finished products with the collection of raw materials.

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Keep an eye out for certifications!



SmartWay

A North American program that supports carriers in optimizing their ways of doing things, implementing best practices, and reducing the environmental impact of their operations.⁸

Bonus questions:

What mode of transportation was used to deliver the products?

In what packaging were the goods delivered?

Is the palletization optimized for deliveries?





Recycling and composting: the end of life of tissue paper

Cascades PRO®

Recycling and composting: the end of life of tissue paper

Wet or soiled tissue products such as hand towels, kitchen roll towels, napkins or facial tissues are not eligible for selective collection and therefore cannot be put in the recycling bin. This leaves two end-of-life options: the compost bin or the garbage can.

According to the product end-of-life hierarchy, composting is the preferred option, as it diverts organic waste from landfills and reduces the production of methane, a greenhouse gas 28 times more potent than CO2. When properly controlled, the composting process accelerates the degradation of organic waste into fertilizer that enriches the soil (compost).

Bathroom tissue, by nature of its main use, is not suited to either of these options. It ends up in the wastewater treatment plant after use.

Unlike tissue products, many containers, packaging, and prints go in the recycling bin and are accepted at the recovery centre. Just follow the instructions on the packaging and check with your municipality to make sure it is recyclable.

Certain Cascades PRO products, such as napkins, have been certified compostable by the Compost Manufacturing Alliance (CMA), an independent organization recognized in North America for industrial composting. Obtaining a certification such as CMA is essential to assure consumers that the product, they have in their hands can indeed be placed in the compost bin for industrial composting at the end of its life, rather than in the trash.

Be part of the solution: sustainability is a choice that companies can make.

Being part of the solution means choosing partners with ambitious sustainability goals, taking an interest in their annual sustainability performance, and favouring a transparent and responsible supply chain. All these necessary actions are at the root of every company's environmental performance.



Keep an eye out for certifications!



Compost Manufacturing Alliance

CMA-certified products are compostable in industrial facilities. They meet the certification acceptability standards for product decomposition in industrial compost manufacturing facilities.

In fact, 41 of our products (11 hand towels, 25 napkins and 5 kitchen roll towels) have been awarded the Compost Manufacturing Alliance seal.¹⁰

Bonus questions:

Is my product compostable?

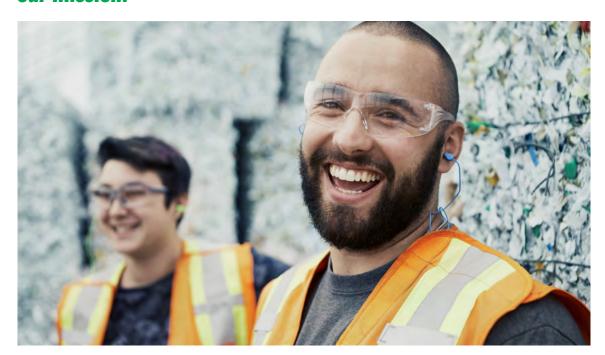
Is my product packaging recyclable?



Beyond The Roll

As part of our commitment to sustainability, Cascades PRO offers a wide range of products, so you can choose the ones that meet your needs.

Continuously improving our production chain to offer you responsible hygiene products is more than just a guideline: it's our mission.



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Does our vision of the market and the future resonate with you?

Visit our website to discover all the products Cascades PRO has to offer to help you achieve your responsible goals.