



FACT SHEET
Cascades® Moka™ Bath Tissue
Life Cycle Analysis
August 2011

CONTACT: *Kohnstamm Communications*
 Troy Tepley, (651) 789-1277, troy@kohnstamm.com
 Aaron Berstler, (651) 789-1264, aaron@kohnstamm.com

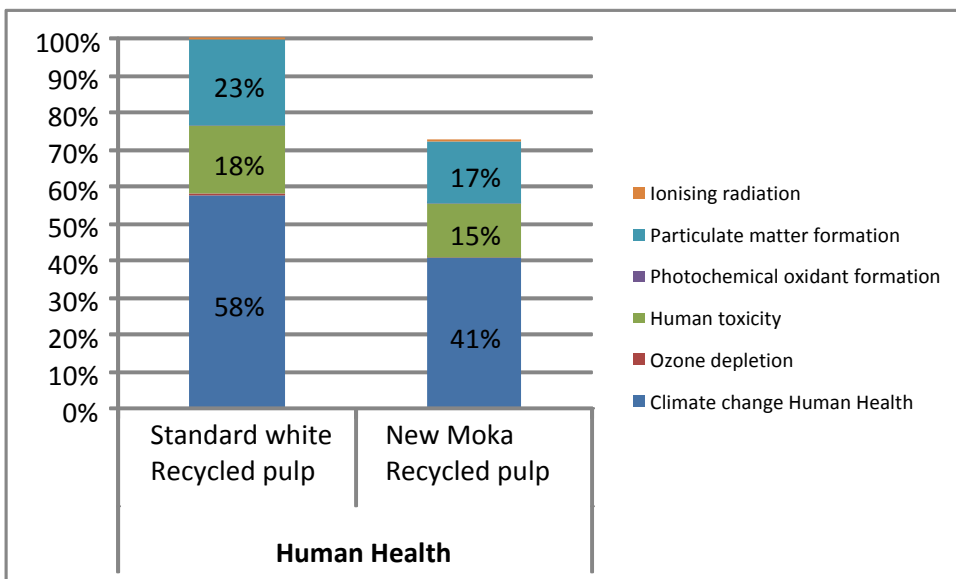
CASCADES® MOKA™ BATHROOM TISSUE
LIFE CYCLE ANALYSIS

A detailed life cycle analysis (LCA) of Cascades Moka undertaken by the company revealed a reduction in overall environmental impact by at least 25 percent when compared to Cascades 100 percent recycled fiber bathroom tissue, which has been regarded as the sustainable tissue exemplar in recent years even though it includes a chlorine-free whitening process for aesthetics.

The reasons behind this reduced impact fall into three categories studied in the LCA:

- human health
- ecosystems and
- natural resources.

All of these categories show a 30% reduction in environmental impact when the new Moka pulp is used versus the standard white recycled pulp.



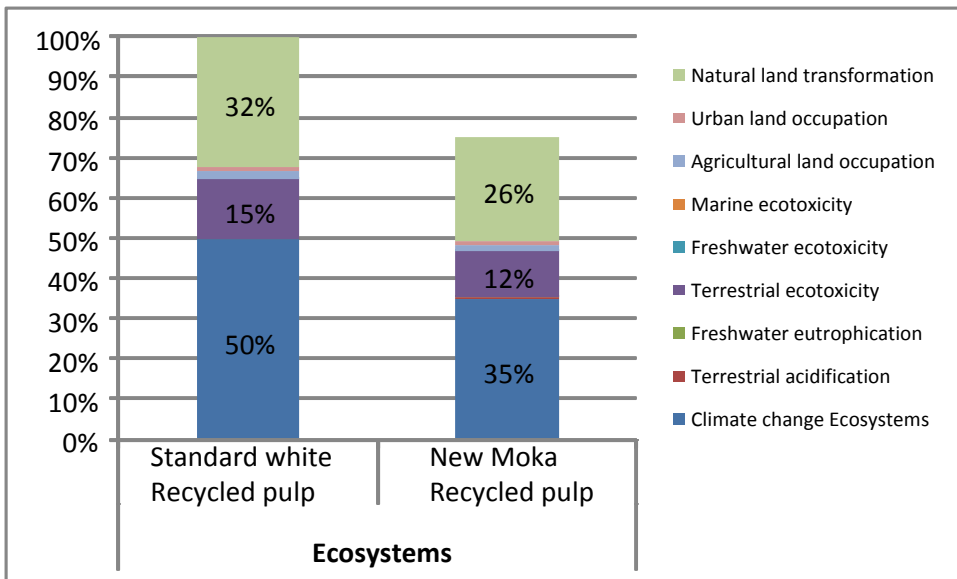
HUMAN HEALTH :

Overall Impact Reduction of almost 30 %:

Reduction mainly in the formation of particulate matter and climate change impacts on human health.

CAUSE:

Due to the reduction in transportation and natural gas consumption.



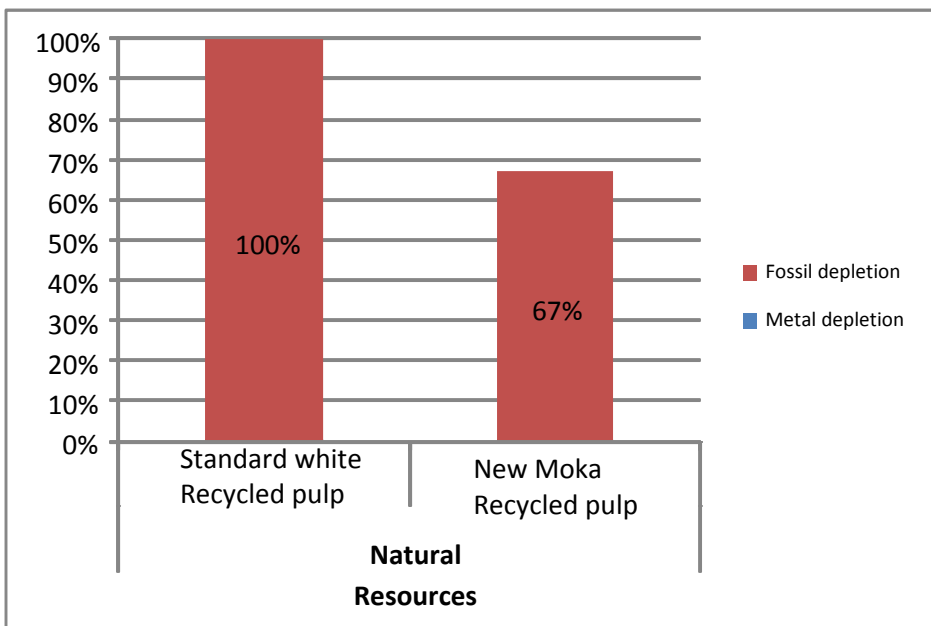
ECOSYSTEMS :

Overall Impact Reduction of almost 30% :

The impact on the number of natural land transformed to cultivate palm trees for palm oil is lessened and climate change impact on ecosystems is also reduced.

CAUSE:

Due to the reduced quantity of unbleached pulp which means less antifoam is used and no natural gas (which is required for bleaching).



RESOURCES :

Overall impact reduction of more than 30%:

The reduction of fossil fuel consumption lessens the overall impact on non-renewable resources.

CAUSE:

Due to the reduction in natural gas required for bleaching pulp and in diesel fuel for transportation.

¹ Cascades, Life cycle analysis of OCC pulp addition in an unbleached deinked pulp used for bath tissue production, (June 2011).



FACT SHEET
Cascades standard Bath Tissue
Environmental Analysis
August 2011

CONTACT: *Kohnstamm Communications*
Troy Tepley, (651) 789-1277, troy@kohnstamm.com
Aaron Berstler, (651) 789-1264, aaron@kohnstamm.com

VIRGIN VS RECYCLED COMPARISON
ENVIRONMENTAL CALCULATOR

The following grid shows Environmental savings¹ based on 100 cases of 80-roll bathroom tissue, comparing products in the industry made of 100% virgin fiber and an 100% recycled fiber.

	Environmental Savings compared to	
	100% virgin fiber	Average 100% recycled fiber
Trees	23 (2 tennis courts)	0
Waste (lbs)	2,826 (58 waste containers)	1,274 (26 waste containers)
Energy (MMBTU)	37 (172,082 60W light bulbs for one hour)	14 (63,821 60W light bulbs for one hour)
Water (Gallons)	22,947 (66 days of water consumption)	8,926 (26 days of water consumption)
Greenhouse gas emissions (lbs CO ₂ eq)	7,119 (emissions of 2 cars per year)	4,065 (emissions of 1 car per year)
Nitrogen oxide (lbs)	22 (emissions of one truck during 68 days)	16 (emissions of one truck during 49 days)

¹ Based on the EPN Calculator and internal data.

For more information about Cascades Tissue Group, visit www.afh.cascades.com or www.sustain.cascades.com

###