

# MYTHS BUSTED:

The truth about paper and its environmental impacts

Lewis Fix, Vice President Brand Management & Sustainable Product Development, Domtar  
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Laura Field, Media Manager, HP Indigo North America

**Thank you for joining us—we will begin at 2pm Eastern.**

If you are unable to hear music at this time, please make sure that your computer speakers are turned on and that your system has not been muted. You can access additional tips for setting up your computer using the “Online Help” button below.

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# WELCOME

## MYTHS BUSTED:

The truth about paper and its environmental impacts

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# Housekeeping Items

- **Getting help**

- Press the **ONLINE HELP** button to access the help files and to view system requirements for this session.

- **Viewing the slides**

- Today's slide presentation should advance automatically in synch with the audio presentation. If they do not change, you may try pressing F5 (Windows) or -R (Mac) to refresh your connection to the server.
- Press **DOWNLOAD PDF** to open or save a copy of the slides in PDF.
- Press **ENLARGE SLIDES** to get a larger view of the slides.

- **Adjusting your volume**

- Volume can be adjusted using the volume control on your computer.
- You can also adjust volume using the slider on the media player at the bottom-right of your screen.

- **Asking questions**

- Type your question into the "Questions" box at left. We will answer as many questions as possible during our Q&A session at the conclusion of today's event.

- **Recording**

- Today's session is being recorded and will be available within the next week on the *American Printer* web site.
- You will receive an e-mail notifying you when it is available.

# Our Panel



**Denise Kapel**  
Managing Editor  
*American Printer*



**Lewis Fix**  
Vice President Brand Management & Sustainable Product Development  
Domtar



**Paul England**  
Environmental and Sustainability Manager  
HP Indigo North America



**Laura Field**  
Media Manager  
HP Indigo North America

# HP Indigo Digital Printing makes good environmental sense

## Three ways digital printing supports environmental futures

1. **Responsible media selection** – wide variety of media that meets multiple environmental criteria.
2. **Conserving paper and ink** –variable data printing and personalization allows printing of fewer pieces—while yielding higher returns on investments
3. **Avoiding waste** by printing what is needed when it is needed, and waste associated with make ready and change over between job runs in conventional printing operations

# What's the Real Story?



  
**Domtar**  
It all begins with paper.\*

# Paper Myth #1 – Making Paper Destroys Forests



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# Paper Myth #1 – Making Paper Destroys Forests



• **No.**

• **In fact the  
opposite is  
true.**

# Managed Forests

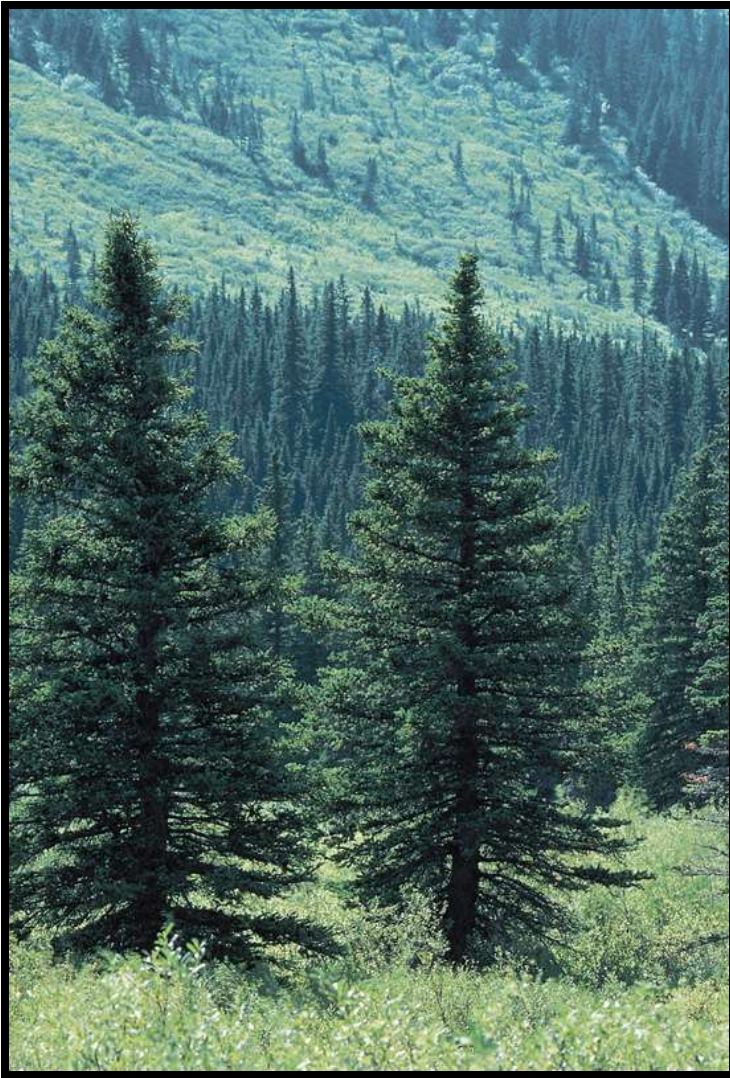


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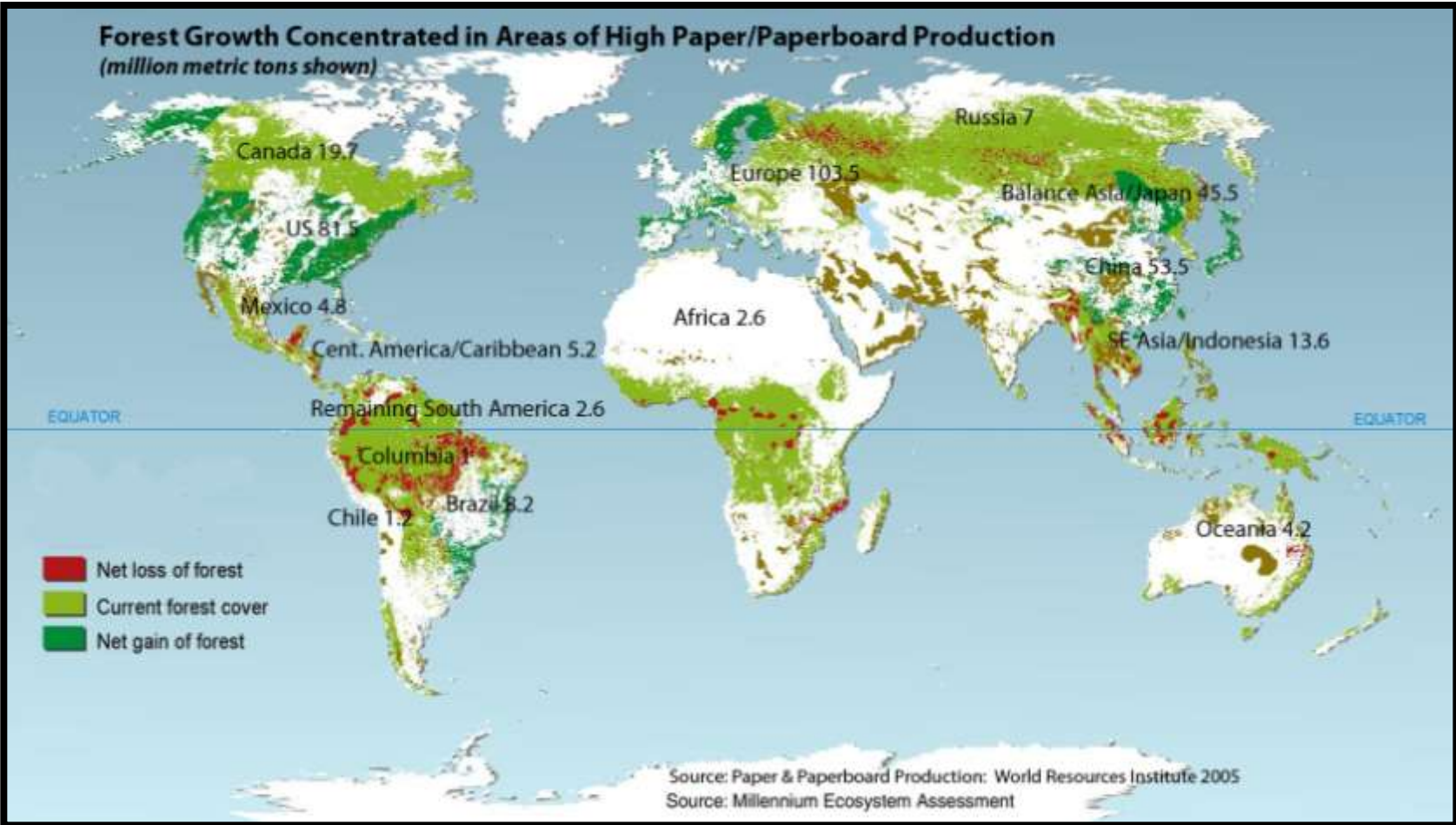
# Managed Forests



• **For every tree harvested, several more are planted, or naturally regenerated, in its place.**

- Four million trees are planted daily in the U.S. - *approximately 1.5 billion per year.*
- 600 million seedlings planted annually supplement natural regeneration in Canada.
- There are nearly 750 million acres of forests in the U.S - about the same as 100 years ago.
- Annual net growth of U.S. forests is 36% higher than the volume of annual tree removals.
- Total forest cover in the U.S. and Canada have basically remained the same from 1990 to 2005.

# Managed Forests



# Paper Myth #2 – Paper is Bad for the Environment



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## Paper Myth #2 – Paper is Bad for the Environment



• **No.**

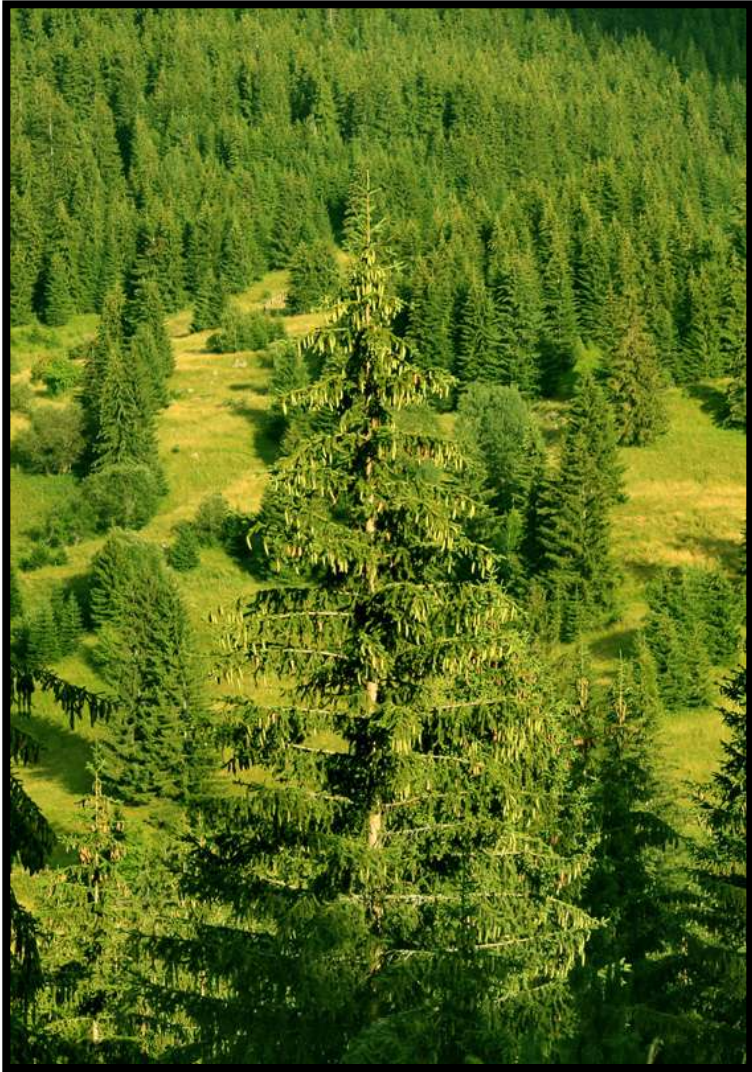
• **Paper is one of the few truly sustainable products.**



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**•“Forestry is the most sustainable of all the primary industries that provide us with energy and materials...To address climate change, we must use more wood, not less. Using wood sends a signal to the marketplace to grow more trees...”**

- *Dr. Patrick Moore, Co-founder of Greenpeace Chair/Chief Scientist of Greenspirit Strategies Ltd  
“An Inconvenient Fact”,  
The Vancouver Sun August 29, 2007*

# Forest Products are a Good Choice

Compared to other materials, wood and paper-based goods, produced in a sustainable manner, can be a wise choice because:

- They come from a renewable resource
- They capture carbon
- They store carbon
- They are recyclable



# Certification



The Mark of Responsible Forestry  
Cert no. SW-COC-001318  
© 1996 Forest Stewardship Council A.C.

- Forest Stewardship Council (FSC)



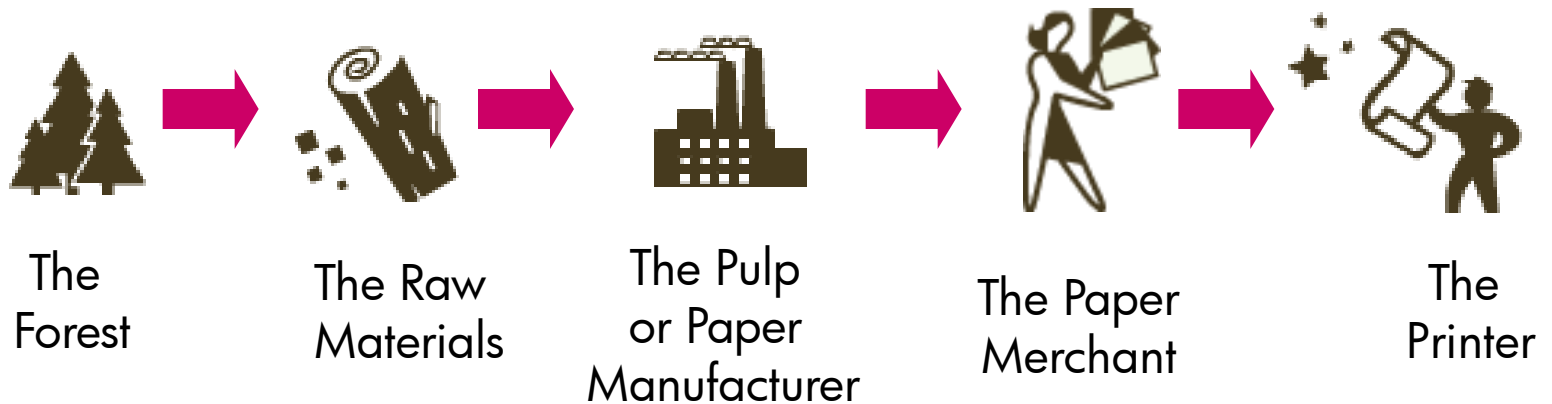
Sustainable Forestry Initiative<sup>®</sup> (SFI)



Program for Endorsement of  
Forest Certification Schemes (PEFC)

# Chain-of-Custody

From the Forest Floor to the Customer's Door



# Paper Myth #3 – Making Paper Consumes a lot of Energy and Fossil Fuels



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# Paper Myth #3 – Making Paper Consumes a lot of Energy and Fossil Fuels



• **No.**

• **Not really.**

# Energy Efficiency

Evolution of GHG Emissions from Continuing Operations—1990 to 2007  
(Tonnes of CO<sub>2</sub> eq)



# Paper Myth #4 – Paper has a High Carbon Footprint



# Paper Myth #4 – Paper has a High Carbon Footprint



• **No.**

• **It's Not as  
High as  
You Think!**

# Carbon Footprint



A measure of the impact human activities have on the environment in terms of the CO<sub>2</sub> and other greenhouse gases (GHG) released into the atmosphere that have arisen through the manufacture and distribution of a product or service.

- The Pulp and Paper Industry largely utilizes renewable energy sources that are considered carbon neutral to generate steam.
- Sustainably managed forests are virtually carbon neutral.
- Papers' primary raw materials are renewable.
- The paper and forest products industry replenishes more than it takes and ensures the sustainability of our forests by planting 1.7 million trees every single day, more than three times what is harvested.
- The U.S. Dept of Energy has stated that the carbon sequestered on forested lands in 2006 was greater than the carbon released from harvesting wood over the same period.

# Electricity Use by Industry

INDUSTRY	BILLION kWh/yr
Chemical Mfg	151
Primary Metal Mfg	137
Food Mfg	79
Paper Mfg	75
Plastics & Rubber Mfg	66
Transportation Equipment Mfg	58

# Electricity Use by Industry

INDUSTRY	BILLION kWh/yr
Chemical Mfg	151
Primary Metal Mfg	137
Food Mfg	79
Paper Mfg	75
Plastics & Rubber Mfg	66
<b>U.S. Servers &amp; Data Centers*</b>	<b>59</b>
Transportation Equip Mfg	58



\* By 2020, the U.S. based servers and data servers are projected to be the largest single users of electricity.

Source: US Census Bureau 2006

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# Some Fast Facts

- 20% less CO<sub>2</sub> is used per year by a person reading a daily printed newspaper versus a person reading web-based news for 30 minutes a day
- The same amount of CO<sub>2</sub> is used per year by all mail delivered to an average household in a year versus a coffee maker being on for one hour per day for one year

Source:

Swedish Royal Institute for Technology; *Paper & the Environment*, ATS Consulting 2007  
Life Cycle Inventory of the Mail; *Greening the Mail Taskforce*, 2008

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# Paper Myth #5 – Recycled Paper is Always Better for the Environment than Virgin Paper



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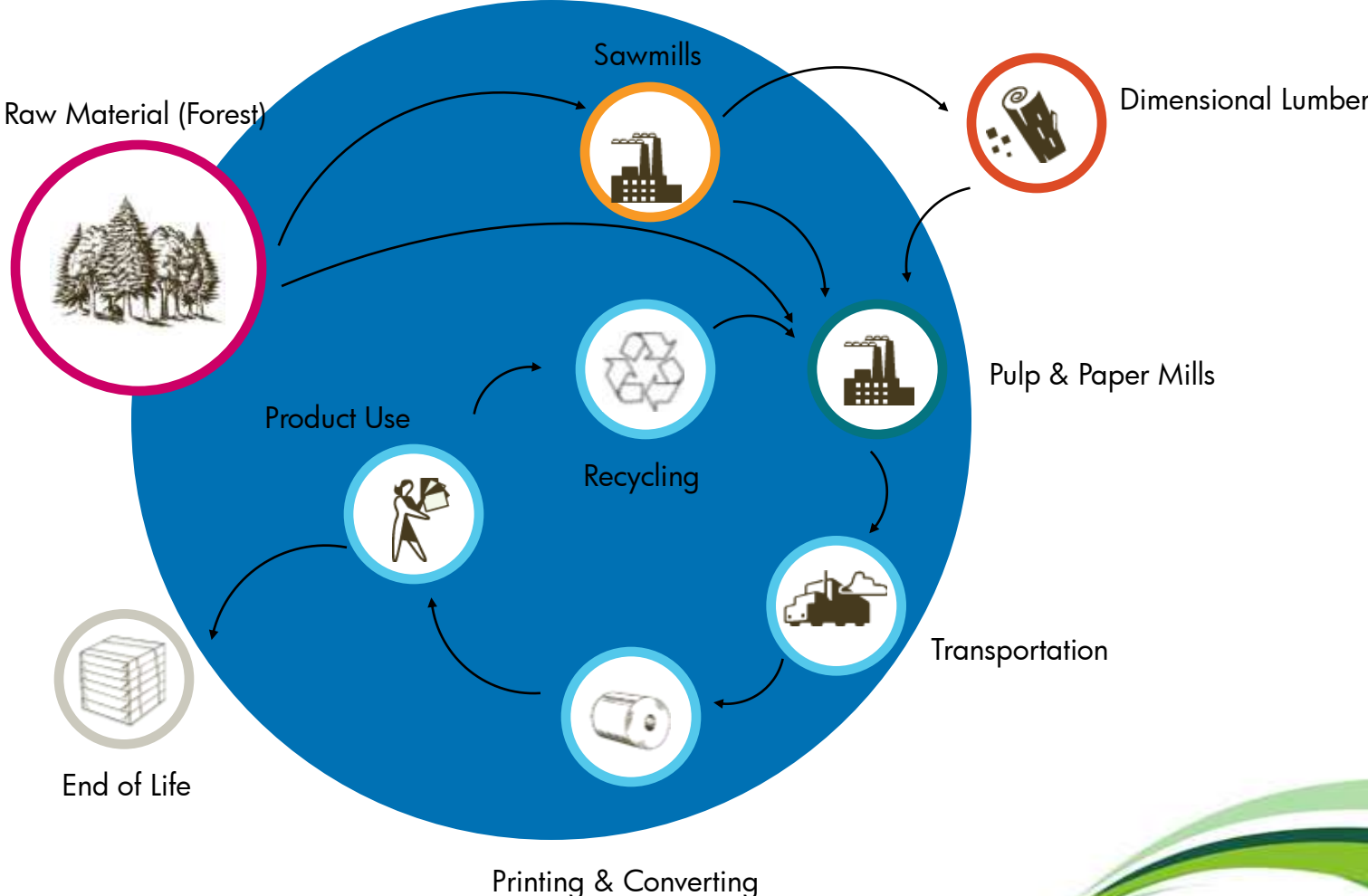
# Paper Myth #5 – Recycled Paper is Always Better for the Environment than Virgin Paper



• **No.**

• **Not necessarily.**

# Life Cycle Management



# Why can't all papers be made from recycled fiber?



- Only 53% of all paper made is immediately available for recycling.
- Making paper from 100% recycled fiber, while technically feasible on the very short-term, is not sustainable over the long-term.
- The input of fresh, virgin fiber into the paper stream is essential.

# Paper Myth #6 – Paper Contributes Significantly to Landfill



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# Paper Myth #6 – Paper Contributes Significantly to Landfill



• **No.**

• **Paper is the most recycled product, compared to metal, glass and plastic, and is also biodegradable.**

# Recovery

- In 2008, 57% of the paper consumed in the U.S. was recovered for recycling - nearly 340 pounds for each man, woman and child in America.
- Comparatively, the recovery rate for metal is 36%, glass is 22%, electronic products is 18% and plastic is only 7%.



# Summary

- Making paper does not destroy forests - if the forests are managed sustainably.
- Paper is one of the few truly sustainable products. Remember, trees are a renewable resource.
- It takes energy to manufacture paper, however with renewable energy technologies, Domtar relies less and less on the grid.
- Paper's environmental footprint is not as great as you think.
- Recycled paper is not always better for the environment than paper made from virgin, sustainably managed, fiber.
- Paper is the most frequently and easily recycled product compared to glass, plastic, or metal – and certainly when compared to electronics.

Thank You.



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# Question & Answer SESSION

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**Thank You**  
for ATTENDING!

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