



## RPN Paper Standards Comparison Chart




Eco-labels can add credibility to environmental claims, although they can sometimes be vague or confusing. In fact, there are currently over 300 unique eco-labels that certify many different types of products. RPN created this *Paper Standards Comparison Chart* to reduce the confusion associated with environmentally preferable paper and allow purchasers to better understand the characteristics of relevant eco-labels. The chart focuses on helping purchasers identify labels that directly address the environmental attributes of paper and paper production.

The list below provides an overview of the certification schemes covered in this Chart:

Canopy Planet	Chlorine Free Products Association (CFPA)	EcoLogo	Forest Stewardship Council (FSC)	Green Seal	Sustainable Forestry Initiative (SFI)
Canopy Planet is a non-profit organization that works to protect endangered forests. Canopy Planet created the <i>Paper Hierarchy</i> , a ranking of environmental attributes in paper. They manage the <i>Ancient Forest Friendly</i> eco-label, which certifies paper with the best environmental attributes in the <i>Paper Hierarchy</i> .	CFPA is a non-profit accreditation & standard setting organization that focuses on technologies free of chlorine chemistry, educates consumers on alternatives, and develops world markets for sustainably produced third party-certified products and services. The CFPA has no financial interest in any manufacturer, or company, of the products it certifies.	The EcoLogo program compares products and services, develops rigorous and scientifically relevant criteria that reflect the entire lifecycle of the product, and awards the EcoLogo label, which demonstrates verification by an independent third party.	FSC is a non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. FSC is a certification system that provides internationally recognized standard-setting, trademark assurance and accreditation services to companies, organizations, and communities interested in responsible forestry.	Founded in 1989, Green Seal is a non-profit organization that provides science-based environmental certification standards that are credible, transparent, and run without commercial interests.	SFI Inc. is a, non-profit organization responsible for maintaining, overseeing and improving sustainable forestry. Its multi-stakeholder board consists of representatives from conservationists, social interest groups, and the timber industry.




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Eco-label	Standard	Criteria
<p><b>Ancient Forest Friendly</b></p>  <p><a href="http://www.canopyplanet.org/">http://www.canopyplanet.org/</a></p>	<p>Ancient Forest Friendly</p>	<p>All fiber (100%) is environmentally superior, which can entail a combination of maximized recycled fiber, agricultural residue fiber, FSC certified virgin fiber, and be TCF or PCF, and must meet the following minimum criteria:</p> <ul style="list-style-type: none"> <li>- Fiber must contain a minimum of 50% post-consumer recycled content if the paper contains virgin tree fiber.</li> <li>- Virgin tree fiber cannot have controlled wood content or originate from controversial sources.</li> <li>- Fiber must be Processed Chlorine Free (PCF) or Totally Chlorine Free (TCF) (although CFPA certification is not required).</li> </ul>
<p><b>Chlorine-Free Products Association (CFPA)</b></p>   <p><a href="http://www.chlorinefreeproducts.org">http://www.chlorinefreeproducts.org</a></p>	<p>Totally Chlorine Free (TCF)</p> <hr/> <p>Processed Chlorine Free (PCF)</p>	<p>TCF is reserved for virgin fiber papers and means:</p> <ul style="list-style-type: none"> <li>- Pulp produced with chlorine or chlorine containing compounds as bleaching agents are not used.</li> <li>- Pulp fiber comes from well managed forests free of old growth vegetation.</li> <li>- The mill has no current or pending environmental permit violations.</li> </ul> <p>PCF is reserved for recycled-content paper and means:</p> <ul style="list-style-type: none"> <li>- Recycled fibers have not been rebleached with chlorine containing compounds.</li> <li>- The paper has a minimum of 70% post-consumer waste.</li> <li>- Fibers come from well managed forests, free of old growth vegetation.</li> <li>- The mill has no current or pending environmental permit violations.</li> </ul>



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Eco-label	Standard	Criteria
<p><b>Chlorine-Free Products Association (CFPA)</b> (cont.)</p>	<p>Sustainability Index</p>	<p>In addition to the TCF and PCF labels, CFPA also performs a comprehensive mill audit and awards a sustainability index value, with a maximum of 1350 points, based on:</p> <ul style="list-style-type: none"> <li>- Environmental policy</li> <li>- Environmental management</li> <li>- Mill process (which includes fiber content, water usage, water quality, bleaching, residual waste, voluntary reductions, energy consumption and hazardous waste management)</li> <li>- Environmental risk management</li> <li>- Product recyclability</li> <li>- Public information</li> <li>- Environmental compliance</li> <li>- Employee recognition</li> </ul>
<p><b>EcoLogo</b></p>  <p><b>EcoLogo<sup>M</sup></b></p> <p><a href="http://www.ecologo.org/en/certifiedgreenproducts/">http://www.ecologo.org/en/certifiedgreenproducts/</a></p>	<p>CCD-077: Printing and Writing Papers</p>	<ul style="list-style-type: none"> <li>- More efficient fiber use (including the use of post-consumer recycled sources and alternative non-wood fibers).</li> <li>- Reduced chronic toxicity to aquatic species from emissions.</li> <li>- Reduced chemical oxygen-demanding matter in effluent.</li> <li>- Increased energy efficiency.</li> <li>- Decreased carbon dioxide (CO<sub>2</sub>) emissions.</li> <li>- Decreased sulfur dioxide (SO<sub>2</sub>) emissions.</li> <li>- Reduced solid waste sent to landfills.</li> <li>- No fiber from mills that produce effluent containing dioxins or furans.</li> <li>- If paper contains virgin fiber, it must come from well managed forests.</li> <li>- Off-site manufactured pulp (e.g. market pulp) and converting operations that meet all of the above requirements.</li> </ul>

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<p>Forest Stewardship Council (FSC)</p>    <p><a href="http://www.fsc.org/">http://www.fsc.org/</a></p>	FSC-mixed	<ul style="list-style-type: none"> <li>- Fibers came from a combination of FSC-certified wood, controlled wood, and recycled fiber.</li> </ul>
	FSC-recycled	<ul style="list-style-type: none"> <li>- 100% of the fiber came from post-consumer waste.</li> </ul>
	FSC-pure	<ul style="list-style-type: none"> <li>- 100% of the fiber originated in FSC certified forests.</li> </ul>



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<b>Green Seal</b>  <a href="http://www.greenseal.org/">http://www.greenseal.org/</a>	GS-07: Printing and Writing Paper	<ul style="list-style-type: none"> <li>- Contains at least 30% post-consumer waste by weight.</li> <li>- Manufactured without chlorine or any chlorine derivatives.</li> </ul>
	GS-10: Coated Printing Paper	<ul style="list-style-type: none"> <li>- Coatings free of heavy metals and formaldehyde.</li> <li>- Contains at least 10% post-consumer waste.</li> <li>- Manufactured without chlorine or any chlorine derivatives.</li> </ul>
<b>Sustainable Forestry Initiative (SFI)</b>     <a href="http://www.sfiprogram.org/">http://www.sfiprogram.org/</a>	100% Certified Forest Content	<ul style="list-style-type: none"> <li>- All fiber is sourced from SFI certified forests.</li> </ul>
	X% Label*	<ul style="list-style-type: none"> <li>- Fiber is sourced from SFI certified forests, responsible fiber sources, and/or post-consumer fiber. *Actual percentage is shown on the label.</li> <li>-</li> </ul>
	100% Post Consumer	<ul style="list-style-type: none"> <li>- 100% of the fiber came from post-consumer fiber.</li> </ul>
	Volume Credit	<ul style="list-style-type: none"> <li>- The portion of products that carry the label will be proportionate to their percentage of certified content in the entire inventory and considered as including 100% raw material.</li> </ul>



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### Vague or Ambiguous Terms to Be Aware of

Claim	Potential Issues
“Carbon Neutral”	Paper that carries the claim “Carbon Neutral” could denote that the company offsets its carbon emissions through an offset program. However, there is no standardized “Carbon Neutral” claim, which makes it potentially unreliable.
“Sustainably Managed Forests”	Some paper products might carry the claim “from Sustainably Managed Forests” without an eco-label or formal certification. Claims without a credible, third-party certification should be viewed with skepticism. When properly certified, sustainable forest management yields many environmental benefits. See <b>Useful Definitions</b> below for more.

### Useful Definitions

Term	Definition	Environmental and Social Effects	Reasoning and Suggestions
<b>Dioxins (including Furans)</b>	Chemical compounds classified as persistent bioaccumulative toxins (PBTs) by the EPA. They include seven of the polychlorinated dibenzo dioxins (PCDDs), ten of the polychlorinated dibenzo furans (PCDFs) and twelve of the polychlorinated biphenyls (PCBs) (EPA, 2008).	- Effects observed in humans include changes in markers of early development and hormone levels. At much higher doses, dioxins can cause a serious skin disease in humans called chloracne and are suspected carcinogens and endocrine disruptors that can also suppress the immune system (EPA, 2008).	- Purchasing chlorine-free bleached or unbleached papers reduces the potential impact of hazardous substances in the lifecycle of copy paper.



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Term	Definition	Environmental and Social Effects	Reasoning and Suggestions
<b>Elemental chlorine</b>	Elemental chlorine (Cl <sub>2</sub> ) is a compound occasionally used in the bleaching process of paper manufacturing.	<ul style="list-style-type: none"> <li>- Elemental chlorine can contribute to hazardous levels of dioxin, furans and other chlorinated organic compounds.</li> </ul>	<ul style="list-style-type: none"> <li>- Elemental chlorine free processes help to reduce dioxin pollution but the use of chlorine-free (TCF or PCF) or unbleached papers reduce the pollution levels even further.</li> <li>- Virtually all paper made in the U.S. is elemental chlorine free.</li> </ul>
<b>Pre-Consumer Waste</b>	Recovered material that does not come into contact with end-use consumer; includes waste left over from manufacturing, converting and printing processes.	<ul style="list-style-type: none"> <li>- Deinking; the process of turning waste paper into pulp, creates a byproduct known as sludge. Sludge is sometimes sold for use as soil amendment, which could cause problems to humans if harmful pathogens such as E. coli are present and percolate into waterways.</li> </ul>	<ul style="list-style-type: none"> <li>- The use of pre-consumer waste and post-consumer waste saves water, reduces greenhouse gas emissions, and diverts solid waste by recycling paper back into production.</li> </ul>
<b>Post-Consumer Waste</b>	Material recovered from a consumer product at the end of its life, diverted from waste destined for disposal and used again in the manufacturing of a product.		



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Term	Definition	Environmental and Social Effects	Reasoning and Suggestions
<b>Sourcing/Chain of Custody</b>	The location and management of forests in which paper is harvested.	<ul style="list-style-type: none"> <li>- Conventional logging practices and conversion of land for tree plantations reduces biodiversity, degrades wetlands and limits carbon storage capacity.</li> <li>- Genetically modified (GM) tree plantations also have an adverse affect on biodiversity.</li> </ul>	<ul style="list-style-type: none"> <li>- Paper manufactured with post-consumer waste and chain-of-custody certified fibers from sustainably managed forests can greatly reduce the carbon emissions and habitat destruction associated with paper production.</li> </ul>
<b>Sustainably Managed Forests</b>	Protection that aims to ensure that the goods and services derived from the forest meet present-day needs while at the same time securing their continued availability and contribution to long-term development (Food and Agriculture Organization of the United Nations, 2008).	<ul style="list-style-type: none"> <li>- GM trees that have been engineered to have increased tolerance of herbicides encourages famers to use more, which affects the soil, water, forest wildlife and human health.</li> </ul>	<ul style="list-style-type: none"> <li>- Harvesting of timber while maintaining the forest's biodiversity, productivity, and ecological processes.</li> <li>- Helps both local people and society at large to enjoy long-term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans (Forest Stewardship Council, 2009).</li> </ul>





## **RPN Paper Standards Comparison Chart**

RPN would like to thank the following people for assisting with the development of this publication. Their expertise helped to ensure quality and accuracy. Affiliations listed below were current when input was provided to RPN and are listed for identification purposes only and do not imply organizational endorsement of this publication.

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