



Following up on  
“Towards a  
Sustainable  
Paper Cycle”

Progress report  
Executive summary, May 2004



World Business Council for  
Sustainable Development





# Background

The production of paper is a key economic activity accounting in value terms for about 2.5% of the world's industrial production and 2% of world trade. Paper products are important for education, communications, packaging and health care. But paper has long been the focus of concerns about unsustainable use of forest resources, industrial pollution, wasteful consumption and contribution to mounting volumes of waste.

To address these concerns, in 1993, the World Business Council for Sustainable Development commissioned the International Institute for Environment and Development (IIED) to conduct an independent study of the pulp and paper sector and its contribution to sustainable development. The objective of the study was defined as follows:

**“In the context of sustainable development, to objectively assess the role of paper and the paper industry worldwide, focusing on the entire cycle from fibre production (including forestry) to pulp and paper production, paper usage, recycling, energy recovery and final disposal.”**

After a wide-ranging program of research and consultation on various aspects of the paper cycle, a report entitled, *“Towards a Sustainable Paper Cycle”* (TSPC) was published in 1996 and disseminated widely through workshops and other means.

A number of recommendations were made in this publication for the pulp and paper industry, and for the stakeholders – governments, international agencies, consumers, and non-governmental organizations – which affect the enabling environment for change.

Ten years after the study was first initiated it is worth asking what has happened since the publication of the report. Have the actions taken by the industry and other stakeholders been in line with the recommendations, whether or not as a direct result of them or of other factors? Are there more pressing issues now that the stakeholders in the paper cycle need to address?

This briefing paper presents an IIED opinion on the progress made in the areas highlighted by the recommendations in TSPC.<sup>1</sup> It is not intended to be a definitive statement on developments since the report was published but to stimulate debate.

<sup>1</sup> – The full IIED progress report can be found on: [www.wbcsd.org/includes/getTarget.asp?type=DocDet&id=3474](http://www.wbcsd.org/includes/getTarget.asp?type=DocDet&id=3474)

A summary of the 1996 TSPC recommendations can also be found on: [www.wbcsd.org/includes/getTarget.asp?type=DocDet&id=3009](http://www.wbcsd.org/includes/getTarget.asp?type=DocDet&id=3009)

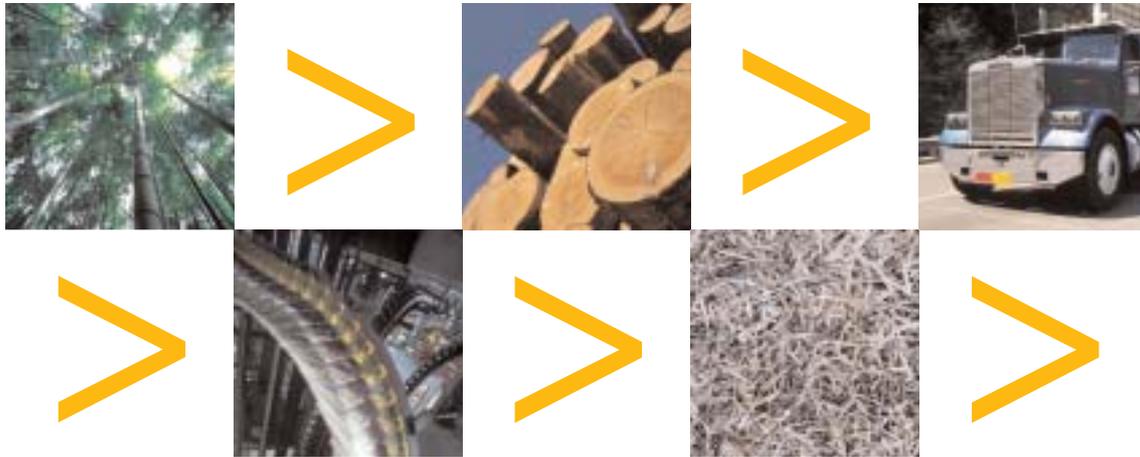
All TSPC reports can be found on the IIED web site: [www.iied.org/eep/pubs/papercycle.html](http://www.iied.org/eep/pubs/papercycle.html)

# ... Forestry ... Industry ...

Recommendations – Forestry	Action
Industry leaders should subject themselves to independent forest management audits and certification.	Most industry leaders have third party certification in place for their domestic forest holdings. They are less advanced with their forest holdings in other countries, particularly in developing countries. Certification of outside suppliers remains a key issue, particularly in the US, but progress has been made in Scandinavia with group certification.
Industry leaders should organize a global leadership group to promote forest stewardship <sup>2</sup>	Consultation on forest issues both within the industry and with a range of stakeholders on forestry issues has increased, in particular through The Forests Dialogue.
Middle ground corporations need to scale up to best practice in a stepwise manner	Little attention has been given to the middle ground corporations. Further effort is needed to document the extent of progress and the impact of consolidation in the sector, and to identify options for improvement.
Governments should support forest stewardship and stakeholder participation through: <ul style="list-style-type: none"> <li>• Establishment of a forest stakeholders forum</li> <li>• Designation of a national permanent forest estate</li> </ul>	Many governments have introduced stakeholder forums and formulated national forest programs which in nations where forestland is in public ownership include designation of a Permanent Forest Estate. But more needs to be done to turn these into more than “paper” exercises.
Governments should remove incentives that undervalue natural forests or overvalue their conversion to other uses and introduce incentives for SFM	There has been some reduction in the perverse incentives which work against good forest management but this has been driven by other concerns such as trade liberalization. Incentives for establishment of forest plantations overshadow those targeted at improvement in forest management but initiatives to promote payments for forest environmental services are on the increase.
Governments can improve information systems for forests	The extent of information has increased but not necessarily the quality. More exchange of information between different initiatives is needed.
International agencies should set up an independent arbitration panel	This has proved difficult to implement reflecting weakness in the international governance of forests. Other options such as bilateral panels need to be explored.
International agencies should extend existing initiatives to offer global payments or other incentives to countries that invest in producing global forest benefits such as carbon offsets and biodiversity conservation.	The flexibility mechanisms set out in the Kyoto Protocol have led to numerous pilot projects and trading schemes for carbon offsets. However, the rules relating to forest-based sinks discriminate against natural forest management.
International agencies should impose conditionality on finance flows by ensuring that no financial support is given to activities that amount to “mining” of the forest resource	Most international and national development banks have stopped funding contentious forestry projects and are requiring certification of forest management. Other types of international financial institution - export credit and investment insurance agencies have taken longer to make this shift but are being pressured to do so.
Recommendation – Industry	Action
The industry as a whole should consider introducing the equivalent of the chemical industry’s Responsible Care with sectorwide monitoring of performance and building on existing initiatives such as ISO and EMAS	The paper industry has not introduced a Responsible Care initiative in the same form as that of the chemical industry. However, the increasing use of third party verification of environmental management and forest certification is having a similar effect.

2 – WBCSD notes the industry’s capacity for leadership and cooperation has been assisted by the International Forest Industry Roundtable (established in 1994), the Global Forest Industry CEO Forum (2001), the International Council of Forest and Paper Association (2003) as well as lead company involvement in WBCSD’s Sustainable Forest Products Industry (SFPI) working group. Engagement with stakeholders has been improved via multistakeholder processes, such as The Forests Dialogue, national level forest certification processes and company level CSR and sustainability reporting initiatives.

# ... Manufacturing ... Transport ...



Recommendations – Manufacturing	Action
Attention should be given to research on the chronic toxicity of non-chlorinated compounds, worker health issues and environmental and health impacts of minerals and chemicals used in paper-making, printing and packaging	Chronic toxicity of non-chlorinated effluents has not become a major issue. The main challenge that remains is greater use worldwide of existing best practices in pulping and bleaching technologies .
Improve international coordination of research efforts within the industry and to this end, industry should consider creating an international forum for paper and sustainable development.	An international forum to provide a focus for coordinated research efforts has not been set up by the industry. But international conferences on the fate and effects of pulp and paper mill effluents have been held every three years. There have also been some first steps to coordination through a joint activity on climate change. More is needed.
Companies should adopt recognized environmental management systems and programs for continuous improvement to reduce emissions, effluents and wastes with published reduction targets and timescales, preferably with third party verification.	There has been considerable progress in both the adoption of environmental management systems and company environmental reporting.
Focus research efforts on the development of clean, efficient production and chemical recovery processes for the non-wood fibre sector to support efforts in developing countries and to provide greater flexibility in fibre sourcing in the North.	Although there has been interest in non-wood fibres, it is likely that their contribution to global pulp production has decreased over the last 10 years. While there are some promising initiatives based on agricultural waste, it is not clear whether these will progress beyond the demonstration stage. Not all NGOs give priority to non-wood fibres as they are concerned that they will divert demand away from higher priority recycled fibre.
Government should collaborate with industry on the development of voluntary programs for environmental improvement in pulping and papermaking.	There has been increasing use of voluntary environmental improvement programs, particularly for emerging issues such as climate change.

Recommendations – Transport	Action
Companies should assess the environmental impact of their transport operations and incorporate the results in environmental reports.	Considerable progress has been made on reporting transport emissions and policies. The next challenge is to reduce the environmental impacts of transport. This will become more pressing as the international trading of paper products and paper raw materials increases.

# ... Consumption ...

## Recycling and Waste Disposal ...

Recommendations – Consumption	Action
<p>Industry should</p> <ul style="list-style-type: none"> <li>improve its understanding of consumer concerns about the wastefulness of a range of paper uses so that these issues can be taken account of in product design</li> <li>rethink what paper use is for – and move to a services-oriented approach that seeks to meet a consumer’s need even if this means selling less paper</li> </ul>	<p>Consumption remains a contentious issue. Paper producers believe that the responsibility for reducing paper consumption should lie with the users and have therefore done little to address consumer concerns about wastefulness and excessive consumption. They have made significant achievements in reducing material inputs to paper production while still meeting performance needs, but these are overshadowed by the perception of paper consumption as wasteful.</p>
<p>Industry should demonstrate its support for global sustainable development by organizing a “paper aid” fund with the aim of raising revenue for primary education and health care projects in the South</p>	<p>This recommendation has not been pursued. While there are mixed views in the industry about the merit of such a fund, it may be worth reconsidering. Its prime benefit to those producers contributing would be to raise the profile of the industry and of paper in contributing to sustainable development. This might help to address negative perceptions of paper consumption.</p>
<p>Governments should strengthen control of manufacturers’ claims on paper products and address the adverse trade and other negative impacts of ecolabelling schemes, for example by establishing equivalency or working towards mutual recognition.</p>	<p>Governments have done little to address the proliferation of unsubstantiated claims. They have not played a role in promoting mutual recognition between third party ecolabelling schemes. However, the growth area in labeling schemes has been in non-governmental schemes rather than government schemes. In this context, governments should concentrate on promoting dialogue between schemes and clarifying trade rules on labeling.</p>
<p>Governments should</p> <ul style="list-style-type: none"> <li>set paper efficiency targets for the consumption of printing and writing paper</li> <li>adopt a more comprehensive approach to procurement policies for paper to include criteria for the whole paper cycle</li> </ul>	<p>The scope of public procurement policy on paper has expanded to address other issues besides recycling, though often not backed by thorough analysis of the life cycle impacts of different types of paper or of substitutes for paper in the case of reduced consumption. Sourcing of legal and sustainable fibre is increasingly emphasized.</p>
<p>Corporate purchasers of paper should</p> <ul style="list-style-type: none"> <li>integrate paper consumption levels and specifications into environmental management policies systems, carrying out audits of their paper use and needs as a first step.</li> <li>Build on the approach of the Environmental Defense Fund Paper Task Force to develop sound guidelines for environmentally preferable paper.</li> </ul>	<p>There have been some notable successes in influencing large corporate purchasers of paper to introduce environmental purchasing policies. This is reflected also in the environmental information that producers are making available about their products. Such practice is however by no means widespread and more could be done to raise awareness</p>

Recommendation – Recycling and Waste Disposal	Action
<p>Industry should demonstrate its commitment to the concept of producer responsibility by working with the private and public waste management industry on development of integrated waste management systems, involving paper recycling as well as composting and waste-to-energy incineration where appropriate.</p>	<p>Recycling has increased and so has industry involvement in collection schemes. But there has been little interest in the fate of paper that is not collected for recycling even though disposal to landfill is a significant contributor to the greenhouse gas emissions of the paper chain. The industry has generally preferred to set up separate collection schemes rather than work in conjunction with local authorities.</p>
<p>Governments should address market failures in the disposal of waste paper through introduction of “pay as you throw” charges for household waste collection and surcharges on waste disposal to reflect external environmental costs</p>	<p>Market-based instruments to promote recycling, reduce waste at source and divert waste away from landfill have become more common. They have been most effective when introduced as part of a package together with producer responsibility schemes and actions to promote demand for recovered paper.</p>

# What has been **achieved?**

## New tools

Considerable progress has been made by the industry in using some of the new tools available for demonstrating environmental performance such as forest certification and certified environmental management systems. There has also been significant improvements in reporting on environmental performance. Attention to social performance and to the use of social audit tools has lagged behind but an emerging trend is for companies to prepare corporate social responsibility reports with a broader focus than the traditional environmental reports.

## Increased dialogue

Most of the current effort of the paper industry to engage with stakeholders is concentrated on forestry issues. This reflects a view that this remains the most difficult issue in the paper cycle and that environmental problems at other stages of the cycle have largely been dealt with. Chlorine bleaching which was a much criticized aspect of the industry in the early 1990s has given way to new less environmentally damaging technologies such as ECF and TCF and their use has spread. The use of biofuels has increased as has energy efficiency. Recycling has increased, driven by a combination of policy measures to increase collection and to promote consumer awareness and demand for recycled products.

## Consumption – as contentious as ever

But in spite of the advances, paper still has a poor image in industrialized countries as a product that is used excessively and has undesirable impacts across its lifecycle. There is a view that even with certified virgin fibre, non-elemental chlorine bleaching and high levels of recycling, paper is still a product whose use has to be reduced. The industry for its part, while making considerable efforts to increase its raw material efficiency, has not effectively addressed these consumer concerns about waste.

## Industry coordination – still lagging behind

The paper industry has not adopted any of the recommendations in TSPC relating to improved coordination or which require industry-wide action such as a “paper aid” fund. This reflects a view that the benefits do not justify the costs involved, particularly as companies that do not participate and share in the costs cannot be excluded from some of the benefits. Companies have been prepared to invest in activities or improvements only where these can differentiate them from others and where they can see a clear direct benefit. Nevertheless, it may be worthwhile for them to rethink their approach to industry coordination. While sections of the industry worldwide remain associated with poor forest management and adverse impacts on local communities, and the consumption of paper is seen to result in large volumes going to landfill, paper will have a poor image, regardless of improvements elsewhere. Coordinated efforts to improve the environmental and social performance of the industry worldwide, to enhance its development contribution and to deal with the post-consumption impacts of paper will improve the image of paper relative to competing substitutes. This may pay off in terms of sustained demand for paper.



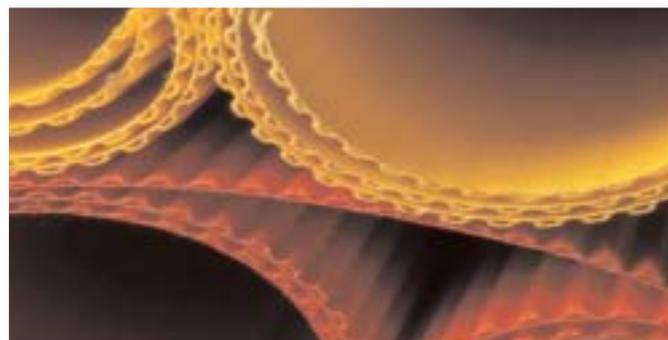
# New challenges?

## Enhancing the development contribution of the industry

TSPC urged paper companies to pay more attention to social issues but most of its recommendations were directed at environmental issues. This reflected the fact that the greatest concerns about the industry at the time were primarily environment-related. With some of these environmental problems on the way to resolution, attention needs to shift to the social impacts and development potential of the industry. The increasing globalization of the industry over the last decade and the shift of production to plantations in the South makes the development contribution of the industry particularly relevant. Some companies are starting to address this as reflected in the appointment of Corporate Social Responsibility directors or production of reports on these issues. As the industry globalizes further, these questions of social responsibility will become more important still. The industry needs to pay more attention to enhancing and demonstrating its development contribution. This could be at both the local level through partnerships with local communities, labour standards and linkages with local enterprises and through industry-wide measures such as the paper aid development fund advocated by TSPC.

## Turning climate change from a constraint to an opportunity

TSPC estimated that the paper industry across the whole life cycle of paper was making a net contribution to carbon emissions due to high use of fossil fuel in manufacturing and the methane emissions from paper going to landfill. It is now clear that a carbon constrained economy could represent a significant opportunity for the paper industry given the nature of the raw material on which it is based. There have been some national level initiatives or efforts by individual companies to reduce carbon emissions, through more use of biofuels and other measures. However, a more coordinated effort by the industry at a global level could have greater impact both on carbon emissions and on the image of paper as a product. The industry could do more for example to stop post-consumer paper from going to landfill. The industry also needs to take advantage of the opportunities afforded by the Clean Development Mechanism to both achieve reduction in carbon releases and contribute to sustainable development.



## About the WBCSD Sustainable Forest Products Industry (SFPI) project

### Mission

To lead business innovation in sustainable forest management and sustainable production, use and reuse of forest products to meet the needs of today's world population for wood and paper products, renewable energy, ecosystem services and livelihoods, and those of an expected nine billion in 2050.

### Work program 2004-2005

Through multi-stakeholder engagement and partnership processes this project will:

- Encourage the use of **credible forest certification systems**
- Seek consensus on definitions and objectives for **high conservation forests and intensive forestry**
- Develop appropriate **sustainability reporting parameters** for the industry
- Work to **combat illegal logging and forest crime**
- Enhance the forest industry's role in **reducing greenhouse gas emissions** via carbon sequestration in forests, carbon storage in forest products and supply of renewable, GHG-neutral energy
- Assist in developing public and private sector **investment principles and safeguard guidelines** for the forest industry

### Project structure and resources

#### Co-chairs 2004

MeadWestvaco

UPM

#### Working group

Aracruz Celulose

Basic Element

Grupo Nueva

Grupo Portucel Soporcel

International Paper

MeadWestvaco

Metsäliitto

Mondi International

Nippon Unipac

Norske Skog

Oji Paper

SAPPI

Stora Enso

Sonae Indústria

UPM

Weyerhaeuser

#### Associate members

BVQI

Caterpillar

Global Forest Partners

Hewlett-Packard

Procter & Gamble

Siam Pulp

Swiss Re

Time Inc

#### Observers

USA BCSD

South Africa BCSD

Global Institute of Sustainable Forestry (Yale)

#### Project director

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## About the WBCSD

The World Business Council for Sustainable Development (WBCSD) is a coalition of 170 international companies united by a shared commitment to sustainable development via the three pillars of economic growth, ecological balance and social progress. Our members are drawn from more than 35 countries and 20 major industrial sectors including forestry and forest products. We also benefit from a global network of 48 national and regional business councils and partner organizations involving some 1,000 business leaders.

## About the IIED

The International Institute for Environment and Development (IIED) is an independent, non-profit research institute working in the field of sustainable development. IIED aims to provide expertise and leadership in researching and achieving sustainable development at local, national, regional and global levels. In alliance with others we seek to shape a future that ends global poverty and delivers sustainable and fair management of the world's natural resources.

### Disclaimer

This report reflects the opinion of IIED. The views expressed do not necessarily represent the views of WBCSD or member companies.

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Printer: Atar Roto Press SA, Switzerland

Design: Anouk Pasquier-Di Dio