EXECUTIVE SUMMARY

THE STATE OF THE GLOBAL PAPER INDUSTRY • 2018

The Environmental Paper Network is a global coalition of civil society organisations working together to achieve our *Global Paper Vision*. The introduction to this collective Vision states:

We share a common vision of a forest, pulp and paper industry that contributes to a clean, healthy, just and sustainable future for all life on earth. We seek a world with new consumption patterns that meet the needs of all people while eliminating waste and over-consumption, where paper production is less reliant on virgin fibre and not associated with loss of biodiversity or forests, maximises use of recycled materials, respects human rights including local people's land rights, provides employment and has social impacts that are beneficial, conflict-free and fair. We seek the successful transition to pulp and paper that is part of the solution to climate change and is made from responsibly sourced fibres, using entirely low-carbon, renewable energy, with water that is as clean after paper production as before, producing zero waste and zero emissions. We seek full transparency and partnerships with diverse stakeholders to successfully implement this vision.

The State of the Global Paper Industry 2018 provides a snapshot of how the world's pulp and paper industry is performing today, relative to each of the goals of the *Global Paper Vision*. It also looks to the future, and the social and environmental risks and opportunities facing the global pulp and paper industry. Each chapter offers insight on key issues in the coming years.

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In looking at the full range of social and environmental issues facing the industry at present and in the future, the report identifies several key themes:

- paper consumption is at unsustainable levels and globally it is steadily increasing, particularly in Asia, while remaining at unequal levels of access in some parts of the world, particularly Africa.
- the industry is expanding, especially in Asia and South America, and the challenges of this geographic shift and expansion in a resource-constrained world are appearing across all priorities of the *Global Paper Vision*.
- the industry has substantial climate change impacts, from its raw material sourcing in forests, through production, to the end of life of its products, so the opportunities for reducing greenhouse gas emissions through better land management and fibre choices need to be urgently seized. Stakeholders must collectively bring forests to the forefront of action to address climate change.
- there are significant gaps in data availability globally across topics and between regions, and there is often a challenge in comparing data when it does exist due to lack of standardisation in measuring and reporting.
- corporate leadership potential in the marketplace is strong, growing, and helping drive change on the ground, but execution and progress on voluntary commitments is lagging in many cases. Additional urgency and transparency are needed to find collaborative solutions at a pace that is sufficient to address the climate change and extinction crises.

REDUCE GLOBAL PAPER CONSUMPTION AND PROMOTE FAIR ACCESS TO PAPER

The Global Paper Vision's first goal is to reduce global paper consumption and promote fair access to paper. However, paper use is steadily increasing, year on year, and recently exceeded 400 million tonnes per year¹. More than half of this consumption occurs in China, the USA and Japan, with a further quarter in Europe². The entire continent of Africa accounts for just 2% of global paper use³. The global average is 55 kg per person per year, while regionally the consumption of people in North America is the highest, registering four times that (215 kg/ person)⁴. While paper consumption is declining slightly in North America, it is notably rising in Asia and driving planned expansion of the industry. More than half the paper used globally is for packaging, with volumes on the increase⁵, so this sector has the greatest opportunity for efficiency and waste reduction. This report highlights how packaging and tissue products are driving sector growth and require global solutions.

MAXIMISE RECYCLED FIBRE CONTENT

The Vision's second goal is to maximise recycled fibre content. Today, global paper production is shifting geographically, resulting in declines in North America and Europe, while many countries around the world build up new paper industries. Asia alone is now providing nearly 50% of the world's pulp and

paper, opening up new paper markets to large populations that had little access to paper in the past. This stimulates more production, which in turn threatens increased environmental destruction. Recycling is key to rapidly reducing the paper industry's production footprint so that it can both benefit far more of the world's population while preserving environmental quality. While recovered paper's market share within the paper industry has been increasing⁶, there is still a large percentage of paper production that uses no recycled content at all.

In addition, currently recycled fibre use in products is by no means uniform: while many newsprint and packaging grades have more than 50% recycled content⁷, printing and writing paper has a global average of only 8% recycled content⁸, so there is still much room for improvement. By more effectively controlling contamination and implementing more robust recycling systems in developing countries, the amount of recycled fibre that could be used could still be nearly doubled before it reaches the upper limit of technical potential⁹. The report also finds wide variation in data collection and highlights a great need for more comparable accounting for recycling rates. In part this requires more standardised global reporting methods.

ENSURE SOCIAL RESPONSIBILITY

The third goal is to ensure social responsibility. Indigenous peoples continue to struggle to have their rights respected in all pulpwood-producing regions, from the boreal and temperate forests of the northern hemisphere to forest regions in Africa, Southeast Asia and South America. Examples include conflict from operations of Asia Pulp & Paper and Asia Pacific Resources International Ltd. in Indonesia, Fibria in Brazil, the

Navigator Company (Portucel) in Mozambique, and various paper companies in Canada. There are similar conflicts in other countries, including Chile, Uruguay, Thailand, India and South Africa, where eucalyptus or acacia are grown in extensive pulpwood plantations, thereby displacing forests and communities, lowering water tables, and negatively impacting rural communities. Companies and governments have a responsibility to ensure Free, Prior and Informed Consent (FPIC)¹⁰ is granted before commencing operations and to ensure that negative impacts are mitigated and compensated. Progressive paper companies respect the right of affected communities to reject plantations and mills, and seek to work with them as allies and beneficiaries and supporting their economic diversification.

SOURCE FIBRE RESPONSIBLY

The fourth goal is to source fibre responsibly. In 2014, around 172 million tonnes of pulp was produced globally from virgin fibre¹¹, with substantially more than half of this produced in North America and Europe, although new mill developments are focused in South America and Asia (including Russia)¹². Around 13 million tonnes of pulp come from (mostly agricultural) alternatives to wood¹³, but there are worrying declines in this sector, despite some growth in North America. Agricultural waste fibre in China used to account for more than 50% of its pulp, but there has been a recent massive shift towards wood-based paper making: Chinese non-wood pulp production peaked in 2004 at 10.5 million tonnes but has since fallen to just 3.5 million tonnes in 2015¹⁴. A worrying trend is the ongoing rate of deforestation: according to the Food and Agriculture Organization of the United

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Nations (FAO), between 2010 and 2015 there was an annual forest loss of 7.6 million hectares and an annual gain of 4.3 million hectares per year, resulting in a net annual decrease in forest area of 3.3 million hectares¹⁵. However, FAO considers "planted forests" or industrial timber plantations as forests; thus it doesn't take into account the massive loss of natural forests by conversion to pulp plantations. Even more worrying is the global loss of intact forest landscapes, down by 7.2% since the year 2000, with the rate of loss tripling between 2003 and 2013¹⁶, the leading driver (responsible for 37% of the loss) being timber harvesting, including for papermaking.

It is not all bad news: there has been a significant decline in illegal logging and Forest Stewardship Council certification of forestry lands is increasing meaningfully, though this is not uncontroversial. In September 2017, the forest area under FSC certified management covered 197,817,395 ha¹⁷, about 9% globally of forest area in permanent forest land use¹⁸. Overall, fibre sourcing for paper remains a very sensitive matter, with risks and opportunities for the world's forests in the coming years. Companies purchasing paper should understand the sources of fibre for their paper, commit to avoiding deforestation, put in place strong measures to make sure that their commitments are effective all the way to the forest, and always consider alternatives to virgin fibre.

REDUCE GREENHOUSE GAS EMISSIONS

The fifth goal is to reduce greenhouse gas emissions, which for paper and packaging result mainly from land use change, production and disposal. The burning of trees for energy for pulping is the single biggest source of emissions by the industry

(40%), with other causes of concern being the massive carbon emissions from the destruction of peatlands (particularly in Indonesia) and emission of methane from landfilled paper¹⁹. Peatland protection and restoration, protection of High Carbon Stock Forests²⁰ and responsible afforestation globally is essential to meeting new international climate targets, and requires the partnership of responsible paper producers. In production performance, there are some gains in efficiency on a global scale²¹. However, mill technology can make a difference: mills in Southern Europe, North America and South America are generally more fossil fuel-intensive than Swedish and Finnish mills²². A key solution is the utilisation of recycled paper, which has half or less climate impact than virgin paper²³. Considerably more attention needs to be paid to the climate change mitigation potential in paper lifecycles. It is critical to do an honest and scientifically supported accounting of carbon fluxes in paper's full cradle to grave life cycle, and reduce all emissions - fossil, biogenic and from land use change. And it is crucial that the industry support strong climate action by governments worldwide.

ENSURE CLEAN PRODUCTION

The sixth goal is to ensure clean production. The pulp and paper industry is one of the world's biggest polluters, as well as one of the heaviest users of fresh water (making one A4 sheet of paper uses as much as 20 litres of water) and energy (using 4% of world energy). It is chemically intensive, with toxic chemicals discharged as effluent into waterways where they pollute rivers, harm ecosystems, bio-accumulate, and eventually enter the food chain.

The use of chlorine for bleaching is particularly problematic, but use of Total Chlorine Free (TCF) technology is rare and declining, despite its benefits in reducing both pollution and water usage compared to Elemental Chlorine Free (ECF) technology. Pulp and paper mills also release air pollutants in the form of fine particulate matter (PM2.5), nitrogen and sulphur oxides which can also affect public health. The report finds a need and opportunity for the North American industry to modernise and implement cleaner technologies to match mill emission levels of mills in other regions.

important role in our global societies, benefiting education, sanitation and democracy. We believe that transformation of the pulp and paper sector is achievable if all stakeholders will work with us to push for the necessary change outlined in our Global Paper Vision. We hope this report and the trends it highlights brings urgency to the social and environmental challenges and opportunities for the global pulp and paper industry, and that it will lead to accelerated actions to achieve long-term solutions.

ENSURE TRANSPARENCY AND INTEGRITY

The final goal is to ensure transparency and integrity. Recent years have seen a welcome surge in transparency tools, both binding and non-binding (including The Carbon Disclosure Index, the Forest 500, the New York Declaration on Forests and WWF's Environmental Paper Company Index), and an increased level of disclosure by pulp and paper manufacturers and retailers on forest sourcing. Meanwhile, there continues to be a lack of transparency and accountability regarding the other pillars of the Global Paper Vision. Better reporting and disclosure is needed. Financiers are particularly lacking in this area, as the top financiers all scored low on a review of the environmental and social safeguards they had in place²⁴. In addition, the report finds pulp and paper companies in Asia, Latin America and Africa lag behind the world on progress toward greater transparency.

It is clear from this broad spectrum of cross-cutting issues that the global pulp and paper sector and its relevant stakeholders have much progress to make to achieve the ethical and sustainable future we all need. Paper has a fundamentally



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