Materiality report
For: CEPI and its Members
By: Deloitte
May, 2018
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About this document

This document is a report on CEPI’s materiality assessment process and its outcomes. In this report, you will find:

- A description of CEPI’s materiality process and methodology, as run by Deloitte
- A sector-wide materiality matrix showing the industry’s most important sustainability issues, as highlighted by the materiality process
- Detailed matrices and KPIs for the identified Top 5 most material issues
- A gap analysis looking at CEPI’s most material issues and KPIs and what Members currently report on

Supporting documents

Two supporting documents will be delivered together with this report:

- A Toolkit or ‘How to’ guide on running your own materiality process
- An Annex with the methodology, references and previous versions of the materiality process and outcomes will also be shared in a separate document.

Authors and contributors

The materiality process and this document have been run in collaboration between CEPI and Deloitte. It involved consultation with CEPI, its Members and external stakeholders.

One size doesn’t fit all

It is understood that each individual organization will have its own ranking of material topics and sub-issues - depending on its core business, the nature of the organization, its key markets and countries of operation, specific stakeholders, operations, etc.

Ultimately, one of the main objectives of this process is to support CEPI’s Members to run their own materiality processes, starting with the industry-wide view presented here – and customizing it further to their own organisation. This is what we would provide in a separate document, the ‘How to guide’.
Objectives of CEPI’s materiality process

Main objectives
The first main objective is to have a structured industry-wide approach and perspective on the most material sustainability issues for the paper and pulp sector as a whole – based on the priority issues topics identified by:

- CEPI’s Members
- Industry and sustainability bodies
- Business imperatives and key stakeholders’ expectations

Our second main objective is to use the outcomes of the materiality analysis to identify key performance indicators (KPI) for the most material issues identified - in order to improve data collection, monitoring and communication.

The ultimate objective of this work is to identify and communicate:

- Priority sustainability issues for the industry;
- Common key performance indicators (KPIs) for CEPI’s Members;
- Improve strategic sustainability focus and simplify data collection, monitoring and verification for member organizations.

In other words ...
A consensual and representative industry-wide materiality matrix...

that can be used as an industry reference and guideline...

that can help to focus action, data collection, monitoring and communication ...

... and that can be adapted by individual Members, depending on their own specificities, history and operations.
Definitions

What we mean by ... ‘Materiality’
What we mean by ‘materiality’ are “those topics that have a direct or indirect impact on an organization’s ability to create, preserve or erode economic, environmental and social value for itself, its stakeholders and society at large”

GRI G4 guidelines

In simpler terms, materiality is about identifying and addressing what matters most to you and to your most important stakeholders; what you have most impact on; and what impacts you the most.

In other words, ‘materiality’ means ‘priority’.

What we mean by ... ‘Sustainability’
What we mean by ‘sustainability’ is the “process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations”.

The World Commission on Environment and Development

What we mean by... ‘the industry’
What we mean by ‘the industry’ is all the associations, the companies (ranging from small- and medium-sized companies to multinationals), people and activities involved in the pulp and paper sector, as a whole.

NB: Consider the CEPI terms and definitions when consulting, using or distributing this document
An overview of the European paper industry main challenges

- Reducing greenhouse emissions
- Reducing paper consumption & ensuring products end-of-life
- A cleaner production
- Increasing recycled fiber content
- Responsible fiber sourcing and supply chain
- More transparency

A social and societal responsibility as a common and transverse base

Upstream...

During production process...

Downstream...
Executive summary
What is materiality and why it matters?

**What is a materiality?**

Materiality is about pinpointing what matters most to you and to your most important stakeholders; what you have most impact on; and what impacts you the most.

When running a materiality process through the lens of sustainability, we look at both business and sustainability issues and impacts – as they are interlinked and not to be looked at in isolation.

**What is the value of a materiality process?**

One of the main values of running a materiality process is in its methodology: consultation.

Running such a process demands external and internal conversations and engagement.

Running a materiality process forces us to pause, engage with internal and external stakeholders and ask yourselves important questions.

The consultative process is a also a great opportunity to mobilize top management on sustainability and engage with external stakeholders on a different level.

Ultimately, having a collective perspective on what and who is most important to your organization facilitates better focus in action, data gathering and monitoring, and clearer communications.
The wider value of materiality

**Stakeholders expectations**

Stakeholders increasingly expect **more transparency and more relevance** concerning sustainability information and reporting. A sustainability materiality assessment is a corporate strategy and communication must-have as international sustainability frameworks (GRI, AA1000, SASB, ISO26000, etc.) all identify materiality as a starting point for action and reporting.

**The multiple benefits and uses of materiality**

A materiality assessment identifies and prioritizes an organization’s most important issues.

The process itself enables **internal and external dialogue and stakeholder engagement.** Once built, it provides a rational basis to integrate environmental, social and societal issues and related actions within an organization’s **strategy.**

It allows internal players and functions to **focus** resources and efforts towards the most important issues and impactful actions for the organization.

Once we have that strategic focus, it enables organizations to equally focus and target their **communications.**
Overview of CEPI’s materiality the process

1. Research
   - Benchmark
   - Resources review

2. Stakeholder consultation
   - List of 18 initial material issues
   - 15 CEPI Members questionnaire (survey)
   - 9 External stakeholders interviews (customers, investors, suppliers, experts, NGOs, analyst, etc.)

3. Data analysis and issues’ ranking
   - Validation workshop with CEPI Members
   - Ranking of all sub-issues for each material topic & KPIs

4. Presentation of results and recommendations
   - Detailed materiality matrices for the Top 5 issues
   - Detailed presentation of the five most material issues, sub-issues and related KPIs, their definition, outcomes and recommendations

Industry Materiality Matrix
- Identification of most material topics

Deloitte - CEPI Materiality Report 2018
Organizations that participated to the process

### CEPI Members
- ASSOCARTA
- CELPI
- COBELPA
- ESSITY
- FINNISH FOREST INDUSTRIES FEDERATION
- INTERNATIONAL PAPER
- LUCART GROUP
- METSÄ GROUP
- MONDI
- MAYR-MELNHOF KARTON
- THE NAVIGATOR COMPANY
- SWEDISH FOREST INDUSTRIES FEDERATION
- SOFIDEL
- STORA ENSO
- TETRAPAK
- UPM

### External stakeholders
- ACTIAM
- BASF
- BUCKMAN
- CONFEDERATION OF EUROPEAN FOREST OWNERS
- ENVIRONMENTAL PAPER NETWORK
- EUROPEAN ENVIRONMENTAL BUREAU
- IKEA
- MIROVA
- VALMET
The industry’s sustainability materiality matrix

<table>
<thead>
<tr>
<th># Environmental issues</th>
<th># Social issues</th>
<th># Responsible business</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>• Society and economic impact on local community</td>
<td>• Business ethics</td>
<td>• Water management at industrial operations</td>
</tr>
<tr>
<td>• Human rights</td>
<td>• Career development and training</td>
<td>• Climate change management</td>
</tr>
<tr>
<td>• Diversity and equal opportunity</td>
<td>• Wellbeing at work</td>
<td>• Efficiency of materials and waste management</td>
</tr>
<tr>
<td>• Biodiversity protection (production site)</td>
<td></td>
<td>• Responsible fibre sourcing</td>
</tr>
<tr>
<td>Medium</td>
<td>High</td>
<td>Very high</td>
</tr>
<tr>
<td>• Water management at industrial operations</td>
<td>• Fair compensation</td>
<td>• Occupational Health and safety</td>
</tr>
</tbody>
</table>

Environmental issues
Water management at industrial operations
Climate change management
Efficiency of materials and waste management
Efficient energy management
Biodiversity protection (production site)

Ethics, responsible business and governance issues
Responsible fibre sourcing
Responsible governance
Supply chain management
Sustainable product development
Business ethics
Society and economic impact on local community
Human rights

Social issues
Occupational Health and safety
Career development and training
Wellbeing at work
Labor relations
Diversity and equal opportunity
Fair compensation
The industry’s sustainability Top 5 material topics and their sub-issues

**#1 Water management at industrial operations**
1. Water discharge: pollutants (COD, BOD, TSS, N, P, AOX)
2. Water consumption: industrial process and cooling
3. Water intake
4. Water efficiency and recycling

**#2 Climate change management**
1. Climate change (global) (Scope 1, 2 and 3 CO2 emissions)
2. Air emissions (local) (Nox, SOx, PM)
3. Energy management
4. Risks, opportunities and adaption to climate change

**#3 Efficiency of materials and waste management**
1. Eco-design (paper recyclability) and end-of-life treatment
2. Waste treatment (industrial operations)

**#4 Responsible fibre sourcing**
1. Fibre traceability and chain of custody certification
2. Recovered fibre procurement / Input of recycled materials in the production process
3. Responsible forest management (deforestation and biodiversity)
4. Supplier assessment and audits
5. Formalization of the fibre sourcing policy

**#5 Occupational Health & Safety**
1. Prevention and existing action plans
2. Accidents and occupational diseases statistics (for employees)
Gap analysis

<table>
<thead>
<tr>
<th>Issue</th>
<th>Current reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water management at industrial operations</td>
<td>Developed</td>
</tr>
<tr>
<td>Climate change management</td>
<td>Mature</td>
</tr>
<tr>
<td>Efficiency of materials and waste management</td>
<td>Developed</td>
</tr>
<tr>
<td>Responsible fibre sourcing</td>
<td>Developed</td>
</tr>
<tr>
<td>Occupational health &amp; safety</td>
<td>Developed</td>
</tr>
</tbody>
</table>

Overall, the current reporting of CEPI is advanced and covers the sustainability material topics highlighted by this process. Of the Top 5 issues identified, climate change management is most mature, where current reporting is robust on nearly all material KPIs.

For the other topics (water management at industrial operations, efficiency of materials and waste management, responsible fibre sourcing and occupational health & safety), the current reporting is developed but there is room to extend it to cover more of the material KPIs. For a detailed overview of the current reporting of KPIs, please see the ‘Gap Analysis’ section.
Main observations about the materiality process at CEPI

What was consensual
Overall, CEPI Members agreed on the final results of the materiality process, the industry matrix, the priority issues and their related KPIs.
The methodology was well received and no major concerns were expressed about the consultation process.

What was added
Initially, the results of the research and consultation phases highlighted only four top material topics:
- Water management at industrial operations
- Climate change management
- Efficiency of materials and waste management
- Responsible fibre sourcing

The issue of occupational health and safety was added as a fifth top material issue during the workshop as it was identified as crucial by most of the participants.

What was discussed
Participants to the materiality process insisted on the importance of social issues for their individual organizations, as well as for CEPI.
However, as the focus on this project was to build an industry-wide ranking, Members did not express the need to integrate social issues other than occupational health and safety as priority issues. Each organization addresses social issues individually.
Tools & future considerations

Materiality is not done once and for all.
A materiality process is a snapshot in time of what is most important to you, to your business and to your most important stakeholders.

Of course, everyone involved in the process will have future considerations in mind (e.g. changing regulation and consumer demands).

However, materiality is a changing and evolving thing. With that in mind, we recommend you run the process every three years to account for changes in regulation, technology, the economic and political context – amongst other factors.

That’s why we encourage each organization to review its material issues regularly.

The ‘How to guide’ (in a separate document) will help you build or update your organization’s materiality matrix and run your process.
The process and methodology

In detail
Scope, perimeter and limits

About this report
This report presents the methodology, the consultation and workshop results. This report is meant to be communicated to CEPI Members.

About the methodology
The methodology, as presented page 20, was validated with CEPI before any stakeholder consultation.

An industry-wise perspective.
This sustainability materiality process was led by Deloitte on behalf of CEPI as an industry-wise exercise. As such, the outcomes of this process represent a consensual perspective of material issues across the entire paper and pulp sector. The outcomes of this process act therefore as recommendations for minimum sustainability (ESG) management and reporting standards across the sector. We acknowledge that the outcomes of this process are already very much reported on and tackled by the main players in this sector.

With that in mind, the ‘Top 5’ material issues listed in this report represent what we found to be:

• A common and consensual understanding of the sector’s most important sustainability issues to be measured, monitored, tackled and reported on,
• The specific KPIs that were most relevant for each of these five priority issues.
Disclaimer

This report is confidential and is only intended for the benefit of the addressees named in this report, namely CEPI and its Members.

The mere receipt of the report by any other persons is not intended to create any duty of care, professional relationship or any present or future liability between those persons and Deloitte Consulting & Advisory CVBA (“Deloitte”).

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The matters raised in this report are only those which have come to our attention arising from or relevant to our procedures that we believe need to be brought to your attention.

They are not a comprehensive record of all the matters arising, and in particular we cannot be held responsible for reporting all matters that possibly could be raised.

Furthermore, the matters raised in this report are based on the facts and assumptions third parties have provided to us. We have assumed that these facts and assumptions are correct, complete and accurate.

If there is any change in these facts and assumptions, or in the law and interpretations thereof (including a change having retroactive effect), the matters expressed herein would need to be reconsidered in light of any such changes.

We have no responsibility to update these matters for any such changes.

The matters expressed herein are not binding on the authorities or courts.
Our process
In detail
Overview of the methodology

Step 1: An industry sustainability materiality matrix

Identification of key sustainability issues, looking at:
- CEPI Members’ existing materiality analyses
- Internal documents and other publications
- International standards and sector guidelines
- Customer surveys, questionnaires from rating agencies, legal requirements

Industry sustainability materiality matrix

Step 2: Individual materiality matrices

For each of the most material topics, define related sub-issues and their indicators

Stakeholder consultation (interviews/surveys) in order to map specific materiality matrices for each material topic

Internal stakeholders | External stakeholders

Validate the findings and the individual matrices through an internal stakeholder workshop with CEPI members

Deloitte - CEPI Materiality Report 2018
Research to build an industry sustainability materiality matrix
Overview of some of the documents and organizations reviewed
Internal stakeholders surveyed

Internal stakeholders, i.e. predominately sustainability managers or directors from CEPI Members, were asked to participate in an online survey prior to the workshop. The people interviewed represent the diversity of the members of CEPI. We therefore consider that the interviews conducted allow us to build a fair and balanced representation of stakeholders’ views on CEPIs sustainability material issues.
External stakeholders, were those organizations that CEPI and its Members consider as key. The stakeholders interviewed represent a diverse set of backgrounds and interests. Overall, the materiality assessment approach was well understood by all interviewees. Most interviewees prepared their ranking of TOP and BOTTOM issues prior to the interview.
It should be noted that internal stakeholders:

• Were CEPI Members
• And that the entities and representatives participating in the online consultation were not identical to the entities participating in the following internal CEPI workshop.

It should be noted for external stakeholders, that:

• The diversity of external stakeholders was taken into account as much as possible (e.g. by engaging public bodies, customers, rating agencies, investors, NGOs, etc.).
• The European Commission was invited to participate to the consultation as the leading public authority that was relevant for the European paper and pulp industry. Unfortunately, they declined to participate.
• We considered that local communities were indirectly represented by interviewing NGOs.
Mapping specific sub-issues for each of the Top 5 priority topics

About our rating and ranking methodology
Based on interview results, issues and sub-issues identified by stakeholders as “Top priorities” were rated 1 while topics identified as “Bottom priorities” were rated -1.
Other topics where given a 0.
Each stakeholder was allowed to provide two “Top priorities” and two “Bottom priorities”. In the event that a stakeholder deviated from this number, corrections were made to ensure that all stakeholders were given an equal voice.
The average rating per topic for each stakeholders group was used for positioning sub-issues in each of the detailed matrices.
Workshop with CEPI Members

The internal stakeholder workshop helped to **validate the industry sustainability materiality matrix**, and **sub-issues materiality matrices** for the most important topics.

Participants included representatives of the following entities:
Some of the questions we asked during the workshop

When looking at the material issues and sub-issues highlighted by this research...

What does that tell us?
Something new? Something shocking?
Are we missing something?

Is that right?
Are those issues truly the ones that impact us?
Are those issues truly the ones that we can impact?

Would others agree?
Would our customers relate to that?
Regulators? NGOs?
Is that what they are asking from us?

Is it all relative?
What does that depend on?
Country of operation?
Type of operation?
Stakeholder group?
Industry sustainability materiality matrix
The industry’s sustainability materiality matrix

Environmental issues
- Water management at industrial operations
- Climate change management
- Efficiency of materials and waste management
  - Efficient energy management
  - Biodiversity protection (production site)

Ethics, responsible business and governance issues
- Responsible fibre sourcing
  - Responsible governance
  - Supply chain management
  - Sustainable product development
  - Business ethics
  - Society and economic impact on local community
  - Human rights

Social issues
- Occupational Health and safety
  - Career development and training
  - Wellbeing at work
  - Labor relations
  - Diversity and equal opportunity
  - Fair compensation
The top material issues’ matrices and their KPIs
Water management at industrial operations
Water management at industrial operations

Issue-specific matrix

N.B. The sub-issues in bold were recognised as being most material during the stakeholder workshop
## List of material sub-issues and their KPIs

### Water management at industrial operations

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>Indicative KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Water discharge: pollutants (COD, BOD, TSS, N, P, AOX)</strong></td>
<td>- BOD - biochemical oxygen demand (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- COD – chemical oxygen demand (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- AOX – adsorbable Organic Halides (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- TSS – total suspended solid (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- $N_{\text{tot}}$ – total nitrogen (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- $P_{\text{tot}}$ – total phosphorous (tons, tons/ton production)</td>
</tr>
<tr>
<td>2</td>
<td><strong>Water consumption: industrial process and cooling</strong></td>
<td>- Total volume of water consumed (m$^3$, m$^3$/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Volume of water consumed for industrial process (m$^3$, m$^3$/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Volume of water consumed for cooling (m$^3$, m$^3$/ton production)</td>
</tr>
<tr>
<td>3</td>
<td><strong>Water intake</strong></td>
<td>- Total volume of water intake (m$^3$) and intensity (m$^3$/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Water intake per type water (m$^3$, m$^3$/ton production): freshwater, non freshwater</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Water intake per source (m$^3$, m$^3$/ton production): public network, groundwater, surface water, purchased materials and products, etc.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Water efficiency and recycling</strong></td>
<td>- Total number of sites using water in a partly or fully closed loop (Nb)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total volume of water reused in industrial process (m$^3$), related recycling rate (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total volume of water reused in cooling (m$^3$), related recycling rate (%)</td>
</tr>
</tbody>
</table>

Deloitte - CEPI Materiality Report 2018
Climate change management
Climate change management
Issue-specific matrix

N.B. The sub-issues in bold were recognised as being most material during the stakeholder workshop.
* The positioning of energy management is indicative.
It was added to the matrix after the stakeholder workshop and has not been scored by the external stakeholders.
# List of material sub-issues and their KPIs

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>Indicative KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Climate change (global)</td>
<td>- Scope 1: Direct CO$_2$ emissions (kt) (from combustion on site)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Scope 2: Indirect CO$_2$ emissions (kt) (from electricity and heat purchase)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Scope 3: Other indirect CO$_2$ emissions (kt, kt/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- CO$_2$ emissions intensity (kt/t product)</td>
</tr>
<tr>
<td>2</td>
<td>Air emissions (local)</td>
<td>- Total NO$_x$ emissions (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total SO$_x$ emissions (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total PM emissions (tons, tons/ton production)</td>
</tr>
<tr>
<td>3</td>
<td>Energy management</td>
<td>- Percentage of energy from biogenic fuels (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Percentage of energy from fossil fuels (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Percentage of energy from other renewable sources (%)</td>
</tr>
<tr>
<td>4</td>
<td>Risks, opportunities and adaption to climate change</td>
<td>- Disclosure of actions undertaken to adapt to climate change (qualitative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Carbon captured and stored (kt)</td>
</tr>
</tbody>
</table>
Efficiency of materials and waste management
Efficiency of materials and waste management

Issue-specific matrix

N.B. The sub-issues in bold were recognised as being most material during the stakeholder workshop.
## Efficiency of materials and waste management

List of material sub-issues and their KPIs

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>Indicative KPIs</th>
</tr>
</thead>
</table>
| 1  | Eco-design (paper recyclability) and end-of-life treatment | ▪ Actions performed in collaboration with downstream sectors to improve the recyclability of the final paper products (qualitative)  
▪ Actions performed to reinforce the traceability and improve the recycling rate of collected waste paper (qualitative) |
| 2  | Waste treatment (industrial operations)                 | ▪ Volume of waste sent to landfill: hazardous/non hazardous (tons, tons/ton production)  
▪ Volume of waste recovered: hazardous/non hazardous (tons, tons/ton production)  
▪ Recovery rate (%)                                                                                       |
Responsible fibre sourcing
Responsible fibre sourcing
Issue-specific matrix

N.B. The sub-issues in bold were recognised as being most material during the stakeholder workshop
### Responsible fibre sourcing

List of material sub-issues and their KPIs

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>Indicative KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fibre traceability and chain of custody certification</td>
<td>- Total volume of fibre/wood used (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of fibre/wood traceable to country (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of fibre/wood traceable to supply base (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of wood sourced from certified forests (FSC, PEFC or equivalent) (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of sourced pulp certified by FSC, PEFC or equivalent (%)</td>
</tr>
<tr>
<td>2</td>
<td>Recovered fibre procurement / Input of recycled materials in the production process</td>
<td>- Part of recovered fibre/wood over the total volume used (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Recycled paper intake per source: industrial sources, commercial sources, households (tons, tons/ton production)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Recycling rate (%)</td>
</tr>
<tr>
<td>3</td>
<td>Responsible forest management (deforestation and biodiversity)</td>
<td>- Part of wood with assurance over its legality (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of used wood/fibre by origin (Europe, non-Europe, Boreal, Temperate, Tropical) (%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total number of engagements with stakeholders on protecting endangered and biodiversity rich forests (Nb)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other actions taken for the conservation of endangered and biodiversity rich Forests (qualitative)</td>
</tr>
<tr>
<td>4</td>
<td>Supplier assessment and audits</td>
<td>- Total number of wood suppliers (Nb)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of fibre suppliers audited or assessed internally (%)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Part of fibre suppliers audited or assessed by a third-party (%)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Number of internal audits conducted (Nb)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Number of external audits conducted (Nb)*</td>
</tr>
<tr>
<td>5</td>
<td>Formalization of the fibre sourcing policy</td>
<td>- Existence of an internal responsible fibre sourcing guideline (qualitative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Existence of a Supplier Code of Conduct (qualitative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Existence of CSR criteria in the selection process of new suppliers (qualitative)*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Weight of the CSR criteria in the selection process (% or qualitative)*</td>
</tr>
</tbody>
</table>

*It should be noted that these issues are not critically material for the sector as a whole, but rather at the company level.*
Occupational Health and Safety
Occupational Health and Safety

Definitions

• Health and safety in the workplace and occupational risks must be managed to ensure employees’ safety and welfare as well as operational continuity.

• Industrial safety is also key to avoid accidents that could have a strong potential impact on the employees’ safety, the operational continuity of the business, surrounding populations and the local environment (e.g. risk prevention of fires in paper storage facilities).

“Every year in the European Union, there are around 5,600 fatal work-related accidents and millions of people are injured or have their health seriously harmed in the workplace. Workers and employers need to be made aware of the risks that they face and how to manage them.”

“Producing pulp and paper in Europe requires the use of a wide range of resources (raw materials, energy, water, chemicals …), of which “people” are the most important.”

## Health and safety

List of material sub-issues and their KPIs

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>Indicative KPIs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prevention and existing action plans</td>
<td>• Existence of a prevention / H&amp;S policy charter (qualitative)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Staff participation to H&amp;S programs / trainings (qualitative)</td>
</tr>
<tr>
<td>2</td>
<td>Accidents and occupational diseases statistics (for employees)</td>
<td>• Frequency rate of work-related accidents (Nb)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Medical Treatment Accident Rate (MTAR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Lost Time accident Rate (LTAR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of fatal work-related accidents within the reporting period (Nb)</td>
</tr>
</tbody>
</table>
Gap analysis
Gap analysis: our methodology

Reference document for the gap analysis
The gap analysis was done based on CEPI’s 2013 Sustainability Report. Their 2017 report was not yet publically available at the time of our research.

Scoring
Each KPI highlighted through this materiality process was contrasted with the ones disclosed in CEPI’s Sustainability Report.

Each KPI was given:
• 2 points in case the item was fully featured and disclosed
• 1 point in case the item was partially reported
• 0 points in case the item was not featured

Each of the material sub-issues highlighted through this materiality process were also scored.

The average score for each of the top 5 material issues (e.g. Water management at industrial operations) was based on the average scorings of its sub-issues (e.g. Water discharge: pollutants)

A correction in weighting was applied to ensure that each of the Top 5 material issues carry the same weight (some having more sub-issues and KPIs than others).

The following scoring was applied:
• 0 – 0.49 = Immature
• 0.50 – 0.99 = Developed
• 1.00 – 2.00 = Mature

Our gap analysis is based on these average scores.
## Gap analysis

### Water management at industrial operations

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>KPIs</th>
<th>KPI rating</th>
<th>Overall</th>
</tr>
</thead>
</table>
| 1  | Water discharge: pollutants (COD, BOD, TSS, N, P, AOX)                    | - BOD - biochemical oxygen demand (tons, tons/ton production)  
- COD – chemical oxygen demand (tons, tons/ton production)  
- AOX - adsorbable Organic Halides (tons, tons/ton production)  
- TSS – total suspended solid (tons, tons/ton production)  
- N$_{tot}$ – total nitrogen (tons, tons/ton production)  
- P$_{tot}$ – total phosphorous (tons, tons/ton production) |            | ![ ](https://example.com) | ![ ](https://example.com) |
| 2  | Water consumption: industrial process and cooling                         | - Total volume of water consumed (m$^3$, m$^3$/ton production)  
- Volume of water consumed for industrial process (m$^3$, m$^3$/ton production)  
- Volume of water consumed for cooling (m$^3$, m$^3$/ton production) | ![ ](https://example.com) | ![ ](https://example.com) | ![ ](https://example.com) |
| 3  | Water intake                                                               | - Total volume of water intake (m$^3$) and intensity (m$^3$/ton production)  
- Water intake per type water (m$^3$, m$^3$/ton production): freshwater, non freshwater  
- Water intake per source (m$^3$, m$^3$/ton production): public network, groundwater, surface water, purchased materials and products, etc. | ![ ](https://example.com) | ![ ](https://example.com) | ![ ](https://example.com) |
| 4  | Water efficiency and recycling                                           | - Total number of sites using water in a partly or fully closed loop (Nb)  
- Total volume of water reused in industrial process (m$^3$), related recycling rate (%)  
- Total volume of water reused in cooling (m$^3$), related recycling rate (%) | ![ ](https://example.com) | ![ ](https://example.com) | ![ ](https://example.com) |

**Overall scoring:** DEVELOPED  
with an opportunity for extending reporting on water consumption (sub-issue 2) and water efficiency and recycling (sub-issue 4)
## Climate change management

### Sub-issues

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>KPIs</th>
<th>KPI rating</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Climate change (global)</td>
<td>- Scope 1: Direct CO$_2$ emissions (kt) (from combustion on site)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Scope 2: Indirect CO$_2$ emissions (kt) (from electricity and heat purchase)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- <strong>Scope 3: Other indirect CO$_2$ emissions (kt, kt/ton production)</strong></td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- CO$_2$ emissions intensity (kt/t product)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td>2</td>
<td>Air emissions (local)</td>
<td>- Total NO$_x$ emissions (tons, tons/ton production)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Total SO$_x$ emissions (tons, tons/ton production)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- <strong>Total PM emissions (tons, tons/ton production)</strong></td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td>3</td>
<td>Energy management</td>
<td>- Percentage of energy from biogenic fuels (%)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Percentage of energy from fossil fuels (%)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Percentage of energy from other renewable sources (%)</td>
<td><img src="#" alt="Green" /></td>
<td><img src="#" alt="Green" /></td>
</tr>
<tr>
<td>4</td>
<td>Risks, opportunities and adaption to climate change</td>
<td>- Disclosure of actions undertaken to adapt to climate change (qualitative)</td>
<td><img src="#" alt="Red" /></td>
<td><img src="#" alt="Red" /></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Carbon captured and stored (kt)</td>
<td><img src="#" alt="Red" /></td>
<td><img src="#" alt="Red" /></td>
</tr>
</tbody>
</table>

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**Overall scoring:** **MATURE**

The material KPIs are thoroughly reported on, with minor exceptions.
# Gap analysis

## Efficiency of materials and waste management

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>KPIs</th>
<th>KPI rating</th>
<th>Overall</th>
</tr>
</thead>
</table>
| 1 | Eco-design (paper recyclability) and end-of-life treatment                | ▪ Actions performed in collaboration with downstream sectors to improve the recyclability of the final paper products (qualitative)  
▪ Actions performed to reinforce the traceability and improve the recycling rate of collected waste paper (qualitative) | ×          | ×       |
| 2 | Waste treatment (industrial operations)                                    | ▪ Volume of waste sent to landfill: hazardous/non hazardous (tons, tons/ton production)  
▪ Volume of waste recovered: hazardous/non hazardous (tons, tons/ton production)  
▪ Recovery rate (%)                                                                 | ×          | ❌       |

**Overall scoring:** DEVELOPED with an opportunity for extending reporting on eco-design and end-of-life treatment (sub-issue 1)
### Gap analysis

**Responsible fibre sourcing**

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>KPIs</th>
<th>KPI rating</th>
<th>Overall</th>
</tr>
</thead>
</table>
| 1   | **Fibre traceability and chain of custody certification**                 | ▪ Total volume of fibre/wood used (tons, tons/ton production)  
▪ Part of fibre/wood traceable to country (%)  
▪ Part of fibre/wood traceable to supply base (%)  
▪ Part of wood sourced from certified forests (FSC, PEFC or equivalent) (%)  
▪ Part of sourced pulp certified by FSC, PEFC or equivalent (%) |
| 2   | **Recovered fibre procurement / Input of recycled materials in the production process** | ▪ Part of recovered fibre/wood over the total volume used (%)  
▪ Recycled paper intake per source: industrial sources, commercial sources, households (tons, tons/ton production)  
▪ Recycling rate (%) |
| 3   | **Responsible forest management (deforestation and biodiversity)**         | ▪ Part of wood with assurance over its legality (%)  
▪ Part of used wood/fibre by origin (Europe, non-Europe, Boreal, Temperate, Tropical) (%)  
▪ Total number of engagements with stakeholders on protecting endangered and biodiversity rich forests (Nb)  
▪ Other actions taken for the conservation of endangered and biodiversity rich Forests (qualitative) |
| 4   | **Formalization of the fibre sourcing policy**                            | ▪ Existence of an internal responsible fibre sourcing guideline (qualitative)  
▪ Existence of a Supplier Code of Conduct (qualitative) |

**Legend**

- Full reporting
- In part reporting
- No reporting

**Overall scoring**: DEVELOPED

With an opportunity for extending reporting on wood/pulp sourcing from certified bodies (sub-issue 1), how the sector responsibly manages forests (sub-issue 2) and on the existence of fibre sourcing policies (sub-issue 4).
## Gap analysis
### Occupational health and safety

<table>
<thead>
<tr>
<th>#</th>
<th>Sub-issues</th>
<th>KPIs</th>
<th>KPI rating</th>
<th>Overall</th>
</tr>
</thead>
</table>
| 1 | Prevention and existing action plans | - Existence of a prevention / H&S policy charter (qualitative)  
   - Staff participation to H&S programs / trainings (qualitative) | ✗️ ✗️       | ✗️       |
| 2 | Accidents and occupational diseases statistics (for employees) | - Frequency rate of work-related accidents (Nb)  
   - Number of fatal work-related accidents within the reporting period (Nb) | ✨ ✗️       | 🟢       |

Legend:
- Full reporting
- In part reporting
- No reporting

Overall scoring: DEVELOPED
with an opportunity for extending reporting on the prevention and existing action plans (sub-issue 1)
Looking further
Updating your materiality process in three years
A process that needs to be repeated every three years

The world is changing fast.
Consumer behaviours are evolving, and so your customers’ demands are changing.
Some of your countries of operation are facing increased extreme weather events and environmental emergencies (such as critical water scarcity situations) that can directly impact your operations.

Your stakeholders can also change with time. Key individuals you built long-term relationships with will move on, whilst new entities, competitors and advocacy groups emerge.

Markets are also likely to change in the near future. Some will ask for more paper, others for less – or of a different kind.

Pricing is also likely to evolve, due to changing demand, fuel prices, financial markets – and should investing in green bonds and carbon markets take off (or not).

The paper and pulp industry is already scrutinized and regulated, notably on environmental criteria, and this is likely to continue – as climate change regulation continues with increased ambition.

That’s why we encourage each organization to review its material issues regularly.
Questions to be asked when reviewing your material issues

Changes in regulation and consumer expectations, commodity prices, stakeholder expectations and pressures, natural resources scarcity, labour laws in our countries of operations ...

How is it all likely to change in the future?
How will it impact us?
How can we prepare for it?

Main areas of change to bear in mind:
- National, international and industry regulations
- Corporate and reporting regulations
- Consumer demand, behaviour and expectations
- Customer demand, behaviour and expectations
- Commodity prices
- Financial markets
- Supply chain continuity and safety, infrastructure
- Political and geopolitical changes
- Environmental risks, extreme weather events and natural resources scarcity
- Technological risks
- Innovation
Questions we asked at the workshop

*Deforestation and value chain, water and climate risks, occupational Health and Safety ...*

How is it likely to change in the future? When ...

... there are now strict ‘cap and share’ regulations on water use?

... Cape Town, Mexico City and Sao Paulo are in a declared state of water emergency?

... renewable energy is cheaper than fossil fuels and their trading is bitcoin based?

... the take-off in Green Bonds and increased forestry regulation means forest preservation will earn more revenue than exploitation (even sustainably sourced)?

... the 2.5bn people without access to decent toilets today would be using 120 rolls of toilet paper per year just like us?

... the technology of making asphalt out of re-purposed used paper would be of scale?
Food for thought
Food for thought: for CEPI and its Members

Shared vision and ambition

- Develop and gather around a shared vision for sustainability and common ambition for the industry

- Set common and bold quantitative KPIs and targets for the industry. E.g. Aligned with the Environmental Paper Network goals

- Develop a common industry-wide sustainability roadmap

- Challenge your ambitions and check your progress towards it regularly

- Communicate and report openly on your ambition, your progress, your journey, your partnerships
Listen, inquire and be challenged

- Regularly seek input and opinion from your stakeholders and partners. Especially from the ones who challenge you.

- Invite innovators and disruptors to inspire you, challenge you and work with you.
  E.g. Diverse experts and organizations (e.g. futurists, carbon offsetting programs, bio-economy experts, NGOs).
Food for thought: for CEPI and its Members
Share and mutualize

- Set a shared watch system on the latest trends and innovations
- Gather and consolidate industry-wide data online, through dedicated collaborative platforms and apps
- Discuss, share and track knowledge, best practices and failures
  And the lessons learned from them
- Mutualize investments in critical industry-wide R&D and start-ups
Food for thought: for CEPI and its Members

Monitor and update

- **Share** common monitoring tools and platforms

- **Improve** and simplify reporting processes and disclosure

- **Monitor**, **track and evaluate success**
  And where you stand regarding your own and the industry’s targets
Food for thought: for CEPI and its Members
Review and re-set

➢ **Materiality is an evolving exercise:** it has to be done, re-done, updated and revised

➢ **Materiality is a start, not an achievement:** the work is never over
Illustrations and inspirations
Illustration and inspiration: a bold vision and goals for the industry

According to the WWF, the paper and pulp industry could be leaders in sustainability

Source: The Environmental Paper Company Index

The Environmental Paper Network areas of progress for the industry

Source: The state of the global paper industry
Illustration and inspiration: bringing the industry to be working more closely together

Supporting CEPI’s formidable work in bringing the industry together, there are inspirational examples of how a fragmented industry (tires, in this case) have worked together under one umbrella (WBCSD’s) to align not only their KPIs, but also their strategy on sector-wide issues, investments and top leadership commitments.

**The Source: WBCSD Tire Industry Project**
Illustration and inspiration: bringing the industry together towards sector-wide improvements

Supporting CEPI’s work in bringing the industry together, there are great opportunities to build on existing initiatives and frameworks to improve the entire industry’s performance.

The Source: UN Global Compact's Supply Chain Practical Guide of the global paper industry
Illustration and inspiration: partnerships

A former label, Citeo works with 50,000 companies and local authorities towards reducing the environmental impact of packaging.

Source: citeo.com
Thank you