Wood fibres are our main raw material, making us part of the bioeconomy. Smurfit Kappa sustainably manages its own eucalyptus and pine plantations in Colombia, as well as smaller forests in France and Spain. We use certified Chain of Custody wood for pulp from European suppliers in Austria, the Baltic countries, France, Germany, Spain and Sweden.

Our Commitment to Sustainable Fibre

We aim to source virgin fibres from certified well-managed forests, or at least of non-controversial origin, or Chain of Custody certified recycled fibres. All materials must be delivered through a third-party verified Chain of Custody certified supply chain. We accept Forest Stewardship Council (FSC®), Programme for Endorsement of Forest Certification (PEFC®) and Sustainable Forestry Initiative® (SFI) certified wood, and the Chain of Custody systems at our mills and plants also cover recycled-fibre sourcing.

Products delivered to our customers must meet the commitments we make in our policy statements (Forestry Policy, Code of Business Conduct, Social Citizenship). Most are covered by the Chain of Custody certification standards, which cover all fibres and fibre-based products we use or manufacture, whatever their origin or form.

A total of 58% of the wood we use for virgin paper or pulp comes from forests certified under the FSC, PEFC and/or SFI schemes. The remaining 42% of non-contraversial fibres are risk-assessed through our FSC and PEFC Chain of Custody system, and verified by a third party. Our forests in Spain to increase FSC certified wood supplies have started to have a positive impact on the Spanish certified wood volumes. We also increased in FSC certified wood supplies in Sweden.

Annually, Smurfit Kappa’s recycling operations handle some 5.5 million tonnes of recovered paper, in Europe, and 2 million tonnes in the Americas. We have a network of 17 recycled paper depots in Europe, and 22 in the Americas, using recovered paper from municipalities, retailers, industries, and our own converting and converting operations.

Chain of Custody

Our sustainability commitments must show supply chain transparency. We robustly monitor and third-party auditing of our supply chain, ensuring compliance. Smurfit Kappa does not source fibre from high deforestation-risk areas, but this issue nevertheless affects the whole industry’s reputation. The best practice to deliver our commitment is through forest certification, and related Chain of Custody certification.

At the end of 2019, 93% of our paper was produced as Chain of Custody certified according to FSC, PEFC or SFI. The remaining 7% is from non-contraversial fibres in accordance with FSC Controlled Wood standard, and managed through the mills’ Chain of Custody risk assessment systems. The complete European Smurfit Kappa paper and board mill system has been Chain of Custody certified under the FSC and PEFC schemes since 2010. Since January 2015, all our American paper mills have been certified by FSC and/or SFI standards.

Furthermore, all our converting operations are Chain of Custody certified. We reach our target to sell over 90% of our packaging solutions as Chain of Custody certified at the end of 2016. In 2019, this has increased to 92.3%.

With Nappcon, we performed an assessment and gap analysis to measure the effectiveness of our Chain of Custody and related due diligence systems during 2018/2019, and used this to strengthen our 2019 forestry and fibre sourcing policy. We sourced fibres from 33 counties among which seven are classified as potential high-risk: Argentina, Belarus, Brazil, Chile, Colombia, Russia and Ukraine. In Colombia, we only source from our own FSC certified plantations, but fibres sourced from the other six countries require additional due diligence before purchasing.

Virgin and Recycled Fibres per Source 2019

<table>
<thead>
<tr>
<th>Source of Fibre</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycled pulp produced internally</td>
<td>60.4%</td>
<td>60.3%</td>
<td>60.3%</td>
<td>60.2%</td>
<td>59.6%</td>
</tr>
<tr>
<td>Wood pulp produced internally</td>
<td>17.1%</td>
<td>17.0%</td>
<td>16.9%</td>
<td>16.7%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Market virgin pulp</td>
<td>9.9%</td>
<td>9.7%</td>
<td>9.7%</td>
<td>9.6%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Virgin paper purchased</td>
<td>6.2%</td>
<td>6.1%</td>
<td>6.2%</td>
<td>6.1%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Recycled paper purchased</td>
<td>13.5%</td>
<td>13.5%</td>
<td>13.5%</td>
<td>13.5%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

Share of packaging products sold as CoC certified 2015-2019

- Virgin and recycled fibres have steadily increased from 70% in 2015 to 83% in 2019.
- Recycled content disposed of at the mills has also increased from 5% in 2015 to 11% in 2019.
- Our sustainable fibre sourcing is supported by the FSC, PEFC and SFI certifications.

Forest and Plantation Management Colombia

Almost all the virgin wood fibre our Colombian plantations need is supplied by 68,000 hectares (ha) of forests and plantations which we own and manage. We use protection programmes with the best sustainable development principles, promoting responsible use of natural resources along with economic development and social inclusiveness. We also conform to comprehensive legal, technical and environmental regulations set by local government and international bodies, subject to annual review.

Our 67,100 ha of forests and plantations in Colombia include:
- 42,000 ha of commercial plantations, of which 6,000 ha are partnerships with private landowners.
- 22,000 ha of protected natural forest.
- 3,300 ha of infrastructure.

In our commercial plantations, 58% of the land is pine, 35% eucalyptus, 6% is being replanted, and 2% is dedicated to research. Our Colombian forest management programmes have been certified by FSC since 2003.

Biodiversity and Ecosystem Conservation

A proof of our Colombian forest land is dedicated to protecting forest sustainability, helping maintain the animal and biodiversity, and preserving woodlands, habitats and ecosystems.

To maintain forest biodiversity and sustainability, our principles are to:
- conserve them, by protecting and promoting species diversity, sustaining ecosystems, and protecting water sources and habitats.
- identify appropriate species and practices that increase plantation yields whilst protecting the environment; and
- develop research programmes to preserve and enhance soil productivity.

Plantation forestry efficiently produces sustainable fibres for paper production. We use carefully selected areas for plantations, avoiding valuable ecosystems and protected forest areas.

Protecting and promoting natural habitats is important to our approach, so in Colombia we use our own research centres as well as third-party institutions. Since 2009, we have worked with four local universities – Cauca, National, Valle and Quindío – studying the flora and fauna populations in and around our forests. Examples include:
- Since 2013, in partnership with the Biology Programme of the National Natural Science School of Universidad del Valle has studied the ‘diversity of birds, mammals and plants in the natural forests of the forestry nucleus in Sevilla’.
- In 2014, a literature review aims to inform conservation planning by identifying areas of special biodiversity close to the Company’s plantations and natural forests in the Santa Rosa Forest core area.
- During the past five years, studies developed by Smurfit Kappa identified 1,223 species in our forests. This includes 651 trees, 494 birds, 77 mammals, and one amphibian, of which 40 species are endangered. Our plantations and neighboring protected forests form important wildlife corridors, contributing to species conservation in the Andean ecosystem, and need careful management.

We also work with neighbouring communities, engaging local people in our decision-making. This is especially important in Latin America, where indigenous people may have land rights, and livelihoods are often dependent on forests. In 2019, there were no violations of the rights of indigenous people.

France and Spain

In Europe, we offer forest management services through our wood supply companies in Spain and France, where we manage some 600 hectares of forest. In both, we follow local best practice for forest management, as certified by PEFC. Our wood-handling operations are Chain of Custody certified to FSC and PEFC standards.