



## STRATEGIC BUSINESS PLAN – ISO/TC 287

### **Executive summary – ISO TC 287 Sustainable processes for wood and wood-based products**

Current definitions of wood and wood-based products<sup>1</sup> cover a wide variety of goods, which are more commonly divided<sup>2</sup> as industrial roundwood, sawnwood, wood-based panels, fibre furnish (pulp), paper, paperboard and wood fuel. Cork and lignified materials other than wood, such as bamboo, rattan and their products are equally included in this framework<sup>3</sup>. Recently, processes of research, development and innovation, aligned with increasing market demands for renewable goods, have been responsible for expanding the sector's business practices, adding biofuels, biochemicals, textiles, new construction materials and other products to this landscape.

In general terms, the wood-based industry<sup>4</sup> formally employs around 13.7 million people and represents a market of approximately US\$ 510 billion, using as reference 2019 numbers, with estimates predicting that it could reach US\$ 585 billion by 2023. According to WWF<sup>5</sup>, trade in timber and paper accounts for 16% of the global soft commodities market. In 2017<sup>6</sup>, the largest timber producing countries were responsible for placing an estimate 2.1 billion cubic metres of wood into global markets.

The societal demands for a low-carbon economy associated with the progress of innovation, allow the diversification of products made from fibre and lignin. Many of these have the potential to replace compounds of fossil origin, and therefore play a crucial role in framing the Committee's conceptual understanding. These emerging business dynamics have opened an important window of opportunity for the wood-based industry to tackle global challenges such as climate change, deforestation, loss of biodiversity and others through its operational practices and products of renewable origin.

On the other hand, the wood-based industry faces considerable challenges to showcase its potential as a provider of sustainable solutions to society. Topics such as biodegradability, compostability, recyclability and carbon balance, to name a few, whilst aligned with current strategic market demands and forecasts, still need further developments and better communication. It is important that this opportunity is realized in a responsible way throughout the entire value chain, from forest to end-of-life. This includes considering the synergies and trade-offs between climate goals and other environmental goals, e.g. those related to biodiversity, and ensuring that social aspects such as labour rights are respected.

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<sup>1</sup> ISO 38200 defines wood-based products as being wholly or partially derived from wood or wooden components.

<sup>2</sup> FAO's 2018 Global Forest Products Facts and Figures Report.

<sup>3</sup> In consonance with the scope of ISO 38200.

<sup>4</sup> The term wood-based industry is used for the purposes of the this SBP, ensuring alignment with the TC title and scope. As there is no international consensus on such terminology, references to other documents used throughout the text represent the wood-based industry or parts of its value chain using other terms, including: forests forestry, forestry sector, among others.

<sup>5</sup> 100% Sustainable Timber Markets: the economic and business case

<sup>6</sup> EY – 2018 Russian Forest Sector Overview Report

These topics and other identified gaps will be the focus of ISO TC 287 in its mission of helping to position the sector at the forefront of sustainable industries. International Standards and other ISO deliverables developed by the Committee will serve as additional tools for companies to clearly demonstrate the sustainability aspects of their products and production processes, including climate benefits, provision of ecosystem services and other positive impacts of forests, whilst assisting businesses, investors and consumers to make informed and responsible choices.

## 1. ISO TC 287 Business Environment

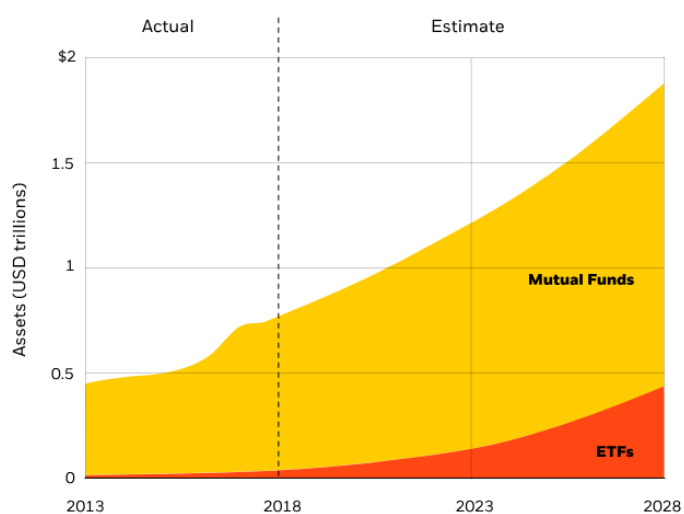
The wood-based industry is currently on the brink of a paradigm shift in its business environment as socio-environmental challenges force a rethink of sustainable consumption, production and investment. Wood-based products have the potential to make a significant contribution to circular economy and bioeconomy strategies as substitutes for fossil compounds in the carbon-based chemical industry, construction and other markets.

Within this fast-evolving scenario, innovation plays a crucial role in enabling new uses of woody biomass and establishing new industry frontiers. In practical terms, pulp, paper and other more “traditional” wood-based products now share the market’s limelight with biofuels, biochemicals, biocomposites, biomedical, to name a few, as renewable options to consumers. Equally relevant for sustainability and resilience are advances in biotechnology, which have the potential to create new pathways for product diversification and to produce more goods with fewer resources.

As pressure for sustainable business practices mounts, investors are integrating environmental, social and governance (ESG) principles into their practices. The growth of sustainability-related investments is far from being just a coincidence or simply another market trend. The prospect of stranded assets in traditional fossil fuel related portfolios is driving significant changes in the invest communities. According to the assessment showcased in the chart below<sup>7</sup>, the resources invested in sustainable exchange-traded (ETF) and mutual funds surpassed 500 billion dollars in 2018, with an estimate that it could almost reach the 2 trillion dollars mark in ten years, if predictions are confirmed.

### Sustainable Swell

Assets of sustainable mutual funds and ETFs, 2013-2028



<sup>7</sup> BlackRock, with data from Broadridge/Simfund, June 2018. Notes: The chart shows the total assets under management in ESG mutual funds (MFs) and ETFs globally. <https://www.blackrock.com/us/individual/investment-ideas/sustainable-investing>

Not surprisingly, the mindset of investors is gradually adjusting to this new dynamic, as demonstrated in an MIT<sup>8</sup> study, which involved more than 3.000 managers and investors in organizations from over 100 countries. Highlighting some of the research's findings, it is possible to outline how this mentality is being translated into specific behaviours. For example, 75% of the executives from investment firms that were interviewed considered that a company's sustainability performance is instrumental to an investment decision. Additionally, more than 50% of the investors that are kept informed about the practices of organizations in their investment portfolio would be willing to divest from businesses reporting poor sustainability performance.

Within this context, the impressive growth of worldwide institutional investments on the wood-based industry, which was estimated to be around US\$15 billion in the early 2000s and climbed sharply to over US\$100 billion in 2015<sup>9</sup>, is also a critical variable to delineate the sector's current perspectives. Associated with the capital flow is the relevant role of the wood-based industry as part of the solution to global challenges, as recognized by the FAO, World Bank, WWF and other members of the Sustainable Wood for a Sustainable World initiative (SW4SW):

“The Paris Agreement also highlights the contributions of forests to climate change mitigation and adaptation, as countries in drawing up their (intended) nationally determined contributions to mitigation mostly confirmed the prominent role of the forest sector. Technical and methodological progress allows for better monitoring of harvested wood products' lifecycle giving them a key role in strategies for transitioning to low-carbon economies. Concurrently, the impact of sustainable management of forests on enhancing livelihoods, contributing to sustainable cities and reducing the world's carbon and material footprints is gaining attention.<sup>10</sup>”

The Principles of Responsible Investments (PRI), further explores the wood-based industry's role in the development of a sustainable economy:

“The 2015 Paris Climate Agreement and subsequent studies on the role that forests can play in mitigating climate change, as well as the EUs Action Plan on sustainable finance, could spur the flow of more institutional capital into forestry. As a result, more forestry investment products and strategies, which deliver market returns and environmental and social benefits, are likely to become available.<sup>11</sup>”

Conversely, the wood-based industry still faces considerable challenges to demonstrate the value of its socio-environmental benefits to interested parties such as investors, clients and communities. SW4SW proposes that, whilst there is a general understanding that forests and its products give an effective contribution to achieve the United Nations Sustainable Development Goals and climate change objectives, “sustainable production and consumption of forest products, in particular, wood products, have not often been given the right places it deserves in the international development agenda<sup>12</sup>”. As such, financing and marketing, among other strategic facets of sustainable wood-based products, underperform considering the sector's overall potential. SW4SW concludes that “there is a need for joint efforts to promote broad understanding on what sustainable forest values chains entail, where they can be found or created, what are the associated business models and how they can contribute to developmental goals at local, national and global levels<sup>13</sup>.”

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<sup>8</sup> Unruh, G. et al. “Investing for a Sustainable Future.” MIT Sloan Management Review. <http://sloanreview.mit.edu/projects/investing-for-a-sustainable-future>.

<sup>9</sup> An introduction to responsible investment in forestry – PRI 2019

<sup>10</sup> Concept note for a joint initiative of the Collaborative Partnership on Forests (SW4SW)

<sup>11</sup> An introduction to responsible investment in forestry – PRI 2019

<sup>12</sup> Concept note for a joint initiative of the Collaborative Partnership on Forests (SW4SW)

<sup>13</sup> Idem

One of the pathways to pinpoint the intricacies and effectively communicate the sustainability aspects of the wood-based industry's value chain is reaching out to interested parties using a standardized, internationally recognized, verifiable, inclusive and consensus-based approach. Standardization and certification processes are already part of the sector's business environment, as companies are increasingly expected to consistently demonstrate the legality and sustainability of their products through the implementation and conformity assessment of technical standards.

Although certification schemes such as the FSC, PEFC and SFI are widely recognized and, in many cases, a *conditio sine qua non* to do business, their scopes partially cover the wood-based industry's value chain.

The Principles for Responsible Investment (PRI) raises important questions in the context of this SBP in attempting to delineate the future of forestry investments:

- “Do certification requirements need to evolve, such as in relation to carbon footprints or generating positive impact?”
- Can forestry managers respond to emission trading schemes by developing products that are attractive to investors and meet scientific standards that demonstrate their carbon impact?
- How can forestry investors measure and report on the impact of their investments in relation to the SDGs, thereby becoming an integral part of the mainstream impact investing conversation?<sup>14</sup>”

These questions, although drafted to encompass an investment-related mindset, can also be associated with the wider perspective of TC 287, as they address matters that will potentially help to shape initiatives within the wood-based industry and therefore are pertinent to other interested parties such as clients, communities and employees. More specifically, such initiatives need to further explore standardization practices aiming at having internationally recognized methods to demonstrate how sustainability aspects and their materiality are integrated into the sector's value chain. SW4SW initiative summarizes the challenge:

“There is also a recognized need to promote the messages to a wider audience, in order to increase the visibility on the benefits of sustainable wood production and consumption, shifting the world mindset to a positive and responsible attitude towards sustainable forest value chains<sup>15</sup>.”

Another crucial factor to the wood-based industry's business environment is the complex network of legal requirements that make the sector highly regulated at national and regional levels. The EU Forest Law Enforcement Governance and Trade (FLEGT), EU Timber Regulation, US Lacey Act, Australia's Illegal Logging Prohibition Act, to name a few, were established as efforts in the fight against the trade of illegal wood and wood-based products.

Currently, clearly demonstrating the traceability and legal origin of wood and wood-based products through the various steps of the supply chain is one of the major concerns within the sector. Concomitantly, some regions and countries are subject to a higher level of scrutiny due to the perception of risk associated with these regional/national contexts, which involves concerns regarding corruption, social conflicts, lack of law enforcement, among others.

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<sup>14</sup> An introduction to responsible investment in forestry – PRI 2019

<sup>15</sup> Concept note for a joint initiative of the Collaborative Partnership on Forests (SW4SW)

Our common understanding, therefore, is that the wood-based industry is well positioned to effectively contribute to the mitigation of pressing global social and environmental challenges, whether by providing renewable and, in many cases, innovative, products that can help reshape consumption habits or by the management of large areas of natural, semi-natural and planted forests, as well as plantations, that sequester and/or store considerable amounts of carbon from the atmosphere. There is an evident opportunity to further explore the wood-based industry's potential through innovation, co-creation of shared value, new investment trends, promotion of a circular bioeconomy, enhancement of natural capital and the achievement of the United Nations Sustainable Development Goals (SDGs).

Paradoxically, most of the value resulting from the comprehension of the wood-based industry's intrinsic relation with such factors is not being realized. Central to this counter-productive scenario are the difficulties of the sector to develop technically sound narratives on the sustainable characteristics of its processes and products. In developing such an approach, companies and relevant stakeholders would benefit from tailor-made, internationally validated methodologies to help them to declare and understand the sustainability and compliance aspects of the wood-based industry's value chain.

## **2. Wood-based industry's quantitative indicators**

### **2.1. Overview**

The wood-based industry's scope embraces a considerable number of long-established products as well as innovative initiatives, some of which are still being tested in the marketplace. Consequently, the value chains that comprise the sector's business environment can be characterized as complex and decentralized, meaning that they are not overseen by a single institution, association or international body. The wood-based industry must contend with a plethora of different terms and definitions, market calculations, assessment methods and other approaches, which in many instances are not aligned and even contradictory.

Therefore, it is a herculean task to pinpoint the wood-based industry's global quantitative indicators and provide precise data on them, because the information on the value chains is fragmented and not consistent.

The following sub-sections of this business plan are the result of research aimed at framing the wood-based industry's different facets, highlighting, where possible, which aspects were considered to compose the required data.

### **2.2. Trends**

Current trends from the wood-based industry encompass the development of products to replace fossil-based compounds, through traditional and innovative uses of wood products and biomass, aiming at contributing to the establishment of a circular bioeconomy and the UN 2030 Agenda. Examples include the production of:

Lignin-based products, such as:

- Biofuels
- Adhesives
- Resins
- Dispersants
- Antioxidants
- Biopolymers

Bio-based packaging solutions and utensils:

- Containers
- Cups and straws
- Industrial Bags
- Barrier coatings
- Everyday use bags
- Food and beverage packages
- Intelligent packaging

Other business trends:

- Biocomposites
- Formed fiber products
- Generation of low-emission energy
- Biomedicals
- Biotechnology

Within this context, the wood-based industry is scaling its capability to provide renewable solutions to other sectors, including construction, automotive, pharmaceutical, chemical, aircraft and aerospace, food and beverage, agricultural, textile, among others.

The approach adopted by the wood-based industry is mostly driven by sustainability-derived concepts, including innovability (innovation + sustainability), bio and circular economy, renewability, biodegradability, recyclability, natural capital, shared value, to name a few.

Also relevant to this business plan are the current investment trends based on environmental, social and governance (ESG) practices, and the expansion of the use of financial instruments designed to encourage the development of sustainability-related projects, such as green bonds. Correspondingly, the establishment of international carbon markets represents an important opportunity for the wood-based industry, due to its considerable forest assets and, in many cases, climate-positive operations. According to the asset management firm New Forests, the attractiveness of investment in forestry is based on a combination of factors that include the generation of income through harvesting, long-term capital appreciation, natural inflation hedging, and low volatility of returns. The asset management firm further explains the rationale in its 2017 assessment<sup>16</sup>:

“Sustainable and responsible management of forestry assets can also generate solutions to climate change, promote a shift to more responsible production and consumption, foster rural livelihoods and economies, and contribute to a growing range of renewable products made from wood fibre. In recent years the concept of a bioeconomy has emerged where demand for timber and other biomass will increase from the manufacture and use of a growing array of materials, chemicals, and energy sources that aim to address critical sustainability challenges. The ongoing development of this bioeconomy, alongside the evolution of timber markets serving a growing global population, provides institutional investors with diverse opportunities in a rapidly changing world.”

### 2.3. Products

Further to the products listed in 2.2, which derive from current innovation processes and new uses of woody biomass, the wood-based industry also relies on well-established markets for:

- Roundwood and sawnwood
- Wood-base panels
- Wood flooring
- Fibre furnish (pulp)
- Fluff pulp
- Tissue
- Paper
- Paper board
- Wood fuel
- Engineered wood
- Moulded wood
- Cork
- Other lignified materials other than wood, such as bamboo, rattan and their products

### 2.4. Quantitative information on the possible use and acceptance of the TC's Standards

Although TC 287 is in the early stages of its development, the balloting results that determined the Committee's establishment showcase the global relevance of the proposed work, considering that among the participating members are the countries that represent most of the world's main producers from the different stages of the sector's value chain.

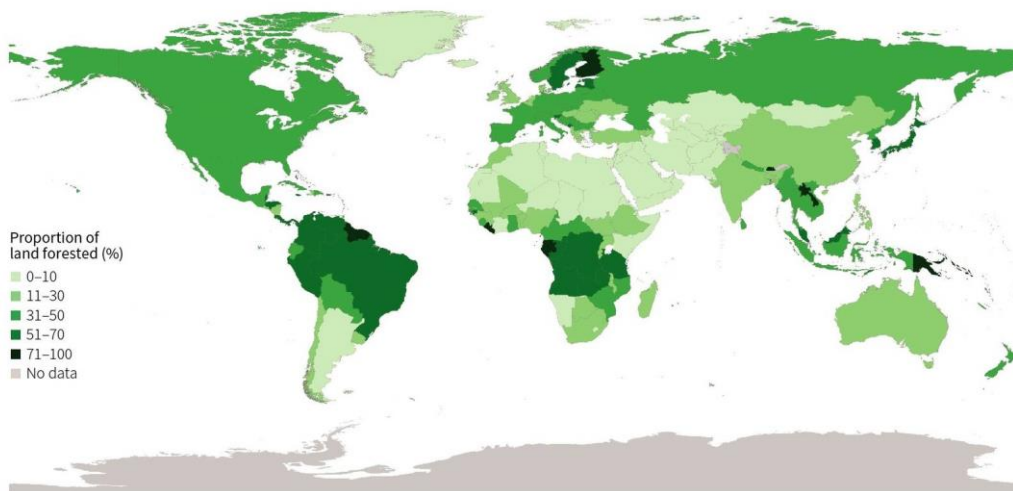
The successful publication of ISO 38200 Chain of custody for wood and wood-based products by PC 287 and the subsequent support of the majority of its members regarding the PC to TC transition are also important factors to be considered.

### 2.5. Wood-based industry in numbers

According to the FAO<sup>17</sup>, 30% of world's forests is being used primarily for production, representing, in global numbers, around 1.15 billion hectares that are managed with the goal of producing wood and non-wood goods.

The graphs from FAO's 2020 Global Forest Resources Assessment presented below brings forth key data related to forests worldwide.

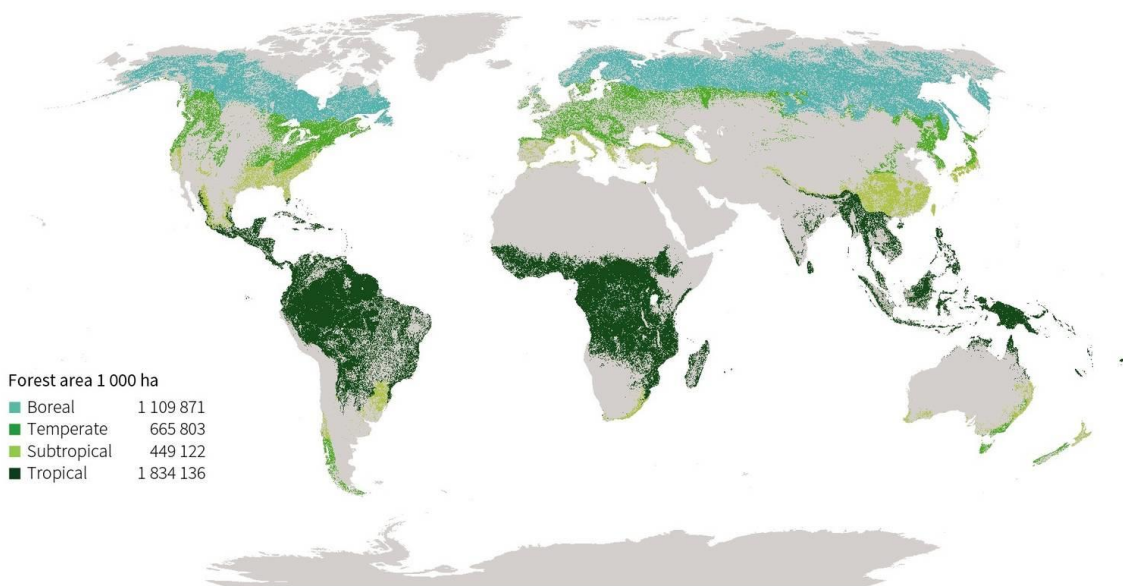
Forest area as a percentage of total land area, 2020



Source: Adapted from United Nations World map, 2020.

FAO. 2020. *Global Forest Resources Assessment 2020*. Rome.

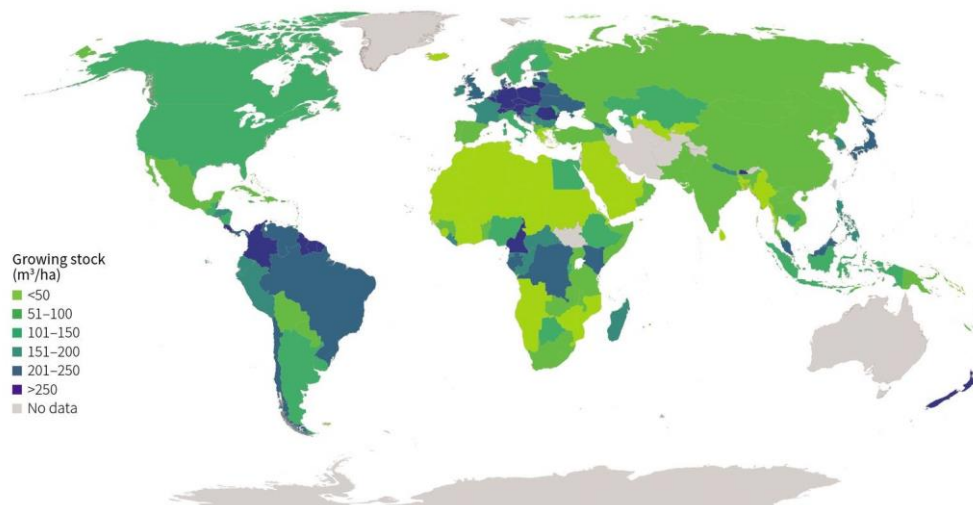
The global distribution of forests, by climatic domain



Source: Adapted from United Nations World map, 2020.

FAO. 2020. *Global Forest Resources Assessment 2020*. Rome.

Forest growing stock per unit area, by country, 2020



Source: Adapted from United Nations World map, 2020  
FAO. 2020. *Global Forest Resources Assessment 2020*. Rome.

Also according to the FAO<sup>18</sup>, in 2018 the global trade (exports) of wood-based products represented approximately US\$270 billion in transactions<sup>19</sup>, demonstrating a continuous improvement comparing with 2017 (US\$245 billion) and 2016 (US\$226 billion).

**Global production and trade in forest products in 2018**

| Product                           | Unit                  | Production   |                         |             | Exports     |            |                         |            |             |
|-----------------------------------|-----------------------|--------------|-------------------------|-------------|-------------|------------|-------------------------|------------|-------------|
|                                   |                       | 2018         | Change (%) compared to: |             |             | 2018       | Change (%) compared to: |            |             |
|                                   |                       |              | 2017                    | 2000        | 1980        |            | 2017                    | 2000       | 1980        |
| <b>Roundwood</b>                  | <b>million m³</b>     | <b>3 971</b> | <b>3%</b>               | <b>14%</b>  | <b>27%</b>  | <b>143</b> | <b>4%</b>               | <b>21%</b> | <b>52%</b>  |
| Wood fuel                         | million m³            | 1 943        | 1%                      | 8%          | 16%         | 8          | -8%                     | 109%       |             |
| Industrial roundwood              | million m³            | 2 028        | 5%                      | 20%         | 40%         | 135        | 5%                      | 18%        | 45%         |
| <b>Wood pellets</b>               | <b>million tonnes</b> | <b>37</b>    | <b>11%</b>              |             |             | <b>24</b>  | <b>18%</b>              |            |             |
| <b>Sawnwood</b>                   | <b>million m³</b>     | <b>493</b>   | <b>2%</b>               | <b>28%</b>  | <b>17%</b>  | <b>158</b> | <b>3%</b>               | <b>38%</b> | <b>125%</b> |
| <b>Wood-based panels</b>          | <b>million m³</b>     | <b>408</b>   | <b>1%</b>               | <b>129%</b> | <b>321%</b> | <b>92</b>  | <b>1%</b>               | <b>75%</b> | <b>518%</b> |
| Plywood                           | million m³            | 163          | 2%                      | 179%        | 313%        | 31         | 1%                      | 74%        | 355%        |
| Particleboard, OSB and fibreboard | million m³            | 245          | 1%                      | 105%        | 326%        | 60         | 1%                      | 75%        | 642%        |
| <b>Wood pulp</b>                  | <b>million tonnes</b> | <b>188</b>   | <b>2%</b>               | <b>10%</b>  | <b>49%</b>  | <b>66</b>  | <b>2%</b>               | <b>71%</b> | <b>210%</b> |
| Other fibre pulp                  | million tonnes        | 12           | 0%                      | -22%        | 64%         | 0.4        | 1%                      | 33%        | 108%        |
| Recovered paper                   | million tonnes        | 229          | -2%                     | 60%         | 354%        | 57         | -1%                     | 130%       | 925%        |
| Paper and paperboard              | million tonnes        | 409          | -2%                     | 26%         | 141%        | 117        | 1%                      | 19%        | 235%        |
| <b>Forest products value</b>      | <b>US\$ billion</b>   |              |                         |             |             | <b>270</b> | <b>10%</b>              | <b>86%</b> | <b>377%</b> |

Source: FAOSTAT-Forestry database

18 FAOSTAT

19 Following FAO's classifications, products included in the assessment were: roundwood, wood fuel, industrial roundwood, sawlogs, veneer logs, pulpwood, wood chips, sawnwood, wood-based panels, fibreboard, fibre furnish, pulp for paper, wood pulp, paper, paperboard, graphic paper and packaging paper.

## 2.6. The wood-based industry and ISO Standards

International Standards, such as ISO 9001, ISO 14001 and ISO 45001 are widely utilized by companies within the wood-based industry and, in many cases, suppliers are required to implement the principles of such standards in their operations. Another important topic for the sector is lifecycle assessment, where the overarching standards ISO 14040 and 14044 on LCA as well as ISO 14067 on carbon footprint play a crucial role. ISO 13065 Sustainability criteria for bioenergy is also relevant for the wood and wood-based industry. Although certification is considered an additional benefit, it is normally not mandatory.

The International Standards developed by TC06 Paper, board and pulps; TC 87 Cork; TC 89 Wood-based panels; TC 122 Packaging; TC 165 Timber structures; TC 218 Timber; TC 296 Bamboo and rattan, are also crucial to the wood-based industry since they are designed to address technical aspects that include terminology and definitions, sampling procedures, performance requirements, test methods, and quality requirements, to name a few. It is common practice to use the work of these Committees as reference in, for example, technical specifications of products, process parameters, public procurement requirements and regulations.

Companies that produce cardboard and other speciality papers for the food industry are normally required to implement ISO 22000 Food Safety Management. The wood-based industry is also demonstrating an increasing interest on International Standards such as ISO 50001, as many companies are being requested to demonstrate their energy performance, and ISO 38200, due to its robust chain of custody requirements that are equally suitable to small and larger businesses that wish to showcase the traceability and other characteristics of their operations.

## 3. Expected benefits from TC 287's work

TC 287's strategic planning is being designed to address current and future trends from the wood-based industry's business environment with the goal of helping to position the sector at forefront of sustainable industries. As such, the expected benefits from the TC's work include:

- TC 287 as a forum where interested parties can have comprehensive<sup>20</sup> strategic discussions about the wood-based industry's sustainability-related standardization pathways. Such a scenario would result in the optimization of resources as an additional benefit, considering the wide range of issues that could be addressed within a single structure.
- Recognition of the wood-based industry's social and environmental positive impacts, as well as its contribution to the UN's Sustainable Development Goals and climate challenges through the development of tailored initiatives to address specific sectorial needs.
- Creation of frameworks with harmonized methodologies, metrics, and terms and definitions that could be applied across the wood-based industry's different value chains to promote the improvement of sustainability practices and to substantiate process and product claims<sup>21</sup>.
- Further work on chain of custody and traceability of products, including uses of new technologies such as blockchain, bar code and genetic tracking; and improvements to ISO 38200, that could encompass a multisite approach, outsourcing, shared credit, due diligence and implementation guidance.

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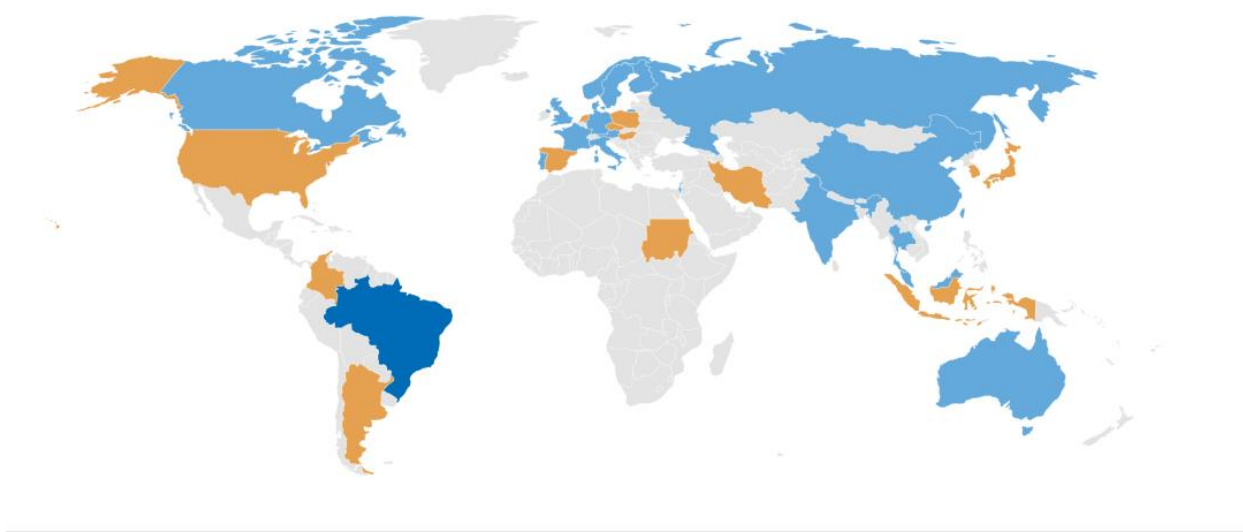
<sup>20</sup> The agreed limitations regarding sustainable forest management will be duly considered.

<sup>21</sup> TC 287 will not address claims from existing forest certification schemes as they have their own methodologies to substantiate product claims.

- Creation of inclusive solutions that are suited to smallholders and other small and medium sized enterprises.
- Initiatives developed using a systemic approach to consider the inter-relation of factors that permeate the wood-based industry's business environment, ensured by the Committee's value chain mindset.
- Development of multidisciplinary initiatives with other Committees, taking advantage of the ISO platform.
- Awareness raising regarding the social, environmental and economic benefits of the wood-based industry's sustainability initiatives.
- The methods developed within TC287 could also be used for other industries, for example the approach for standing carbon stock assessment can be used to assess the change in the use of forest land.

#### 4. Representation and participation

The development of this strategic business plan is the first task assigned to the recently established TC 287, after its successful transition from a Project Committee to a Technical Committee. In this early development stage, TC 287 already has a reasonably balanced membership, considering regional and development aspects, as demonstrated in map below.



With a total of 32 members, divided into 19 participating and 13 observers, TC 287 should prioritize, in a preliminary assessment, the engagement of African countries and the balance between P and O members in the Americas. The focus, however, could potentially change as the Committee's activities gain traction, which will naturally raise awareness and interest among other stakeholders. Given this dynamic scenario, TC 287 should not only understand possible barriers for the engagement of such countries and develop action plans to mitigate them, but also be proactive in the evaluation of membership risks and opportunities.

This rationale is also valid when it comes to the participation of external organizations as liaisons in TC 287. Currently, the Committee has a total of 11 type A liaison members, as listed below:

- European Confederation of Woodworking Industries, CEI-Bois
- European Environmental Citizens Organisation for Standardisation, ECOS
- European Federation of the Parquet Industry, FEP
- Forest Stewardship Council, FSC
- Groupe Energies Renouvelables, Environnement et Solidarités, GERES
- GS1
- International Council of Forest and Paper Associations, ICFPA
- International Network for Bamboo and Rattan, INBAR
- Programme for the Endorsement of Forest Certification, PEFC
- Rainforest Alliance
- Sustainable forestry initiative, SFI

Assessing the profile of these organizations, it becomes clear that TC 287's liaison membership would benefit from more diversity in regional representation and further participation of social and environmental NGOs, as well as intergovernmental bodies.

As for the establishment of internal relationships with other ISO Committees, TC 287 already liaises with:

- TC 06 Paper, board and pulps
- TC 89 Wood-based panels
- TC 165 Timber structures
- TC 218 Timber
- PC 308 Chain of custody - General terminology and models

This list, however, should be continuously reassessed as the Committee's work evolve. An initial forecast of potential internal liaisons would include:

- TC 38 Textiles
- TC 87 Cork
- TC 136 Furniture
- TC 207 Environmental performance evaluation
- TC 238 Solid biofuels
- TC 268 Sustainable cities and communities
- TC 296 Bamboo and rattan
- TC 307 Blockchain and distributed ledger technologies
- TC 322 Sustainable finance
- TC 323 Circular economy
- TC 331 Biodiversity

## 5. TC 287's Objectives

TC 287's main objective is to produce International Standards and other ISO deliverables aimed at helping the wood-based industry to clearly demonstrate the materiality of its social and environmental performance, that would include the contributions to the UN 2030 Agenda. Linked to this goal is the need to develop frameworks with harmonized principles, terminology and methods to not only promote the improvement of sustainability practices within the sector, but also to enable interested parties, such as clients, communities, governments, workers and investors, to understand how the sector creates shared value through its process and products.

Therefore, the Committee's work should focus on identifying current needs, trends and opportunities and on the development of International Standards and other ISO deliverables addressing new issues to establish clear criteria and tools to enable substantiated and verifiable sustainability claims for processes and products, including:

- Wood-based products and processes are part of the solution to global challenges: communication of product characteristics, including biodegradability, compostability, renewability and recyclability, as well as the materiality of further socio-environmental contributions; GHG emission reductions; substitution of fossil energy, fossil-based and finite materials; contributions to the UN 2030 Agenda for Sustainable Development Goals; among others.
- Resource renewability of managed forests that guarantees as a minimum a constant value of the tree standing volume, thus the carbon stock. Also, methods to define and measure the substitution effect, which makes a huge difference between sustainable harvesting and non-harvesting scenarios in terms of GHG reduction.
- Traceability and origin assurance of products: improvements related to ISO 38200 chain of custody system, including multi-site and how to define product groups; as well as monitoring of uses of new technology, such as blockchain, bar code, genetic tracking and isotope analysis.

In order to achieve its goals, TC 287 should consider the approaches that currently permeate the wood-based industry's business environment that are, consequently, being used as drivers for initiatives within the sector, which would include the concepts of: circularity, bioeconomy, innovability, shared value, restorative growth, natural capital, among others. It will also be essential to encompass in the Committee's work long-established wood-based products (pulp, paper, cork) as well as innovative initiatives such in the areas of biochemicals, biocomposites, bioenergy, biofuels, bio-based packaging and utensils.

It's important to emphasize that, whilst some of the proposed initiatives have clear correlations with the work of other Technical Committees, the goal of TC 287 is to develop sector specific standards. TC 287's Leadership will proactively coordinate the engagement with other Committees to avoid the duplication of efforts and to fully explore opportunities for cooperation.

It is the Committee's intention to bring forward, within its initial programme of work, proposals for the development of International Standards and other deliverables on the following topics:

- DNA tracking;
- Databases for timber tracking systems;
- Available standing stock carbon accounting;
- Forest restoration and regeneration assessment;
- Deforestation free supply chains;

- Substitution;
- Renewability, recyclability, biodegradability and compostability;
- Further work on chain of custody, building on ISO 38200:2018 Chain of custody of wood and wood-based products.

The Committee intends to take these deliverables to publication by Quarter 3 of 2024 at the latest.

## 6. Strategies to achieve objectives

The strategies to achieve the Committee's objectives would initially include the establishment of three working groups that will be structured as follows:

- **WG 1 Chain of Custody**  
Objectives: maintain ISO 38200 and develop initiatives aiming at improving its chain of custody system, including new topics such as multisite, shared credit, implementation guidance, and product groups.
- **WG 2 Measurement methods and tracking**  
Objectives: develop and improve measurement methods in line with the TC's objectives (e.g. available standing carbon stock measurement) as well as pertinent tools in the field of timber tracking (e.g. decision-making tools for DNA tracking, database structure for timber tracking systems).
- **WG 3 Sustainability aspects**  
Objectives: address the different sustainability aspects of wood and wood-based products and industries, including carbon and LCA-related issues, to be able to show the impacts (positive and negative). The WG will, where possible, use a life cycle perspective, including end-of-life aspects.

Considering that TC 287 intends to develop International Standards and other ISO deliverables that are connected with innovative initiatives that could help to position the sector as a leader in the transition to a more sustainable society, it is recommended that the WGs continuously assess market gaps and trends as part of their standard's development process. In some cases, these demands are evident and such an approach would not be necessary.

The engagement of stakeholders and collaboration with other ISO Committees are also important factors for achievement of Committee's objectives. As such, TC 287 intends to establish a task group to coordinate communication and engagement initiatives. Completing the TC's structure, a Chair's Advisory Group (CAG) will be created to discuss and advise on strategic issues.

As part of the strategy's implementation process, the TC Leadership should consider:

- The use of IT tools to facilitate the development of projects;
- Opportunities for engagement and collaboration with stakeholders, other bodies and ISO Committees;
- The ongoing technical work at ISO and other bodies;
- The limitation of resources and technical expertise at TC 287.

TC 287 should consider the following agreement, which was part of the proposal to establish the Committee, during the development of its technical work:

"As there is currently no demonstrable industry demand, it is not intended that the new TC should develop, as an International Standard, a complete framework for sustainable forest management. However, it is intended that the new TC should bring forward proposals for technical guidance standards that will support the sustainable and renewable production of wood and wood-based products."

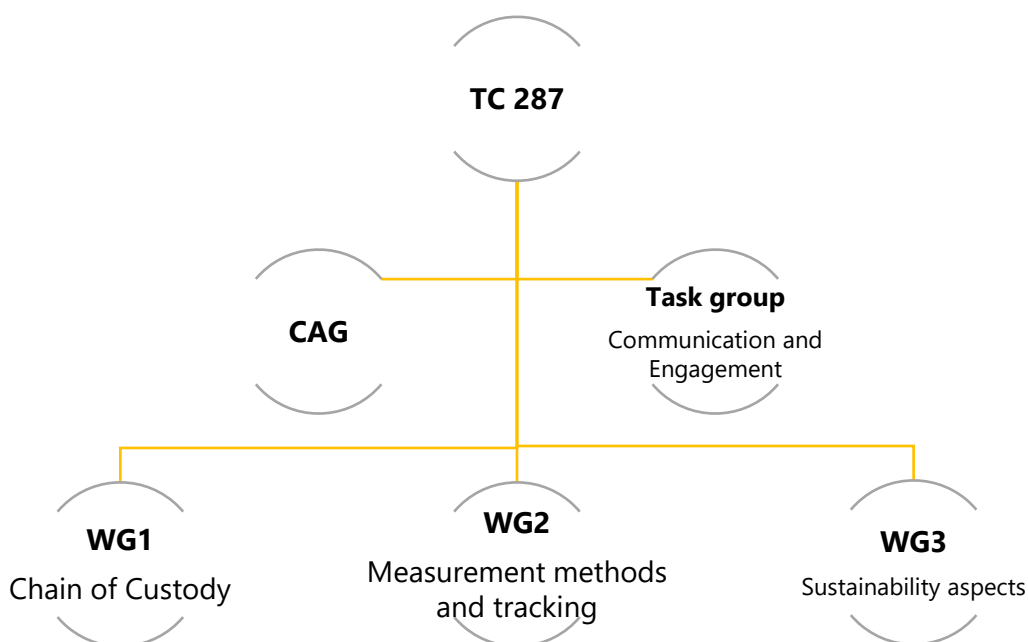
## 7. Factors affecting completion and implementation of the ISO/TC work programme

The following issues should be considered as factors that could negatively impact the Committee's strategy. Note that the list is not exhaustive, and it should be revised periodically:

- Number and complexity of current market trends (in a few cases not yet fully developed);
- Lack of support from NGOs;
- Lack of available resources, such as the expertise required to develop the technical work;
- Need for further engagement of ISO Members;
- Timing between the publication of Standards and market demands (need to expedite standardization process);
- Negative campaigns from other bodies;
- Potential overlap with other certification and standardization initiatives;
- Lack of understanding of TC 287's objectives among stakeholders.

## 8. Structure, current projects and publications of the ISO/TC

TC 287's initial structure:



### **TC 287's Scope:**

Standardization in the field of the wood and wood-based industries, including sustainability aspects and renewability, chain of custody, timber tracking and timber measurement, across the entire value chain from biomass production to finished wood and wood-based products, and including the use phase and end of life.

Excluded are those specific areas or aspects of the wood and wood-based industry covered by ISO/TC6 "Paper, board and pulps"; ISO/TC89 "Wood-based panels"; ISO/TC 165 "Timber structures"; ISO/TC 218 "Timber"; and ISO/TC 207 "Environmental management".

### **TC 287's current projects – under development.**

#### **TC 287's publications:**

- [ISO 38200:2018 Chain of custody of wood and wood-based products.](#)

### **Information on ISO online**

The link below is to the TC's page on ISO's website:

#### **[ISO TC 287 on ISO Online](#)**

Click on the tabs and links on this page to find the following information:

- About (Secretariat, Committee Manager, Chair, Date of creation, Scope, etc.)
- Contact details
- Structure (Subcommittees and working groups)
- Liaisons
- Meetings
- Tools
- Work programme (published standards and standards under development)

### **Reference information**

[Glossary of terms and abbreviations used in ISO/TC Business Plans](#)

[General information on the principles of ISO's technical work](#)