CLIMATE

OUR COMMITMENT

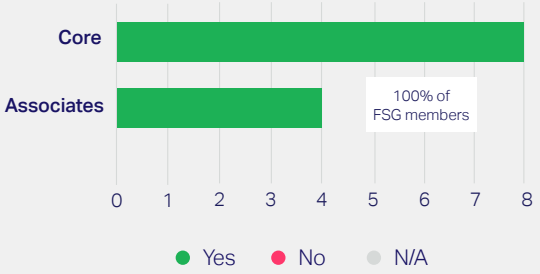
SDG impact

Advance and strengthen the role of forests, wood fiber products and the forest sector in global climate change mitigation and adaption

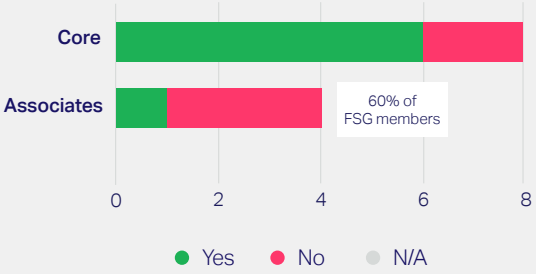
1. Support and invest in **reforestation, afforestation, wider land restoration and conservation** efforts, especially of unique forest values.
2. **Reduce scope 1 and 2 GHG emissions across operations**, for example by improving manufacturing technology or increasing the resource-efficient production and use of renewable energy.
3. **Achieve scope 3 GHG emissions reductions across the supply chain** by working with suppliers to optimize transportation and distribution logistics, increase the resource-efficient production and use of renewable energy and further localize supply chains where possible.
4. Support the **development and implementation of new tools and approaches to measure, value and manage GHG emissions avoidance** by substituting fossil-based and other non-renewable materials with wood fiber products.

KPI RESULTS

Does your company invest in reforestation, afforestation, wider land restoration and conservation efforts?



Has your company set time-bound and verified CO2 reduction targets using the GHG protocol and aligned with climate science?



Renewable energy consumed on total energy consumed (%) (weighted average)	**2019** 63% 8 core	**CAGR (2015-2019)** 0%
Total renewable energy sold externally annually (GWh) (aggregated sum)	**11,840 GWh** 8 core	(enough to power over 1 million US homes for a year)

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The science is clear on the need for ambitious climate action to keep the global temperature increase at a maximum of 1.5°C above pre-industrial levels to avoid devastating impacts on people and nature. To achieve this goal, it is necessary to both drastically reduce emissions and to draw carbon dioxide out of the atmosphere. Estimates show that natural climate solutions such as forests and peatlands can provide up to 37% of the emissions reductions needed by 2030 to keep global temperature increases within safe limits.[17] The responsible use of wood fiber can expand this carbon sink beyond the forests to the products, where the product stores carbon for the duration of the product's lifetime. Action aimed at leveraging the carbon-absorbing effects of forests and forest products should not displace ambitions to halt deforestation, which currently contributes to approximately 10% of global warming emissions.[18]

The forest sector can play a key role in the climate agenda by promoting successful sustainable forest management models and investing in reforestation, afforestation, conservation and land restoration efforts to grow healthy forests with stable and increasing carbon stocks. The sector should carry out actions in forest management in parallel with interventions further down the forest products value chain to reduce emissions, improve energy efficiency and increase the use of renewable forest products while promoting their longevity and circularity.

1. Sustainable working forests and climate

The role that forests and forest products play in climate change mitigation is gaining increased global recognition: some 120 countries have made commitments to climate change mitigation and adaptation that include action through and within forests.[19] Nevertheless, debates about the type of forests that should form part of these commitments continue. We operate in different types of forests, from managed natural and semi-natural forests in the Global North, to plantations in the Global South. Mitigating climate change requires all types of forests. While managed natural and semi natural forests tend to have more carbon storage capacity, it can take up to a century for the trees planted to reach their full carbon-absorbing effects. Forest plantations are comparatively less effective at storing carbon, but their carbon-absorbing effects can occur more rapidly due to the shorter rotation periods.

Regardless of the type of forests, studies show that sustainable forest management practices contribute to maximizing the carbon abatement potential of forests. The 2019 Intergovernmental Panel on Climate Change (IPCC) Special Report on Climate Change and Land states that sustainable working forests can contribute to climate change mitigation by maintaining or enhancing forest carbon stocks. They can also contribute to climate change mitigation by preventing and reducing land degradation, maintaining land productivity, and sometimes reversing the adverse impacts of climate change on land degradation.[20]

2. Investment in reforestation, afforestation, wider land restoration and conservation

By the nature of our business, we grow and plant a striking number of trees every year just to regenerate forests harvested for their wood supply in the 10 million hectares of forests that we directly own, manage or lease. This contributes to a great pool of resources and expertise that **all FSG members then contribute to reforestation, afforestation and wider land restoration and conservation efforts in their respective regions of operation.** Where commercially used species are not indigenous to the area, we can grow indigenous or endangered species in nurseries alongside species for commercial use. We then use these seedlings for reforestation and afforestation efforts in the region, led by us or by others, such as local authorities, NGOs, landowners or local communities. For example, in Brazil, **Stora Enso**'s joint operation, Veracel, has restored 6,600 hectares of the Atlantic rainforest since 1994, 95% of which farmers had converted to cattle pasture prior to the company's operations. To meet the need for some 1.8 million seedlings of diverse species on a yearly basis, the company helped set up 20 community-run tree nurseries, thereby providing important income in rural areas where jobs are scarce.

Definition: Natural climate solutions

Conservation, restoration and improved land management actions that increase carbon storage or avoid greenhouse gas emissions in landscapes and wetlands across the globe.[16]

3. Emissions reductions and improved resource efficiency

The private sector has a crucial role to play in climate change mitigation by reducing GHG emissions along the value chain and improving resource efficiency. This starts by matching the company-level climate ambitions with robust strategies. As some segments of the forest products sector are energy intensive, we are responding to this call to action and are working on reducing emissions along the value chain. Some **60% of FSG members have set time-bound and verified CO_2 reduction targets using the GHG Protocol and aligned with climate science. The remaining 40% are currently working towards that goal.** The Task Force on Climate-related Financial Disclosure (TCFD) and the Science Based Targets (SBT) initiative are the global climate initiatives that we most commonly support to achieve this goal.

We strive to improve energy efficiency throughout our operations, mainly through investments in technology upgrades or the use of renewable energy. **In 2019, FSG members consumed on average 33,858 GWh of energy, of which 63% came from renewable sources.** This percentage is high relative to other industries and is due largely to the use of woody biomass derived from upcycling harvesting, processing and manufacturing wood fiber residues.[22] With regards to the use of woody biomass for energy, we uphold the principle of cascading use of wood. Due to this abundant access to woody biomass, in addition to producing renewable energy for our own consumption, we also sell the surplus externally, thereby contributing to the share of renewables in the energy mix. **In 2019, FSG members sold a total of 11,840 GWh of renewable energy externally.** This is enough to power over 1 million US homes for one year. In Japan, **Sumitomo Forestry** is striving to increase the use of unused forest materials as fuel for wood biomass to feed power generation facilities throughout the country primarily employing chips of wood not suitable for use as a building material, thinning leftovers from forests and construction and demolition waste.

No ambitious carbon reduction strategy can be achieved without addressing the indirect emissions that occur both upstream and downstream in the value chain, known as scope 3 GHG emissions. In the forest sector an important part of these emissions comes from product transportation and distribution, as well as the additional processing of products further down the supply chain or emissions associated with end-of-life management. We work closely with suppliers to drive down these emissions, especially for transportation and logistics.

In alignment with WBCSD's membership criteria, we all commit to setting an ambition to reach net-zero GHG emissions no later than 2050 and to having a science-informed plan to achieve it, which can include natural climate solutions and other carbon removal solutions. GHG emissions include scopes 1 and 2 and the most relevant and influenceable elements of scope 3.

Credits: Stora Enso

Definition: Cascading use of wood

This strategy uses raw materials such as wood or other biomass in chronologically sequential steps as long, often and efficiently as possible for materials and only to recover energy from them at the end of the product life cycle.[21]