

Strategy for long-term EU greenhouse gas emissions reduction

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Position from the Swedish Forest Industries Federation

Summary

The Swedish Forest Industries Federation (SFIF) represents the pulp and paper and saw milling industry in Sweden. Our industry is the world's third largest exporter of pulp, paper, packaging and sawn timber and represents about 10 percent of employment, exports, turnover and value added in the Swedish industry. During the last decades, our industry has decoupled its production from its emissions and today, the internal processes are approximately 96 percent fossil free.

We have set ourselves an ambitious vision: to drive growth in the global bio-economy. Already today, we contribute to decarbonization in three ways: by sequestration, by storage and by substitution. Growing trees sequester carbon dioxide, harvested wood products store carbon and bio-based products and bioenergy substitute greenhouse gas intensive products and fossil energy sources.

On the condition that the revised 2050 strategy contains the elements listed below, we support that the EU should contribute to the Paris Agreement's objective by **achieving a balance between emissions and removals in the EU by 2050**. Our interpretation of balance is net zero emissions and this should preferably be achieved on a Member State level. Complementary measures in third countries, driven by European know-how and technology, should be included as possible measures.

In our view, the revised EU 2050 strategy must define a clear political ambition to create a bio-based economy. This must be combined with a solid industrial policy contributing to growing prosperity and a commitment to increase the production of sustainably sourced renewable resources.

More specifically, we argue that the strategy must:

- Acknowledge the importance of active and sustainable forest management
- Define substitution as a core component
- Integrate the LULUCF sector in a way that incentivizes Member States to support a growing bio-economy
- Focus on maximizing value creation from biomass, but not prescribe cascading use by legislation
- Acknowledge that recycled papers grow in the forests
- Secure that impacts are fairly assessed in environmental impact assessments
- Facilitate more efficient and low carbon transportation
- Create viable conditions for further R&I in bio-based products
- Connect to global development

a) About our industry

The Swedish forest industry is the world's third largest exporter of pulp, paper, packaging and sawn timber. More than 80% of what is produced in Sweden is sold elsewhere and in 2016, the export value amounted to approx. EUR 12.5 billion. Our industry creates more than 100,000 jobs and in the last five years, some EUR 4 billion has been invested in our operations. Our industry takes pride in its sustainable forest management.

On average, our industry represents some 10 percent of employment, exports, turnover and added value in Swedish industry, while our industry's investments lately have corresponded to as much as 23 percent of all industrial domestic investments. Furthermore, as most of the raw materials are domestic and the import of forest industry products is relatively small, our industry makes a significant contribution to Sweden's trade balance.

During the last decades, our industry has decoupled its production from its emissions, i.e. despite increased production rates, emissions have substantially been reduced. This has resulted in the internal processes today being approx. 96 percent fossil free. From side streams, our industry produces large amounts of bio-heat to cover its own needs and to sell to external use in the municipal heating sector. The industry is the largest Swedish producer of renewable electricity outside of the utility sector and a growing producer of advanced biofuels. This results in our products having a very low carbon footprint. In other words, when producing and exporting its products, our industry clearly contributes to a low-carbon economy and generate direct climate benefits, not only in the EU, but world-wide.

The bio-based products our industry already offers to consumers will continue to be the basis for operations for years to come, but much R&I work is ongoing to be able to launch new, complementary products. Such development is generally twofold: existing products are further developed to address changing consumer needs and side streams are further upgraded to achieve products with higher value added and increased resource efficiency. Both types of developments generally take place in the same biorefineries.

Our industry has set itself an ambitious vision: ***to drive growth in the global bio-economy***. Such an economy assumes a high level of circularity of materials and carbon. The vision goes beyond our own sector by including a transformation of society to a bio-based economy. Already today our industry contributes in three ways: by *sequestration* of carbon dioxide in growing trees; by *storage* in harvested wood products and by *substitution*, when bio-based products and bioenergy replace other products that are produced from fossil raw materials or in greenhouse gas intensive production processes.

In June 2018, our industry presented its ***Roadmap for fossil-free competitiveness*** to the Swedish Government, in which it defines how to increase profitability, competitiveness and jobs across the country, while at the same time contribute to overall climate benefits for the society and phase out our remaining use of fossil energy sources by 2045.

b) Our view on the EU long-term greenhouse gas emissions reductions

On the condition that the revised 2050 strategy (hereinafter the strategy) contains the elements listed below, our industry supports that the EU should contribute to reach the Paris Agreement's objective by **achieving a balance between emissions and removals in the EU by 2050**. Our interpretation of "balance" is net zero emissions and this should preferably be achieved on a Member State level. Complementary measures in third countries, driven by European know-how and technology, should be included as possible measures.

c) Our view on the strategy

In our view, the strategy must define **a clear political ambition to create a bio-based economy**. This because global challenges caused by a growing and more wealthy population cannot be met by continuing today's fossil based economy. Instead, the strategy must focus on the need for further innovation and technology developments for more and smarter bio-based products and solutions.

The EU can be a forerunner in achieving such a bio-based and low-carbon economy. The EU will, however, only be a role model for others if an ambitious strategy is combined with **a solid industrial policy contributing to growing prosperity** including a stable, predictable and enabling regulatory framework. This framework must assure a level playing field within the EU, but also conditions that allow successful competition for EU based businesses in a global context. Furthermore, the strategy must also include a commitment to **increase the production of sustainably sourced renewable resources**. That way, bio-based and low-carbon products can be produced in Europe, from European raw materials, for European and global citizens. If the EU succeeds in being a forerunner, this would foster demand for European technology and know-how from other parts of the world.

More specifically, SFIF argues that the strategy should:

a) Acknowledge the importance of active and sustainable forest management

When defining the role of forests in climate mitigation, a long-term perspective is essential due to rotation periods of up to 100 years. Furthermore, the system limits applied must be from a landscape or national perspective.

From a climate perspective, the largest mitigation effect from forests is when the forest increment and harvest is high. The IPCC's conclusion from its 4th assessment report in 2007 is still valid: "in the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber and energy from the forest, will generate the largest sustained mitigation benefit".

It is worth noticing that, at the time of the IPCC report publishing, focus was on decarbonizing power and fuel sectors. Today, we know that biomass has an important role to play in also decarbonizing industrial commodities, thus the IPCC report conclusion on long-term strategy is even more valid. Additionally, by stimulating increased growth and mobilizing larger amounts of woody biomass, the resource base for more bio-based products is enlarged.

The strategy must not include a policy aiming at increasing the European forests role as passive carbon sinks, as this is both a short-sighted and risky strategy for climate change mitigation. This because conditions outside of human control, such as storms, fires or diseases, can torpedo such a strategy in no time, increasing GHG emissions short term and foiling mitigation efforts. Canadian forests are warning examples, where bark beetles and wild-fires in unmanaged forests cause enormous damages and large carbon dioxide emissions.

Although there is a need for the strategy to acknowledge the importance of active and sustainable forest management, the strategy must also fully respect that forest policy is national competence. This is important since the nature given conditions differ substantially between Member States.

b) Define substitution as a core component

Bio-based products from wood store carbon. Even more important, they substitute products produced from fossil raw materials and products, which cause major fossil emissions during production. Bio-based products also substitute fossil energy sources. In other words, by choosing a bio-based product, a consumer is making an instant and substantial contribution to climate change mitigation.

As the EU heat, power and transport systems already are under way of being decarbonized, the material sector is next in line. The choice of material will therefore increase in importance as a mean to decrease climate impacts. Consequently, the substitution of fossil based materials with renewable products with a significantly lower carbon footprint needs to be accelerated. This can be achieved by promoting bio-based products, for instance via green public procurement or by establishing building in wood as a preferred solution. Supporting innovation is also a key to accelerate the transformation.

c) Integrate the LULUCF sector in a way that incentives Member States to support a growing bio-economy

Reporting emissions when a tree is harvested is the only functional way of including carbon from sustainably managed forests in climate policy. The alternative, i.e. to report when the wood is combusted or decaying, would lead to an enormous administrative burden, complexity and uncertainty.

The newly decided LULUCF legislation treats forests in a suboptimal and short-term manner. In the legislation, maintaining a sink in the short term, i.e. 2030-2050, seems to be more important than to encourage Member States to develop active and sustainable forest management. As the land-use sector is the only sector that can remove carbon dioxide from the atmosphere, this ability should instead be further utilized in the strategy. Afforestation is already encouraged in the LULUCF regulation; however, most countries in the EU cannot increase their forest land. Instead, the strategy should focus on improving the existing forest resources now and in the future.

Trying to regulate an individual Member State's use of its forest resources by referring to the practice during a reference period could limit the future use of wood and create a state of saturating forest that starts to emit carbon in a near future. Forest products and energy from forest biomass

is today widely used for substituting green-house gas intensive products or fossil energy. As long as this substitution takes place in the same Member State as the harvest, it will not be in conflict with an increased use of wood, since reported emissions in the LULUCF sector are met by decreased emissions in the ETS or ESR sectors. However, as there is an extensive trade and further processing of wood based products between Member States, in many cases, the emissions are reported in one country and the substitution effect occurs in other countries further down the value chain. If harvesting levels are higher than in the reference level, the Member State needs, according to the so called “no debit rule”, to compensate this with further measures in the ESR sector; measures, which most likely will be the most expensive ones. Alternatives for a forest-rich Member State is to limit the wood based industry expansion and for a less forested Member State to import wood from countries outside the EU, with less sustainable forest management practices, thus causing carbon leakage. Since the value adding in the forest industry is much higher than just using woody biomass for energy, this way of reporting could hamper the economic development of EU and it would hit its rural areas the hardest.

A future integration of managed forests into the EU climate policy needs to address the above described negative effects. The forest reference level as well as sustainable use of forest resources should be aiming at using the highest possible harvesting today without reducing the availability of timber for future generations. From a climate point of view, it's just as wrong to harvest more as to harvest less. The forest-rich Member States have well-developed, credible and transparent models to calculate this, which could be used throughout the EU. Such a model for calculating Forest Management Reference Levels would encourage active forest management and support a growing bio-economy.

d) Focus on maximizing value creation, but not prescribe cascading use by legislation

The forest industry uses wood raw materials where it generates the highest value. By using wood fibers and other components of the raw material smartly and as many times as possible, before using it for bioenergy, the value added is maximized.

Everything that is made of oil can also be made of wood, but to politically prescribe how biomass should be used through regulatory demands on cascading use, complicates the transition to a bio-economy. In addition to the administrative burden that would imply, regulations cannot be expected to keep up with technological or market developments.

The biomass markets are complex and have developed over decades. Furthermore, the markets are different between and within Member States. Decisive parameters defining market and economic mechanisms are for example balances between demand and supply, production costs and logistics. Furthermore, markets are dynamic and develop over time, as new innovations are created. Therefore, any actions to try to control the markets will undoubtedly create unwanted effects, decrease resource efficiency and hamper innovation. Therefore, the strategy should refrain from prescribing cascading use by legislation and instead show faith in the market mechanisms.

e) Acknowledge that recycled papers grow in the forests

Paper is a bio-based renewable material that has many different applications. Paper can also be recycled and become the basis for new paper production. Both collection and recycling processes are well developed and in use in many Member States. The cellulose fibers in paper can normally be recycled five to seven times, after which the fiber quality deteriorates and the fibers need to be separated and used for energy generation. New production of cellulose fibers based on wood raw materials is thus a prerequisite for recycling of paper. In other words, paper produced from virgin as well as recycled fibers are integrated and essential parts of the same system. This needs to be acknowledged in the strategy.

f) Secure that impacts are fairly assessed in environmental impact assessments

Depending on whether paper is produced from virgin fibers or recycled paper, the value chains are differently designed and they include various production processes. Therefore, the environmental impact differs. To exemplify, production of virgin fibers includes land use, while recycled paper requires recycling operations to be in place.

In the calculations of the environmental impact of recycled paper, past life cycle steps should be allocated to the recycling paper product to incorporate impacts of the virgin paper production. By doing so, impacts and benefits are distributed fairly between both ways of producing paper.

g) Facilitate more efficient and low carbon transportation

As a large buyer of transportation services - presently approx. EUR 2.5 billion/a – efficient and low carbon transportation is a core task for our industry both from a cost and emissions point of view.

The strategy should include EU initiatives to support:

- More efficient transports, e.g. by allowing heavier and longer trains and trucks, by simplifying cross-border transports, by facilitating multi-modal transports and by removing infrastructure bottle necks.
- Increased digitalization in transports, e.g. by digitally assisted driving, dynamic route planning and digital planning platforms.
- More electrification, e.g. by establishing e-road networks.

To achieve a continued growth rate for advanced biofuels, the strategy must secure predictable and stable investments conditions for such products. At the same time, the strategy must also ensure that the cost for large transport buyers remains internationally competitive, also when the amounts of advanced biofuels in the fuel pool increase.

h) Create viable conditions for further R&I in bio-based products

In 2018, the Swedish Forest-based Sector Research Agenda 4.0 was published compiling research and development priorities for the Swedish forest industry. The agenda connects to the European Strategic Research Agenda of the Forest-based Sector Technology Platform (FTP).

Without any doubt, investments in research and innovation from the EU must be intensified further to enable development towards a growing bio-based economy. The strategy should therefore define the following strategic areas of research:

- Increased growth and harvest in sustainably managed forests
- Enhanced competitiveness for existing bio-based processes and products
- Development of new bio-based products
- Increased industrial timber construction

According to our experience, cooperation between industry, academy and research institutes is the best way to carry out R&I efforts and this needs to be acknowledged in the strategy. Furthermore, in such co-operations, the industry's needs must define the objectives to be met.

i) Connect to global development

When assessing sustainability, it is important to apply a holistic approach and not address a single goal only. This is especially important for forests and related value chains, as these are relevant for almost all UN Sustainable Development Goals (SDG). FAO has recently analyzed the connection between the SDGs and the world's forests and associated value chains or ecosystem services¹. The analysis demonstrates clear links and progress between forests, forest value chains and sustainable development.

FAO underlines in its report that forests and trees make vital contributions both to people and the planet, bolstering livelihoods, providing clean air and water, conserving biodiversity and responding to climate change. In addition to helping to respond to climate change and protect soils and water, forests hold more than three-quarters of the world's terrestrial biodiversity, provide many products and services that contribute to socio-economic development, and are particularly important for hundreds of millions of people in rural areas, including many of the world's poorest.

According to FAO, there is 2 billion hectares, i.e. 2 000 000 000, of degraded land world-wide. Afforestation and development of sustainable wood value chains is important, but finance and technology is lacking. Therefore, the strategy should include complementary measures in third countries by supporting afforestation and the creation of sustainable wood based value chains.

¹ FAO report: State of the world's forest 2018 - Forest pathways to sustainable development