

Our Net Zero Transition Plan

The actions associated with Our Net Zero Transition Plan may differ across geographies and specific sites but the plan itself is intended to provide an overview of how we are approaching decarbonization in our business.

<p>Our Ambition, Strategy and Accountability</p>	<p>Smurfit Westrock is working towards a net zero future, addressing demand-side reductions and supply-side efficiencies, and working with our suppliers to reduce Scope 3 emissions.</p> <p>The strength of our approach is demonstrated through the actions of both legacy companies</p> <ul style="list-style-type: none"> History of GHG reduction Continued strategy of decarbonization SBTi approval of interim targets for both legacy companies Collaboration across the value chain Trialing emerging technology <p>Smurfit Westrock is working towards a net zero future, and while we believe we can play an important role, we also believe that delivering on a net zero future will rely on new and evolving technologies as well as supportive regulation.</p>	
<p>Our Approach - Timelines</p>	<p>Short-term: Acting now, using latest technology in key processes (where feasible), progressive improvement, and renewable electricity procurement.</p> <p>Medium-term: Strategic investment projects to replace high emitting assets, progressive improvement, availing of best available technology in key processes (where feasible), and collaboration across the value chain.</p> <p>Long-term: Through collaborative projects and partnerships, executing controlled trials of new and emerging technology to understand the feasibility and cost of implementation beyond 2030.</p> <p>These plans are expected to be financed by a combination of operational and capital expenditures and supported by the Company's Green Finance Framework.</p>	
<p>Across Emissions</p>	<p>Scope 1 and 2 Emissions</p> <p>Investing in fossil CO₂ reductions such as:</p> <ul style="list-style-type: none"> Shifting to low or zero carbon fuels including CO₂ neutral energy sources: <ul style="list-style-type: none"> Use of biofuels; and/or Electrification supported by the greening of electricity supply. Research and development into new and emerging technologies with controlled trials: <ul style="list-style-type: none"> Hydrogen, geo-thermal and heat pump technology. <p>Greening of electricity supply such as:</p> <ul style="list-style-type: none"> Procuring low or no carbon electricity where feasible; Renewable power purchase agreements; and Onsite renewable energy generation. <p>Reducing energy use such as:</p> <ul style="list-style-type: none"> Adopting best available technology in key process areas (where feasible) to improve quality and productivity, in addition to reducing energy usage. <p>Investing in efficient energy-generation such as:</p> <ul style="list-style-type: none"> Highly efficient Combined Heat and Power (CHP) systems*; and Improving the efficiency of our existing equipment. 	<p>Scope 3 Emissions</p> <p>Supplier engagement such as:</p> <ul style="list-style-type: none"> Sustainable and Responsible Sourcing programs; Engaging suppliers on decarbonization strategies; and Use of third-party Scope 3 and supply chain data collection. <p>Customer engagement such as:</p> <ul style="list-style-type: none"> Better Planet Packaging program delivering lower CO₂ solutions for customers through: <ul style="list-style-type: none"> materials design; packing automation; packing design; and supply chain optimization. <p>Exploring transport strategies such as:</p> <ul style="list-style-type: none"> Modal shift: CO₂ reduction by shifting transport from road to lower emission transport models; Operational efficiency: CO₂ reduction by optimizing transport operations, sources, and destinations; and Fuel efficiency: CO₂ reduction by leveraging new technology, alternative fuels, and engine efficiency. <p>Reduce solid waste to landfill:</p> <ul style="list-style-type: none"> Managing and reducing waste to decrease landfill GHG emissions. <p>Supported by our end-to-end approach to circularity.</p>
<p>Residual Emissions</p>	<p>While the Company is focused on its direct impact on emissions reductions across its value chain, with significant scope well into the future, we acknowledge that we may reach a point in the future where we have residual emissions which we cannot eliminate. In the event that this occurs, the Company would consider neutralizing these emissions through appropriate and credible solutions.</p>	

*Note: The hydrogen trials in our Saillat paper mill could facilitate the move from current energy efficiency outcomes to low or no carbon outcomes via the retrofitting of existing CHP assets.

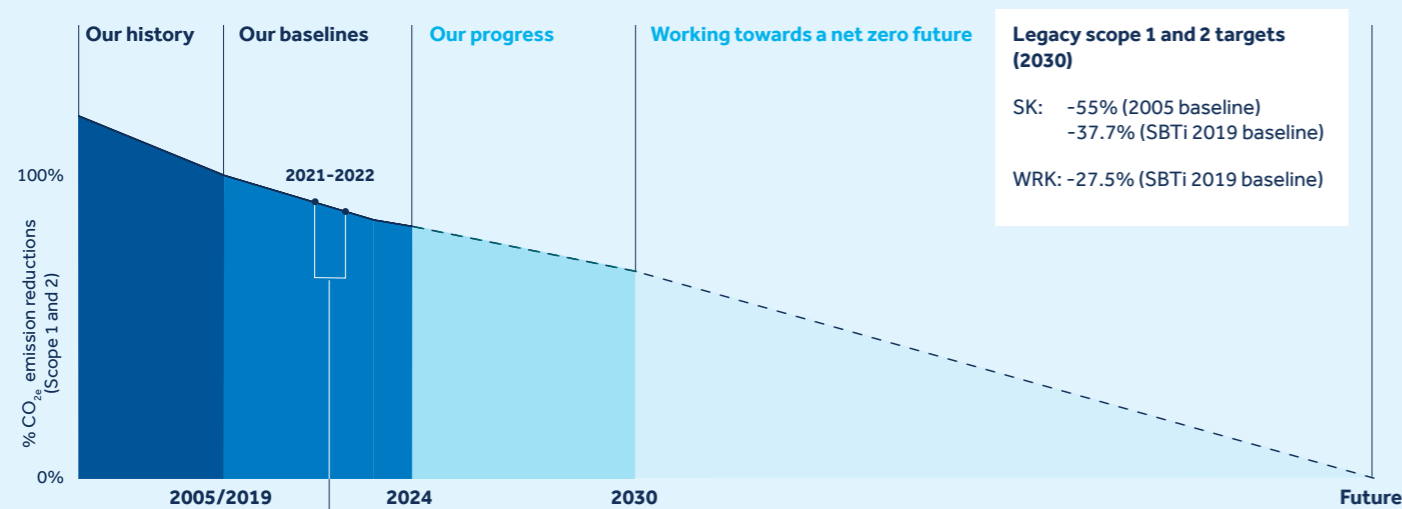
Our Net Zero Transition Plan continued

Scope	Time horizon*	Actions that help demonstrate our approach
<p>Scope 1 and 2</p>	<p>Short-term</p>	<ul style="list-style-type: none"> Continuously improving our operations through the implementation of best practices such as: pipe insulation, LED lights, process monitoring, data use, reuse of residual steam, biogas usage from water treatment plants, and energy efficiency enhancements. Using Digital Twin technology in our Townsend Hook paper mill to help reduce steam consumption by approximately 5%. Nettingsdorf biomass investment of €134 million completed in 2020 with a run rate of 40,000 tonnes on emissions reduction. Completed installation in 2021 of an 8.4-meter state-of-the-art kraft linerboard machine in Florence (U.S.), replacing three older, narrow-width paper machines and reducing the thermal energy intensity by 18%. Invested €11.5 million in our Zulpich paper mill. A major redesign of the multi-fuel boiler, providing a more sustainable fuel source for generating steam and electricity and reducing CO₂ emissions by 55,000 tonnes. A major upgrade of the Tres Barras paper mill in Brazil, completed in 2021, resulted in a 20% increase in production while reducing Scope 1 and 2 emissions per tonne by approximately 12%. Installation of 12,000 solar panels adjacent to the Sangüesa paper mill in Spain which is estimated will reduce CO₂ emissions by over 3,200 tonnes per annum. In 2021, greenfield mill in Monterrey, Mexico, achieved its full run-rate steam and electricity usage levels in its first year of operation. Start-up of a new, state-of-the-art water treatment plant at Belgrade paper mill in Serbia in 2023. This \$5 million investment, the first of its kind in the country, is designed to purify water to the highest applicable standards, reduces electricity usage, and cuts CO₂ emissions. Optimizing starch use in our Hoya mill, in Germany, which requires less steam and energy to dry. Water treatment plant investments in Colombia and Brazil which will help improve our COD (water) and capitalise on biogas from plants (CO₂). Entered into two VPPAs that have an estimated annual output of approximately 700,000 MWh of renewable electricity as contracted by WestRock for receiving RECs Strategic projects to deliver on our decarbonization strategy including the investment of almost \$100 million in a sustainable biomass boiler in our paper mill in Cali, Colombia which is expected to reduce our global Scope 1 and Scope 2 CO₂e emissions by over 100,000 tonnes and is planned to be operational by the end of 2025.
	<p>Medium-term</p>	<ul style="list-style-type: none"> Controlled trialing of new/emerging technology and feasibility of large-scale implementation: <ul style="list-style-type: none"> Collaborative heat pump project in Morava paper mill (Czech Republic); and Collaborative research with a consortium in areas of dryer web and black liquor concentration energy efficiency and decarbonization.
	<p>Longer-term</p>	<ul style="list-style-type: none"> Proactive identification and controlled trialing of new/emerging technology today: <ul style="list-style-type: none"> In 2023 the HYFLEXPOWER consortium and Smurfit Kappa successfully completed the second stage of the HYFLEXPOWER hydrogen project, the first in the world for a paper mill and a truly collaborative project including suppliers, academia and government support. Collaborating with the Alliance for Pulp & Paper Technology Innovation (APPTI) consortium to advance manufacturing technologies that promote energy-efficient and sustainable practices. This group has a subcommittee working towards net zero carbon emissions by 2050 through public-private partnerships and innovative research. Research on carbon capture and sequestration or utilization; and Geo-thermal technology being explored in our paper mills in the Netherlands and Germany.
<p>Scope 3</p>	<p>Short-term</p>	<ul style="list-style-type: none"> Customers: We have many examples where a collaborative approach has delivered a lower carbon, circular solution. For example, by working together with a customer in Switzerland, we reduced the CO₂ emissions in transport by switching from road to rail delivery. This reduced the transport emissions by approximately 600 tonnes of CO₂ for one customer site alone. Customers: Developing products such as Top-Clip, Click-to-Lock, Cluster-Clip, EnduraGrip which can help our customers deliver on their sustainability goals. Engagement with Suppliers: As part of Smurfit Kappa's Sustainable and Responsible Sourcing program we consider our suppliers' energy reduction programs and participation in certification standards as well as collecting climate data direct from suppliers through third party, supply-chain systems. Investments in research capabilities to improve the recyclability of our products.
	<p>Medium-term</p>	<ul style="list-style-type: none"> Progressing our Scope 3 inventory assessment, supported by GHG training. Considering SBTi commitments, including forest land and agriculture ('FLAG') targets. Tried electric delivery vehicles in Germany and the Netherlands. Continued focus on innovation and collaboration with our suppliers and customers to offer right-weighted, fit-for-purpose packaging solutions that minimize inefficiency and waste.

* Time-horizons are defined by when we believe they could be scaled, so we are actively exploring and trialing them now, but their scalability could be now (short-term), 3-10 years (medium-term) or 10-30 years (long-term).



Our Net Zero Transition Plan continued



SBTi approval received for our legacy companies' CO₂ emissions targets as being in line with the Paris Agreement and well below 2°C trajectory.

Pre-2019*

- Setting and achieving legacy targets.
- Continued improvement in operations.
- Investments to increase biofuels consumption.

2020*

- Completion of €134 million new recovery boiler in Nettingsdorf (Austria).

2021*

- Opening of the new Monterrey mill in Mexico.

2022*

- Successfully trialed hydrogen project at the Saillat paper mill in France, a world first for a paper mill.
- Announced an investment of almost \$100 million in a sustainable biomass boiler in our Cali mill (Colombia).
- Completed the Zülpich energy project, an €11.5 million investment reducing CO₂ emissions annually by 55,000 tonnes.
- Invested \$23.5 million to upgrade the Nuevo Laredo plant in Mexico, reducing site CO₂ emissions by up to 40% and doubling production capacity.

2023*

- Investment in our Hoya paper mill and board manufacturing plant (Germany) delivering approximately 5,500 tonnes of CO₂ emissions reduction per annum.

- Entered into two solar VPPAs in Texas (U.S.).
- Inaugurated the Company's first box plant in Africa (Morocco), which included 1,500 solar panels.

2024*

- First VPPA project reaches commercialization (U.S.).
- Inauguration of €6 million solar project in Sangüesa, Spain.

2025

- Second VPPA project reaches full commercialization (U.S.).
- Expected startup of new biomass boiler at the paper mill in Cali, Colombia, which is estimated to reduce our global Scope 1 and Scope 2 CO₂ emissions by over 100,000 tonnes.

2025-2030

- Projects identified to implement until 2030 in order to help achieve our new CO₂e emissions reduction target (target expected to be published by end of 2025).

Beyond 2030

- Scaling new and emerging technologies, as they become available. Our Net Zero Transition Plan will also depend on government action and the development of new technologies.
- Consideration of residual carbon neutralizing solutions to deliver on a net zero future.

*The examples here reflect, a combination of the activities of both legacy companies.