act4nature international

SOLVAY

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SOLVAY's individual commitments to act4nature international

Company overview

Solvay is a company founded by Ernest Solvay in 1863, originally dedicated to the production of soda ash. Since then, Solvay has expanded its product offerings into markets that address the most fundamental needs of our planet.

In December 2023, Solvay completed the spin-off of its specialty activities to Syensqo. This move marked a significant shift for Solvay, positioning the company as a leader in essential chemicals on a global scale. In 2020, Solvay was among the first companies to support act4nature. In 2024, the company is pleased to renew its commitment to act4nature international. The Solvay group comprises five key business units: Soda ash, Special Chem (fluorine and rare earths), Silica, Peroxides (hydrogen peroxide) and Coatis (phenol chemistry).

Solvay's activities serve several key industrial sectors, aiding its customers in their energy and environmental transformations. The company is a global leader in several markets. Solvay employs over 9.000 people across 45 production sites worldwide. These sites are located in Europe (20), Asia (12), North America (7) and Latin America (6). In Europe, sites are located in France, Germany, Bulgaria, Belgium, the Netherlands, Italy, Spain, Finland and Poland.

Within the company's portfolio, 25% is focused on high-growth markets, including air purification, water and food preservation, health and well-being, eco-friendly clothing production, enhancing the durability of car tires, and cleaning and protecting our homes.

The Solvay group is reinforcing its commitment to transition markets and has pledged to achieve carbon neutrality by 2050, as well as to various objectives to reduce pressure on biodiversity.

With net sales of 4.9 billion euros in 2023, Solvay is listed on Euronext Brussels and Paris (SOLB). More information is available at solvay.com et Linkedin.

Materiality analysis

Since 2020, Solvay has been assessing the impact of its activities on biodiversity using life-cycle analysis tools ("from cradle to gate") based on the ReCiPe method[1]. The main pressures on biodiversity are climate change (47%), marine ecotoxicity (20%), eutrophication (14%) and acidification (10%), with other pressures (land use, natural resources, etc.) accounting for less than 10%. For each major pressure and product manufactured, the impact on biodiversity is calculated by taking into account product eco-profiles, reference databases (Simapro) and quantities manufactured. The final result is expressed as the theoretical number of species potentially affected in the relevant ecosystems.

As part of its sustainable development strategy, in 2020 the Group set the ambition of reducing its overall impact on biodiversity by 30% by 2030 (vs. 2018). In 2022, the monitored indicator demonstrated a 28% reduction in this impact, affecting 63 species compared with 2018 (78 species). These results underscored the need to refine the method to better reflect efforts made on major pressures such as decarbonization. Indeed, life cycle assessment methods are based on validated and published databases that may not always align with actual production conditions. Therefore, the results achieved are contingent upon database updates, their alignment with actual processes, and production volumes.

In addition to this global analysis, Solvay is dedicated to developing specific roadmaps for its priority sites. The roadmap aim is to implement actions to conserve and restore biodiversity, in collaboration with local communities and scientific partners.

In first step, international databases referencing the richness and sensitivity of biodiversity around production sites were used:

- The Integrated Assessment Tool (IBAT) developed by the BirdLife International Alliance, the United Nations World Conservation Monitoring Centre (UNEP-WCMC) and IUCN (International Union for Conservation of Nature). This database can be used to identify protected areas, key biodiversity zones and protected species around a site.
- The "Biodiversity Risk Filter" (BrF) tool developed by the World Wide Fund for Nature (WWF) covers a broader range of reputational, regulatory and natural risks related to biodiversity.

A final score was assigned to each site, enabling us to prioritize a third of the production sites. For these sites, action plans will be developed and implemented, with regular monitoring of progress.

Links to previous act4nature commitments

Solvay is renewing the commitments it made in 2020: on the one hand, by completing actions related to the main pressures on biodiversity, and on the other, by addressing specific objectives of the global framework on biodiversity adopted in December 2022. A new Nature strategy, integrating the Biodiversity dimension, is currently being developed and will be published by the end of the first quarter of 2025. This renewal of commitments is an opportunity for Solvay group to consolidate and strengthen its specific biodiversity ambitions.

Individual commitments

Link Common commitments	Commitment	Description of SMART commitment	Scope	Metrics/KPI	Measurable target (SMART)	Deadline
4 5	**1.** Decrease GHG emissions to put on a trajectory towards carbon neutrality	Commit to a carbon neutrality trajectory by 2050 evaluating the impact on biodiversity (see commitment#3)	Scopes 1 and 2 Scope 3	Emissions in MtCO2eq vs 2021 (9 MtCO2eq) (17.4 MtCO2eq in 2021)	-30% Carbon neutrality -20%	End of 2030 End of 2050 End 2030
4 5	**2.** Eliminate the use of coal	• No new coal-powered plant built • Stopping the use of coal as an energy source at sites where sustainable alternative energy sources are available[2]	Global	Number of production sites using coal as new source of energy Coal phase-out plan for Green River, Rheinberg , Torrelavega, Dombasle and Devnya sites % of sites where renewable energy exists having phased out the use of coal	0 100% of sites with action plan 100% of sites where alternative sustainable sources are possible	By 2024 End of 2025 End of 2030
1 6	**3.** Directe Investments towards "Nature-based Solutions"	Study the impact of investment projects on the achievement of the Group's sustainable development objectives. Develop more specific assessment criteria on the biodiversity dimension	Global	Investment project appraisal procedure	• Identification of criteria • Procedure updated and applied • Measuring effectiveness	End of 2024 End of 2025 End of 2028
4 5	**4.** Preserve freshwater resources and optimizing uses • Implementation of action plans to optimize usage at priority sites • Reducing water abstraction at priority sites	• Prioritization of sites under water stress or subject to other water resource constraints	Priority sites	• Review of priority sites • Number of action plans defined • Number of action plans launched • Freshwater withdrawal (Mm3)	Number of priority sites identified[3] Action plan for 100% of priority sites -10% (volume) baseline 2021: 165 Mm3 , of which 70% freshwater	Annual End of 2026 End of 2030 End of 2030
3 5	**5.** Reduce environmental pressure from emissions into the environment	Based on a materiality analysis conducted in 2024: • Monitoring of (groups of) air pollutants (e.g. VOC, Hazardous Air Pollutants, E-PRTR substances, POPs and other legacy air pollutants) • Monitoring of substances and groups of substances emitted to the effluents • Define targets to decrease emissions to the environment	Global	• Quantities of substances and groups of substances emitted to air and via effluents • % reduction	• Number of sites carrying out measurements • Identification of substances and group of substances to be monitored • Reduction target on each indicator	End of 2025 End of 2026
2 5 8	**6.** Establish biodiversity action plans for priority sites at local level • Develop action plans for priority sites • Development of guidances and tools to support the sites • Monitoring action plans and their implementation	• Identify priority sites for biodiversity (based on an analysis of the site's environmental sensitivity)	Local	• Number of sensitive species and protected areas near production sites • Number of action plans and status • Presentations and support documents • % of prioritized sites	• Mapping of sites in relation to species and protected areas. List of priority sites[4] • 100% of priority sites have a validated action plan • Presentation of tools at 100% of prioritized sites • Biodiversity actions launched for 80% of priority sites • Results for 50% of priority sites	Mid 2024 End of 2026 End of 2026 End of 2026 End of 2030
2 9	**7.** Establish partnerships with local associations and communities for priority sites	Develop partnerships to support sites in implementing biodiversity action plans. Target partnerships with nature protection associations (e.g. LPO), local communities (e.g. universities), scientific organizations (e.g. OFB)	Local and Global	Number of partnerships in place on priority sites	Have at least one partnership in place at 80% of priority biodiversity sites	End of 2026
1 2 3 4 7 8 10	**8.** Improve measurement of biodiversity across the value chain • Developing local life cycle analyses	• Include investments made to reduce environmental footprint in the Life Cycle Assessment (LCA)	Global	• New method in place • Number of local life cycle assessments	• Publication(s) available on the new method • At least one local lifecycle analysis of a priority product for each BU	End of 2030 End of 2026
2 5 6 8	**9.** Restore biodiversity	Develop biodiversity conservation and/or restoration activities on permeable site surfaces: • Fully protected zones • Activities to promote biodiversity: planting hedges, restoring wetlands, protecting habitats and sensitive species • Vegetative areas with sustainable management: differentiated mowing, dead wood left on the forest floor • Responsible farming (Nature-based Solutions, not intensive agriculture) • Eco-pasturing (sheep to maintain green spaces) • Installation of solar panels to create micro-habitats for flora and fauna • Other environment-friendly human activities	Global	% of permeable surfaces with biodiversity conservation and/or restoration activities	30% of permeable surfaces	End of 2030
8	**10.** Train leadership teams and educate employees on Nature topics	Train or raise the awareness of employees and train management teams on nature issues, particularly on the protection and conservation of biodiversity and its link with the Group's activities. Training adapted to the type of mission carried out by the teams	Global	Number of employees and management teams trained or made aware of nature issues	80% leadership teams 80% of employees aware of or trained on Nature issues	End of 2026 End of 2030
7	**11.** Contribute to the implementation of the national and the international biodiversity strategies	Participation in sector discussions, international and national discussions for the implementation of the Global Biodiversity Framework, regional and national biodiversity strategies	All countries with more than 500 employees	• Number of local networks set up • Number of active participations	• 1 focal point in place for each country concerned • At least one active participation (report, workshop...)	End of 2026 End of 2026
2 - 5 6 - 8 9	**12.** External recognition of biodiversity strategy or action plan	External recognition of the global strategy on biodiversity (e.g. SBTN[5]) and/or local action plans (e.g. WHC[6])	Global and Local	Number of certificates / recognitions	At least two international awards for biodiversity projects	End of 2026

1 ReCiPe 2016 v1.1. A harmonized life cycle impact assessment method at midpoint and endpoint level. Report I: Characterization. Department of Environmental Science, Radboud University Nijmegen. ReCiPe Update 2017, Huijbregts, M.A.J., Steinmann, Z.J.N., Elshout, P.M.F. et al. Int J Life Cycle Assess (2017) 22 : 138.
2 Local alternative and sustainable sources of energy are available and are economically realistic.
3 Prioritization in reference to hydric stress zone: 13 priority sites in 2024.
4 16 priority sites identified by mid 2024.
5 SBTN : Science-based Target Network.
6 WHC : Wildlife Habitat Council.