

Assessment of Bayer's approach to addressing biodiversity loss



Bayer: Overview

Bayer AG is a pharmaceutical, personal care and agricultural chemicals company based in Leverkusen, Germany.



Market cap

€52.1 billion (\$47.5 billion)



2022 pesticide sales

€13.18 billion¹ (\$14.46 billion)



Highly Hazardous Pesticides

≥50



Top-selling Highly Hazardous Pesticides in 2018

1) Glyphosate 2) Glufosinate¹ 3) Isoxaflutole 4) Imidacloprid 5) Flubendiamide



EU-banned pesticides notified for export in 2018

3,055 tonnes

Product Portfolio	E1.1 The company does not produce or sell any HHPs	Not achieved
	E1.2 The company does not sell EU-banned pesticides outside of Europe	Not achieved
Impact assessment	E2.1 The company assesses biodiversity-related impacts, dependencies and risks	Partly achieved
	E2.2a The company uses a clearly defined methodology to assess downstream impact of all pesticide products	Partly achieved
	2.2b The methodology was developed in partnership with and peer reviewed by independent experts	Partly achieved
Biodiversity strategy	E3.1 The company has a target that aligns with GBF Target 7 to reduce pesticide risks to biodiversity by half by 2030	Not achieved
	E3.2 The company has a commitment to phase out HHPs by 2035	Not achieved
	E3.3 The company has a management plan for high-risk locations in its value chain	Not achieved
	E3.4 The company has a biodiversity strategy that includes relevant targets and commitments	Achieved
Disclosures	E4.1 The company fully reports against GRI 304 and has committed to align with the TNFD and GBF Target 15	Not achieved
	E4.2 The company publishes a list of active ingredients and discloses sales volumes of HHPs	Not achieved
	E4.3 The company discloses at-risk locations in its value chain, including areas of biodiversity importance	Not achieved
	E4.4 The company discloses toxicological studies of all active ingredients	Partly achieved
Product innovation	5.1 The company assesses inherent risks of new solutions and ensures they pose lowest possible risks	Partly achieved
	5.2 The company has a target for expanding safer and sustainable alternatives	Not achieved
	5.3 The company's innovation practices include replacing hazardous products with lower risk alternatives	Not achieved

Bayer is the largest pesticide producer of the six companies we assessed by annual pesticide sales. The company produces a high number of HHPs and exports pesticides banned for use in the EU outside Europe, indicating high risks to biodiversity from its products. The company is

¹ Since 2018, [BASF has acquired Bayer's glufosinate-ammonium business](#). There is no indication that Bayer currently produces glufosinate.

developing an impact assessment methodology to assess its products and has committed to reduce the environmental impact of its pesticide products. However, this is not accompanied by a methodology to assess new products for biodiversity risks, or commitments to support a transition toward a low-risk portfolio.

INDICATORS OF PROGRESS

- **Impact assessment:** Bayer has started to assess the impacts of its products on freshwater using a clearly defined impact assessment methodology.
- **Biodiversity strategy:** Bayer has committed to reduce the environmental impact of its product portfolio by 30 per cent by 2030.

AREAS OF CONCERN

- **Product portfolio:** Bayer produces a high number of HHPs and exports high volumes of pesticides banned for use in the EU outside Europe.
- **Impact assessment:** Bayer's Crop Protection Environmental Impact Reduction (CP EIR) methodology applies to just one biome (freshwater) and does not consider location-level effects on biodiversity in at-risk locations or on all material species.
- **Product innovation:** Bayer has not disclosed a methodology or criteria for assessing the risks of proposed sustainable solutions and has not disclosed any commitments to dedicate company resources to sustainable innovation.

Assessment

1. Product portfolio

1.1 Expectation: The company does not produce any products with active ingredients that appear in Pesticide Action Network's list of Highly Hazardous Pesticides.

ASSESSMENT NOT ACHIEVED

Bayer produces at least 50 active ingredients that are Highly Hazardous Pesticides.

1.2 Expectation: If the company is incorporated in a country subject to European Union pesticide use restrictions, it does not sell pesticides that are banned for use in the EU to other countries.

ASSESSMENT NOT ACHIEVED

In 2018, Bayer notified for export 3,055 tonnes of pesticides banned for use in the EU to other countriesⁱⁱ.

2. Impact assessment

2.1 Expectation: The company assesses its pesticide-related impacts and dependencies on biodiversity, and the risks arising from these, across its full value chain, including downstream impacts.

ASSESSMENT PARTLY ACHIEVED

Bayer assesses pesticide-related impacts on freshwater ecosystems through the CP EIR methodology. The company states that this approach does not include downstream impacts of pesticide products and only considers impact “during its use phase on the field”ⁱⁱⁱ. Bayer does not disclose the findings of this impact assessment. See Expectation 2.2a for more information.

The company does not appear to include biodiversity in risk assessment practices^{iv}, nor does it disclose any assessment of dependencies.

2.2a Expectation: The company uses a clearly defined methodology to assess its impact on biodiversity from all pesticide products, which includes considering how inherent risks of a product materialise throughout the company’s value chain and impact biodiversity at the location-level.

ASSESSMENT PARTLY ACHIEVED

Bayer’s CP EIR methodology estimates the environmental impact of 270 active ingredients on freshwater. The company uses the methodology to quantify its environmental impact and track progress against its impact reduction commitment (see Expectation 3.1). It aims to use the findings to reduce the impacts of its crop protection products on non-target species^v.

Bayer’s methodology includes considering the inherent risks posed by pesticide products, including ecotoxicity and degradation half-lives. However, as it only covers freshwater, it is unclear to what extent Bayer considers or plans to consider risks its products pose to biomes or species not relevant to freshwater.

The methodology does not consider all relevant biomes and material species, such as pollinators or soil ecosystems. Bayer also states that this methodology does not consider downstream impacts beyond use at the field level^{vi}. Although Bayer assesses potential impact at the country level, the methodology does not appear to assess product impact at a more granular location level including at-risk areas in its value chain.

It is unclear if Bayer has assessed **all** pesticide products according to this methodology.

2.2b Expectation: The company's methodology for impact assessment was developed in partnership with, and peer reviewed by, independent subject-matter experts, as evidenced by a disclosure of all relevant details of the company's relationship and the nature of collaboration with all experts involved.

ASSESSMENT PARTLY ACHIEVED

Bayer states that its methodology has been developed with the Technical University of Denmark (TUD) and that an external panel of subject-matter experts will review all results and progress^{vii}. Bayer discloses this panel of experts and specifies the role of TUD in the methodology^{viii}.

Bayer has not disclosed the compensation details of the company's relationship with TUD.

3. Biodiversity strategy

3.1 Expectation: In alignment with the Global Biodiversity Framework's Target 7, the company has commitments and targets that seek to reduce the company's impact on or risk to biodiversity from its pesticide products by 50 per cent by 2030.

ASSESSMENT NOT ACHIEVED

Bayer has committed to reduce the negative environmental impact of its pesticide products by 30 per cent by 2030, which is measured using the CP EIR methodology. GBF Target 7 states that pesticide risk must be reduced by 50 per cent by 2030.

The company tracks progress against a 2014–2018 average as the baseline and has reported a 14 per cent reduction in impact as of 2022,^{2,ix}. This progress only reflects the company's calculated reduction in impact on freshwater biomes.

3.2 Expectation: The company has committed to phase out production of Highly Hazardous Pesticides by 2035.

ASSESSMENT NOT ACHIEVED

Bayer has not disclosed a commitment to phase out production of HHPs.

² Bayer does not specify how the 14 per cent reduction in impact has been achieved.

3.3 Expectation: The company has a management plan for locations within its downstream value chain that are at medium or high risk of negative biodiversity impacts from pesticide use, including areas of biodiversity importance. This plan includes restricting sales of some products to at-risk locations.

ASSESSMENT NOT ACHIEVED

Bayer has not disclosed a management plan to protect locations in its value chain at medium or high risk of biodiversity loss from pesticide use.

3.4 Expectation: The company has a clear biodiversity strategy, which sets out how it will meet biodiversity-related commitments and targets.

ASSESSMENT ACHIEVED

Bayer's strategy to address biodiversity loss is guided by five 'action-based principles': developing innovative sustainable solutions; supporting farmers and landowners; advancing the science in balancing food production while enhancing biodiversity; helping to protect forests and promoting sustainable vegetation; and helping to mitigate climate change^x.

The company has a stated commitment to reduce environmental impact of pesticides by 30 per cent by 2030. It states that impact will be reduced by "optimizing pesticide volumes required per hectare", "discovering new and better crop protection solutions that can significantly reduce environmental impact", and "recommending best practices to growers that can improve their sustainability and reduce their environmental impact"^{xi}.

4. Disclosures

4.1 Expectation: The company's biodiversity disclosures fully align with standards set by the Global Reporting Initiative 304 guidance on biodiversity. The company has committed to implement the disclosure framework set by the Taskforce for Nature-related Financial Disclosures and to report biodiversity-related impacts, dependencies and risks in alignment with Global Biodiversity Framework Target 15.

ASSESSMENT NOT ACHIEVED

Bayer states that it reports against some topic areas required by GRI 304. However, the company does not report against all topics, nor does it provide all details required by the topics it does report against, to be considered fully aligned with this standard^{xii}.

Bayer states that the company is working to regularly monitor, assess and disclose activities related to sustainability in accordance with Target 15^{xiii}. However, this is not embodied in a commitment, and the company has not committed to implement the TNFD framework.

4.2 Expectation: The company publishes an exhaustive list of active ingredients included in its products and discloses annual sales volumes of Highly Hazardous Pesticides.

ASSESSMENT NOT ACHIEVED

Bayer does not disclose this information.

4.3 Expectation: The company discloses locations where its pesticide products are used that have been identified as at-risk, including those at medium or high risk of negative biodiversity impacts from pesticide use and those in or near areas of biodiversity importance.

ASSESSMENT NOT ACHIEVED

Bayer does not disclose this information.

4.4 Expectation: The company discloses toxicological studies of all active ingredients included in its product portfolio, including all studies submitted to regulators for product approval.

ASSESSMENT PARTLY ACHIEVED

Bayer publicly discloses summaries of safety studies for 32 active ingredients, however, this is a fraction of the active ingredients that the company produces^{xiv}. Individuals can request summaries and full safety studies for any Bayer ingredients^{xv}. It is not clear if the summaries or the studies shared with requesting individuals include all studies submitted to regulators.

5. Product innovation

5.1 Expectation: The company assesses the inherent risks of proposed agricultural solutions or those in development and ensures all new solutions pose the lowest possible risks to biodiversity.

ASSESSMENT NOT ACHIEVED

Bayer states that it screens new substances for their environmental impact during the development process but has not disclosed a methodology or criteria for doing this^{xvi}. Bayer has not stated to what extent proposed solutions are assessed against the CP EIR methodology.

5.2 Expectation: The company has a target (such as sales, portion of product portfolio, or research and development spending) for expanding safer and sustainable alternatives.

ASSESSMENT NOT ACHIEVED

Bayer has not disclosed a target for expanding safer or sustainable alternatives.

5.3 Expectation: The company's innovation practices explicitly include replacing hazardous products with lower risk alternatives.

ASSESSMENT NOT ACHIEVED

Bayer has not disclosed an approach to product innovation that includes this principle.

References

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ShareAction is a NGO working globally to define the highest standards for responsible investment and drive change until these standards are adopted worldwide. We mobilise investors to take action to improve labour standards, tackle climate change and address pressing global health issues. Over 15 years, ShareAction has used its powerful toolkit of research, corporate campaigns, policy advocacy and public mobilisation to drive responsibility into the heart of mainstream investment. Our vision is a world where the financial system serves our planet and its people.

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