BASF
We create chemistry

Sustainability in Agricultural Solutions across Australia and New Zealand

We create chemistry for a sustainable future

We want to contribute to a world that provides a viable future with enhanced quality of life for everyone. We do so by creating chemistry for our customers and society and by making the best use of available resources. Sustainability is at the core of what we do, a driver for growth as well as an element of our risk management.

Corporate commitments

We have defined sustainability focus areas within our corporate strategy. These formulate the commitments with which BASF positions itself in the market and how it aims to meet the growing challenges along the value chain.

Suppliers | **BASF operations** | **Customers** | **And along the way…**

We source responsibly

We produce safely for people and the environment

We produce efficiently

We drive sustainable solutions

We value people and treat them with respect

Our sustainability goals and KPIs

BASF welcomes the Sustainable Development Goals (SDGs) and supports the UN in making our planet more sustainable. BASF was actively involved in the development of the SDGs as a member of the working groups. Of particular importance to BASF are the SDGs: Zero Hunger, Good Health and Well-being, Clean Water and Sanitation, Decent Work and Economic Growth, Industry, Innovation and Infrastructure, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life on Land and Partnerships for the Goals.

BASF is contributing to the SDGs in the following areas:

Effective climate protection

- Reduce our absolute CO2 emissions[1] by 25% by 2030 compared with baseline 2018
- Achieve net zero CO2 emissions[1] by 2050

Resource efficiency and safe production

- Reduce worldwide process safety incidents per 200,000 working hours to ≤ 0.1 by 2025
- Reduce the worldwide lost-time injury rate per 200,000 working hours to ≤ 0.1 by 2025
- Introduce sustainable water management at our production sites in water stress areas and at our Verbund sites by 2030

Sustainable product portfolio

- Achieve €22 billion in Accelerator sales[2] by 2025

Employee engagement and diversity

- Increase the proportion of women in leadership positions with disciplinary responsibility to 30% by 2030
- More than 80% of our employees feel that at BASF, they can thrive and perform at their best

Responsible procurement

- Cover 90% of our relevant spend[3] with sustainability evaluations by 2025
- Have 80% of our suppliers improve their sustainability performance upon re-evaluation

Scan for more information on how BASF supports the UN SDGs.

[1] The goal includes Scope 1 and Scope 2 emissions without emissions from sale of energy to third parties. Other greenhouse gases are converted into CO2 equivalents according to the Greenhouse Gas Protocol.
[2] Products with substantial contribution to sustainability
[3] Relevant spend; based on risk matrices, purchasers' assessments and other sources

Circular economy

For BASF, circular economy is much more than waste management. The aim is to close cycles, use products and resources in the best way possible across the entire value chain, and support our customers in their journey towards a more sustainable future.

The circular economy model has been gaining ground in politics, industry, and society over the last years. Behind this idea is a change away from the linear model of "take-make-dispose", to a system of closed loops powered by renewable energy. The chemical industry and its innovations can lead the way in this change. BASF is already applying circular economy in several ways.

We aim to **double** our **circular sales to reach €17 billion** by 2030.

We commit to using **250,000 metric tons of recycled feedstock by 2025** globally.

We run a **Circular Economy Program** to accelerate the transition.

Sustainability in Agricultural Solutions across Australia and New Zealand

Over the coming decades, our agricultural food system will undergo an accelerated transformation in order to provide access to enough healthy and affordable food for the growing population. At the same time, it will need to mitigate its impact on our planet so that future generations can flourish.

BASF Agricultural Solutions aims to translate sustainable initiatives into realised actions and has set the following global sustainability targets, to be achieved by 2030. Here are some examples of sustainability initiatives across Australia.

Axalion® – Active

Redefining sustainable insect control

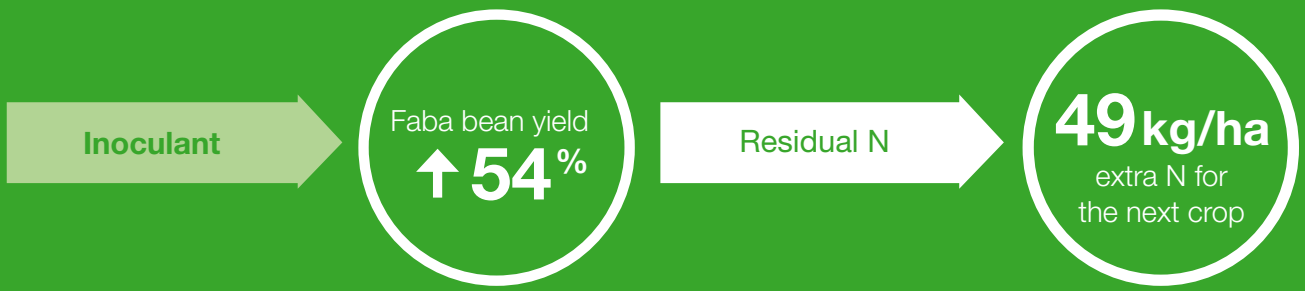
Axalion® Active is the first active ingredient from the BASF R&D pipeline in the pursuit of redefining modern, sustainable pest control by balancing outstanding efficacy with beneficial safety. Through a new class of chemistry with a novel mode of action, Axalion® gives farmers the best of both worlds by providing long lasting control of piercing and sucking pests, while working harmoniously with the environment regarding soil and water organisms and beneficials such as pollinators and birds.

Axalion® finally puts an end to farmers having to choose between sustainability and superior performance. Axalion® Active can be found in new product, Efficon® insecticide, due to launch in Australia in April 2023.

Nodulaid® – biological inoculant

Nodulaid is produced by culturing different strains of rhizobia which will form a symbiotic relationship with the various pulse crops to stimulate nodulation. The nodules that grow on the roots produce enough nitrogen to both increase the growth and yield of the host plant itself and leave sufficient residual nitrogen in the soil to feed the following crop.

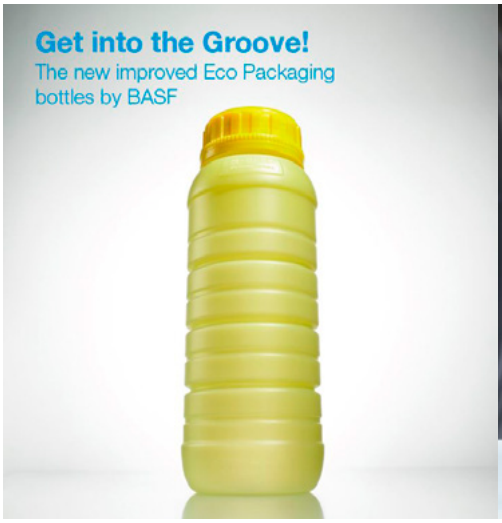
The various strains of rhizobia are classified into Groups matched to the crops they can inoculate. Seven different Nodulaid and Nodulator products are produced in the lead-up to every season, each containing rhizobia from a different group.

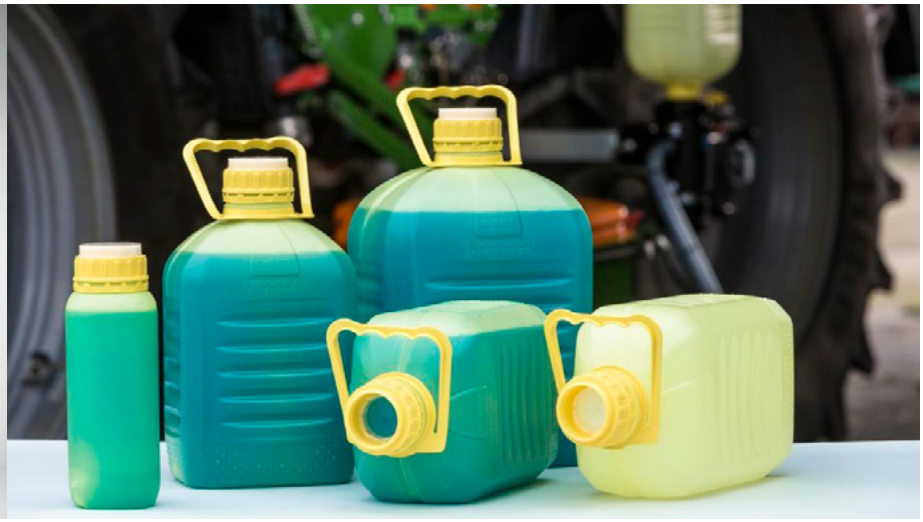


This diagram shows the result of a CSIRO/GRDC trial that increased nitrogen fixation by 700%.
The benefit of using inoculants can vary widely, depending on the existing levels of rhizobia in the soil.

Eco-packaging

BASF Agricultural Solutions adopts eco-packaging technology in packaging products where suitable. All materials are polyethylene and use 20% less plastic than standard industry products. Aside from its sustainable attributes, the packaging also has a multitude of functional benefits – making it easier to store,





Research farm – Tamworth

Alongside the sustainable solutions that BASF drives, there is a focus on embedding sustainability within the research processes that help produce the final product. At our Crop Solutions farm in Tamworth, NSW, the research and development team are proving that indeed, from little things, big things grow. In their work trialing new crop protection products developed by BASF's global experts, the Tamworth team ensures that stewardship requirements are monitored and upheld.

With the challenges presented by Australia's changing climate, it is important to maximise water use efficiency across all operations of the farm, ensuring they offset the effects that rising temperatures and rainfall deficits will have on the crops. They undertake several initiatives, one of which is cover cropping.

In between trial crops, a variety of mixed species cover crops are planted which aim to capture rainfall, reduce evaporation, increase soil microbial activity, and increase organic matter within the soil. Maintaining biodiversity is important to the team as it directly supports sustainable agriculture systems by promoting soil fertility, pollination, and Integrated Pest Management. Protocols are therefore followed to minimize disturbance to the bee populations. Part of BASF's strategy is to develop products that have low toxicology ratings, and therefore present minimal impact to residing species, which is why the team also record any effects on beneficial insects.

They also aim to pioneer sustainable practices at the farm, one of which is a system for the disposal of dust, oil and crop protection products, collected when washing of machinery. This aims to minimise and remove waste in an environmentally friendly manner.