

Planet Life

MINIMIZING IMPACT ON NATURAL CAPITAL



Working to reduce the environmental impact of our operations



Committed to Finding Win-Win Environmental Solutions

In 2024, we continued making headway toward our Environmental Impact commitments. Increases in renewable purchased electricity and finding further beneficial uses for our solid waste demonstrate how we are working to meet our goals and create a more sustainable business. As we continue to drive progress, we are also seeing growing and evolving external attention in environmental performance. Stakeholders have expressed interest in understanding our carbon transition plan, and a growing number of customers would like to understand how our products and operations affect their own carbon reduction plans. At the heart of it all, we are committed to identifying and implementing innovative, economical solutions that protect the environment across our global business.



Milestone Performance

MILESTONE	PROGRESS
Carbon Emissions (Scopes 1, 2 and Biogenic)	-22%
Carbon Emissions (Scope 3)	-7%
Renewable Purchased Electricity	32%
Water Use Intensity*	0%
Waste to Landfill Avoidance	92%
Wastewater COD Intensity	1%

*Extreme highly stressed geographies only
Results based against 2019 baseline



Environmental Metrics

ENVIRONMENTAL METRIC	PROGRESS
Scope 1 Emissions	1,825,070 metric tons
Scope 2 Emissions	779,840 metric tons
Biogenic Emissions*	30,426 metric tons
Scope 3 Emissions	16,076,377 metric tons
Overall; 11,457,253 SBTi	
Water Use: Global	51,503,000 cubic meters
Solid Waste	276,188 metric tons

*Net emissions after removals
Ingredion's environmental data has undergone limited verification by our outside auditor, Apex.



Building a Carbon Reduction Strategy: Our Climate Transition Plan

Last year, for the first time, we provided a high-level overview of Ingredion's climate transition plan to our well-below 2°C target in our 2023 Sustainability Report. We received positive feedback from our stakeholders, so we have included an update on this plan in this year's report as well.

Our Scopes 1 and 2 GHG emissions versus 2023 were similar. The energy mix in some sites changed compared to the prior year, but the net global impact was neutral. For example, our two new renewable biomass boilers in Mogi Guaçu and Balsa Nova, Brazil, ran for the full 12-month period. In addition, we increased our renewable electricity to approximately 32% purchased globally with the largest year-over-year increase occurring in Brazil. We also started up on-site solar generation at our Ban Kao Dihn and Kalasin, Thailand, sites in 2024. However, in our Cornwala, Pakistan, plant, the energy economics favored coal cogeneration for the full year.

2024

Our Strategy to Reduce Scope 1 and 2 Emissions Includes Several Pathways

LEVER

Optimize Energy Consumption

Substitute Energy Sources

Capture CO₂

Offset

PROGRESS

1. Ingredion Performance System (IPS)
2. Energy Efficiency Capex Investment
3. Network Optimization

4. Coal Conversion
5. Biomass Energy
6. Renewable Electricity
7. Zero/Low Carbon Fuels (e.g. Renewable Natural Gas and Green Hydrogen)
8. Electric Vehicles
9. Process Electrification

10. Carbon Capture, Utilization and Sequestration (CCUS)

11. Purchased Offsets



The Mogi Guaçu and Balsa Nova and the Brazil biomass boilers.



**LEVER: Optimize Energy Consumption**

01 **INGREDION PERFORMANCE SYSTEM (IPS)** is the implementation of standard tools and routines for operations processes that apply best practices to enable continuous improvement of our operation leading to energy, water and waste optimization. IPS implementation is progressing across our global sites to become our standard way of working.

02 **ENERGY EFFICIENCY CAPEX INVESTMENT** is deploying our capital resources to improve existing plant equipment energy efficiency leading to financial cost savings and energy consumption reductions.

\$14M

invested globally by Ingredion in projects that would make our operation more environmentally sustainable through Greenhouse Gas (GHG) or water reductions.

We have developed a robust global pipeline of capital projects with sustainability benefits following plant-specific energy studies with third-party energy experts. Ingredion is exploring AI digital use cases to optimize asset performance as well, and we will continue to build capability in areas such as energy and water optimization. We continue to prioritize these investments based on available resources.

Energy efficient solutions can come in many forms. **An example:** We made an investment at our Argo, Illinois, plant to more efficiently operate the natural gas boiler following the conversion from coal a few years ago. This enabled the plant to reduce an estimated 19,000 metric tons (MT) of CO₂ per year.



03 **NETWORK OPTIMIZATION** is routinely performed by our Global Operations team, which aims to optimally produce products in our global asset network to satisfy our customers' requirements with a high level of service. As part of our cost-to-compete initiative, we previously announced the cessation of operations at two smaller facilities in Brazil and Canada, as well as Goole, United Kingdom operation. These network changes will be realized in 2025, and the overall GHG impact is expected to be relatively small compared to Ingredion's global GHG footprint.

LEVER: Substitute Energy Sources

04 **COAL CONVERSION** has been a significant decarbonization lever for Ingredion. In 2021, Ingredion finalized efforts to exit coal used in our boilers at our Argo facility – the largest manufacturing plant globally for the company. In the United States, our Winston Salem, North Carolina site also utilizes a small percentage of coal in its energy mix, and we have a project that will be completed in 2025 to transition this small portion to natural gas, reducing the site's carbon footprint by approximately 5,000 MT CO₂. When this investment is complete, Ingredion's Americas operations will be coal-free.



05

BIOMASS ENERGY has been utilized in new renewable biomass boiler investments in three Brazilian locations since 2019, which has enabled Ingredion to reduce its carbon footprint through the transition to renewable sources.

06

RENEWABLE ELECTRICITY provides a substantial lever to decarbonize our global carbon footprint. The economic cost of renewable electricity varies by market based on local supply and demand. There is relative cost parity in some markets, and in those cases, we have prioritized renewable electricity purchases from the grid. In 2023, we participated in a project to explore a US virtual power purchasing agreement (VPPA) with an external consultant and other supply chain partners. Upon analysis, we concluded that the current US VPPA agreement structures would increase Ingredion's earnings volatility and add incremental energy cost. It is extremely difficult to pass this incremental cost to our customers, who are looking for cost-effective solutions in their formulations. As a result, we concluded to not pursue the VPPA agreement. We continue to monitor the market for more economic opportunities in the future.

We continue to evaluate solar power solutions at our manufacturing sites, looking for solutions that provide renewable green power. Given the physical on-site surfaces available (e.g. available land, rooftops), the solution can often be a smaller percentage of the site's overall electricity consumption. We have progressed on-site solar installations in Colombia, Thailand and Pakistan, which have had attractive capacity generation and financial returns. Two on-site solar installations in Thailand started operations in 2024.

32%

of our electricity
purchases from
renewable sources
was achieved
in 2024.

