

PUBLIC-PRIVATE COP30 LEAF ALLIANCE ACTION STATEMENT

Advancing Low-Emission Ammonia-based Fertilizers for Resilient Decarbonized Food Systems

Nitrogen fertilizers are vital to global food security, sustaining the harvests that feed communities worldwide. Meeting this need today depends largely on ammonia-based fertilizer production, a process that some reports estimate to be responsible for roughly 1% of global greenhouse gas emissions - a footprint comparable to Brazil's or Germany's total annual emissions. Reducing these emissions, while maintaining essential nutrient supply and safeguarding food security, will require a comprehensive, agrifood industry-wide effort underpinned by strong public-private collaboration.

Low-emission ammonia fertilizers can play a key role in unlocking new and decarbonizing existing production sources for the agrifood industry, bolstering supply chain resilience, serving as a complementary solution to other practices to maintain soil health and nutrient use efficiency, all while presenting cost-effective and impactful decarbonization lever.

We, the Alliance for Low-Emission Ammonia-based Fertilizers (LEAF)¹ represent first-mover governments, financial institutions, and companies from the food, agriculture, fertilizer, sustainable fuels, and manufacturing sectors. We unite at COP30 in Brazil to support acceleration and scaling toward sector-wide adoption of low-emission ammonia-based fertilizers.

We identify the following key priorities for collective action to advance this objective and, in doing so, to contribute to the global effort to accelerate the transition towards sustainable agriculture and energy systems, in line with the goals of the Paris Agreement.

KEY PRIORITIES FOR COLLECTIVE ACTION

1. Accelerate large-scale investments by closing the cost gap and activating demand

The sector is already ramping up mature low-emission projects on both the supply and demand side. Producers are advancing projects with 35 million tons of capacity already at Front End Engineering and Design (FEED) stage or beyond. 15 million tons of this capacity has even passed a final investment decision (FID) and is in the process of being constructed. On the other end of the value chain, over 75% of the world's 20 largest FMCG companies now have specific Scope 3 emissions targets, which can create a robust downstream pull.

To unlock the emerging demand and bring mature supply projects to financial closure, market clearing mechanisms are needed to match supply and demand and help bridge the cost gap with counterfactuals.

Recognizing opportunities to:

¹All members of the Alliance are acting independently and not on behalf of each other.

- Acknowledge low-emission fertilizers as a key enabler of agricultural decarbonization and food system resilience
- Advance market-based incentives and risk-sharing solutions, such as clearing platforms that pool volumetric and cost risk to match producers with consumers. Existing platforms, such as The Low Carbon Fertilizer Alliance and the GMA-RMI Low-Emissions Fertilizer Procurement initiative, already provide a foundation for market-based risk sharing solutions. Building on initiatives such as this can help further and track progress on implementation
- Leverage auction-based mechanisms helping match supply and demand cost-effectively, including for instance contract-for-difference mechanisms (e.g., expansion of the H2Global mechanism)
- Reward early adoption across the value chain, including by enabling fast moving consumer goods (FMCGs) companies to benefit from direct payments or tax credits for low-emission fertilizer adoption; offer priority access for public procurement contracts for food products (e.g., state contracts for food supply and catering)
- Provide targeted investment support across the value chain to accelerate deployment, considering national circumstances
- Integrate low-emission fertilizers into Nationally Determined Contributions, agricultural programs, and transition plans to embed them in long-term climate strategies.

2. Boost investor confidence and reduce transaction costs through standards and market-based mechanisms

Robust, industry-wide standards and certification solutions that help reduce transaction costs, ensure credibility and certainty are vital to build investor confidence in low-emission fertilizer projects. Relevant standards and certification frameworks for low-emission ammonia are being developed by groups such as Ammonia Europe, The Fertilizer Institute, and the Ammonia Energy Association, feeding into global voluntary standards led by the International Organization for Standardization (ISO). Meanwhile consumer goods companies are advancing standards and certification solutions for fertilizers and end use food products. Aligning the efforts between producers, distributors, consumer goods companies, and voluntary standards development bodies is critical to void market fragmentation and accelerate deployment at scale.

Recognizing opportunities to:

- **Increase uptake and align industry standards and certification solutions for low-emission ammonia fertilizers, crops and consumer goods**, ensuring interoperability to reduce transaction costs, unlock lead markets and enhance transparency of emissions reductions across the value chain.
- **Develop credible market-based mechanisms**, in particular, book-and-claim systems for environmental attribute certificates to overcome the challenges in physical tracing in most agricultural supply chains. These systems will enable FMCGs to invest confidently in fertilizer decarbonization and help channel capital at scale
- **Align market-based mechanisms with global industry standards**, such as the Greenhouse Gas Protocol and the Science Based Targets initiative (SBTi) for the use of book-and-claim systems in Scope 3 emissions reduction claims. This can help to reduce fragmentation, enable consistent Scope 3 emissions accounting, and provide verifiable claims for corporate buyers that underpin offtake commitments.

3. Advance public-private collaboration on policy frameworks and financial instruments

Partnerships across governments, international institutions, and industry are vital to create the enabling conditions for the rapid deployment of low-emission fertilizers as a critical pillar of food and agriculture decarbonization. Existing platforms, such as the Breakthrough Agenda, already provide a foundation for enhanced cooperation with time-bound action plans. Building on initiatives such as the Hydrogen Breakthrough and the COP30 Plans to Accelerate Solutions will help deliver lasting impact and to track progress on implementation.

Together with governments, international financial organizations and global financing institutions can advance a suite of complementary actions.

Recognizing opportunities to:

- Develop targeted de-risking facilities for capital-intensive investments in low-emission fertilizer assets (e.g., first-loss guarantees, publicly backed insurance funds, or extending existing facilities to the sector)
- Roll out blended finance instruments that combine concessional public funds with private capital to lower borrowing costs for value chain actors
- Reduce the cost of capital for low-emission fertilizer projects through targeted bonds, favourable debt conditions, and lower capital requirements for financial institutions providing such loans
- Support farmers adopting low-emission fertilizers with financial incentives and credit instruments, training and capacity building, and improved access to premium markets for low-carbon crops.

Recognizing and supporting the ongoing initiatives such as

- UNIDO's Global Programme for Hydrogen in Industry (GPHI) and its Low-Emissions Ammonia Fertiliser Initiative (LEAFI) which have a clear focus on technical cooperation for member states to address sustainable industrial development and food security
- The 10 GW Lighthouse Initiative, part of the Breakthrough Agenda. Facilitated by World Bank, 15 development financing institutions together seek to deploy their financing and risk mitigation instruments in order to accelerate deployment of renewable hydrogen and derivatives such as low-emission ammonia based fertilizers in Emerging Markets and Developing Countries
- The Industrial Transition Accelerator (ITA), hosted by the Mission Possible Partnership (MPP), which is advancing a variety of solutions to activate demand for and unlock investment in low-emissions ammonia fertiliser projects around the world, including revenue certainty mechanisms in Brazil and regulatory solutions in Europe and India
- The World Business Council for Sustainable Development (WBCSD) and its Emissions Reduction Accelerator (ERA) aimed to mobilize collective action across the entire food value chain—from agri-input providers to food manufacturers—to drive decarbonization in the full agriculture and food sector, with an initial focus on fertilizers (both production and on-field use) as a key lever for impact.

By signing this Action Statement, we support advancing low-emission ammonia-based fertilizers as a cornerstone of resilient and sustainable agrifood and energy systems.



