# Decarbonizing chemical distribution, staying resilient

**KOHLPAINTNER:** 'A holistic approach to sustainability.'

Brenntag SE, the global leading chemical and ingredients distributor, has committed to fostering a sustainable future and to caring for human needs. "With our 'Future Sustainable Brenntag' vision 2050, we have set ourselves an ambitious ESG agenda to become a leader in responsible distribution of sustainable chemicals and ingredients," Christian Kohlpaintner, Brenntag CEO and an EPCA board member, told Chemical Week in an interview ahead of the EPCA Annual Meeting. Brenntag's targets include 100% energy consumption from renewable sources by 2025, offsetting 100% of its remaining Scope 1 and 2 emissions. The company is also committed to a 40% absolute carbon reduction by 2030 compared with 2020, and zero carbon emissions by 2045.

Brenntag is pursuing various internal initiatives to cut its own carbon footprint, such as pilot programs for electric vehicle use and solar power at its sites, Kohlpaintner said. "And to support our customers, our 'CO2Xplorer' tool allows our sales representatives and customers to quantify their Scope 3 emissions based on the products they buy from us, as well as presenting a range of alternatives with lower emissions," he said. "We are also continually expanding our supplier and product portfolio to offer a wide variety of more sustainable, for example bio-based chemicals and ingredients, as we are constantly aiming to improve ours and our industry's energy footprint and emissions output."

Brenntag has been recognized for its achievements. In June 2024, the company was again awarded the platinum rating in the EcoVadis sustainability assessment with an enhanced score. Brenntag has also improved its ISS ESG Corporate Rating to B-. "In both cases, Brenntag is the only chemical distributor worldwide with these ratings," Kohlpaintner said. "Our progress in the area of sustainability is the result of our holistic approach and the great commitment of our Brenntag teams and this makes me very proud." The company was recently also included in the DAX 30 ESG Index.

Meanwhile, Brenntag is facing tough conditions in many of its markets. "Multiple geopolitical challenges and uncertainties keep impacting overall economic development and influenced our business results in the first half of the year, which overall were below our ambitions," Kohlpaintner said. "However, sequential volume recovery quarter by quarter materialized as we predicted. Chemical manufacturers were able to improve their capacity utilization rates from depressed levels. But average selling prices for industrial chemicals have declined, especially in the chlor-alkali value chain. Sales prices for specialties, however, seem to have stabilized more."

Brenntag's worldwide sourcing network helps make the company resilient, even in the current challenging market conditions. "Our ability to draw on multiple supply chains enables us to capture business opportunities even in particularly difficult economic times and to reliably supply our customers. This remains a key competitive advantage of Brenntag," Kohlpaintner said.

Kohlpaintner cited the example of rising shipping costs for products from Asia-Pacific, which have supported the competitiveness of local chemical production, and product sourced outside Asia, in Latin American markets. "With its local and regional sourcing capabilities, Brenntag is able to adapt to these changing conditions to serve local customers in the most reliable and competitive way," he said.

Brenntag is celebrating its 150th anniversary in 2024, having been founded by Philip Mühsam in 1874 as an egg-wholesale business. "The company has changed and grown throughout its history through relentlessly rethinking and reinventing the business in ever-evolving markets," Kohlpaintner said. "With curiosity, a great deal of pioneering spirit, and keeping focus in times of change, Brenntag successfully adapted to changing circumstances, and is doing so again now."

Brenntag embarked on its latest transformational journey in 2020 with the creation of two global divisions: Brenntag Essentials and Brenntag Specialties. "The chemical industry has split into commodity and specialty chemicals — in terms of customer and supplier requirements, strategies, trends and innovation," Kohlpaintner said. The move was "in response to this development and to position Brenntag for the future," he said.

Brenntag Essentials and Brenntag Specialties have "dedicated strategies and business steering, and are becoming more and more autonomous and independent in their operations to best serve their

PRODUCED IN COOPERATION WITH EPCA

FOR THE 58TH EPCA ANNUAL MEETING
Oct. 7–10, 2024
Berlin

customers and supply partners," Kohlpaintner said. "The ability and willingness to be constantly agile and moving forward is deeply embedded in Brenntag's history and culture. Continuously transforming ourselves and shaping the future of our industry is what drives us and remains our inspiration," he said.

Industrial chemicals, including petrochemicals, are key for Brenntag Essentials. "With Brenntag Essentials we are pursuing a 'triple' business model and strategy to leverage the division's unrivalled local, regional and global capabilities," the Brenntag CEO said. The three pillars of the model are Brenntag Essentials' Last Mile Service Operations (LMSO), its regional logistics and storage network, and its global sourcing capabilities.

The LMSO — about 100 units across the globe — "stand for Brenntag's unique customer reach, proximity, network and service excellence," Kohlpaintner said. "For our customers and supply partners a standard sales catalogue combined with tailored and reliable local services provides a broad, cost-efficient market reach."

Meanwhile, Brenntag Essentials' "extensive, integrated regional network of in-house and third-party logistics and storage resources connects our suppliers to the LMSO, ensuring reliable and resilient supply chains for our customers and suppliers," Kohlpaintner said. "With the execution of Brenntag's M&A strategy, we have added sourcing and supply-chain capabilities in each global region in the last 12 months," he said. This includes the acquisition of Aik Moh in Southeast Asia, the purchase of OWI and ICC in North America and Solventis in EMEA.

"Each acquisition supports our Essentials' 'triple' with new local and regional sourcing and supply-chain capabilities and access to local markets," Kohlpaintner said. "We are expanding our global networks of terminal capabilities for larger-volume chemicals and interregional opportunities. Thus, we are strengthening and growing our network in a targeted and consistent manner. The efficient integration of these companies into our network, systems and ways of working is key to leveraging the growth potential coming with the acquisitions."

Finally, global sourcing and interregional optimization "leverage Brenntag's global scale, arbitrage and network, and our market insights to ensure global reliability and availability of products for our business partners," Kohlpaintner said. "We are already seeing the benefits of connecting the different product market expertise in our acquisitions in North America and EMEA with our existing teams to ensure the supply of competitive products to Latin America within a new, global business team structure for relevant product groups."

# Europe's petrochemical industry at a crossroads, investment under threat

Europe's petrochemical industry is at a crossroads as the burden of EU bureaucracy and environmental regulation, including carbon taxes, weaken the region as an investment location, according to John McNally, CEO of Ineos Group Ltd.'s Project One ethane cracker investment at Antwerp, Belgium and an EPCA board member.

"Carbon taxes have been successful in driving away investment from Europe," McNally told Chemical Week in an interview ahead of the EPCA Annual Meeting. "These taxes have encouraged imports from countries without carbon taxes, which has increased the carbon footprint of Europe. We are seeing China selling into Europe at below variable costs from their own overcapacity; we need fair rules and a level playing field."

The intention behind the EU's Carbon Border Adjustment Mechanism (CBAM) "is good but it does not take into account value chains," McNally said. As an example, the CBAM will be applied to imported ammonia but not to consumer products such as a bicycle made of carbon fiber or a LEGO brick, "even if the ammonia and other raw materials used to make these end products emit many times more $CO_2$ during production in countries where there is little or no regulation," he said.

In addition, Europe's chemical sector is hampered by much higher energy and feedstock costs than in other regions. "The chemicals industry is energy intensive and natural gas is five times more expensive in Europe than in the US. Electricity is four times more expensive," McNally said.

# The Power of Action

**MCNALLY:** 'How you reduce emissions is not important as long as it is effective and competitive.'

He cites this year's Antwerp Declaration for a European Industrial Deal, of which Ineos is a signatory: "We need an EU strategy with concrete actions that enable cross-border electrical power, grid expansion for hydrogen and other renewable and low-carbon molecules, and EU financial support for new projects exploiting low-carbon renewable energy opportunities."

The EU also needs to revisit nuclear energy, which could be "a crucial element of a pan-European, low-carbon energy strategy," McNally said.

The European Industry Summit, held in February, where the Antwerp Declaration was signed and presented to European Commission President Ursula von der Leyen, was "a first, which demonstrates the sense of urgency which now seems to be acknowledged," McNally said. He noted that in July — during the first 100 days of the new European Commission — von der Leyen committed to introducing a Clean Industrial Deal, which could potentially rival the US Inflation Reduction Act.

"The US has used the carrot not the stick, which provides half a trillion dollars of government incentives for technologies that improve the carbon footprint of the US," McNally said. "This encourages investment in cleaner technologies. In short, how you reduce emissions is not important as long as it is effective and competitive. Europe needs to explore a carrot versus stick strategy for encouraging investment."

However, time is running out for the European Commission to rethink its ongoing wave of environmental legislation, according to McNally. "The complexity and rigidity of current EU regulations and EU objectives, which often prevent timely implementation of projects, needs to be overhauled and streamlined — and time is not our friend here, this has to be a priority," he said. "Now that the new European Commission is installed, it is time to back up good words with strong actions."

Meanwhile, Project One is moving ahead after a delay caused by the suspension of the cracker's environmental permit following a campaign by environmentalists over the alleged impact of nitrogen emissions. "Since Ineos regained a permit for Project One in early January 2024, after it got annulled in July 2023, works on the construction site in Antwerp have been in full swing after a five-month standstill," McNally said. "At this stage, we have surpassed the mark of 1,300 people working simultaneously on our site in Antwerp. In the first half of this year the focus has been on underground and civil engineering works such as foundation works, concrete pouring, laying underground pipes, roads, substations and utilities."

One key piece of infrastructure has been erected since May — the ethane tank, which McNally calls "the logistics heart of Project One." At 197,000 cubic meters, it is the largest cryogenic tank in Europe, he said.

"After the summer, the site will go really vertical, when the shipped modules will come in, which have been built in multiple overseas yards," McNally said. "These works have not been impacted by the permit annulment in Antwerp." The modules include pipe racks, cracking furnaces and process units weighing up to 10,000 metric tons. "At our nearby Lillo site, we are getting everything ready for the reception and construction of these modules," he added. "The quay wall and the offloading platform have now been finalized."

Ineos still aims to go live with the plant at the end of 2026, McNally said. But, the permitting difficulties have made it "a very challenging journey" since Ineos announced the €4 billion Project One investment in January 2019 — the first new cracker to be built in Europe for 25 years — McNally said. "We have written a permit application totalling 5,176 pages to get to build Project One," he said. "When our permit was annulled, it took six months and another 832 pages to recover the permit, in the form of detailed environmental research to demonstrate that our negligible deposition of nitrogen does not have a significant impact on nature reserves. We are now five years later and naturally our permit and legal team is making every effort to ensure maximum legal certainty for the project."

In July 2024, the Flemish Minister of Environment withdrew the January decision to restore the original permit and issued a new environmental permit for Project One. The new permit also refers to Flanders' Nitrogen Decree, providing for limits on nitrogen emissions, which came into force at the end of February. "This way legal certainty is increased," McNally said. "For megaprojects like ours it is extremely difficult to be exposed to this kind of legal uncertainty."

Ineos' experience with permitting in Belgium, in the context of the EU's regulatory burden, has likely made Europe even less attractive as an investment location, McNally said. "It is telling that since we made our announcement in early 2019 to build an ethane cracker in Antwerp, no other new investment of that order has been announced in Europe," he said.

Of the 24 new world-scale ethylene assets being constructed globally today, only one is in Europe — Ineos Project One, McNally noted. "European assets are typically 30-50 years old; we need to build new and replace old to avoid being locked into old and uneconomical technology," he said. "The rest of the world has been doing just this. We need incentives for investment matching the rest of the world. We need more, not fewer, projects such as Project One."