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QatarEnergy, CPChem Begin Construction On Ras Laffan Petrochemicals Complex

Doha—

Ras Laffan Petrochemicals, a joint venture of QatarEnergy and Chevron Phillips Chemical Co. (CPChem), has started construction on a \$6-billion integrated polymers complex in Qatar (PCN, 16 October 2023, p 1).

The project, located in Ras Laffan Industrial City, will include an ethane cracker with 2.08-million t/y of ethylene capacity, making it the “largest” ethane cracker in the Middle East and “one of the largest” in the world, the companies noted.

The complex will also include two high-density polyethylene derivative units, utilizing CPChem’s MarTech loop slurry process, with a total capacity of 1.68-million t/y. Start-up is expected in late 2026.

“This project advances CPChem’s long-held strategy to expand its operations in regions where feedstock is reliable and abundant and will help meet the global demand for polyethylene products,” said CPChem President and Chief Executive Bruce Chinn.

SABIC & Fujian Energy Start Building New JV Petchem Complex in China

Beijing—

SABIC and Fujian Energy and Petrochemical Group Co. have started construction on their joint venture SABIC Fujian Petrochemicals Complex (Sino-Saudi Gulei Ethylene Complex Project) located in Gulei Industrial Park, Fujian Province, China (PCN, 29 Jan 2024, p 1).

The estimated \$6.4-billion complex will include a mixed feed steam cracker with up to 1.8-million t/y of ethylene capacity, and downstream facilities for the production of polyethylene, polypropylene, ethylene glycol, and polycarbonate, among others. Commissioning and start-up is expected from the second half of 2026.

SABIC Fujian Petrochemicals Co. is owned 51% by SABIC Industrial Investment Co. and 49% by Fujian Fuhua Gulei Petrochemical Co. (holding by Fujian Energy).

In addition to the start of construction, SABIC said engineering, procurement and construction contracts and a project financing loan agreement for the complex were signed.

Celanese Closes PA66, HPN Units At Uentrop Facility in Germany

Berlin—

Celanese, in its full year 2023 and fourth quarter earnings, said it completed the planned closure of its polyamide 66 (PA66) and certain high-performance nylon (HPN) polymerization units at its site in Uentrop, Germany (PCN, 6 Nov 2023, p 3).

“Polymerization costs at Uentrop were the highest in the Celanese global nylon network due to energy and raw material costs in the region,” the company noted.

The closure is expected to help optimize Celanese’s production costs across its global network.

Bayegan Chooses Lummus’ Technology For PDH and PP Facility in Turkiye

Ankara—

Lummus Technology announced that Bayegan will license its technologies for a new integrated propane dehydrogenation (PDH) and polypropylene (PP) complex in the Hatay Province of Turkiye.

The project, for which a cost and schedule were not given, will include a 450,000-t/y PDH unit based on Lummus’ Catofin technology and a 450,000-t/y PP plant that will utilize Lummus’ Novolen technology.

Lummus’ scope includes the technology license for the PDH and PP technologies, basic design engineering, advisory services and training.

“We are excited to partner with Bayegan on this critical investment, which will help Turkiye meet the market demand for high-quality polymers and reduce the country’s dependence on polymer imports,” said Romain Lemoine, chief business officer of polymers and petrochemicals at Lummus.

“Integrating our Catofin and Novolen technologies will provide reliability and robustness, lower capital and operating expenses, environmental performance, flexibility and broad product capability and simple processes.”

Balrampur Chini Entering PLA Market With New Industrial Bio-Plastic Plant

New Delhi—

Indian sugar company Balrampur Chini Mills Ltd. (BCML) said it is set to venture into polylactic acid (PLA) manufacturing with the establishment of India’s “first-ever” industrial bio-plastic facility.

The 75,000-t/y PLA plant, estimated to cost Rs 2,000 crores, will use sugar as a raw material and will be located on a greenfield site, adjacent to an existing BCML sugar plant. The project will be built in phases over a period of two and a half years.

Advanced Plans IPA Unit in Jubail; Awards EPC Contracts to SGC

Jubail—

Advanced Petrochemical Co. announced its decision to build a new isopropanol (IPA) plant in Jubail Industrial City, Kingdom of Saudi Arabia.

The 70,000-t/y IPA facility, expected to begin commercial operations by the fourth quarter of 2026, will be based on technology provided by Thyssenkrupp Uhde Engineering Services GmbH.

The project “represents a major step towards achieving product diversification for Advanced in particular, and enhancing the diversity of specialized chemicals in the petrochemical industry in the Kingdom,” Advanced noted.

SGC eTec Co. and SGC Arabia have been awarded the engineering, procurement and construction contracts (EPC) for the project, valued at a total of around \$191-million.

Lummus Wins Heater Supply Contract For Satorp's Amiral Petchem Complex

Jubail—Hyundai Engineering & Construction has awarded a heater supply contract to Lummus Technology for Satorp's Amiral petrochemical complex being built in Saudi Arabia (PCN, 3 July 2023, p 1).

The \$11-billion complex, operated by Satorp, a joint venture of Saudi Aramco and TotalEnergies, will be integrated with the existing Satorp refinery and will comprise a 1.65-million-t/y mixed feed ethylene cracker and two 500,000-t/y state-of-the-art polyethylene units. Commercial operation is planned for 2027.

Under the contract, Lummus will supply eight proprietary short residence time ethylene cracking heaters. It has already licensed multiple technologies at the complex including its ethylene, refinery off-gas recovery and treating, pygas hydrotreating, methyl tertiary butyl ether, isobutylene, butene and butadiene extraction technologies.

According to TotalEnergies' website, the project aims to convert feedstock directly produced by the Satorp refinery, such as its off-gases and naphtha, as well as ethane and light naphtha supplied by Aramco.

Ultimately, the complex will also supply a park in the Jubail industrial area, where specialty chemical plants will be located.

PerPetum Energy Building Solar Farm To Supply Ineos Inovyn's Jemeppe Site

Brussels—PerPetum Energy, on behalf of Green4Power, is nearing completion of a new 60-megawatt solar farm that will supply renewable energy to Ineos Inovyn's polyvinyl chloride (PVC) production site in Jemeppe, Belgium.

PerPetum is responsible for construction, commissioning and maintenance of the solar farm, which is owned and financed by Green4Power. The solar farm is expected to be online this July.

Under a power purchase agreement, Ineos Inovyn will acquire all the green electricity produced from Jemeppe over the next 15 years.

"Jemeppe is one of the largest PVC production facilities in Europe, and our new solar farm is another step in supporting Europe's green transition," said Ineos Inovyn Chief Executive Geir Tuft.

"For the PVC industry to grow it is critical we have support and access to competitive renewable energy."

Eni Awards EPC Contract to Maire's KT For New Hydrogen Plant at Livorno

Milan—Maire announced that its KT - Kinetics Technology subsidiary has received a €123-million engineering, procurement and construction (EPC) contract by Eni to build a new hydrogen production unit at Eni's Livorno refinery in Italy (PCN, 5 Feb 2024, p 3).

The plant, scheduled for completion in 2026, will process natural gas and biogenic feedstocks to create hydrogen for the production of biofuels. It is designed so that a residual carbon dioxide capture unit can be implemented at a later stage.

Eni recently announced it was converting the Livorno refinery into what will be the country's third biorefinery

LYB Buys Mechanical Recycling Assets From Global Recycling Firm PreZero

Houston—LyondellBasell (LYB) has acquired mechanical recycling assets and properties containing rigid plastics recycling processing lines from PreZero, a global recycler and waste management service provider.

The transaction, for which a value was not disclosed, includes leasing the processing facility in Jurupa Valley, Calif., which has a production capacity of around 50-million lbs/yr for recycled materials.

LYB plans to operate the mechanical recycling plant in California to manufacture post-consumer recycled resins using plastic waste feedstock. The recycled polymers will be sold under its CirculenRecover brand. Operations are expected to begin next year.

"This acquisition further strengthens our U.S. presence and will deliver value for our customers and plastic recycling rates in the West Coast," said Yvonne van der Laan, executive vice president, circular and low carbon solutions at LYB.

"We will build upon our existing experience in plastic recycling in Europe and deliver a state-of-the-art mechanical recycling facility to meet growing demand for recycled products in the U.S."

Rohm Commissions New PMMA Plant

Berlin—Rohm said it has officially commissioned a new polymethyl methacrylate (PMMA) unit at its Worms site in Germany (PCN, 8 May 2023, p 4).

The project, for which a capacity was not given, employs a newer, highly-efficient production process that will see a significant reduction in the carbon footprint of the Plexiglass molding compounds production, the company noted.

"The strategic expansion of our global PMMA capacities is an important step on our way to becoming the leading methacrylate Verbund," said Rohm Chief Operating Officer Hans-Peter Hauck.

"Following the expansion of the plant's capacity in Shanghai last year, we are now further consolidating our market leadership in Europe with this substantial increase in production capacity at Worms. This is yet another example of how we are a reliable partner within easy reach of our customers."

People on the Move

Olin Corp.—*Kenneth Lane*, most recently executive vice president of Global Olefins & Polyolefins (O&P) at LyondellBasell, has been appointed president and chief executive of Olin, effective 18 Mar. 2024. He will succeed *Scott Sutton*.

William Weideman has become chairman, effective 16 Feb. 2024.

LyondellBasell—*Kimberly (Kim) Foley* has been named executive vice president, Global O&P, Refining and Supply Chain. She has been executive vice president of Global Intermediates & Derivatives (I&D) since October 2022.

Aaron Ledet, senior vice president of O&P Americas since October 2022, has been appointed executive vice president, I&D. Both appointments are effective 1 Mar. 2024, following the departure of Kenneth Lane.

Methanex Delays Commercial Production Of Methanol Unit Citing Complications

Geismar—Methanex, which recently began the start-up process for its new Geismar 3 (G3) methanol facility in Geismar, La., announced that commercial production has been delayed due to complications that occurred during the late stages of the initial start-up process (PCN, 5 Feb 2024, p 1).

The G3 methanol plant has a production capacity of 1.8-million t/y. It is located adjacent to the company's Geismar 1 and Geismar 2 methanol facilities.

The problem occurred in the autothermal reformer (ATR), which required it to be cooled and brought to a safe state where teams could conduct detailed inspections.

Initial inspections determined there is significant damage to a large number of supporting refractory bricks in the vessel that will require replacement.

The refractory bricks will require time to procure and, as a result, management believes commercial production could be delayed up to the end of the third quarter of 2024.

Equinor Signs Agreement to Supply LNG To Deepak's New Fertilizer, PC Facility

Mumbai—Equinor and Deepak Fertilisers have entered into an agreement for the supply of liquefied natural gas (LNG) to Deepak to be used mainly as feedstock in its newly commissioned fertilizers and petrochemicals manufacturing facility in India (PCN, 14 Aug 2023, p 3).

Under the agreement, Equinor will supply Deepak with around 650,000 t/y of LNG for 15 years starting in 2026.

Performance Chemiserve Ltd., a step-down subsidiary of Deepak Fertilisers and Petrochemicals Corp. Ltd. recently began commercial production at its new 1,500-t/d greenfield ammonia facility in Taloja, India.

"Equinor's growing global LNG portfolio is based on LNG from the Equinor operated LNG plant in Hammerfest, Norway, and LNG supply sourced mainly from the U.S.," Equinor noted.

Approtium Selects Topsoe Technology For NH3 Cracking Plant in S. Korea

Seoul—Topsoe has signed an engineering agreement with Approtium, an industrial hydrogen supplier in South Korea, to supply its ammonia cracking technology for Approtium's planned hydrogen plant in Ulsan, South Korea.

The 75,000-t/y low-carbon hydrogen facility will utilize Topsoe's H2Retake technology, which converts low-carbon ammonia back into hydrogen. Production is expected to begin in 2027.

"We are excited to embark on this project with Approtium, showcasing not only the potential of our innovative technology, but also the strengths of ammonia as a key energy carrier," noted Topsoe Chief Commercial Officer Elena Scaltritti.

"Greenhouse gas emissions need to be reduced drastically on a global scale and through this project, Topsoe delivers a strong contribution to support South Korea's decarbonization targets."

PCG Signs MoU with Sarawak Petchem For Low-Carbon NH3 and Urea Plant

Bintulu—Petronas Chemicals Group (PCG) has signed a memorandum of understanding (MoU) with Sarawak Petchem Sdn. to jointly study the feasibility of developing a low-carbon ammonia and urea facility in Bintulu, Sarawak, Malaysia.

Under the terms of the MoU, the two companies will conduct a comprehensive study on the technical and commercial aspects, among other considerations, in meeting the rising demand for cleaner energy solutions by tapping into the renewable energy potential within the region, PCG noted.

"This collaboration allows us to capitalize on synergies, optimize costs, and share the risks, thereby maximizing value for Sarawak and Malaysia," said Sarawak Petchem Managing Director and Chief Executive Mohammad Haji Ibrahim. "This further exemplifies our prudent business practices and collaborative mindset.

"This joint development initiative serves as a catalyst for economic development in Sarawak, driving job creation and fostering sustainable growth in line with the objectives outlined in the Sarawak Post COVID-19 Development Strategy 2030."

Covestro Inks Long-Term PPA with RWE For Renewable Power to Antwerp Site

Antwerp—Covestro and RWE have entered into a long-term power purchase agreement (PPA) for the supply of renewable power to Covestro's production site in Antwerp, Belgium.

Under the agreement, which runs from 2026 to 2030, RWE will supply power from offshore wind turbines in the North Sea.

The new PPA with RWE replaces a current agreement, which expires at the end of 2025, and will enable Covestro to increase the share of renewable energy from the current 45% to 60% of the site's current power needs, saving 103,000 tons of carbon dioxide.

Covestro produces high-performance plastic polycarbonate at the Antwerp site, and is currently expanding production there with the construction of a new world-scale aniline plant (PCN, 17 Oct 2022, p 1).

Delta Lets Award to Thyssenkrupp Uhde For Ammonia Unit Revamp in Egypt

Cairo—Delta Company for Fertilizer and Chemical Industries has awarded a contract to Thyssenkrupp Uhde to revamp an existing ammonia facility in Dakahlia, Talkha, Egypt.

The project will enable the ammonia plant to be recommissioned after a three-year shutdown, and will increase ammonia capacity to 1,400 t/d from 1,275 t/d currently. A schedule was not given.

Under the contract, Thyssenkrupp Uhde will be responsible for the front-end engineering design of the facility as well as the ammonia offsite and central utility units. Thyssenkrupp Uhde will also supply its state-of-the-art technology for ammonia and urea production.

The revamped ammonia plant will be "ready for blue ammonia production thanks to the Uhde ammonia technology, Thyssenkrupp Uhde noted.

Itero Awarded Funding from EU's JTF For Chemical Recycling Demo Plant

London— Chemical recycling technology provider Itero Technologies has been awarded €5-million by the European Union's (EU) Just Transition Fund (JTF) to support Itero's chemical recycling demonstration unit in the Netherlands.

The plant, located at Brightlands Chemelot Campus in Sittard-Geleen, will process 27,000 t/y of waste plastics using Itero's patented chemical recycling technology. The mixed plastic waste will be converted into high-value circular chemical products used to produce new plastics.

JTF's primary goal is to enable European regions that are dependent on fossil-based income and employment to transition to a low-carbon energy future, considering the social and economic impacts, as well as environmental, the parties noted.

Itero has previously been awarded a grant from Rijksdienst voor Ondernemend Nederland, the Netherlands Enterprise Agency, and a €6-million investment, led by Infinity Recycling's Circular Plastics Fund for the demonstration plant.

SI to Sell Jinshan Manufacturing Facility; Dingjide to Co-Produce Certain Products

Beijing— SI Group said it will cease manufacturing operations at its Jinshan, China, manufacturing plant and list the property and associated legal entity for sale, as a result of a supply agreement with Liaoning Dingjide Petrochemical Co. (Dingjide).

Under the long-term agreement with Dingjide, a Chinese manufacturer of additives and specialties, Dingjide will manufacture certain SI Group products in China as a co-producer. This will allow SI to continue to offer these products to customers in China and also distribute and sell the products outside of China.

SI will relocate its research and development facilities in Jinshan and will continue to operate its remaining offices and manufacturing facility in China.

"We're very pleased to enter into a long-term strategic agreement with SI Group," said Zaiming Zhang, chairman of the board of directors of Dingjide.

"By partnering with SI Group, an international leader in additives, Dingjide will leverage its world-class quality and production capabilities to support antioxidant growth in the global marketplace."

BASF Plans More Cost Savings Measures For Its Ludwigshafen Site in Germany

Berlin— BASF said it is planning an additional cost savings program at its Ludwigshafen, Germany, site, that is expected to reduce costs by a further €1-billion by the end of 2026, and lead to further job cuts.

The program will generate cost savings in both production and non-production areas. Fixed costs will be lowered by driving efficiency in company structures and adapting production capacities to market needs, BASF noted.

In addition, the company aims to significantly cut variable costs by redesigning processes. The details of the cost savings program are currently being worked out.

"The board team will remain strongly committed to the Ludwigshafen site," said Dr. Martin Brudermuller, chairman of the executive board of BASF. "We want to develop Ludwigshafen into the leading low-CO₂-emission chemical production site with high profitability and sustainability.

"We will focus Ludwigshafen on supplying the European market to remain the partner of choice for our customers. To achieve this, it is essential that we implement the program consistently and as quickly as possible.

"At the same time, we are systematically driving forward our business in those regions of the world that are growing more dynamically and offer attractive conditions for investments."

BASF confirmed in its third quarter reporting that total annual cost savings from its previously announced measures in 2022 and 2023 are expected to reach €1.1-billion by the end of 2026 (PCN, 27 Feb 2023, p 4).

NextChem Buys HyDEP, Dragoni Stakes To Expand Capabilities in Green H₂


Milan— Maire said that NextChem, through its subsidiary NextChem Tech, has signed a binding agreement to acquire 80% of HyDEP Srl and 100% of Dragoni Group to further strengthen NextChem's capabilities in green hydrogen.

The transaction, valued at a total of around €3.6-million, is expected to close in the second quarter of 2024, subject to certain conditions precedent.

"Both Italian based, HyDEP and Dragoni Group are well-recognized engineering services companies in the mechanical and electrochemical sectors, with strong process design expertise and a track record of over 20 years in green hydrogen, including patents," Maire noted.

NextChem will leverage HyDEP and Dragoni's competences to reinforce its engineering solutions for projects based on green hydrogen, from process and mechanical design to validation, prototyping and certification.

The agreement provides an earn-out clause based on the achievement of technical objectives within 30 months from closing, as well as put and call options on the remaining 20% stake in HyDEP, exercisable within 36 months from closing.



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