
ChemOne Group moving forward with its sustainability and low-carbon focused energy and petrochemical development—MD

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ChemOne, a Singapore-headquartered petrochemical project owner and developer, is developing PEC in Johor, Malaysia for SGD 6bn (USD 4.5bn) with other partners whom the MD declined to name due to confidentiality agreements. These will be announced by 2H23 upon financial closing of the project.

ChemOne and its strategic equity partners will have a total equity shareholding of USD1.15bn in the project and mezzanine equity of around USD 300mn, while around USD2.95bn to be financed through debt. It will operate and manage the 150,000 barrel-per-day condensate processing plant, the engineering works which have now commenced with the total project execution targeted to be completed by early 2027.

ChemOne, which has operations in Malaysia, Thailand, and Indonesia, has been in the petrochem business for more than 40 years. In 2020, it decided to diversify its business to produce low carbon footprint chemicals “and select the best technology, best feedstock, with the least environmental impact,” Samtani noted.

It is also receptive to investor approaches for its new businesses in the natural resources (specifically forestry/ plantation) and green energy spaces, the MD said. He estimated each project for these two ventures would likely be at least USD 1bn.

Green initiatives

In a bid to become a more environmentally friendly business by reusing industrial by-products, ChemOne plans to process the output from PEC, specifically hydrogen, for downstream renewable fuels in Southeast Asia. Samtani said this hydrogen will be used to produce hydrogenated vegetable oil (HVO), which in turn can be processed further into sustainable energy fuel (SAF), which is a blend of traditional and renewable jet fuel.

Aside from using the hydrogen by-product from PEC, ChemOne can also recycle used cooking oil as feedstock for HVO and turn it into SAF, the MD explained.

It plans to have a plant in China that can process HVO using used cooking oil. Samtani said the country is a huge source of this waste product.

Another project in the works is the production of non-edible oils (NEO). Under ChemOne's forestry business, it has about 160,000 hectares of land in West Kalimantan in Indonesia that can be used to produce NEO, which in turn will serve as feedstock for its green energy projects, Samtani said. NEO will bridge the limited supply of used cooking oil and other waste oils that can be processed into fuels for the transportation industry.

ChemOne's forestry business is integrated with environmentally friendly fossil fuel-free production of kraft pulp, biomaterials, and an excess of green electricity. Renewable wood can be converted into biomaterials for paper, textile, second-generation biofuels, bioplastics, biodegradable resins and glues, biopolymers, and carbon fibres, with a surplus of green energy, according to its website.

PEC

According to Samtani, the debt component of the PEC project launched into syndication in 2022 and its financial investment decision (FID) is expected to conclude within this year. This is in accordance with the financing terms and schedule agreed with leading global export credit agencies (ECAs), with export guarantee facilities close to USD 3bn to be available to support the project.

PEC is expected to receive its long-term feedstock supplies from major international energy majors, while leading European, American, Japanese, Chinese and Thai petrochemical players have committed to off-take the products, which Samtani declined to disclose at this point due to confidentiality agreements. These will be announced later this year.

Its petrochem products are: aromatics (paraxylene, benzene), phthalic anhydride, oxo alcohols (2-EH, IBA, NBA and others), specialty resins (alkyd, amino, acrylic resins, unsaturated polyester resins, synthetic latex resins) plasticizers (DOP, DINP), and acrylamide. These products are used in infrastructure (flexible hoses, wires and cables, coating and concrete adhesives), consumer products (synthetic leather, footwear, home appliances, medical devices, pulp and paper), transportation (automobile interiors, car seat leather, marine and leisure craft), and environmental and industrial industries (waste water treatment and enhanced oil recovery).

Its manufacturing plants are in Bangplee in Thailand and Banten, Tangerang and Gresik in Java island in Indonesia.

By Likha Cuevas in Manila