

## **NEXTCHEM (MAIRE) AWARDED THE LICENSING AND PROCESS DESIGN PACKAGE FOR A SUSTAINABLE AVIATION FUEL (SAF) PROJECT BASED ON ITS PROPRIETARY NX PTU™ AND NX SAF™ BIO TECHNOLOGIES IN INDONESIA**

- **The plant is expected to produce 60,000 tonnes per year of SAF entirely from a domestic feedstock, accounting for approximately 5% of the jet fuel demand of the Jakarta international airport**
- **NEXTCHEM will offer an integrated end-to-end solution combining its NX PTU™ and NX SAF™ BIO proprietary technologies**

*Milan, 19 December 2024* - **MAIRE (MAIRE.MI)** announces that **NEXTCHEM** (Sustainable Technology Solutions) has been awarded the licensing and the Process Design Package for a Sustainable Aviation Fuel (“SAF”) plant located in Sei Mangkei, North Sumatra Province, Indonesia. This will be the first plant that will produce SAF with high efficiency, mainly from palm oil mill effluent (POME), enabling the full valorization of this feedstock in the country, including certified used cooking oil, and demonstrating the economic sustainability of small-scale plants.

This award follows the successful completion of the feasibility study announced in August this year for the joint development of a SAF plant optimized for local feedstock availability. The positive outcome demonstrated the viability of a SAF production facility which is designed for domestic, locally sourced feedstock and located to fit feedstock logistics in Indonesia. The 60,000 tonnes per year SAF production capacity could potentially account for approximately 5% of the fuel demand of the Soekarno-Hatta International Airport in Jakarta, the largest airport in Indonesia, confirming the fit of the domestic scale concept.

NEXTCHEM offers a fully integrated package which combines both its NX PTU™<sup>1</sup> technology, the hydrogen production unit and its NX SAF™ Bio technology, an hydrotreated esters and fatty acids (HEFA)<sup>2</sup> proprietary process, for an efficient SAF production. This process uses 2<sup>nd</sup> generation vegetable oils and residual fats, which are pre-treated through the NX PTU™ technology. The purified feedstock is then refined into SAF using hydrogen through the NX SAF™ BIO technology, which allows to produce an ultra-low carbon SAF which is able to reduce aviation emissions by up to 95% compared with the use of fossil fuels<sup>3</sup>. The high level of standardization, coupled with a modular and compact design of the technology, allows a reduced project execution and makes it ideal for small-scale plants in any geography.

**Alessandro Bernini, CEO of MAIRE**, commented: “Decarbonising high-impact sectors such as aviation requires not only technical expertise, but the courage to execute new avenues. This agreement demonstrates that MAIRE has the competences and determination to deploy innovative and integrated technological solutions that can be adapted to different contexts and needs.”

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<sup>1</sup> NX PTU™ is a proprietary pretreatment process for second generation oleaginous feedstocks.

<sup>2</sup> The Hydrotreated Esters and Fatty Acids (HEFA) refines vegetable oils, waste oils, or fats into SAF through a process that uses hydrogen (hydrogenation). In the first step of the HEFA process, the oxygen is removed by hydrodeoxygenation.

<sup>3</sup> Based on the results of a Life Cycle Assessment analysis.

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**MAIRE S.p.A.** is a leading technology and engineering group focused on advancing the Energy Transition. We provide Integrated E&C Solutions for the downstream market and Sustainable Technology Solutions, the latter through three business lines: Sustainable Fertilizers, Low-Carbon Energy Vectors, and Circular Solutions. With operations across 45 countries, MAIRE employs over 9,300 people, supported by a global network of 20,000 project partners. MAIRE is listed on the Milan Stock Exchange (ticker "**MAIRE**"). For further information: [www.groupmaire.com](http://www.groupmaire.com).

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