Disappointingly slow growth in SAF production

2024/12/13 15:24 στην κατηγορία INTERNATIONAL

The International Air Transport Association (IATA) released new estimates for Sustainable Aviation Fuel (SAF) production showing that:

- In 2024, SAF production volumes reached 1 million tonnes (1.3 billion liters), double the 0.5 million tonnes (600 million liters) produced in 2023. SAF accounted for 0.3% of global jet fuel production and 11% of global renewable fuel.

- This is significantly below previous estimates that projected SAF production in 2024 at 1.5 million tonnes (1.9 billion liters), as key SAF production facilities in the US have pushed back their production ramp up to the first half of 2025.

- In 2025, SAF production is expected to reach 2.1 million tonnes (2.7 billion liters) or 0.7% of total jet fuel production and 13% of global renewable fuel capacity.

“SAF volumes are increasing, but disappointingly slowly. Governments are sending mixed signals to oil companies which continue to receive subsidies for their exploration and production of fossil oil and gas. And investors in new generation fuel producers seem to be waiting for guarantees of easy money before going full throttle. With airlines, the core of the value chain, earning just a 3.6% net margin, profitability expectations for SAF investors need to be slow and steady, not fast and furious. But make no mistake that airlines are eager to buy SAF and there is money to be made by investors and companies who see the long-term future of decarbonization. Governments can accelerate progress by winding down fossil fuel production subsidies and replacing them with strategic production incentives and clear policies supporting a future built on renewable energies, including SAF,” said Willie Walsh, IATA’s Director General.

Aviation is part of the global energy transition

“The airline industry’s decarbonization must be seen as part of the global energy transition, not compartmentalized as a transport issue. That’s because solving the energy transition challenge for aviation will also benefit the wider economy, as renewable fuel refineries will produce a broad range of fuels used by other industries, and only a minor share will be SAF, used by airlines. We need the whole world to produce as much renewable energy as possible for everybody. Airlines simply want to

access their fair share of that output," said Marie Owens Thomsen, IATA's Senior Vice President Sustainability and Chief Economist.

To reach net zero CO2 emissions by 2050, IATA analysis shows that between 3,000 to over 6,500 new renewable fuel plants will be needed. These will also produce renewable diesel and other fuels for other industries. The annual average capex needed to build the new facilities over the 30-year period is about $128 billion per year, in a best-case scenario. Importantly, this amount is significantly less than the estimated total sum of investments in the solar and wind energy markets at $280 billion per annum between 2004 and 2022.

"Governments must quickly deliver concrete policy incentives to rapidly accelerate renewable energy production. There is already a model to follow with the transition to wind and solar power. The good news is that the energy transition, which includes SAF, will need less than half the annual investments that realizing wind and solar production at scale required. And a good portion of the needed funding could be realized by redirecting a portion of the retrograde subsidies that governments give to the fossil fuel industry," said Walsh.

Short Term Measures

Progress on expanding SAF production and use could be accelerated in three critical ways:

- **Increase co-processing:** Existing refineries can be used to co-process up to 5% of approved renewable feedstocks alongside the crude oil streams. This solution can be implemented quickly and requires minimal material investments. It should urgently be expanded by allowing a greater amount of renewable feedstock to be co-processed. By 2050, co-processing could save $347 billion in capex as more than 260 new renewable fuel plants would not need to be built.

- **Diversify SAF production:** There are 11 certified pathways to make SAF, but the HEFA method (hydrotreated esters fatty acids (used cooking oil, animal fats etc.)) accounts for around 80% of production in the next five years. SAF volumes could be boosted by increasing investments to scale up production through the other certified pathways, in particular Alcohol-to-Jet (AtJ) and Fischer-Tropsch (FT), which use biological and agricultural wastes and residue.

- **Create a global SAF accounting framework:** It is essential to have a registry that allows airlines to benefit from the environmental attributes of their SAF purchases and to be able to claim these against their obligations in a transparent manner that prevents double counting. Such a registry is necessary for achieving a global SAF market where all airlines can buy SAF, and all SAF producers can sell their fuel to

airlines.

Passenger Support

A recent IATA survey revealed significant public support for SAF. Some 86% of travelers agreed that governments should provide production incentives for airlines to be able to access SAF. In addition, 86% agreed that it should be a priority for oil companies to supply SAF to airlines.

(IATA)