



POTENTIAL FOR €2.55 BILLION SUSTAINABLE AVIATION FUEL INDUSTRY IN IRELAND BY 2050

News / Airlines



Ireland has the potential to develop a sustainable aviation fuel industry generating revenue of €2.55 billion by 2050 and providing up to 1,000 high-skilled jobs. These are the findings of a feasibility study into the production of SAF in Ireland produced by SkyNRG and SFS Ireland, in a partnership supported by Avolon, Boeing and ORIX Aviation.

The [study](#) - *Ireland's Sustainable Aviation Fuel Opportunity* - was launched by the Minister for Enterprise, Trade and Employment, Simon Coveney TD, and looks at the key role SAF will play in helping the aviation industry achieve its net zero goal by 2050. IATA estimates that SAF, which can be used to replace traditional jet fuel, will deliver over 60% of the contribution needed to reduce aviation emissions to reach net zero by 2050. The European Union's ReFuelEU initiative obligates fuel suppliers to blend SAF into the fuel available at all EU airports, rising from 6% SAF by 2030, to 70% by 2050.

To meet EU mandated SAF volumes alone, Ireland will require approximately 10 SAF plants of 80 kilo tonnes production capacity each. This would create an Irish SAF sector generating revenue of €2.55 billion per annum and could provide up to 1,000 high-skilled jobs in direct and indirect

employment. Further export opportunities could significantly increase these numbers.

The research finds that the biggest opportunity for Ireland lies in Power to Liquid production of eSAF, a synthetic fuel produced by combining green hydrogen (extracted through electrolysis from water using renewable energy) with biogenic CO₂. SAF derived from bio-based intermediates like renewable natural gas has potential to scale up more rapidly to fulfill the advanced biofuels portion of the ReFuelEU mandate.

Significant progress is required for Ireland to be able to develop eSAF at scale, particularly to ensure there is enough excess renewable power available to produce hydrogen in the required quantities. The increased levels of offshore wind power generation that Government initiatives are targeting by 2030 will put the country in a stronger position to develop a domestic SAF industry.

Key policy initiatives the research recommends to be prioritised by the Government and other stakeholders include:

- **Targets:** Include sustainable aviation in climate action plans to strengthen Ireland's position as a renewable fuel aviation hub.
- **Incentivise:** Incentivising mechanisms are crucial for a viable PtL business case to stimulate the development of both SAF and hydrogen: capital allowances, tax credits, guaranteed minimum pricing, investment incentives (e.g. via EII or SCI schemes).
- **Research and Development:** Funding and promotion of SAF technologies leveraging Ireland's third-level institutions and Government entities such as Enterprise Ireland, Science Foundation Ireland and SEAI.
- **Reforming planning process:** Implement a comprehensive and systematic approach in the planning process for SAF production plants, taking into account the potential for future energy parks and circular economy development in Ireland.
- **Storage and transport:** Invest in hydrogen storage and transport, and solving the electricity congestion issues through more flexible use / development of the grid.
- **Collaboration:** Collaboration between public and private sector is critical to mobilise the required investment. Cross-departmental Government relationships are also essential (DECC, DOT, DAFM) to ensure comprehensive policy framework.

Minister for Enterprise, Trade and Employment, Simon Coveney, TD said: "The Government is committed to supporting EU and international action to reduce aviation emissions. The European Green Deal has set ambitious targets for reducing net emissions by at least 55 per cent by 2030, when compared to 1990 levels, and to be the first climate neutral continent by 2050. The agreement of the global long-term aspirational goal (LTAG) for international aviation at the International Civil Aviation Organisation (ICAO), which includes a collective global goal of net-zero carbon emissions by 2050 further demonstrates the level of ambition of States and Industry alike. We welcome the proactive approach from the aviation sector to progress its own net zero commitments. This research presented today shows that there are clear future economic benefits from the green economy, which can create new jobs and exciting new business ventures. We look forward to engaging further with industry to explore Ireland's Sustainable Aviation Fuel (SAF) potential."

Andy Cronin, CEO, Avolon, commented: “Our support for this partnership reflects our ambition to be at the forefront of sustainable innovation that will reshape the future of aviation. Large-scale deployment of SAF and the transition of the global fleet to new technology aircraft are the two biggest near-term drivers that can progress the sector’s net zero by 2050 goal. It is going to require large levels of investment and close collaboration across many stakeholders, and we value the Minister’s engagement to explore Ireland’s sustainable aviation fuel opportunity.”

Sheila Remes, Vice President, Environmental Engagement and Business Development, Boeing, stated: “Significant progress is required for Ireland to be able to develop eSAF at scale, particularly to ensure renewable power is available in the scale required production of hydrogen in the required quantities. The increased levels of offshore wind power generation that Government initiatives are targeting by 2030 will put the country in a much stronger position to develop a domestic SAF industry.”

25 OCTOBER 2023

ARTICLE LINK:

<https://to.50skyshades.com/news/airlines/potential-for-255-billion-sustainable-aviation-fuel-industry-in-ireland-by-2050>