

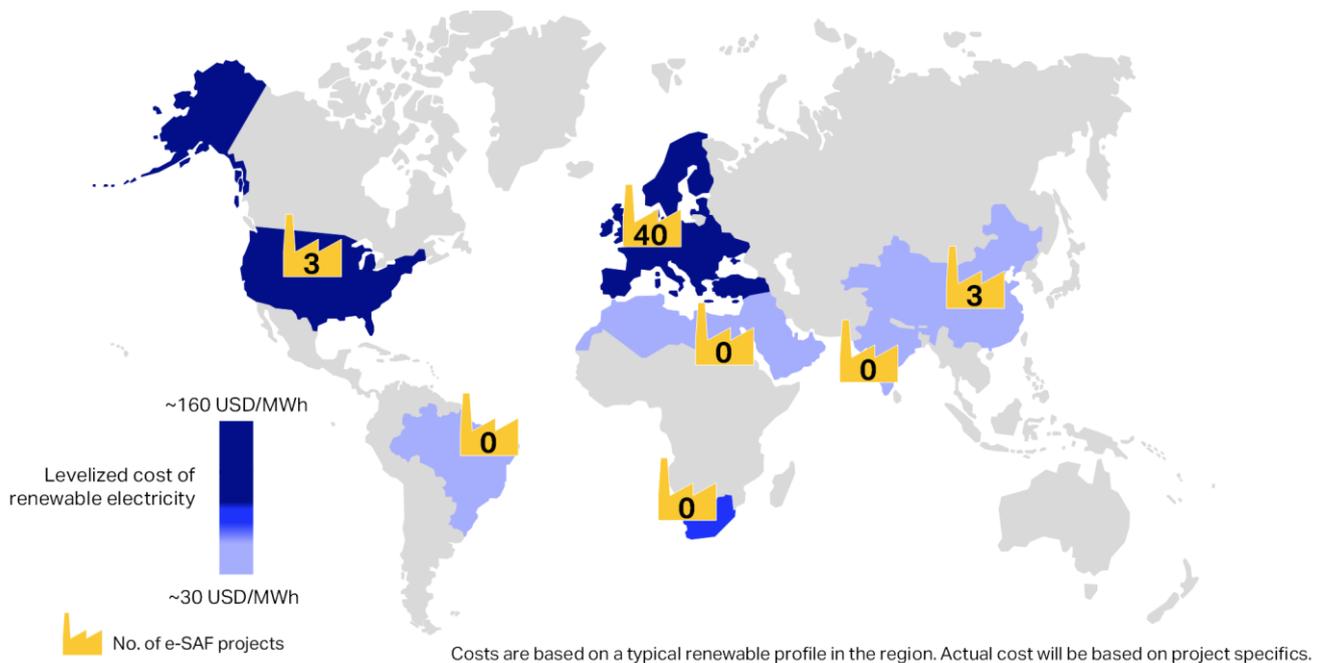


## Chart of the Week

20 February 2026

### Are e-SAF projects emerging in cost-competitive locations?

Estimated cost of renewable electricity production, and number of e-SAF projects



Source: IATA Sustainability and Economics, Worley Consulting

- e-SAF is expected to account for over 40% of the total SAF needs by 2050. Yet, no commercial-scale e-SAF facilities are currently in operation, and the risk of insufficient supply, particularly by 2030, is increasing. Progress is hindered by high capital investments and production costs, which can be up to 12 times higher than conventional aviation fuel (CAF). Costs are driven by feedstocks such as CO<sub>2</sub> and, in particular, renewable electricity, which is needed in large volumes for green hydrogen production. This occurs amid rising electricity demand from multiple sectors, including data centers, driven by the growth in AI.
- From a production cost perspective, e-SAF projects should be developed in regions where renewable electricity is more abundant and affordable, as electricity alone can account for up to two-thirds of total production costs. Instead, 40 of the 46 announced commercial-scale e-SAF facilities are located in Europe, where the average levelized cost of renewable electricity is among the highest globally. The Nordics have the potential to be a rare exception as a relatively low-cost electricity market in Europe. In the regions and countries with significant untapped potential and lower renewable electricity costs, such as North Africa and the Middle East, and India and Brazil, there is a glaring dearth of announced projects.
- e-SAF project announcements seem to be driven primarily by the mandates in the EU and the UK rather than by project economics. As a result, no commercial-scale e-SAF projects in Europe have progressed to a final investment decision (FID), and globally, only one project has reached FID to date and is under construction in the US. Scaling affordable e-SAF supply should focus on enabling countries with the highest potential to enter the market. Developed economies should also boost their renewable energy production to lower their costs and make their planned production economically viable.

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[economics@iata.org](mailto:economics@iata.org)