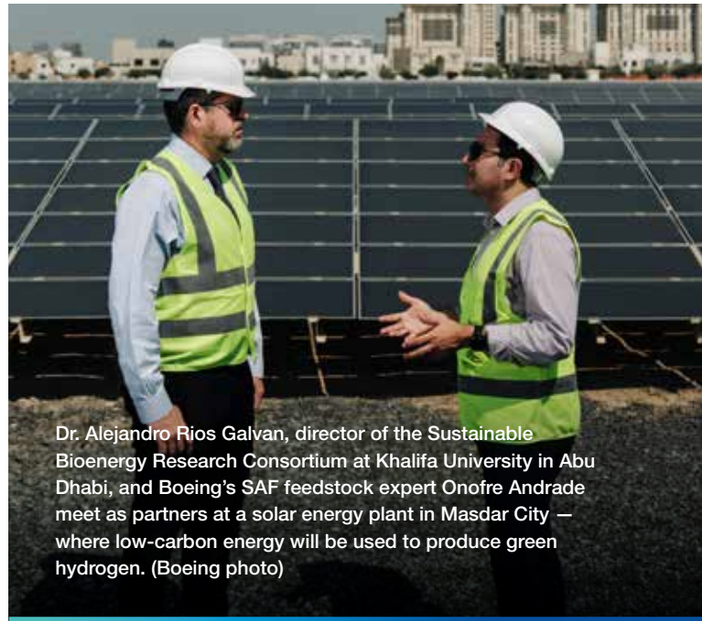
Feedstocks and forces – Boeing's work to scale up SAF around the world

Why it matters: Today, SAF is made from waste-based agricultural products and used cooking oil and reduces emissions by up to 80% compared to conventional jet fuel. Most is currently blended with fossil fuel. Boeing is working to make SAF more accessible to help deliver on its commitment that commercial airplanes will be compatible to fly on 100% SAF by 2030. SAF development and production deliver economic growth, provide energy security for countries and create jobs across multiple industries.

SAF sources and building scale: Boeing is researching, developing and advocating for SAF across the globe, working with the most sustainable feedstocks that are available.

- **Australia and New Zealand:** Boeing is working on a SAF road map, in partnership with the Commonwealth Scientific and Industrial Research Organisation (CSIRO), to help analyze the availability of sustainable feedstocks in the Asia-Pacific region, primarily focusing on Australia and New Zealand.
- **Brazil** is the second-largest biofuel producer globally. Boeing's focus includes feedstocks that can be sourced sustainably, such as sugar cane, eucalyptus and other residual biomass options.
- **China** is planning to scale up SAF adoption and Boeing has partnered with Peking University to develop fundamental research meant to guide the industry in identifying promising SAF feedstocks and pathways.
- **Ethiopia:** Boeing supports a SAF e-learning and academic program in partnership with Roundtable for Sustainable Biomaterials (RSB). Boeing conducted a feasibility study on Carinata (Ethiopian mustard) as a feedstock for SAF production.
- **Europe:** Boeing's technology office in Madrid participates in research and development activities with the Horizon Europe program to develop new pathways and to join consortia focused on energy transition for both small and large airports.
- **India:** In collaboration with World Economic Forum's Clean Skies for Tomorrow initiative, India produced a road map detailing how to scale production and use of SAF, including feedstock analysis, production capacity and technological maturity.
- **Japan:** In August 2022, Boeing announced its new center focusing on sustainability and supporting a newly expanded cooperation agreement with Japan's Ministry of Economy, Trade and Industry. Read more on our partnerships in Japan on Page 45.
- **Middle East:** Boeing also participated in the Sustainable Bioenergy Research Consortium's (SBRC) Seawater Energy and Agriculture System (SEAS), which is an integrated system of aquaculture, halo-agriculture and mangrove silviculture to produce SAF and seafood. The first airplane flight fueled with jet fuel produced through SBRC's SEAS happened in January 2019.
- **Mexico:** Boeing is the only multinational company working with the Biojet Consortium, established in 2016 and is comprised of 14 research centers and companies that are exploring alternative aviation fuel supply chain in Mexico.
- **South Africa:** Since 2014, Boeing has been working with RSB and World Wildlife Fund-South Africa to help small-hold farmers to grow crops that produce SAF. Boeing is partnering with Stellenbosch University to deliver SAF e-learning.
- **UK:** Boeing is focused on supporting the creation of a policy, capital and innovation ecosystem in the UK to enable the Government's Jet Zero Strategy commitment of having five plants in construction by 2025. Boeing was proud to be the founding partner of the Energy Innovation Centre at the University of Sheffield, which has since been selected as the home of the UK SAF clearing house.
- **U.S.:** Boeing focuses on SAF procurement, research and development, and promoting SAF commercial scale-up in the U.S. and around the globe. Boeing also recently announced the purchase of 5.6 million gallons of SAF for its commercial operations in 2023.



Dr. Alejandro Rios Galvan, director of the Sustainable Bioenergy Research Consortium at Khalifa University in Abu Dhabi, and Boeing's SAF feedstock expert Onofre Andrade meet as partners at a solar energy plant in Masdar City — where low-carbon energy will be used to produce green hydrogen. (Boeing photo)