



Regulations are driving the accelerating growth of the global SAF market

Global SAF market demand outlook<sup>1</sup> (Mt/a)

European and North American opt-ins

<1

2023

 Voluntary demand from airlines and corporates

 First mandates for SAF (FR, NO, SE) ~4

2025

 ReFuelEU & UK SAF mandate implementation

 First SAF mandates in APAC

Opt-in and incentive driven growth in North America

15

## **Long-term drivers:**

- 70% SAF mandate under ReFuelEU in 2050
- IATA target of net-zero by 2050
- ICAO Long Term Aspirational Goal of net zero by 2050
- ReFuelEU and UK SAF mandate ramp-up
- US Sustainable Aviation Fuel Grand Challenge translated to policies
- Global SAF policy ramp-up (APAC, Middle East, LatAm)
- Additional incentives and voluntary demand beyond mandates

by 2030

1) Including opt-in into road mandates and voluntary demand. Source: Neste estimates.

NESTE

## Global supply chain capabilities and channel partners enable managing growth and serving diverse customer segments

Global supply chain has been expanded...

...to serve global customers across the key regions

Network of key airports where Neste MY SAF is available<sup>1</sup>

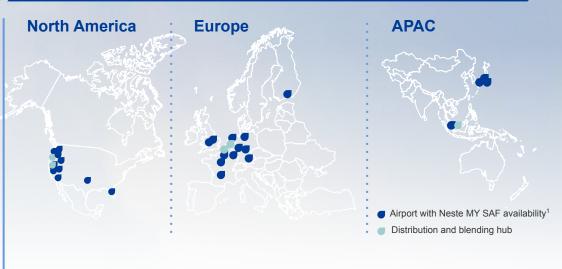


Distribution and blending hubs



Pipeline US: Colonial a deliveries Europe: CEP

**US:** Colonial and Buckeye Pipeline, SFPP **Europe:** CEPS, CIM, Exolum UK



## Selected customers and channel partners:





















## Neste's SAF is already used by airlines around the world



# SAF production capacity is increasing significantly through investments from Neste and others

2019

100 kton SAF

Neste's total global production capacity

2024

1.5 Mton SAF

total global capacity through investments in Rotterdam and Singapore 2026

2.2 Mton SAF

total global capacity through further investments in Rotterdam 2030

>3 Mton SAF

aspiration with increasing renewable and circular capacity and product optionality

## Continuing growth of the SAF market will require policy support to create demand certainty for investments

## **Americas British Columbia** (Canada) Opt-in<sup>2</sup> Opt-in Canada federal LCFS opt-+ LCFS in in CA, OR US state level IL, MN, MI, incentives NM, NY IL. WA **RFS RFS** opt-in: **US** federal opt-in, SAF BTC **TBA** / CFPC<sup>3</sup> 1% Brazil (2027)

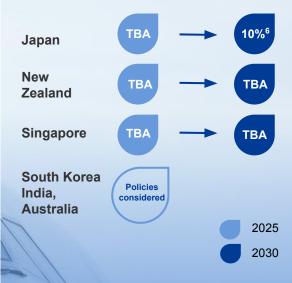
- Market growth in the US driven by a mix of federal and state level incentives (opt-ins and tax credits)
- British Columbia plans to implement an aviation specific emission reduction target
- First LatAm SAF mandate expected for Brazil

## **EMEA** European Union United Kingdom Turkev. **Policies** considered UAE



- UK plans to follow similar timeline
- Policy discussion starting in the Middle East

## **Asia Pacific**



- Frontrunner countries such as Japan and New Zealand setting comparable targets and timelines for SAF adoption as Western peers
- SAF policy discussion spreading to an increasing number of countries



## Frontrunner countries in APAC are shaping policies for SAF, with ambitions that are aligned to those in Europe and North America SAF regulatory and market developments in selected APAC countries

### **SINGAPORE**

Green Plan published in 2021 established first holistic approach for Singapore's climate agenda

International Advisory Panel (set up by CAAS) proposed in Sep 2022 a structural offtake mechanism for SAF: Blueprint for Sustainable Aviation Hub to be published in 2023

Singapore Airlines, Temasek, CAAS SAF pilot launched in July 2022

International collaborations with US, UK, Japan, New Zealand and Australia on aviation sustainability

## **AUSTRALIA**

Government Bioenergy Roadmap published in November 2021 established SAF as key focus area (1 of 3 hard to abate sectors).

Jet Zero Council to advise government on required policies for aviation decarbonization launched at the Avalon Airshow in February 2023

SAF Partnership of Oantas Airbus to invest US\$200 million in the SAF industry in Australia

Boeing and CSIRO revealed SAF Roadmap for Australia's sustainable jet fuel future



South Korea announces plans for SAF policy by 2026: Korean Air operated first Neste SAF flight at Incheon in September, 2023

Thailand civil aviation authority (CAAT) sets up a SAF working group

India exploring development of a SAF mandate by 2025

China aims to outline a SAF roadmap by end 2023

#### **JAPAN**

Agency for Natural Resources and Energy (ANRE) has announced its plan to introduce a 10% SAF mandate in 2030 for all international flights.

Ministry of Land, Infrastructure, Transport and Tourism (MLIT) has set the target of 10% for SAF in 2030

**Basic Policy on Aviation Decarbonisation of MLIT features** SAF as one of five key elements

### **MALAYSIA**

Ministry of International Trade and Industry (MITI) established Sustainable Aviation Energy Task Force to advise on policy and to advance SAF production

Malaysia Airlines operated first flight using Neste MY SAF from Kuala Lumpur to Singapore in June 2022

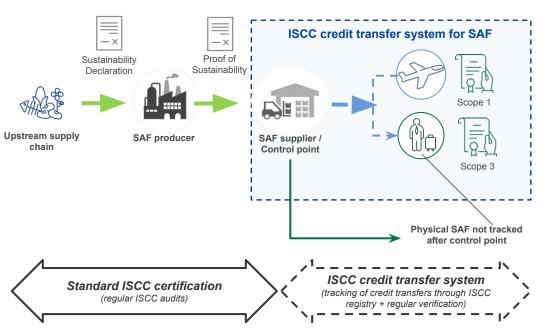
#### **NEW ZEALAND**

Government announced intention to implement a dedicated SAF mandate, coming into force in 2025

Sustainable Aviation Aotearoa Public-Private partnership launched in November 2022

First shipment of SAF delivered to Auckland airport for Air New Zealand in September 2022

With trusted partners, ISCC is currently developing a credit transfer system to allow full end-to-end tracking and verification of SAF claims, including for aviation end-customers



## What is the opportunity?

- Enable and access additional demand for SAF
- Enable credible tracking of SAF volumes and claims
- Positively shape an emerging SAF market

## Value-add for ISCC credit transfer system

- ✓ ISCC as leading scheme with most major suppliers certified uniquely positioned to offer end-to-end solution
- ✓ Robust end-to-end approach by combining credit transfer system with tried-and-true upstream ISCC certification
- ✓ SAF credit transfers are based on fuel actually consumed in the aviation sector, thus reducing the sector's GHG emissions
- ✓ SAF transferred and claimed as credits fulfils stringent sustainability criteria (i.e. is ISCC certified)
- Sustainability attributes claimed via credits can be claimed in accordance with industry-accepted standards (e.g. science-based targets for the voluntary market)
- Transaction and claiming process is governed by clear and robust rules, subject to credible verification and handled in the ISCC registry (currently in development)

