



SUSTAINABLE
AEROSPACE
TOGETHER

May 23, 2024

Societal Benefits



4.5 billion
passengers



\$7 trillion
in goods
exchanged

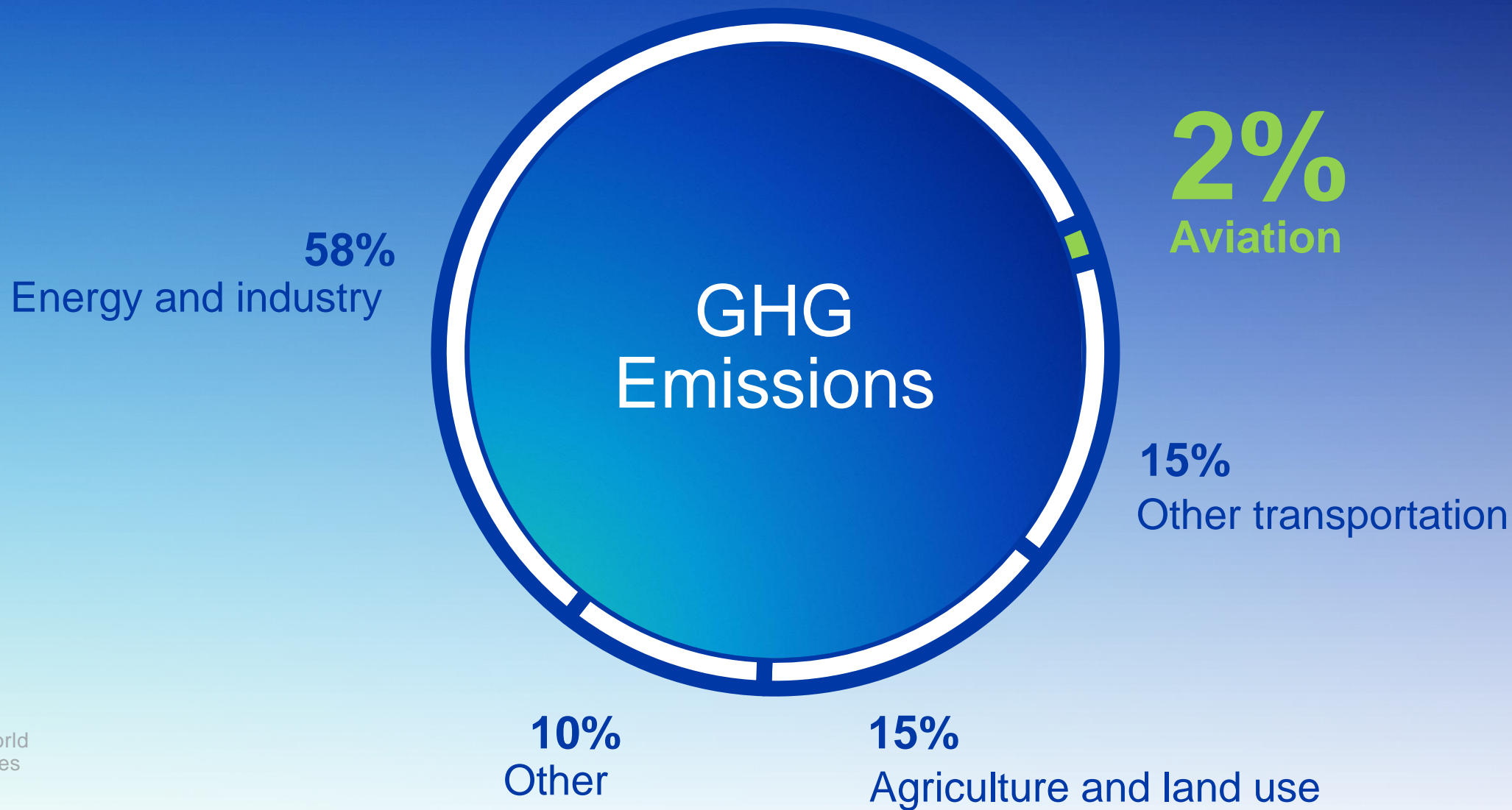


87.7 million
jobs
supported

Source: ATAG

2050





Source:
2022 World
Resources
Institute

Fleet renewal



Operational efficiency



Renewable energy



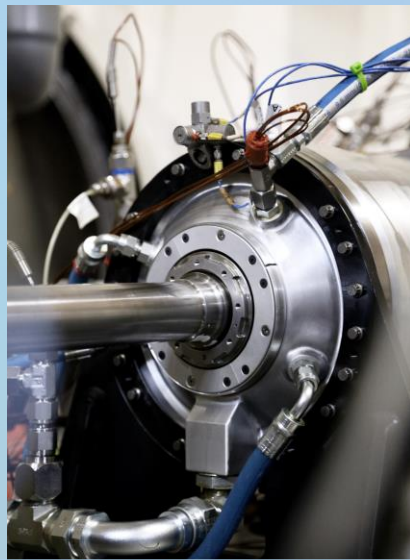
Advanced technology



Carbon Offsetting and Reduction Scheme for International Aviation

Demonstrators

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SAF

Boeing & SAF

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2009
Co-founded Sustainable Aviation Fuel Users Group (SAFUG)

2010
Boeing supports the supersonic flight of a U.S. Navy F/A-18 on a 50/50 SAF blend - U.S. Navy photo

2014
Proposed and partnered with Neste on ASTM approval of Green Diesel pathway



2018
First commercial airplane test using 100% SAF

2018
Launched program for biofuel delivery flights from Boeing Delivery Centers

2022
2M gallons (7.5M liters) of SAF procured for operations

2023
5.6M gallons (21.2M liters) of SAF contracted for operations



2023
Developed jet reference fluid to test 100% SAF compatibility

2023
Studied SAF's impact on contrails with NASA, United

2024
9.4M gallons (35.6M liters) of SAF bought for operations

2008

2010

2012

2014

2016

2018

2020

2022

2024

2008
First SAF test flight with Virgin Atlantic

2011
Led research approval of HEFA pathway

2011
First regional multi-stakeholder roadmaps in the US and Australia

2012
Used biofuel on every ecoDemonstrator program since 2012

2021
Committed to 100% SAF compatible airplanes by 2030

2021
First 100% SAF* passenger flight with United Airlines
*100% SAF in one engine

2021
100% SAF flight with Rolls-Royce

2021
Boeing-SkyNRG partnership

2021-2022
Partnered with NASA to test the emissions of SAF

2023
First 100% SAF transatlantic commercial flight with Virgin Atlantic

2023
Collaborated with Masdar and Zero Petroleum

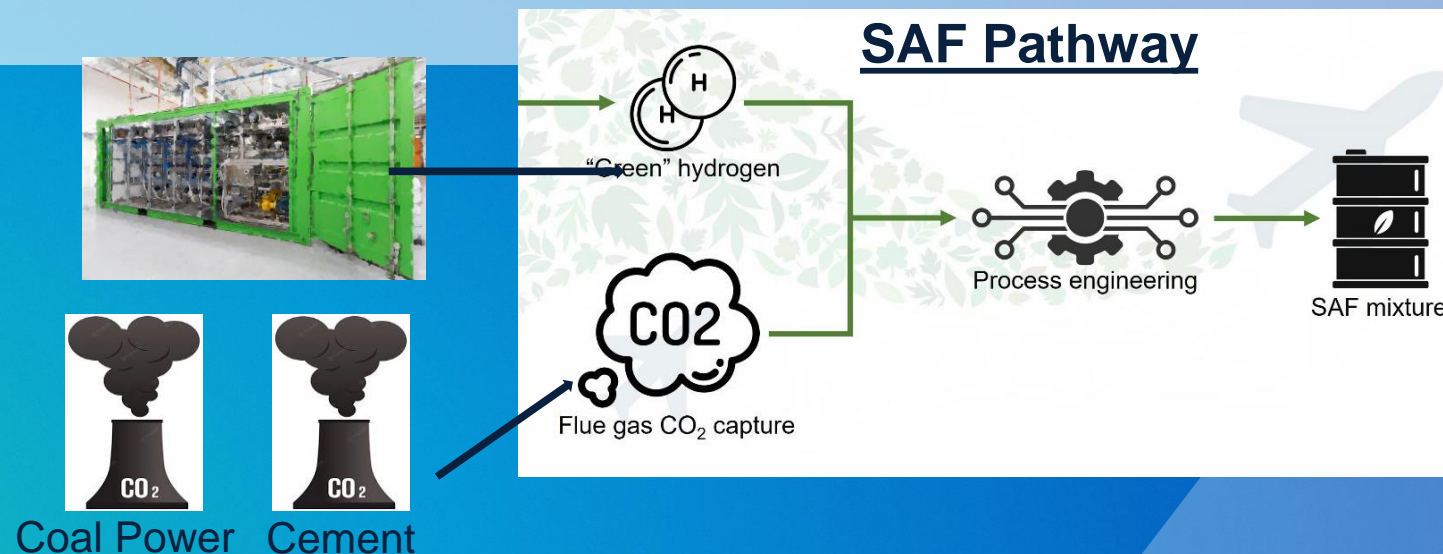
2023
Spearheaded Air-CRAFT, a UAE SAF consortium

2023
Launched APEC SAF initiative with U.S. Government



Boeing Israel SAF Innovation Center

The Boeing – Technion SAF Innovation Center is dedicated to the advancement of technology for the conversion of carbon dioxide and hydrogen into economically viable Sustainable Aviation Fuel (SAF)



SAF Innovation Center Team

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Theory



Prof.

Alon Grinberg Dana



Prof.

Maytal Caspary
Toroker

LCA & TEA



Prof.

Sabrina Spatari



Prof.

Michael Patrascu

Combustion



Prof.

Beni Cukurel



Prof.

Joseph Lefkowitz



Prof.

Dan Michaels

Synthesis



Prof.

Gideon S. Grader



Prof.

Oz M. Gazit



Prof.

Moris S. Eisen



Prof.

Michael Patrascu



Project Manager
Ido Lieberman



Prof.

David Eisenberg

Management

SAF Innovation Center Consortium

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