

# ICAO Aviation CO<sub>2</sub> Reduction Initiative Trackers

By ICAO Secretariat

## Introduction

This article provides an overview of the ICAO aviation CO<sub>2</sub> emissions reduction initiatives tracker tool<sup>1</sup>, which is intended to facilitate the green innovation technologies in the aviation sector and to support the ICAO Long-Term Aspirational Goal (LTAG) process.

## ICAO aviation CO<sub>2</sub> emissions reduction initiatives tracker tool

ICAO Secretariat developed a CO<sub>2</sub> emissions reduction initiatives tracker tool that provides a variety of information related to initiatives to reduce the environmental footprint of aviation, including details on past and ongoing measures and initiatives, and information about partner projects within the ICAO Global Coalition for Sustainable Aviation<sup>2</sup>. For information, the tracker tool is published on the ICAO public website.

The ICAO Coalition for Sustainable Aviation is a forum of stakeholders working on innovations and breakthroughs on aviation Technology, Operations and Infrastructure, and Sustainable Aviation Fuels. The ICAO Global Coalition aims to promote the sustainable growth of international aviation in facilitating the development of new ideas and accelerate the implementation of innovative solutions that will further reduce greenhouse gas emissions at source, on the ground or in the sky. As of May 2022, 52 Coalition partners have joined the ICAO Global Coalition for Sustainable Aviation - from the industry, Academia and Non-Governmental Organizations.

The tracker tool is organized in three main streams (Technology, Operations and Infrastructure, and Sustainable Aviation Fuels) to closely follow up the development of the innovations and breakthroughs that can generate in-sector CO<sub>2</sub> emissions reductions in international aviation. The tracker tool was developed with Google Data Studio which allows capturing statistics such as the number of initiatives/projects by country, by category or by year (Figure 1).



FIGURE 1: Overview of the ICAO tracker tool structure and main indicators

1 <https://www.icao.int/environmental-protection/SAC/Pages/GCSA%20main%20page.aspx>

2 <https://www.icao.int/environmental-protection/SAC/Pages/learn-more.aspx>

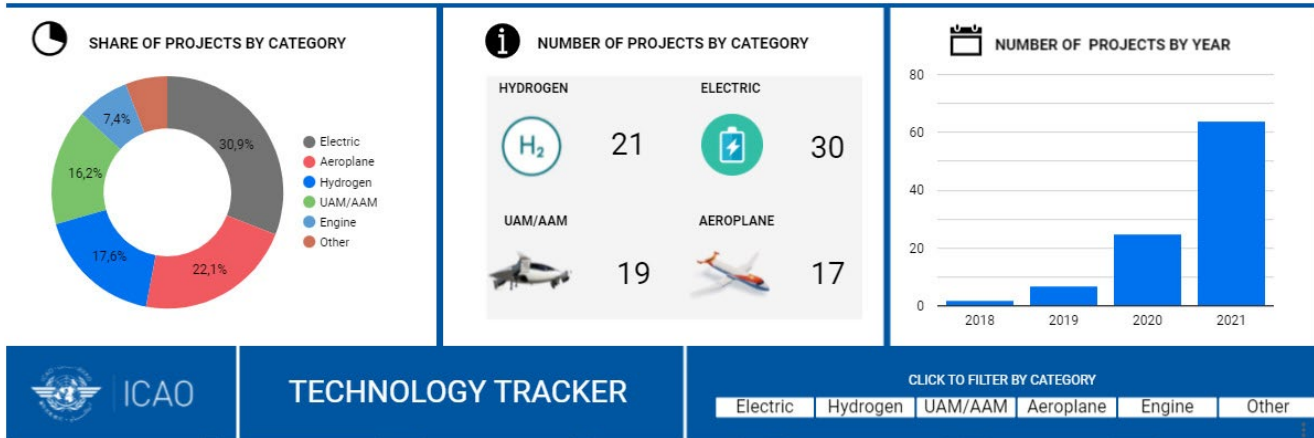


FIGURE 2: Overview of the ICAO technology tracker tool

The Technology tracker (Figure 2) tool<sup>3</sup> provides an up-to-date platform on initiatives related to technologies and aircraft innovation projects reducing the environmental footprint of aviation, retrospective from 2018. The information on technological initiatives is categorized into major streams such as hydrogen- and electric powered aircraft, aeroplane- and engine-specific projects, urban/advanced air mobility (UAM/AAM) and others. As of May 2022, the Technologies tracker includes 102 initiatives (27 from Coalition partners) worldwide.

The Sustainable Aviation Fuels tracker (Figure 3) tool<sup>4</sup> provides a variety of information on airports distributing SAF, numbers of policies adopted or under development, volumes of offtake agreements, number of conversion processes certified for aviation. The tracker also provides

an aviation up-to-date feed, based on publically available information from airports and airlines in on-going alternative fuel purchase agreements. As of May 2022, the Sustainable Aviation Fuels tracker includes 940 news and initiatives (19 from Coalition partners) across the globe.

The Operations tracker (Figure 4) tool<sup>5</sup> provides a variety of information on initiatives related to operational and infrastructural measures aimed at reducing the environmental footprint of aviation. As of May 2022, the Operations tracker includes 97 initiatives (20 from Coalition partners) worldwide. These initiatives are distributed into the following categories: latest news, green infrastructure, ground operations and air operations. The tracker also provides information on geographical and retrospective parameters of the innovations.

SAF Tracking tools (click on the drops for details)

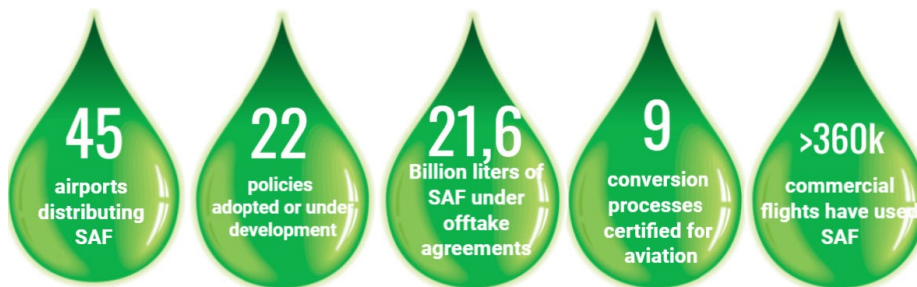


FIGURE 3: Overview of the ICAO Sustainable Aviation Fuels tracker tool

3 <https://www.icao.int/environmental-protection/SAC/Pages/Technology.aspx>

4 <https://www.icao.int/environmental-protection/Pages/SAF.aspx>

5 <https://www.icao.int/environmental-protection/SAC/Pages/Operations.aspx>

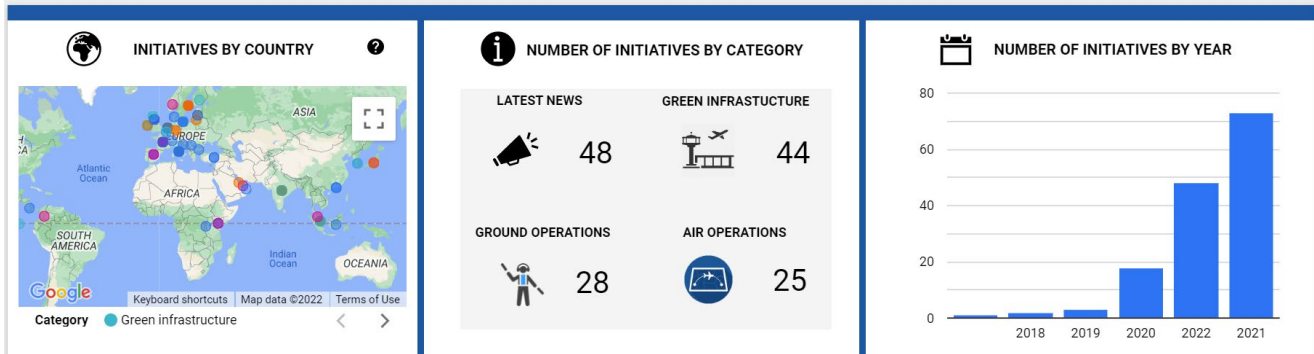


FIGURE 4: Overview of the ICAO operations tracker tool



FIGURE 5: Overview of the ICAO aviation net zero tracker tool

Aviation net zero trackers<sup>6</sup> (Figure 5) records initiatives and relative news releases on the national, regional, and international levels since 2019. This tracker also provides share of the initiatives by scope and their geographical distribution. These initiatives were taken according to the basket of measures by member states, international organizations and industry.

The fifth tracker shares a link<sup>7</sup> to the CORSIA news release page for parties with the latest update in the ICAO initiative in international civil aviation carbon offsetting and reduction scheme.

6 <https://www.icao.int/environmental-protection/SAC/Pages/Aviation-net-zero.aspx>

7 <https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-News.aspx>