



August 1, 2025
ENEOS Corporation
ITOCHU Corporation
NIPPON EXPRESS HOLDINGS, INC.
Japan Airlines Co., Ltd.
Mizuho Bank, Ltd.
Mizuho Research & Technologies, Ltd.
NARITA INTERNATIONAL AIRPORT CORPORATION

Phase 1 Successfully Completed in World's First Initiative to Promote SAF Use and Advance Decarbonization of Aviation

—Expansion Planned Following Confirmation of Effectiveness of Scope 3 Environmental Value Trading at Narita Airport—

In August 2024, a project was launched to build a new scheme for trading Scope 3 environmental value to encourage the use of sustainable aviation fuel (SAF). Having completed the first phase of demonstration testing of Scope 3 environmental value trading to verify the effectiveness of the new scheme, the participating companies have released the results.

The demonstration test enabled the participating companies to gain knowledge about trading Scope 3 environmental value, and to identify issues. The second phase of demonstration testing will see the number of participating companies expanded in an effort to further boost awareness of Scope 3 environmental value, and step up trading. In doing so, the project partners will consider approaches to the scheme ahead of its full-scale social implementation.

*Press release: "World's First Initiative to Promote SAF Use and Decarbonize Aviation Begins" (September 6, 2024)

URL: [World's First Initiative to Promote SAF Use and Decarbonize Aviation Begins](#)

<Demonstration Testing (Phase 1) of the Scope 3 Environmental Value Trading Scheme: Overview of Results>

■ Participating companies

ITOCHU Corporation, ENEOS Corporation, NIPPON EXPRESS HOLDINGS, INC., Japan Airlines Co., Ltd., Mizuho Bank, Ltd., Mizuho Research & Technologies, Ltd., and NARITA INTERNATIONAL AIRPORT CORPORATION

■ Implementation period

August 2024 – March 2025 (8 months)

■ Main outcomes

- Scope 3 environmental value sellers and purchasers registered trading information on the platform, which led to successful trades through matching of trading terms and signing of bilateral contracts.
- Confirmed the successful establishment of a platform system that brought together multiple companies wishing to trade in Scope 3 environmental value.
- Ensured the appropriate implementation of the series of processes encompassing the registration of Scope 3 environmental value trading information, matching, and contracts, and confirmed the transparency and appropriateness of the processes via evaluation by a third-party organization (Nippon Kaiji Kyokai (ClassNK)).

For further details, please refer to the attachment "Report on Phase 1 Demonstration Testing of the Scope 3 Environmental Value Trading Scheme Project to Promote SAF Use."

■ Information on and Comments from Each Company

ITOCHU Corporation (ITOCHU)

Head Office: Minato-ku, Tokyo President & COO: ISHII Keita

ITOCHU is promoting the wider adoption of Sustainable Aviation Fuel (SAF) and the trading of Scope 3 environmental value as part of its efforts to contribute to a sustainable society. The confirmation of the scheme's effectiveness through this demonstration test marks a significant step forward. ITOCHU will continue collaborating with leading partners to help build a circular economy.

ENEOS Corporation (ENEOS)

Head Office: Chiyoda-ku, Tokyo Representative Director, President: YAMAGUCHI Atsuji

ENEOS is moving forward with the construction of an integrated system covering everything from procurement of the raw materials for SAF to in-house manufacturing and sales. Through participation in this project, we conducted a demonstration transaction of Scope 3 environmental attributes and confirmed its effectiveness. We will continue to promote the use of SAF and Scope 3 environmental attributes to contribute to GHG reduction in the aviation industry.

NIPPON EXPRESS HOLDINGS, INC. (NX)

Head Office: Chiyoda-ku, Tokyo President & CEO: HORIKIRI Satoshi

Examining the role of the platform from the perspective of each business and confirming its effectiveness is a meaningful for the expansion of SAF. The NX Group will continue contributing to better lives and sustainable development by addressing climate change through its businesses.

Japan Airlines Co., Ltd. (JAL)

Head Office: Shinagawa-ku, Tokyo President & Group CEO: TOTTORI Mitsuko

Through demonstration tests conducted with six companies, we have recognized once again that environmental value trading is a mechanism that contributes to the decarbonization of aviation. The JAL Group will continue to collaborate with each company to promote understanding of environmental value trading and to support its penetration into society.

Mizuho Bank, Ltd.

Head Office: Chiyoda-ku, Tokyo President & CEO: KATO Masahiko

We have provided our SAF-related expertise in the first round of verification trials, clarifying outstanding issues and supplying operational support. In the second round we will conduct initiatives to boost Scope 3 environmental value trading in anticipation of the formation of the next-generation aviation network, and thereby contribute to the decarbonization of the aviation and airport industry and users of air transport.

Mizuho Research & Technologies, Ltd.

Head Office: Chiyoda-ku, Tokyo President & CEO: YOSHIHARA Masatoshi

We have provided our environmental value expertise in the first round of verification trials, supporting for establishment and verification of the trading system. In the second round we will conduct initiatives to boost Scope 3 environmental value trading in anticipation of the formation of the next-generation aviation network, and thereby contribute to the decarbonization of the aviation and airport industry and users of air transport.

NARITA INTERNATIONAL AIRPORT CORPORATION (NAA)

Head Office: Narita City, Chiba Prefecture President & CEO: FUJII Naoki

Scope 3 environmental value trading is a new approach to promoting decarbonization throughout the air transport value chain. NAA will continue to encourage more widespread take-up of SAF, in an effort to decarbonize Narita Airport and the aviation industry as a whole.

■ Information on and Comments from the Third-Party Organization

Nippon Kaiji Kyokai (ClassNK)

Head Office: Chiyoda-ku, Tokyo President & CEO: SUGA Hayato

Trading the environmental value of Scope 3 emissions is an extremely effective means of promoting greater use of SAF. We anticipate that such trading will create an incentive to introduce SAF, thereby stimulating the market. To ensure the credibility of this environmental value trading scheme, ClassNK intends to support the participating companies' efforts by conducting third-party verification. In doing so, we aim to contribute to the wider use of SAF and the creation of a sustainable society.

Sale of Sustainable Aviation Fuel (SAF) environmental attributes+ to corporate customers engaging in air transportation

- SAF Market Development through Avelia -

ENEOS Corporation (“ENEOS”) has been providing the Scope 3 environmental attributes+ of SAF to corporate customers engaging in air travel and air freight activities. Through the Avelia*1 book and claim*2 platform, ENEOS aims to make SAF more accessible in Japan and promote more aviation stakeholder participation.

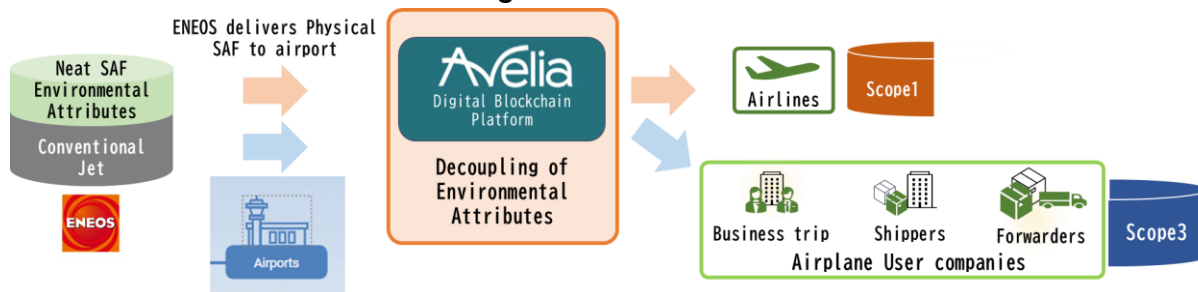
Currently, we face challenges in promoting SAF use among aviation stakeholders given its cost and supply chain constraints. Through Avelia, ENEOS offers a new solution to increase aviation stakeholder participation by allowing both airlines and corporates to access the environmental attributes+ of SAF and share its cost and benefits.

Through these activities, ENEOS will contribute to the decarbonization of the aviation industry and the sustainability goals of our customers.

【Regular SAF Transaction】



【Book & Claim Transaction】 *Trade using the Book and Claim method



Note: Diagram is for illustration only, proportions are not representative of actual blend ratio

Scope 1: CO₂ and other greenhouse gases emitted by businesses themselves (fuel combustion, industrial processes)

Scope 3: Indirect emissions from other companies related to business activities

*1 Avelia is one of the world’s first blockchain powered digital book-and-claim solutions developed by Shell. Not all offerings are available in all jurisdictions. Depending on jurisdiction and local laws, Shell may offer the sale of Environmental Attributes (for which subject to applicable law and consultation with own advisors, buyers might be able to use such Environmental Attributes for their own emission reduction purposes) and/or Attribute Information (pursuant to which buyers are helping subsidize the use of SAF and lower overall aviation emissions at designated airports but no emission reduction claims may be made by buyers for their own emissions reduction purposes). Different offerings have different forms of contracts, and no assumptions should be made about a particular offering without reading the specific contractual language applicable to such offering.

*2 The Book and Claim method is a method that is not necessarily tied to the physical flow of products throughout the supply chain, but is managed and traded on a register.

【Media contacts】 ENEOS Corporation Public Relations Department, Media Relations Group: pr@eneos.com

Report on Phase 1 Demonstration Testing of the Scope 3 Environmental Value Trading Scheme Project to Promote SAF Use

ITOCHU Corporation

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NIPPON EXPRESS HOLDINGS, INC.

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Mizuho Bank, Ltd.

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NARITA INTERNATIONAL AIRPORT CORPORATION

August 2025



Scope 3 Environmental Value Trading Scheme Demonstration: Background and Overview

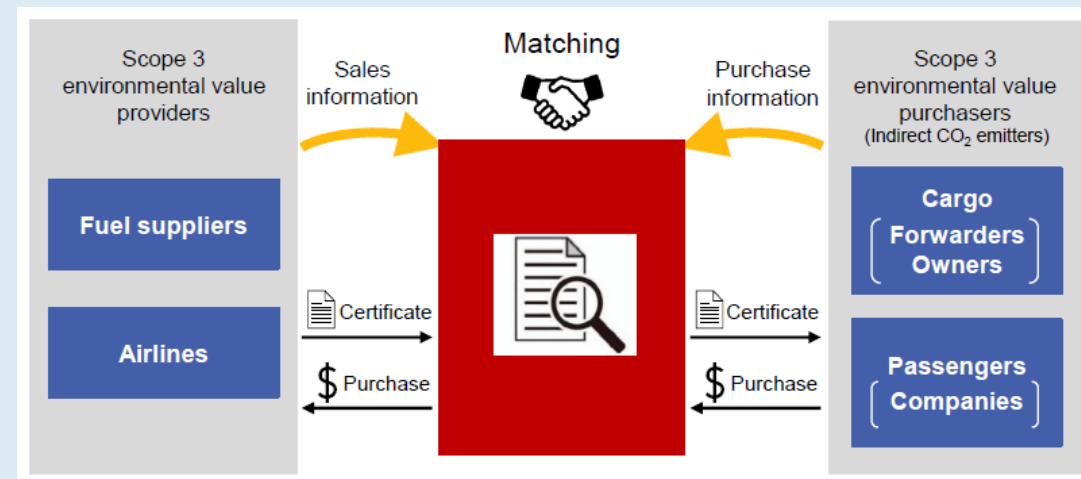
Background

- SAF use is essential to the decarbonization of the air transport supply chain. Involving companies throughout the supply chain in the decarbonization of air transport is crucial to promoting the use of high-cost SAF.
- There is a growing need for **an environmental value trading scheme** that allows aviation users to utilize the indirect CO₂ emission reduction effects (**Scope 3 environmental value**) of SAF use in their own decarbonization efforts, enabling cost-sharing for SAF.

Overview of Demonstration

- Objective: To build a new scheme for trading Scope 3 environmental value to encourage the use of SAF
- Specifics: Conducting trading in practice to verify the concept of the scheme, identify issues, and confirm effectiveness, and considering the direction of the future scheme
- Participating companies: NARITA INTERNATIONAL AIRPORT CORPORATION (NAA), ITOCHU Corporation (ITOCHU), ENEOS Corporation (ENEOS), Japan Airlines Co., Ltd. (JAL), NIPPON EXPRESS HOLDINGS, INC. (NX), Mizuho Bank, Ltd. (Mizuho Bank), and Mizuho Research & Technologies, Ltd. (Mizuho R&T)
- Phase 1 demonstration period: August 2024 – March 2025

Illustration of the environmental value trading scheme



Roles of each company

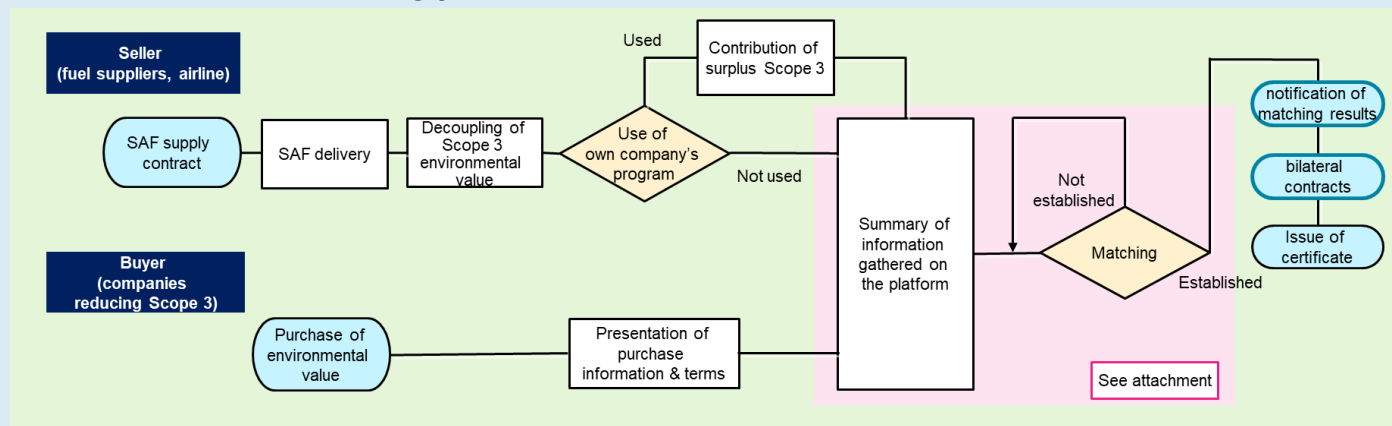
NAA	Platform operation , project planning , and purchase of Scope 3 environmental value associated with business travel by employees
ITOCHU	Supply of SAF and provision of Scope 3 environmental value
ENEOS	Supply of SAF and provision of Scope 3 environmental value
JAL	Provision of Scope 3 environmental value arising from the use of SAF
NX	Purchase of Scope 3 environmental value associated with air cargo transport and rollout of Scope 3 environmental value to cargo owners
Mizuho Bank	Support for the operation of the demonstration project and verification of the trading system
Mizuho R&T	Support for the operation of the demonstration project and verification of the trading system

Matching Process in the Phase 1 Demonstration

■ Matching Process

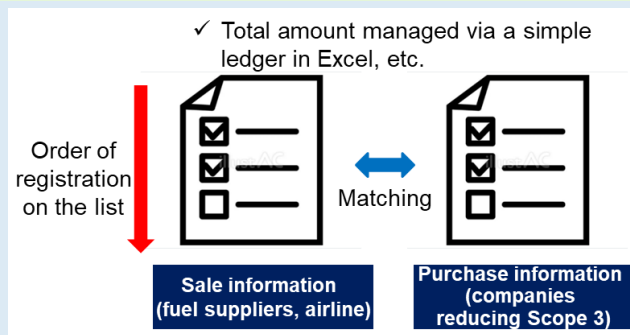
- Platform operator (role filled by NAA) gathers Scope 3 environmental value information from buyers and sellers, and manages the ledger.
- Matching takes place once a month based on the ledger.
- Platform operator provides notification of matching results.
- Bilateral contracts concluded between companies and environmental value transferred.
- Companies notify platform operator of results of contract conclusion.

■ Illustration of the matching process



	Information collected
Seller (fuel suppliers, airline)	(1) SAF-related information Volume delivered (kL), CO2 reduction effect, certification type, etc. (2) Total environmental value (tCO2)
Buyer (companies reducing Scope 3)	(3) Total environmental value requested for purchase (tCO2)

- ✓ Based on the information concerning (2) and (3), **matching** is carried out within a range that does not exceed the total for (2).



Results of Demonstration

■ Results of Matching

- Scope 3 buyers and sellers were ultimately **matched and concluded contracts**. Uncontracted environmental value has been returned.

■ Results of Demonstration Phase 1

- Platform-based trading system was built, and trading was actually carried out.
- Buyers and sellers registered sale/purchase information in accordance with the manual, and successful matching took place.
- Platform operating entity managed the ledger in accordance with the manual and issued matching notifications.
- Appropriate ledger management prevented double counting in the matching process.
- After matching, bilateral trading successfully took place in accordance with the contract forms drawn up by seller companies.
- Environmental value was transferred appropriately in each instance of matching.

Demonstration Outcomes and Issues

■ Outcomes of Demonstration Phase 1

- Confirmed that multiple companies wishing to trade in Scope 3 environmental value had successfully carried out trading using the platform system.
- Scope 3 sellers were able to find new sales contacts other than those involved in their own company's program through trading via the platform.
- Scope 3 buyers were able to purchase environmental value corresponding to their purchase conditions via the platform.
- Confirmed the successful execution of platform operation tasks focused on avoiding the double counting of Scope 3 environmental value and conducting appropriate matching, based on the current transaction volume.

■ Issues Identified via Demonstration Phase 1

- The number of participants in the platform needs to be increased. In particular, consideration must be given to the question of how to encourage buyers to participate in the platform. One method is to promote buyers' understanding of the significance of procuring Scope 3 environmental value.
- Systematization would be required in due course, once the scale of trading increases.
- Collaboration with the government or equivalent organization will be required, with a view to increasing the scale of trading and social implementation of the scheme.
- Consideration must be given to ensuring the environmental value stated on the certificate is appropriate, while ensuring consistency with other guidelines.

Third-Party Evaluation by ClassNK

- Third-party organization Nippon Kaiji Kyokai (ClassNK) was asked for assistance in conducting a review to verify the scheme used in the first phase of the demonstration.
- Results of Evaluation by ClassNK

- Comments on the demonstration as a whole

As checks of the materials (manual and final summary documents) provided concerning the trading carried out in this demonstration revealed no problems, the scheme employed in this demonstration project is judged to have been successfully established.