

QUESTIONNAIRE CONCERNING VOLUNTARY ACTIVITY FOR GHG REDUCTION/MITIGATION IN THE AVIATION SECTOR

Q1. Name of the voluntary activity.

Activity toward Global environment-friendly Airport in Eco-Airport Master Plan

Q2. Type¹ of the voluntary activity.

Unilateral commitment
 Public voluntary scheme
 Negotiated agreement
 Other (Please describe the activity in the box below)

Q3. Please mark all the participants² of the activity.

Airline
 Airline association
 Manufacturer
 Manufacturer association
 Airport authority
 Air traffic control
 Government
 Other (Please specify in the box below)

Ground handling company, traffic company, cargo-handling company, cargo-handling association, Vendor

Q4. Is the voluntary activity accompanied by a side agreement³?

Yes (Proceed to Q4-1.)
 No (Proceed to Q5.)

Q4-1. If the voluntary activity is accompanied by side agreement, please describe the parties and outline the side agreement.

Q5. Please answer the following questions concerning the coverage of the voluntary activity:

Q5-1. Select all green house gases (GHGs) which are part of the voluntary activity.

Carbon dioxide (CO₂)
 Methane (CH₄)
 Nitrous oxide (N₂O)
 Hydrofluorocarbons (HFCs)
 Perfluorocarbons (PFCs)
 Sulphur hexafluoride (SF₆)
 Nitric oxide & Nitrogen dioxide (NO_x)
 Water vapor (H₂O)
 Other (Please specify in the next box)

¹The feature of each type of the voluntary activities is as follows.

- Unilateral Commitment: The environmental improvement plan established by the participant itself, and declared to the stakeholders, such as employees, stockholders, consumers, etc. Target and measures to environmental improvement are established by the participant itself.
- Public Voluntary Scheme: Public: The scheme which the participant agrees voluntarily with the standard on environmental improvement target, technology, management, etc. established by public organization such as ministry for environment issue.
- Negotiated Agreement: Contract based on negotiation between public organization (national government/local government) and industries. Both parties can independently decide whether to agree to the contract.

² If you marked “Public voluntary scheme” on Q2, the public organization which establishes the standard is included to the participants. If you marked “Negotiated agreement”, the public organization which agrees to the contract is included to the participants.

³ “Side agreement” is the agreement between the participant of the activity and third party. For example, the agreement between an airline and an engine manufacturer, which prescribes that the manufacturer assist the airline to attain its target by introducing new emission-reducing technologies, is considered as third agreement. For more information, please refer to Part II Paragraph 6.5.2 on “Template and Guidance on Voluntary Measures”, released on ICAO CAEP website (http://www.icao.int/icao/en/env/Caep_Template.pdf).

Q5-2. Please select all operations⁴ which are part of the voluntary activity.

<input type="checkbox"/> International passenger flight <input type="checkbox"/> Domestic passenger flight <input type="checkbox"/> International cargo flight <input type="checkbox"/> Domestic cargo flight <input type="checkbox"/> Other (Please specify in the next box.)
On ground facilities, Traffic

Q6. Please answer the following questions concerning the index to measure the effect of the voluntary activity

Q6-1. Select the index used to measure the effect of the voluntary activity.

<input type="checkbox"/> Absolute quantity of GHG emission ⁵ (Please outline the index in the box below) <input type="checkbox"/> Unit of GHG emission ⁶ (Please outline the index in the box below.) <input type="checkbox"/> Introduction of Specific technology <input type="checkbox"/> Introduction of specific procedure <input type="checkbox"/> Other (Please specify in the box below)
Percentage of GHG reduction per one aircraft movement compared with the benchmark year.

Q6-2. Please outline the procedure to acquire data to calculate or describe the index of Q6-1.

We intend to acquire data through questionnaire toward airport businesses related to the activity. Some data are available in our institutions.
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Q7. Please answer the following questions concerning the target of the voluntary activity.

Q7-1. Is the target of the voluntary activity clearly defined?

<input checked="" type="checkbox"/> Yes (Proceed to Q7-2.) <input type="checkbox"/> No (Proceed to Q8.)

Q7-2. Please describe the target of the voluntary activity, including substance of the target, target year, base year.

Reduction of GHGs emission from aircraft, ground vehicles, and airport facilities. Base year: Fiscal 2002 Target year: Fiscal 2006(Medium-term) 5%reduction(per aircraft movement) Fiscal 2010(Long-term) 15% reduction(per aircraft movement)

Q8. Please list the measures to attain the target or to reduce/mitigate GHGs.

<ol style="list-style-type: none"> 1. Greater introduction of fuel-efficient aircraft 2. Promotion of the use of GPUs 3. Introduction of more fuel-efficient vehicles in the airport 4. Improvement of energy conservation initiatives 5. Use of solar-powered illumination 6. Carbon fixation through the promotion of plant conservation 7. Use of Thermal Storage System and cogeneration system 8. Use of LEDs for aeronautical lights in the taxiways.

⁴ In case that the voluntary activity describes its coverage from the other viewpoint than listed above, such as “operation under IFR”, “operation of aircraft larger than specific weight”, etc. and that aim of the activity is not linked to operation directly, for example introduction of new technology which contributes reduction/mitigation of GHGs, please mark “other” and please describe feature.

⁵ The example of the unit is Ton-CO₂, Ton-C, m³-CO₂, etc.

⁶ The example of the unit is g-CO₂/RPK(Revenue Passenger Kilometer), g-CO₂/ASK(Available Seat Kilometer), g-CO₂/RTK(Revenue Ton Kilometer), g-CO₂/ATK (Available Ton Kilometer), etc.

Q9. Please answer the following questions concerning periodic review of the voluntary activity.

Q9-1. Is the progress of the voluntary activity reviewed periodically?

Yes (Proceed to Q9-2.) No (Proceed to Q10.)

Q9-2. Please describe the frequency of the periodic review.

Every year

Q9-3. Is third party's opinion considered/to be considered in the periodic review?

Yes (Proceed to Q9-4.) No (Proceed to Q10.)

Q9-4. Please outline the third party.

Q10. Please answer the following questions concerning legislative obligation.

Q10-1. Is there any legislative obligation on attainment of the target?

Yes (Proceed to Q10-2.) No (Proceed to Q11.)

Q10-2. Please describe legislative obligation, including measures taken in case that the participant of the voluntary activity fails to attain the target.

"Law concerning the Promotion of the Measures to Cope with Global Warming" and "Law concerning the Rational Use of Energy" obliges us to report the energy consumption and CO₂ emission at the airport facilities every year.
By "Law concerning the Rational Use of Energy", we are obliged to make 1% reduction of energy consumption from the facilities per year.

Q11. Please answer the following questions concerning disclosure of information⁷ on the voluntary activity:

Q11-1. Is the name of the participant of the voluntary activity disclosed to the public?

Yes No

Q11-2. Is the target of the voluntary activity disclosed to the public? (If you marked "no" at Q7-1, the answer to this question shall be "not applicable".)

Yes No Not applicable

Q11-3. Are the measures taken/to be taken by the participant of the voluntary activity to attain the target/reduce or mitigate GHGs disclosed to the public?

Yes No

Q11-4. Is the result of each periodic review disclosed/to be disclosed to the public? (If you marked "no" at Q9-1, the answer to this question shall be "not applicable".)

Yes No Not applicable

Q11-5. Is the effect of the voluntary activity disclosed/to be disclosed to the public?

Yes No

Q12. Please answer the following questions concerning effect of the voluntary activity:

Q12-1. Is third party's opinion considered/to be considered when examining the effect of the voluntary activity?

Yes (Proceed to Q12-2.) No (Proceed to Q12-3.)

⁷ Item(s) to which the answer is/are "no" from Q11-1 to Q11-5, are considered but this information will not be included in the final report.

Q12-2. Please outline the third party.

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Q12-3. How much of GHGs amount emitted per year, in CO₂ weight equivalent are reduced or mitigated/expected to be reduced or mitigated by the voluntary activity?

As fiscal 2008, GHGs amount is approximately 1,050,000CO₂.ton, which make 90,000CO₂-ton reduction compared with the base year, fiscal 2002 (1,140,000 CO₂.ton)

* The amount of GHGs emission is changeable depends on the year.

Q13. Please provide the website address for the voluntary activity, if any, in the box below.

<http://www.naa.jp/en/environment/index.html>

Q14. Please describe additional information, if any.

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