

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

**Q1.** Name of the voluntary activity.

Carbon neutral Company

**Q2.** Type<sup>1</sup> of the voluntary activity.

Unilateral commitment       Public voluntary scheme       Negotiated agreement  
 Other (Please describe the activity in the box below)  
Unilateral commitment with a stakeholder engagement plan.

**Q3.** Please mark all the participants<sup>2</sup> of the activity.

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

**Q4.** Is the voluntary activity accompanied by a side agreement<sup>3</sup>?

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.

<sup>1</sup>The 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.

<sup>2</sup> 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.

<sup>3</sup> “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](http://www.icao.int/icao/en/env/Caep_Template.pdf)).

**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.

<input checked="" type="checkbox"/> Carbon dioxide (CO <sub>2</sub> ) <input checked="" type="checkbox"/> Methane (CH <sub>4</sub> ) <input checked="" type="checkbox"/> Nitrous oxide (N <sub>2</sub> O) <input checked="" type="checkbox"/> Hydrofluorocarbons (HFCs) <input checked="" type="checkbox"/> Perfluorocarbons (PFCs) <input checked="" type="checkbox"/> Sulphur hexafluoride (SF <sub>6</sub> ) <input type="checkbox"/> Nitric oxide & Nitrogen dioxide (NO <sub>x</sub> ) <input type="checkbox"/> Water vapor (H <sub>2</sub> O) <input type="checkbox"/> Other (Please specify in the next box)

**Q5-2.** Please select all operations<sup>4</sup> 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 checked="" type="checkbox"/> Other (Please specify in the next box.)
All operation run by the airport authority including air navigation services

**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 checked="" type="checkbox"/> Absolute quantity of GHG emission <sup>5</sup> (Please outline the index in the box below) <input type="checkbox"/> Unit of GHG emission <sup>6</sup> (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)
Ton CO <sub>2</sub> equivalents

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

Follow the green housegas protocol.

<sup>4</sup> 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.

<sup>5</sup> The example of the unit is Ton-CO<sub>2</sub>, Ton-C, m<sup>3</sup>-CO<sub>2</sub>, etc.

<sup>6</sup> The example of the unit is g-CO<sub>2</sub>/RPK(Revenue Passenger Kilometer), g-CO<sub>2</sub>/ASK(Available Seat Kilometer), g-CO<sub>2</sub>/RTK(Revenue Ton Kilometer), g-CO<sub>2</sub>/ATK (Available Ton Kilometer), etc.

**Q7.** Please answer the following questions concerning the target of the voluntary activity.

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

Yes (Proceed to Q7-2.)  No (Proceed to Q8.)

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

Reduce CO2 emission with 50 % 2010 compared with the emission 2005, Long time goal for 2020 is zero emission of fossil CO2

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

Save energy,  
Only use of clean energy, solar energy, wind energy  
Only use of clean cars, biofuels  
Biofuel for heating,

**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.

the review is assessed by an auditing company, Det Norske Veritas

**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.)



**Q12-3.** How much of GHGs amount emitted per year, in CO<sub>2</sub> weight equivalent are reduced or mitigated/expected to be reduced or mitigated by the voluntary activity?

1200 ton per year

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

<http://www.lfv.se/en/Start-page/Environment/LFVs-environmental-work/>  
but the webpage is not updated

**Q14.** Please describe additional information, if any.

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