**Exercise 4-A**

**Assumption Table 7: Information on the routes operated by Aircraft Operator A1 in 2024,**

**and resulting offsetting requirements under CORSIA in 2024**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **State** | **Airline** | **From** | **To** | **Covered?** | **CO2**  (2024) | **Sector Growth Factor**  (2024) |
| A | A1 | A | B | Yes | 60 |  |
| A | A1 | A | C | No | 60 |
| A | A1 | A | D | Yes | 60 |
| Total CO2 emissions covered by CORSIA in 2024 by the Airline A1 | | | | | 120 | 21.1% |
| **Offsetting requirements for Aircraft Operator A1** | | | | | **25.3** |  |

**Assumption Table 8: Information on programmes issuing emissions units**

|  |  |  |
| --- | --- | --- |
| **Programme** | **Emissions Unit**  **Identification Numbers** | **Eligibility**  **for CORSIA** |
| A | 1000-1999 | Eligible |
| B | 2000-2800 | Eligible |
| C | 3000-3486 | Eligible |
| D | 4000-4999 | Ineligible |
| E | 5000-5450 | Eligible |
| F | 6000-6900 | Ineligible |
| G | 7000-7200 | Ineligible |
| H | 8000-8999 | Eligible |
| I | 9000-9900 | Eligible |

With reference to previous exercises, data for Aircraft Operator A1 for the year 2024 is used for the purpose of this exercise as an example. Assumption table 7 provides information on the routes operated by Aircraft Operator A1 in 2024, resulting total CO2 emissions covered by CORSIA by this operator, and the resulting offsetting requirements for Aircraft Operator A1 in 2024 (when multiplying the aircraft operator’s CO2 emissions covered by CORSIA with the sector growth rate of this year).

An aircraft operator meets its offsetting requirements by purchasing and surrendering a number of eligible emissions units equivalent to the offsetting requirements; each eligible emissions unit corresponds to one tonne of CO2 emissions reduction generated by an eligible programme under CORSIA. Assumption table 8 provides information on various programmes issuing emissions units and their eligibility / ineligibility under CORSIA.

To fulfil the offsetting requirements of an aircraft operator, eligible emissions units purchased need to be surrendered. It is your task now to review the information on surrendered emissions units by the Aircraft Operator A1 and to assess if Aircraft Operator A1 fulfilled its offsetting requirements for the given year.

For simplicity reasons, only the year 2024 is considered for the purpose of this exercise and offsetting requirements for Aircraft Operator A1 are addressed for this single year (instead of a 3-year compliance cycle, as defined in Assembly Resolution A39-3, paragraph 16).

**Instruction for Exercise 4-A**:

Based on the information provided:

a) How many eligible emissions units were surrendered, based on the information on transactions by Aircraft Operator A1 provided in the table below?

24

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Transaction** | **Quantity of Units** | **Identification Numbers** | ***Notes*** |
| 1 | Purchase | 2 | 3455-3456 | *Eligible Units (Purchase)* |
| 2 | Purchase | 7 | 4587-4593 | *Ineligible Units (Purchase)* |
| 3 | Sell | 4 | 4590-4593 | *Sell, not surrender (ineligible units)* |
| 4 | Surrender | 1 | 4587 | *Ineligible Units (Surrender)* |
| 5 | Purchase | 6 | 1111-1116 | *Eligible Units (Purchase)* |
| 6 | Sell | 2 | 1112; 3455 | *Sell, not surrender (eligible units)* |
| 7 | Surrender | 1 | 4588 | *Ineligible Units (Surrender)* |
| 8 | Purchase | 3 | 3661-3663 | *Invalid ID-Number 🡪*  *Ineligible Units (Purchase)* |
| 9 | Surrender | 1 | 3456 | ***Eligible Units (Surrender)*** |
| 10 | Surrender | 2 | 3662; 3663 | *Invalid ID-Number 🡪*  *Ineligible Units (Surrender)* |
| 11 | Purchase | 20 | 2746-2765 | *Eligible Units (Purchase)* |
| 12 | Surrender | 9 | 2746-2754 | ***Eligible Units (Surrender)*** |
| 13 | Surrender | 14 | 1111; 1113-1116; 2755-2763 | ***Eligible Units (Surrender)*** |

b) Did Aircraft Operator A1 meet its offsetting requirements for 2024?

Not enough eligible emissions units surrendered (24 units) to meet the offsetting requirements of 25.3; (other emissions units were either not eligible or not surrendered (but sold), or had ineligible Identification Numbers).

Yes No Reason:

**Solution Tables**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Eligible Emissions Units** | | | | |
| **#** | **Purchase** | **Sell** | **Surrender** | **Stock** |
| 1 | 2 |  |  | +2 |
| 5 | 6 |  |  | +8 |
| 6 |  | 2 |  | +6 |
| 9 |  |  | 1 | +5 |
| 11 | 20 |  |  | +25 |
| 12 |  |  | 9 | +16 |
| 13 |  |  | 14 | +2 |
| ***SUM*** | ***28*** | ***2*** | ***24*** | ***-*** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ineligible Emissions Units (Ineligible Programme)** | | | | |
| **#** | **Purchase** | **Sell** | **Surrender** | **Stock** |
| 2 | 7 |  |  | +7 |
| 3 |  | 4 |  | +3 |
| 4 |  |  | 1 | +2 |
| 7 |  |  | 1 | +1 |
| ***SUM*** | ***7*** | ***4*** | ***2*** | ***-*** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ineligible Emissions Units (Ineligible Identification Numbers)** | | | | |
| **#** | **Purchase** | **Sell** | **Surrender** | **Stock** |
| 8 | 3 |  |  | +3 |
| 10 |  |  | 2 | +1 |
| ***SUM*** | ***3*** | ***0*** | ***2*** | ***-*** |

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**Exercise 4-B**

Aircraft Operators are required to submit various CORSIA-related data and/or information to their State. States are required to review that data / information and submit it to ICAO. ICAO in turn is required to produce information and provide it to the public, States and operators.

**Instruction for Exercise 4-B**:

Fill in the sections of the tables below with the data / information that is to be transferred and to which stakeholder.

Note: The stakeholders (for the right-hand column) in this exercise are:

Aircraft Operators; States; ICAO; Eligible Emissions Programs; Verifiers; and the Public.

**Aircraft Operators**

|  |  |
| --- | --- |
| Data / Information | From AO  to whom? |
| Fuel Burn Monitoring / Estimation | State / Verifier |
| CO2 emissions data for international flights | State / Verifier |
| Post Verification of Emissions Report | State |
| Purchase / Sale / Surrender of Emissions Units | Emissions Programme |
| Volume / number of Emissions Units | State |
| Evidence / date that eligible emissions units were used to offset CORSIA requirements | State |

**States**

|  |  |
| --- | --- |
| Data / Information | From State  to whom? |
| CO2 emissions data for international flights | ICAO |
| Volume / number of Emissions Units | ICAO |
| Evidence / date that eligible emissions units were used to offset CORSIA requirements | ICAO |
| Offsetting requirements | Aircraft Operator |

**ICAO**

|  |  |
| --- | --- |
| Data / Information | From ICAO  to whom? |
| Total sector CO2 emissions data for international flights | Public |
| Total emissions units volume offset | Public |
| Sector growth rate | Public / States |
| Offsetting requirements | States |

— END —