

# Joint annual energy questionnaires data report card

based on the 2018/2019 data collection for 2017 data

## Note on methodology

As a follow-up to several presentations on data quality and transparency to the Governing Board, the Secretariat has developed a set of indicators to give an overall assessment of the annual statistics questionnaires sent to the IEA. The Report Card assembles in one page these indicators; it therefore constitutes an easy way to visualise the performance of a country during one annual cycle and to compare it with its performance during the previous cycle. The objective of the card is to provide feedback to both policy makers and statisticians on the timeliness, completeness and quality of the annual statistics that they collect, process and submit to the IEA and on the progress they have made compared to the previous year. The wish of the Secretariat is that countries make full use of this information in order to further improve the quality of their statistics.

The assessment is based on the timeliness, the completeness and the quality of the five annual questionnaires that the Secretariat receives every year from its Member countries. Two indicators have been developed to measure timeliness, two for completeness and five for assessing data quality.

To ease visualising the performance, four to five colour codes have been used for each indicator: dark green, light green, orange, red and purple, respectively for very good, good, fair, unsatisfactory and action required quality of the indicator. In case the indicator is not applicable, grey stripes are used.

### 1 Timeliness:

1.1 *Submission dates (base: 30 September)* refers to the date when the first submission was received by the IEA Secretariat.

**Very Good:** submission received before the deadline, **30 September (dark green box)**.

**Good:** submission received during the month of October **(green box)**.

**Fair:** submission received during the month of November **(orange box)**.

**Unsatisfactory:** submission received during the months of December - February **(red box)**.

**Action Required:** submission received on or after the 1<sup>st</sup> of March and last two years' indicator was red or purple **(purple box)**.

1.2 *Submission dates (base: 30 November, for EU member countries only due to the deadline for EUROSTAT)* refers to the date when the first submission was received by the IEA Secretariat.

**Very Good:** submission received before the deadline, **30 November (dark green box)**.

**Good:** submission received during the month of December **(green box)**.

**Fair:** submission received during the month of January **(orange box)**.

**Unsatisfactory:** submission received on or after the 1<sup>st</sup> of February **(red box)**.

**Action Required:** submission received on or after the 1<sup>st</sup> of March and last two years' indicator was red or purple **(purple box)**.

1.3 *Average response time to queries* from the Secretariat in relation to issues in the submissions.

**Very Good:** an average response time of less than 5 working days **(dark green box)**.

**Good:** an average response time between 6 and 10 working days **(green box)**.

**Fair:** an average response time between 11 and 15 working days **(orange box)**.

**Unsatisfactory:** an average response time of more than 15 working days **(red box)**.

**Action Required:** an average response time of more than 30 working days or no answer at all and last two years' indicator was red or purple **(purple box)**.

**Not applicable:** no questions were asked **(grey stripes)**.

### 2 Completeness:

2.1 *Data coverage* compares, in terms of data points, the data coverage of the first submission received versus the expected data coverage as defined by the IEA Secretariat. For example, no detailed breakdown in consumption would negatively affect completeness.

**Very Good:** the reported number of data points meets expectation **(dark green box)**.

**Good:** the reported number of data points is 1-5% below expectation **(green box)**.

**Fair:** the reported number of data points is 5-10% below expectation **(orange box)**.

**Unsatisfactory:** the reported number of data points is over 10% below expectation **(red box)**.

**Action Required:** in case there was no submission (**purple box**).

2.2 The lower the *Share of Non-Specified in totals*, the better allocation of the products to the proper flows. The share refers to the percentage of energy in a sector which is reported in the *Non-Specified* category as a substitute to reporting at the individual component level in the balance or trade tables. For example, reporting energy inputs to *Transformation* under *Non-Specified* - when it should have been reported under the different transformation categories - would negatively affect completeness.

**Very Good:** *Non-Specified* lower than 1% of the allocated energy (**dark green box**).

**Good:** *Non-Specified* between 1 to 5% of the allocated energy (**green box**).

**Fair:** *Non-Specified* between for 5 to 10% of the allocated energy (**orange box**).

**Unsatisfactory:** *Non-Specified* greater than 10% of the allocated energy (**red box**).

### 3 Data Quality:

3.1 *Overall quality of the answers* refers to an assessment of the responses received from the administrations to the queries sent by the IEA Secretariat. This is a subjective assessment.

**Very Good:** complete, detailed and clear answers (**dark green box**).

**Good:** answers of acceptable quality but more could be done (**green box**).

**Fair:** answers of just reasonable quality (**orange box**).

**Unsatisfactory:** no answers at all, or incomplete and unconvincing answers (**red box**).

**Not applicable:** no questions were asked (**grey stripes**).

3.2 The lower the *Size of Statistical Differences*, the better the allocation of the products to the proper flows. The size is expressed as a percentage comparison of reported statistical differences to the gross consumption.

**Very Good:** statistical difference up to 1 % of the gross consumption (**dark green box**).

**Good:** statistical difference between 1% and 5% of the gross consumption (**green box**).

**Fair:** statistical difference between 5% and 10% of the gross consumption (**orange box**).

**Unsatisfactory:** statistical difference greater than 10% of the gross consumption (**red box**).

3.3 *Breaks in time series* is an assessment of flows that stop or start or are affected by changes in reporting methodology without reconciliation with historical series.

**Very Good:** no “unaccounted for” breaks in time series (**dark green box**).

**Good:** up to 5 “unaccounted for” breaks (**green box**).

**Fair:** 5 to 10 “unaccounted for” breaks (**orange box**).

**Unsatisfactory:** more than 10 “unaccounted for” breaks (**red box**).

3.4 *Internal consistency* refers to the consistency in reporting within a questionnaire. There are many areas where lack of consistency could occur: for instance, the balance calculation (Production + Imports – Exports + Stock Changes) does not add up to demand data, the sum of imports by origin does not add up to total imports, or incompatible inputs and outputs for transformation processes.

**Very Good:** no intra-questionnaire inconsistencies (**dark green box**).

**Good:** a small number of questionnaire inconsistencies (**green box**).

**Fair:** an average number of intra-questionnaire inconsistencies (**orange box**).

**Unsatisfactory:** a large number of intra-questionnaire inconsistencies (**red box**).

### 4 Cross-questionnaire consistency:

4.1 *Inputs to power generation* refers to the comparability of the inputs to electricity and heat plants reported in the fuel questionnaires compared with the ones reported in the electricity questionnaire.

**Very Good:** average discrepancy lower than 1%, or lower than 1 unit (**dark green box**).

**Good:** average discrepancy between 1% and 5%, or between 2 and 5 units (**green box**).

**Fair:** average discrepancy between 5% and 10%, or between 6 and 10 units (**orange box**).

**Unsatisfactory:** average discrepancy greater than 10%, or greater than 10 units (**red box**).

**Not applicable:** the fuel is not used to produce electricity and heat (**grey stripes**).

*The Secretariat welcomes any comments on both the content and the format of the report cards. Comments should be sent to [stats@iea.org](mailto:stats@iea.org).*