

Metadata Sheet

ESG Framework for Tourism Businesses

Dimension: Environmental

Measurement Theme: Energy

Overview

This measurement theme addresses companies' performance, impacts, risks and opportunities, policies and targets related to energy use. This enables companies to understand the scale of energy use throughout their operations, as well as their exposure to energy-mix-related issues. It facilitates efforts to manage the absolute levels of energy use and energy intensity and plan for issues related to energy availability.

Rationale

Measures of energy use provide a sense of the dependency of tourism companies on energy resources and their potential impact on climate change. It allows companies to quantify their energy use and identify areas for resource efficiency and identifying and managing energy-related risks.

Alignment with other ESG frameworks and standards

Please refer to Figure 2 in the "ESG Framework Annotated Outline" document.

Definition and underlying concepts

Total energy use refers to the total amount of energy used by a tourism company over a specified period. It encompasses electricity, fuels (such as gas and diesel), and other forms of energy required for operations, including heating, cooling, lighting, and transportation.

Energy intensity measures the efficiency of energy use relative to a specific business output, such as revenue generated, number of guests, or floor area. It provides insight into how efficiently energy is utilised in distinct company activities.

Key underlying concepts include:

- Energy: the total amount of electricity, fuel, and/or heat used across a company's operations and activities.
- Renewable energy: renewable energy is electricity or fuel derived from hydro, solid biofuels, wind, solar, liquid biofuels, biogas, geothermal, marine, and waste (E-handbook on SDG indicators, UNSD).
- Non-renewable energy: energy that cannot be defined as renewable energy use is non-renewable energy. For example, fossil fuels (coal, oil, and gas) are non-renewable energy sources that are formed over long-time horizons.
- Sustainable aviation fuel: non-conventional drop-in aviation fuel alternative to fossil-based jet fuel that reduces life cycle greenhouse gas (GHG) emissions relative to conventional aviation fuel (ECAC Guidance on Sustainable Aviation Fuels). Definitions for sustainable aviation fuel may vary.
- Sustainable marine fuel: fuel that significantly reduces GHG emissions across its lifecycle and does not negatively impact food security or biodiversity (Sustainable Shipping Initiative: Defining sustainability criteria for marine fuels 2021). Definitions for sustainable marine fuel may vary.

Indicator measurement guidelines

This indicator entails measuring the use of energy by a company. Data collection/sources, calculation method, units of measurement, recommended disaggregation of indicators, recommended frequency of reporting, and measurement considerations are detailed below.

Data collection/sources

Data on energy use can be collected from the following sources:

- Utility bills and meter readings for electricity and fuel usage.
- Internal records from energy management systems or building management systems.
- Energy audits conducted by third-party specialists.
- Supplier invoices and contracts detailing energy procurement.

Calculation method

Total energy use can be measured in the following ways:

- Total energy use as the sum of all electricity and fuel used, calculated using the following formula:

$$\text{Quantity of electricity used} + \text{Quantity of fuel used}$$

- Percentage of renewable energy used, calculated using the following formula:

$$\text{Quantity of energy sourced renewably} / \text{Total energy use} \times 100$$

Energy intensity can be measured in the following ways, depending on the nature of the tourism company:

- Energy intensity per revenue, calculated using the following formula:

$$\text{Total energy use} / \text{Total revenue}$$

- Energy intensity per bed-night (e.g., accommodation), calculated using the following formula:

$$\text{Total energy use} / (\text{Number of beds occupied} \times \text{Number of nights stayed})$$

- Energy intensity per customer (e.g., guest, passenger), calculated using the following formula:

$$\text{Total energy use} / \text{Number of customers}$$

- Energy intensity per distance travelled (e.g., transport companies), calculated using the following formula:

$$\text{Total energy use} / \text{Distance travelled (km)}$$

Units of measurement

- Megawatt hours (MWh) for energy use
- Percentage (%) e.g., of renewable energy or sustainable aviation/marine fuel used
- MWh/monetary value
- MWh/bed-night
- MWh/customer e.g., guest, passenger
- MWh/km

Recommended disaggregation

It is recommended that energy use be disaggregated by:

- Energy type e.g., electricity; types of fuel.
- Renewable or non-renewable energy and/or sustainable or non-sustainable fuel e.g., % of renewable energy used; % of sustainable aviation fuel used.
- Functional area/company unit e.g., by different properties, by different modes of transport, by activities.
- Country/region where applicable.

Frequency of reporting

It is recommended that this indicator be reported annually.

Measurement considerations

Electricity use represents one component of energy use. Ideally, the full range of energy sources would be measured. An overall energy use metric (in a common unit) could then be produced. Companies might consider fluctuations in energy demand, especially in tourism destinations with peak seasons. Companies should choose to report against the intensity unit that is relevant to the tourism industry in which they operate. For example, transport companies should report energy intensity per distance travelled, while accommodations for visitors should report energy intensity per bed-night.

Energy Use Example Indicators

Quantitative indicators:

- Total energy use (MWh) – refers to the total amount of energy used by a tourism company over a specified period. It encompasses electricity, fuels (such as gas and diesel), and other forms of energy required for operations, including heating, cooling, lighting, and transportation.
- Percentage of renewable energy (sustainable fuel) used
- Energy intensity (MWh per revenue, bed-night, customer, or distance travelled) - measures the efficiency of energy use relative to a specific company output, such as (a) revenue generated, (b) bed-night, (c) customer, or (d) distance travelled. It provides insight into how efficiently energy is utilised in distinct company activities.

Qualitative indicators:

- Targets, policies and actions to improve energy use performance.
- Contextual information on energy sources, energy infrastructure, or domestic challenges.

Industry-specific considerations

All tourism companies should measure, report, and mitigate energy use and intensity. Companies should report the percentage of renewable energy they source, while transport companies (e.g., airlines, road, cruise, train) might also report the percentage of sustainable fuel they use. Industry-specific considerations also arise in selecting the intensity unit to report against. For example, air passenger companies might report energy use per distance travelled, while sports and recreational companies might report energy use per customer.