ENVIRONMENT · TOPIC GUIDE A1

Energy

Energy used per room-night, renewables, LED and efficiency controls.

WHAT THIS COVERS

Everything about the energy the property buys and how efficiently it uses it: total consumption from bills (ENV-01), the renewable share (ENV-02), year-on-year change (ENV-03), LED coverage (ENV-04), efficiency equipment and controls (ENV-05) and low-impact refrigerants (ENV-06).

WHY IT MATTERS

Energy is usually the biggest controllable cost after payroll and the largest part of your carbon footprint. It is the first thing every scheme and corporate buyer asks about, and the one where the business case is easiest to prove.

How to track it well

1. List every meter and fuel account on site: main incomers, sub-meters, gas, LPG, oil tank, generator diesel.
2. Each month enter each bill against its own meter or fuel, in the unit printed on it (kWh, m³, litres) and for the exact period on the bill; Canoprise converts it to kWh, splits it across months and divides by occupied room-nights.
3. Attach the bill. When a bill is late, enter a meter photo as an estimated read and true it up later.
4. Once a year confirm the renewable share from your supply contract, the LED percentage from a quick lighting walk-round, and tick off the efficiency controls that are in place.
5. Review flagged readings: anything more than double or less than half your usual is held back until confirmed.

Your first month

1. Walk the site and list every electricity meter, gas or LPG supply, oil tank and generator.
2. Enter last month's bills, one per meter or fuel, in the unit printed on them, and attach each bill.
3. Enter occupied room-nights for the same month and check the per-room-night figure looks sensible.

WORKED EXAMPLE (ILLUSTRATIVE FIGURES)

A 100-room hotel enters 62,000 kWh of electricity and 3,900 m³ of gas for March. Gas is converted (about 10.5 kWh per m³) to roughly 41,000 kWh, giving 103,000 kWh in total. With 2,150 occupied room-nights that is about 48 kWh per room-night, which is what the chart and score use.

Where the data comes from

- Utility bills (electricity, gas)

- Fuel delivery invoices (LPG, oil, diesel)
- Supply contract or renewable certificates
- Lighting and equipment walk-round
- BMS export if you have one

EVIDENCE TO ATTACH

Bill or invoice PDF per period; supply contract; photos from the lighting audit; refrigerant service records.

HOW OFTEN, AND WHO

Consumption monthly (chief engineer or finance, about 15 minutes once bills arrive); the rest annually or when something changes.

Common pitfalls

- Entering the invoice date instead of the consumption period
- Missing a sub-meter or fuel account, which makes the total look better than it is
- Forgetting occupancy, which leaves the intensity blank
- Entering a gas or LPG bill against the electricity meter instead of its own line

Quick wins that move the score

- Finish the LED retrofit in back-of-house
- Set-back temperatures for unoccupied rooms
- A coil and filter cleaning schedule for HVAC

What the research says

- A modelling study of a tourist resort in a cold, sunny region found evacuated-tube solar water heating could meet around three-quarters or more of hot-water demand with a payback of roughly five to seven years. Results depend heavily on climate and hot-water use, so treat it as a prompt to get a site-specific quote, not as a forecast.

Source: Arif et al. (2022), Alexandria Engineering Journal 61 — simulation of solar water heating for a tourist resort in northern Pakistan. Findings are summarised in our own words; they come from specific samples and may not hold everywhere.

What you record

6 attributes make up this topic. Each lists the data points to enter; anything marked “calculated for you” needs no entry.

Energy consumption ENV-01 · foundational — Monthly

Energy used per source series (grid electricity, gas, LPG, oil, diesel, district heat, on-site solar), entered in native units or cost, normalised to kWh; export netted off

Evidence: Utility bill / fuel invoice · Scoring: target 25 · floor 90 kWh per occupied room-night

No.	Data point	How it is entered	Asked for by
ENV-01.1	**Energy used, per series**	Quantity per meter / source (kWh, MWh, m³, L, kg, GJ, therm → kWh)	GK 4.1 · GSTC D1 · WTTC #1
ENV-01.2	Energy cost, per series	Cost	–
ENV-01.3	Measurement method statement	Document	GK 4.1
ENV-01.4	Total energy (Σ series − export)	Calculated for you	–
ENV-01.5	Energy intensity per occupied room-night	Calculated for you	–

Renewable electricity ENV-02

Annually

% of electricity from renewable sources, with the tariff or contract

Evidence: Supplier contract / certificate · Scoring: target 100 · floor 0 %

No.	Data point	How it is entered	Asked for by
ENV-02.1	**Renewable share of electricity (tariff / contract)**	Percentage	GK 4.6/4.7 · GSTC D1
ENV-02.2	Renewable share of heating & cooling	Percentage	GK 4.4/4.5
ENV-02.3	Supplier contract / guarantee of origin	Document	GK 4.6
ENV-02.4	Renewable share incl. on-site generation	Calculated for you	–
ENV-02.5	Supplier emission factor for electricity (market-based)	Count	GRI 305-2 · CSRD E1

Year-on-year energy reduction ENV-03

Annually

% change in energy use vs the prior year, like-for-like

Evidence: Derived from bills · Scoring: target 5 · floor -5 %

No.	Data point	How it is entered	Asked for by
ENV-03.1	**Year-on-year change in energy intensity**	Calculated for you	–
ENV-03.2	Like-for-like adjustment note	Short text	–

Efficient lighting ENV-04

Annually

% of guest and public-area lighting that is LED

Evidence: Lighting audit / photos · Scoring: target 100 · floor 80 %

No.	Data point	How it is entered	Asked for by
ENV-04.1	**LED share of light points**	Percentage	GK 4.14 (≥80%)
ENV-04.2	LED light points	Count	–
ENV-04.3	Total light points	Count	–
ENV-04.4	Lighting inventory / invoices	Document	–

Efficiency equipment & controls ENV-05

When it changes

Keycard switches, efficient appliances, smart thermostats, insulation, glazing; coil and filter cleaning schedule

Evidence: Document / photo · Scoring: in place = 100, not in place = 0

No.	Data point	How it is entered	Asked for by
ENV-05.1	**Efficiency measures in place**	Yes / no	–
ENV-05.2	Set-point SOP documented	Yes / no	GK 4.2
ENV-05.3	Switch-off procedure or automation	Yes / no	GK 4.3
ENV-05.4	HVAC maintained in last 12 months	Date	GK 4.13
ENV-05.5	Coil & filter cleaning schedule	Yes / no	WTTC 2026
ENV-05.6	New electronics energy-rated	Yes / no	GK 4.16
ENV-05.7	Energy audit in last 6 years	Date	GK 4.9 (G)
ENV-05.8	Sub-meters at key points	Yes / no	GK 4.11 (G)

Low-impact refrigerants ENV-06

When it changes

Cooling uses natural or low-GWP refrigerants and is HFC-free

Evidence: Equipment spec / service record · Scoring: in place = 100, not in place = 0

No.	Data point	How it is entered	Asked for by
ENV-06.1	**HFC-free / low-GWP cooling**	Yes / no	–
ENV-06.2	Refrigerant top-up, per gas	Quantity per meter / source (kg → kg)	GSTC D3 (Scope 1)
ENV-06.3	Refrigerant inventory (type, charge)	Document	–

Ready-for-audit checklist

- Every attribute above has a value for the current period, submitted (not left as a draft).
- Each measured value has its bill, invoice, log or photo attached.
- Any estimated figure is marked as estimated, with the real figure entered when it arrives.
- Flagged readings have been confirmed or corrected.
- The method is written down: which meters, sources or records feed each number.
- Two full years of history are in place before you apply for certification.

What a certifier will ask

The certification criteria this topic supports, in plain words, and the Canoprise attribute that holds the evidence.

Scheme	Criterion	What it asks for	Supported by
WTTC Basics	1	Measure and reduce energy use	ENV-01, ENV-03
WTTC Basics	2026 LED	LED lighting	ENV-04

Scheme	Criterion	What it asks for	Supported by
WTTC Basics	2026 coils	Clean coils and filters	ENV-05
WTTC Basics	2026 thermostats	Digital thermostats	ENV-05
GSTC Hotel v4	D1	Energy conservation	ENV-01, ENV-02, ENV-03, ENV-05
GSTC Hotel v4	D3	Greenhouse gas emissions	ENV-06
Green Key	4.1	Energy by source recorded monthly	ENV-01
Green Key	4.2	Standard heating and cooling set-points	ENV-05
Green Key	4.3	Switch-off in unoccupied rooms	ENV-05
Green Key	4.4	50% renewable heating/cooling (guideline)	ENV-02
Green Key	4.5	100% renewable heating/cooling (guideline)	ENV-02
Green Key	4.6	50% renewable electricity (guideline)	ENV-02
Green Key	4.7	100% renewable electricity (guideline)	ENV-02
Green Key	4.9	Energy audit every 6 years (guideline)	ENV-05
Green Key	4.11	Sub-meters at key points (guideline)	ENV-05
Green Key	4.12	Controls for heating, cooling, ventilation	ENV-05
Green Key	4.13	Annual HVAC maintenance	ENV-05
Green Key	4.14	At least 80% LED	ENV-04
Green Key	4.16	Energy-rated new electronics	ENV-05
Green Key	4.17	Efficient new minibars	ENV-05
Green Key	4.27	Scope 1 and 2 emissions calculated	ENV-06
EarthCheck	2.1	Core benchmarking data collected yearly	ENV-01
EarthCheck	2.3.1	Greenhouse gases: inventory, reduction, refrigerants	ENV-06
EarthCheck	2.3.2	Energy efficiency and renewable supply	ENV-01, ENV-02, ENV-03, ENV-04, ENV-05

Criterion titles are Canoprise's short paraphrases of WTTC Hotel Sustainability Basics, the GSTC Hotel Standard v4 and the Green Key 2026–2031 hotel criteria; read the scheme's own text before applying. This mapping is our reading; your certification partner decides what is met.
EarthCheck clause titles paraphrase the EarthCheck Company Standard v4.2.

Where it is reported

The same data answers the reporting frameworks: GRI disclosures, SASB Hotels & Lodging metrics and CSRD (ESRS) topics. These are referenced, not scored.

Framework	Reference	What it asks for	Supported by
GRI	302-1	Energy consumed within the organisation	ENV-01, ENV-02*
GRI	302-3	Energy intensity	ENV-01
GRI	302-4	Reduction of energy consumption	ENV-03, ENV-04*, ENV-05*

Framework	Reference	What it asks for	Supported by
GRI	305-2	Energy indirect (Scope 2) GHG emissions	ENV-02
GRI	305-6	Ozone-depleting substances	ENV-06*
SASB	SV-HL-130a.1	Energy consumed, share from the grid, share renewable	ENV-01, ENV-02
CSRD	E1	Climate change	ENV-01, ENV-02, ENV-03, ENV-05*, ENV-06*
CSRD	E2	Pollution	ENV-06*

* gives part of what the reference asks for. Titles are Canoprise's paraphrases; check the official standard before you publish. GRI 102 and GRI 103 replace GRI 305 and 302 from 1 January 2027.

Record sheet

Print and keep by the meter, scale or register; enter the figures in Canoprise when the period closes. For metered items use one line per meter, source or stream.

Ref	What	Period from	to	Reading / quantity	Unit	Evidence kept	Initials
ENV-01.1	Energy used, per series						
ENV-01.1							
ENV-01.1							
ENV-01.2	Energy cost, per series						