



Times Higher Education
**Sustainability
Impact Ratings**

SDG

7

Affordable and
Clean Energy





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Affordable and Clean Energy

Why we measure

After water and food, energy is one of the key enablers of human life. Energy is central to nearly every major challenge and opportunity the world faces today and access to energy for all is essential. But energy needs to be available and affordable to all to allow future development, and it needs to be clean in order to ensure that the development can be sustainable.

We are exploring how universities promote and support clean energy, both through research, outreach, and also in their own behaviour and usage.

<https://www.un.org/sustainabledevelopment/energy/>

Links to other SDGs

Focusing on universal access to energy, increased energy efficiency and the increased use of renewable energy is crucial to creating more sustainable and inclusive communities (SDG11). It is a foundation to addressing climate change (SDG13), and offers the prospect of new economic and job opportunities (SDG8 and SDG9). Fuel poverty can be addressed by the provision of affordable energy (SDG1).

Metrics and indicators

7.1 Research on clean energy

7.1.1 Affordable and Clean Energy: CiteScore

This indicator measures the proportion of a university's publications appear in the top 10% of journals according to the Citescore metric. It is intended to reflect on excellence of academic output.

The indicator is normalised and is worth 10% of the score in this SDG (equivalent to 2.6% of the overall score)

7.1.2 Affordable and Clean Energy: FWCI

This indicator explores the quality of a university's output in the area of energy and energy efficiency research using the number of citations received as a metric.

This number is normalised by publication type (paper, review, conference proceeding, book, or book chapter), by year of publication, and by subject. Subjects are defined using Elsevier's ASJC classification.

This indicator is normalised and is worth 10% of the score in this SDG (equivalent to 2.6% of the overall score).

7.1.3 Affordable and Clean Energy: publications

The number of publications looks at the scale of research output from a university around energy and energy efficiency. It is not scaled by the size of the institution – rather it looks at the overall impact.

This indicator is normalised and is worth 7% of the score in this SDG



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7.2 University measures towards affordable and clean energy

Universities need to establish measures and policies which when considered would battle the harms of climate change and help achieve the goal of reducing emissions and provide a clean environment.

There are a total of 20 points that could be gained from meeting the criteria in this metric, worth 23% of the score in this SDG (equivalent to 5.98% of the overall score).

This metric and indicators relate to the UN Targets 7.1, 7.3 and 7.B.

#	Indicator	Maximum score
7.2.1	Energy-efficient renovation and building Year: in place by 2024 Have a policy in place for ensuring all renovations or new builds are following energy efficiency standards Up to four points based on: • Existence of policy – one point • Evidence provided – up to one point • Is the evidence provided public – one point • Is policy created or reviewed in period 2020-2024 – one point	3.85% in SDG (1% Overall)
7.2.2	Upgrade buildings to higher energy efficiency Year: in place by 2024 Have plans to upgrade existing buildings to higher energy efficiency Up to three points based on: • Existence of plans – one point • Evidence provided – up to one point • Is the evidence provided public – one point	3.85% in SDG (1% Overall)
7.2.3	Carbon reduction and emission reduction process Year: in place by 2024 Have a process for carbon management and reducing carbon dioxide emissions Up to three points based on: • Existence of process – one point • Evidence provided – up to one point • Is the evidence provided public – one point	3.85% in SDG (1% Overall)



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#	Indicator	Maximum score
7.2.4	Plan to reduce energy consumption Year: in place by 2024 Have an energy efficiency plan in place to reduce overall energy consumption Up to three points based on: • Existence of plan – one point • Evidence provided – up to one point • Is the evidence provided public – one point	3.85% in SDG (1% Overall)
7.2.5	Energy wastage identification Year: in place by 2024 Undergo energy reviews to identify areas where energy waste is highest Up to three points based on: • Existence of reviews – one point • Evidence provided – up to one point • Is the evidence provided public – one point	3.80% in SDG (0.99% Overall)
7.2.6	Divestment policy Year: in place by 2024 Have a policy on divesting investments from carbon-intensive energy industries notably coal and oil Up to four points based on: • Existence of policy – one point • Evidence provided – up to one point • Is the evidence provided public – one point • Is policy created or reviewed in period 2020-2024 – one point	3.80% in SDG (0.99% Overall)

Data submission guidance

Guidance: Energy standards (7.2.1)

Relevant standards could be LEED certification. If you are following your government guidelines/policies – please provide a link to your government website.

7.3 Energy use density

Year: 2024

This metric looks into energy used per floor space of university buildings.

We look at units of energy used by an individual, event, organisation or product at the university and we focus on all that is owned, controlled or consumed by the university.



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The metric relates to the UN Targets 7.3.

This indicator is normalised and is worth 17% of the score in this SDG (equivalent to 4.42% of the overall score).

This year we have reduced the percentage of this metric and added metric 7.5 on green energy usage.

7.3.1 Indicator: Energy usage per sqm

Data Collected	Definition
Total energy used	Total energy used in Gigajoule (GJ) for the year 2024
University floor space	Floor space of the university buildings in square metre (m ²) in 2024

Data submission guidance

Guidance:

Energy use density looks into energy used per floor space of university buildings. We focus on all energy use that is owned or controlled by the university (e.g. fuels used for vehicles, heaters, boilers), and consumed by the university (e.g. purchased electricity).

In both cases, energy used and floor space, we are solely focusing on buildings for now. You can include sports stadia if it can be referred to as building space.

Definition: units of measurement

For total energy used, the unit of measurement is Gigajoule (GJ). For **floor space**, the unit of measurement is square metre (m²). We expect these figures to be rounded figures.

Definition: Total energy used

This includes both, energy generated by the university and energy purchased by the university.

7.4 Energy and the community

Universities need to directly outreach to help the community to return to renewable energy sources and to reduce environmental impacts.

There are a total of 15 points that could be gained from meeting the criteria in this metric, worth 23% of the score in this SDG (equivalent to 5.98% of the overall score).

This metric and indicators relate to the UN Targets 7.2, 7.A and 7.B.



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#	Indicator	Maximum score
7.4.1	Local community outreach for energy efficiency Year: 2024 Provide programmes for local community to learn about importance of energy efficiency and clean energy Up to three points based on: • Existence of programmes – one point • Evidence provided – up to one point • Is the evidence provided public – one point	4.60% in SDG (1.20% Overall)
7.4.2	100% renewable energy pledge Year: 2024 Promote a public pledge toward 100% renewable energy beyond the university Up to three points based on: • Existence of promotion – one point • Evidence provided – up to one point • Is the evidence provided public – one point	4.60% in SDG (1.20% Overall)
7.4.3	Energy efficiency services for industry Year: 2024 Provide direct services to local industry aimed at improving energy efficiency and clean energy (energy efficiency assessments, workshops, research renewable energy options) Up to three points based on: • Existence of services – maximum one point for both options free and paid, one point for free services only, 0.25 points for paid for services only • Evidence provided – up to one point • Is the evidence provided public – one point	4.60% in SDG (1.20% Overall)
7.4.4	Policy development for clean energy technology Year: in place by 2024 Inform and support governments in clean energy and energy-efficient technology policy development Up to three points based on:	4.60% in SDG (1.20% Overall)



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	of local, regional, national and global cooperation • Evidence provided – up to one point • Is the evidence provided public – one point	
7.4.5	Assistance to low-carbon innovation Year: 2024 Provide assistance for start-ups that foster and support a low-carbon economy or technology Up to three points based on: • Existence of assistance – one point • Evidence provided – up to one point • Is the evidence provided public – one point	4.60% in SDG (1.20% Overall)

Data submission guidance

Guidance: Pledge toward 100% renewable energy (7.4.2)

Universities have a significant role to play in encouraging others to make a move towards renewable energy sources. This falls under advocacy. Does your institution promote this promise/agreement by gathering petitions, setting up meetings with most relevant people, and/or by holding events and discussions.

7.5 Low-carbon energy use

7.5.1 Low-carbon energy use

Year: 2024

This metric is used to understand the carbon footprint of energy use at the university.

The metric relates to the UN Targets 7.3 and 13.2.

This indicator is normalised and is worth 10% of the score in this SDG (equivalent to 2.6% of the overall score).

Data Collected	Definition
Total energy used	Total energy used in Gigajoule (GJ) for the year 2024
Total energy used from low-carbon sources	Energy used from low-carbon sources in 2024 in Gigajoule (GJ)

Data submission guidance

Guidance: Low-carbon sources

These can be:



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- Power generation sources (wind, solar, nuclear)
- Electricity (renewable)
- Electricity (nuclear)

This should not include energy from fossil fuels.

This can include

- no-fossil fuels (alternative fuels include bio-alcohol (methanol, ethanol, butane), refuse-derived fuel, chemically stored electricity (batteries and fuel cells), hydrogen, non-fossil methane, non-fossil natural gas, vegetable oil, propane and other biomass sources.)
- Renewable Energy (Biofuel, Biomass, Biogas): Bioethanol, Biodiesel, Biomethane, Biodiesel (from used cooking oil), Biodiesel (from tallow). Wood logs, Wood chips, Wood pellets, Grass/straw, Biogas, Landfill gas

Guidance: Total energy used

Total energy used includes both, energy generated by the university and energy purchased by the university.

We look at units of energy used by an individual, event, organization, or product (at university). We focus on all that is:

- owned or controlled by the university (e.g. fuels used for vehicles, heaters, boilers),
- consumed by the university (e.g. purchased electricity)

Definition: units of measurement

The unit of measurement is Gigajoule (GJ).

We expect these figures to be a rounded figure.