Main survey Wave 15:

Prior to Wave 15, we reviewed our questions about environmental behaviour and attitudes. You can read more about the review and the new content in the Working Paper Review of environmental attitudes and behaviour questions in the Understanding Society survey. Post-review, it was decided to drop the environmental attitudes module and introduce a new environmental identity module based on European Social Survey questions.

See the **Environmental identity** module: Main survey - module: scaenvironmentalidentity_w15 Self-Completion Environmental Identity Module - Understanding Society

Innovation Panel Wave 17:

For IP17, we included an overarching project to investigate people's indoor residential environment and their energy use. This included collection of questionnaire responses about people's homes and associated factors related to their energy use, as well as data collection via placing sensors in consenting respondents' homes and collecting information from their smart meters, if they have them and consent to it.

Smart meter data linkage (to be released Summer 2026)

Linked n=586 households

Data: Half-hourly electricity and gas usage

In-home sensor data (to be released Summer 2026)

Linked n=95 households

Data: Air temperature; humidity; ambient light; noise level; air pressure; particulates; UV-A/B/C; VOC gas; CO2

For further details on the project's approach see:

- Indoor residential environment: consent for in-house sensor - Understanding Society
- Domestic energy use: consent for smart meter data linkage - Understanding Society
- Indoor residential environment and energy use: background information - Understanding Society

For household context see **Household questionnaire module**, including questions about people's homes and factors related to their energy use: Innovation Panel - module: household_ip17 Household Questionnaire Module - Understanding Society

IP17 also contains a **Climate adaptation module**: Innovation Panel - module: scaclimateadaptation_ip17 Self-completion Climate Adaptation - Understanding Society

Energy Performance Certificates (to be released Summer 2026):

For the IP, we have linked EPC records to 820 participant household addresses in England/Wales.

Each EPC record holds around 100 variables. Listed below are the variables that we are intending to make available, likely as a mix of untreated, broad-banded and/or top-coded via Special Licence access conditions. We are open to discussions around making other EPC variables available.

CURRENT_ENERGY_RATING	Current energy rating converted into a linear 'A to G' rating (where A is the most energy efficient and G is the least energy efficient)
POTENTIAL_ENERGY_RATING	Estimated potential energy rating converted into a linear 'A to G' rating (where A is the most energy efficient and G is the least energy efficient)
CURRENT_ENERGY_EFFICIENCY	Based on cost of energy, i.e. energy required for space heating, water heating and lighting [in kWh/year] multiplied by fuel costs. (Â£/mÂ^2/year where cost is derived from kWh).
POTENTIAL_ENERGY_EFFICIENCY	The potential energy efficiency rating of the property.
PROPERTY_TYPE	Describes the type of property such as House, Flat, Maisonette etc. This is the type differentiator for dwellings.
BUILT_FORM	The building type of the Property e.g. Detached, Semi-Detached, Terrace etc. Together with the Property Type, the Build Form produces a structured description of the property
INSPECTION_DATE	The date that the inspection was actually carried out by the energy assessor
TRANSACTION_TYPE	Type of transaction that triggered EPC. For example, one of: marketed sale; non-marketed sale; new-dwelling; rental; not sale or rental; assessment for Green Deal; following Green Deal; FIT application; none of the above; RHI application; ECO assessment. Where the reason for the assessment is unknown by the energy assessor the transaction type will be recorded as 'none of the above'. Transaction types may be changed over time.
ENVIRONMENTAL_IMPACT_CURRENT	The Environmental Impact Rating. A measure of the property's current impact on the environment in terms of carbon dioxide (COâ,,) emissions. The higher the rating the lower the COâ,, emissions. (COâ,, emissions in tonnes / year)

ENVIRONMENTAL_IMPACT_POTENTIAL	The potential Environmental Impact Rating. A measure of the property's potential impact on the environment in terms of carbon dioxide (COâ,,) emissions after improvements have been carried out. The higher the rating the lower the COâ,, emissions. (COâ,, emissions in tonnes / year)
ENERGY_CONSUMPTION_CURRENT	Current estimated total energy consumption for the property in a 12 month period (kWh/m2). Displayed on EPC as the current primary energy use per square metre of floor area.
ENERGY_CONSUMPTION_POTENTIAL	Estimated potential total energy consumption for the Property in a 12 month period. Value is Kilowatt Hours per Square Metre (kWh/mÂ^2)
CO2_EMISSIONS_CURRENT	COâ,, emissions per year in tonnes/year.
CO2_EMISS_CURR_PER_FLOOR_AREA	COâ,, emissions per square metre floor area per year in kg/mÂ^2
CO2_EMISSIONS_POTENTIAL	Estimated value in Tonnes per Year of the total COâ,, emissions produced by the Property in 12 month period.
LIGHTING_COST_CURRENT	GBP. Current estimated annual energy costs for lighting the property.
LIGHTING_COST_POTENTIAL	GBP. Potential estimated annual energy costs for lighting the property after improvements have been made.
HEATING_COST_CURRENT	GBP. Current estimated annual energy costs for heating the property.
HEATING_COST_POTENTIAL	GBP. Potential annual energy costs for lighting the property after improvements have been made.
HOT_WATER_COST_CURRENT	GBP. Current estimated annual energy costs for hot water
HOT_WATER_COST_POTENTIAL	GBP. Potential estimated annual energy costs for hot water after improvements have been made.
TOTAL_FLOOR_AREA	The total useful floor area is the total of all enclosed spaces measured to the internal face of the external walls, i.e. the gross floor area as measured in accordance with the guidance issued from time to time by the Royal Institute of Chartered Surveyors or by a body replacing that institution. (mÂ^2)
FLOOR_LEVEL	Flats and maisonettes only. Floor level relative to the lowest level of the property (0 for ground floor). If there is a basement, the basement is level 0 and the other floors are from 1 upwards
FLAT_TOP_STOREY	Whether the flat is on the top storey
FLAT_STOREY_COUNT	The number of storeys in the apartment block.
NUMBER_HABITABLE_ROOMS	Habitable rooms include any living room, sitting room, dining room, bedroom, study and similar; and also a non-separated conservatory. A kitchen/diner having a discrete seating area (with space for a table and four chairs) also counts as a habitable room. A non-separated conservatory adds to the habitable room count if it has an internal quality door between it and the dwelling. Excluded from the room count are any room used solely as a kitchen, utility room, bathroom, cloakroom, en-suite accommodation and

	similar and any hallway, stairs or landing; and also any room not having a window.
HOTWATER_DESCRIPTION	Overall description of the property feature
HOT_WATER_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
HOT_WATER_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
FLOOR_DESCRIPTION	Overall description of the property feature
FLOOR_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
FLOOR_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
WINDOWS_DESCRIPTION	Overall description of the property feature
WINDOWS_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
WINDOWS_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
WALLS_DESCRIPTION	Overall description of the property feature
WALLS_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
WALLS_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
SECONDHEAT_DESCRIPTION	Overall description of the property feature
SHEATING_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
SHEATING_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
ROOF_DESCRIPTION	Overall description of the property feature
ROOF_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
ROOF_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
MAINHEAT_DESCRIPTION	Overall description of the property feature
MAINHEAT_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.

MAINHEAT_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
MAINHEATCONT_DESCRIPTION	Overall description of the property feature
MAINHEATC_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
MAINHEATC_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
LIGHTING_DESCRIPTION	Overall description of the property feature
LIGHTING_ENERGY_EFF	Energy efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
LIGHTING_ENV_EFF	Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.
MAIN_FUEL	The type of fuel used to power the central heating e.g. Gas, Electricity
SOLAR_WATER_HEATING_FLAG	Indicates whether the heating in the Property is solar powered.
TENURE	Describes the tenure type of the property. One of: Owner-occupied; Rented (social); Rented (private).
INDICATIVE_COST	The indicative costs are the cost of installed recommendation measures, which are fixed no matter the type of house being assessed. These are displayed as a cost range on the Energy Performance Certificate as costs vary between individual suppliers.