

EPBR data fields

The purpose of this exercise is to understand very precisely what data items per unique property actually land on the register (each row) and how those data items get carried through to various use cases.

The exercise is initially for domestic EPCs only.

The exercise is crucial to get a communal understanding of data items, the units, etc.

Information about the XML Nodes is available from [Phil Beschizza](#), and has not been populated here.

Universal Description of Data Item (Brief)	XML data item as it lands from the assessor.	Open Data Variable Name	Open Data Extended Description (Including Units of Measure)	Number in Annex A of the PIA, see P IA dated 23 March 2016	Comments
		LMK_KEY	Individual lodgement identifier. Not guaranteed to be unique. See also: Certificate Hash. We're making some changes soon, so that this will be unique Read more.		
		ADDRESS1	First line of the address	1	
		ADDRESS2	Second line of the address	1	
		ADDRESS3	Third line of the address	1	
		POSTCODE	The postcode of the property	1	
		BUILDING_REFERENCE_NUMBER	Unique identifier for the building	73?	
		CURRENT_ENERGY_RATING	Current energy rating, A-G.	2	
		POTENTIAL_ENERGY_RATING	Estimated potential energy rating, A-G.	3	
		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. (£/m ² /year where cost is derived from kWh).		
		POTENTIAL_ENERGY_EFFICIENCY	Summary of the potential environmental efficiency of the property feature		
		PROPERTY_TYPE	Describes the type of property such as House, Flat, Mansion, Maisonette etc. This is actually the type differentiator for Property but only a limited number of property types, notably Apartment and Apartment Block, have any specific characteristics and warrant their own definition.	4	
		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	4	
		INSPECTION_DATE	The date that the inspection was actually carried out by the energy assessor	5	
		LOCAL_AUTHORITY	Office for National Statistics (ONS) code. Local authority area in which the building is located.	6	

		CONSTITUENCY	Office for National Statistics (ONS) code. Parliamentary constituency in which the building is located.	7	
		COUNTY	County in which the building is located (where applicable)	7	
		LODGEMENT_DATE	Date lodged on the Energy Performance of Buildings Register	8	
		TRANSACTION_TYPE	Type of transaction that triggered EPC. For example, one of: marketed sale; non-marketed sale; 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.	9	This field has been mentioned to be problematic in the Monitoring and Evaluation document in Data Quality and Monitoring and also by the UCL Energy Institute Notes from User Research Meeting 20181015 .
		ENVIRONMENT_IMPACT_CURRENT	The Environmental Impact Rating. A measure of the property's current impact on the environment in terms of carbon dioxide (CO) emissions. The higher the rating the lower the CO emissions. (CO emissions in tonnes / year)	10	
		ENVIRONMENT_IMPACT_POTENTIAL	The potential Environmental Impact Rating. A measure of the property's potential impact on the environment in terms of carbon dioxide (CO) emissions after improvements have been carried out. The higher the rating the lower the CO emissions. (CO emissions in tonnes / year)	11	
		ENERGY_CONSUMPTION_CURRENT	Estimated total energy consumption for the Property in a 12 month period. Value is Kilowatt Hours per Square Metre (kWh/m²)	12	
		ENERGY_CONSUMPTION_POTENTIAL	Estimated potential total energy consumption for the Property in a 12 month period. Value is Kilowatt Hours per Square Metre (kWh/m²)	13	
		CO2_EMISSIONS_CURRENT	CO emissions per year in tonnes/year.	14	
		CO2_EMISS_CURR_PER_FLOOR_AREA	CO emissions per square metre floor area per year in kg/m²	15	
		CO2_EMISSIONS_POTENTIAL	Estimated value in Tonnes per Year of the total CO emissions produced by the Property in 12 month period.	16	
		LIGHTING_COST_CURRENT	GBP. Current estimated annual energy costs for lighting the property.	17	
		LIGHTING_COST_POTENTIAL	GBP. Potential estimated annual energy costs for lighting the property after improvements have been made.	18	

		HEATING_COST_CURRENT	GBP. Current estimated annual energy costs for heating the property.	19	
		HEATING_COST_POTENTIAL	GBP. Potential annual energy costs for lighting the property after improvements have been made.	20	
		HOT_WATER_COST_CURRENT	GBP. Current estimated annual energy costs for hot water	21	
		HOT_WATER_COST_POTENTIAL	GBP. Potential estimated annual energy costs for hot water after improvements have been made.	22	
		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. (m ²)	23	
		ENERGY_TARIFF	Type of electricity tariff for the property, e.g. single.	24	
		MAINS_GAS_FLAG	Whether mains gas is available. Yes means that there is a gas meter or a gas-burning appliance in the dwelling. A closed-off gas pipe does not count.	25	
		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	26	
		FLAT_TOP_STOREY	Whether the flat is on the top storey	27	
		FLAT_STOREY_COUNT	The number of Storeys in the Apartment Block.	28	PIA document describes this as whether the building is a flat not on the top floor, implying a yes/no rather than which storey it is.
		MAIN_HEATING_CONTROLS	Type of main heating controls. Includes both main heating systems if there are two.		
		MULTI_GLAZE_PROPORTION	The estimated banded range (e.g. 0% - 10%) of the total glazed area of the Property that is multiple glazed.	30	PIA says "proportion of the windows which are multi-glazed", which is not the same as % of glazed area that is multi-glazed.
		GLAZED_TYPE	The type of glazing. From British Fenestration Rating Council or manufacturer declaration, give as one of; single; double; triple.	31	
		GLAZED_AREA	Ranged estimate of the total glazed area of the Habitable Area.		
		EXTENSION_COUNT	The number of extensions added to the property. Between 0 and 4.	32	
		NUMBER_HABITABLE_ROOMS	Methodology in docs.	33	

		NUMBER_HEATED_ROOMS	The number of heated rooms in the property if more than half of the habitable rooms are not heated.	34	
		LOW_ENERGY_LIGHTING	The percentage of low energy lighting present in the property as a percentage of the total fixed lights in the property. 0% indicates that no low-energy lighting is present.	66	
		NUMBER_OPEN_FIREPLACES	The number of Open Fireplaces in the Property. An Open Fireplace is a fireplace that still allows air to pass between the inside of the Property and the outside.	37	
		HOTWATER_DESCRIPTION	Overall description of the property feature	39	
		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.	40	
		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.	41	
		FLOOR_DESCRIPTION	Overall description of the property feature	51	
		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.	52	
		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.	53	
		WINDOWS_DESCRIPTION	Overall description of the property feature	54	
		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.	55	
		WINDOWS_ENV_EFF	WINDOWS. Environmental efficiency rating. One of: very good; good; average; poor; very poor. On actual energy certificate shown as one to five star rating.	56	
		WALLS_DESCRIPTION	Overall description of the property feature	57	
		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.	58	
		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.	59	
		SECONDHEAT_DESCRIPTION	Overall description of the property feature	48	

		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.	49	
		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.	50	
		ROOF_DESCRIPTION	Overall description of the property feature	60	
		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.	61	
		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.	62	
		MAINHEAT_DESCRIPTION	Overall description of the property feature	42	
		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.	43	
		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.	44	
		MAINHEATCONT_DESCRIPTION	Overall description of the property feature	45	
		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.	46	
		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.	47	
		LIGHTING_DESCRIPTION	Overall description of property feature. Total number of fixed lighting outlets and total number of low-energy fixed lighting outlets	63	
		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.	64	
		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.	65	
		MAIN_FUEL	The type of fuel used to power the central heating e.g. Gas, Electricity	36	
		WIND_TURBINE_COUNT	Number of wind turbines; 0 if none.	67	

		HEAT_LOSS_CORRIDOOR	Flats and maisonettes only. Indicates that the flat contains a corridor through which heat is lost. Heat loss corridor, one of: no corridor; heated corridor; unheated corridor	68	
		UNHEATED_CORRIDOR_LENGTH	The total length of unheated corridor in the flat. Only populated if flat or maisonette contains unheated corridor. If unheated corridor, length of sheltered wall (m²).	69	
		FLOOR_HEIGHT	Average height of the storey in metres.	35	
		PHOTO_SUPPLY	Percentage of photovoltaic area as a percentage of total roof area. 0% indicates that a Photovoltaic Supply is not present in the property.	70?	
		SOLAR_WATER_HEATING_FLAG	Indicates whether the heating in the Property is solar powered.	72	
		MECHANICAL_VENTILATION	Identifies the type of mechanical ventilation the property has. This is required for the RdSAP calculation.	71	
		ADDRESS	Field containing the concatenation of address1, address2 and address3. Note that post code is recorded separately.		Concatenation of fields.
		LOCAL_AUTHORITY_LABEL	The name of the local authority area in which the building is located. This field is for additional information only and should not be relied upon: please refer to the Local Authority ONS Code.		Not stored on registers - added to 'extracted' dataset by Landmark prior to FTP transfer.
		CONSTITUENCY_LABEL	The name of the parliamentary constituency in which the building is located. This field is for additional information only and should not be relied upon: please refer to the Constituency ONS Code.		Not stored on registers - added to 'extracted' dataset by Landmark prior to FTP transfer.
		CERTIFICATE_HASH	Unique, cryptographic hash of a set of fields from the certificate. Can be used to uniquely identify a certificate in the downloads and the API. Note that these may change in the future, but will be consistent within a single session. Note: this will be removed soon in favour of just using LMK KEY. Read more.		Not stored on registers - added to 'extracted' dataset by Landmark prior to FTP transfer.