

# POLAND

## 1. CONTEXT OF THE BUILT ENVIRONMENT

### Urban population

Total population	Functional Urban Area population*	Share of urban population	Average urban growth
38.482 million (2020)	18.970 million (2020)	49% (2020)	-0.1% (2015-2020)

\*Data source: European Commission (2023), FUA and eFUA methodology: OECD/European Commission (2020)<sup>1</sup>

### Building data

	Building stock	Built before 1980	Annual construction	Annual construction rate
Residential	15,540 thousand dwellings (2021)	45% (2013)	234,680 thousand dwellings (2023)	2% (2023)
Non-residential	2.152 million m <sup>2</sup>		12.825 million m <sup>2</sup>	596%

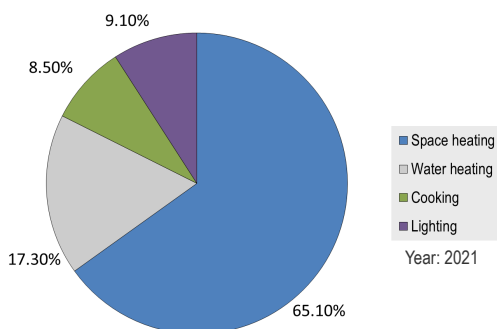
### Energy & emissions data

Residential buildings**	1990	2021	+/- rate
Final energy consumption (PJ/year)	746	913	22.3%
	1990	2021	+/- rate
GHG emissions (MtCO <sub>2</sub> /year)	35.28	31.67	-10.2%

\*\*Data source: IEA Countries & Regions<sup>2</sup>

Non-residential buildings	2021
Final energy consumption (PJ/year)	N/A
GHG emissions (MtCO <sub>2</sub> /year)	10.37

#### Energy consumption by end-use (Residential)



#### Heating degree days\*\*\*

2,478.6

Degree (°C) Days (2020)

Reference degree day: 16 degree (°C)

#### Cooling degree days\*\*\*

34.6

Degree (°C) Days (2020)

Reference degree day: 21 degree (°C)

\*\*\*Data source: IEA Weather, Climate and Energy Tracker<sup>3</sup>

<sup>1</sup> <http://data.europa.eu/89h/2ff68a52-5b5b-4a22-8f40-c41da8332cfe>, <https://doi.org/10.1787/d58cb34d-en>

<sup>2</sup> <https://www.iea.org/countries>

<sup>3</sup> <https://www.iea.org/data-and-statistics/data-tools/weather-climate-and-energy-tracker>

## 2. GOVERNANCE AND CAPACITY BUILDING

### Who does what

#### Ministries/Agencies responsible for BEE (building energy efficiency) and related policies

<b>A</b> Ministry of Economic Development and Technology	<b>B</b> Ministry of Climate and Environment	<b>C</b>	<b>D</b>	<b>E</b>
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#### Ministries/Agencies responsible for each policy area

Building code	Governmental buildings	Housing policy in general	Financial incentives for BEE	Behaviour change for BEE
<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>
BEE standard	Act/law for BEE regulation	Whole life carbon	Energy policy in general	NDC
<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>	<b>A</b> <b>B</b> <b>C</b> <b>D</b> <b>E</b>

#### Local governments' authority to customise BEE standards<sup>4</sup>

—	<del>Local governments can customise national standards.</del>
—	<del>Local governments cannot adjust national standards, but the standards differ across regions depending on the local climate.</del>
<input checked="" type="checkbox"/>	<b>Local governments cannot adjust national standards. All building codes, standards or requirements are uniform across the entire country.</b>
<input checked="" type="checkbox"/>	<b>Neighbourhood level approach/planning</b> Sub-national governments are working on district/neighbourhood approach.
<input checked="" type="checkbox"/>	<b>The national government is tracking progress on decarbonisation efforts at the local level</b> Since July 2021 the declarations submitted to Central Records of Emissions of Buildings include information on the number and type of heat sources or fuel combustion sources in operation, as well as their purpose and the fuels used in them. This data are currently available at local level.
<input checked="" type="checkbox"/>	<b>More ambitious policy instrument by local governments</b> Most voivodeships, including many cities, have introduced or intend to introduce anti-smog resolutions

### Capacity building

#### Government funding programmes to train/enhance skills for SMEs

Designing for ZEB	<input checked="" type="checkbox"/>	Insulation	<input type="checkbox"/>
Calculation for energy performance of buildings	<input type="checkbox"/>	Installation of energy efficient equipment	<input type="checkbox"/>
Calculation for life cycle CO2 of buildings	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>

**Actions undertaken by the national government to support local governments for BEE policy implementation<sup>5</sup>**

Co-ordinating regional networks for knowledge exchange and support	-
Providing funding for training	-
Distributing toolkits and guidelines	Priority ✓
Developing online platforms to share best practices	-
Hosting annual conferences focused on BEE policy implementation	✓
Offering grants to hire consultants	-
Collaborating with research institutes offering specialised courses on BEE practices	-
Creating incentive programmes to reward local governments	Priority ✓
Supporting the Implementation of local regulations	-
Establishing mentorship programmes	-
Other	-

### 3. GOALS AND POLICY FOCUS

**Policy areas covered in the goals and existing commitments**

	Zero emission for new buildings	Zero emission for existing buildings	Renewable energy for new buildings	Renewable energy for existing buildings	Whole-life cycle carbon reduction
NDC	-	✓	-	✓	-
LT-LEDS	-	-	-	✓	-
Ministerial plan	-	-	-	✓	-

**Quantitative targets included in long-term goals**

<b>Fossil fuel-free buildings</b>	Update heat systems of 791.200 residential buildings towards sustainable sources by 2026.	<b>District heating/cooling</b>	Heat sources in district heating systems – from 0 to 45 in IV quarter 2024, 90 II quarter 2026.
Insulation		Heat pumps	
Rooftop PVs		Solar heating of water	
<b>Other renewable energy</b>	Reach 700,390 residential buildings with installed renewable energy sources by 2026.	<b>Other</b>	Decrease energy poverty levels from 9.4% (2018) to 6% by 2040.

## Policy focus for decarbonising buildings (Top 3)

### Current focus

Passive design to reduce heating demand	<input type="radio"/>
Energy efficiency on heating	<input checked="" type="radio"/>
Passive design to reduce cooling demand	<input type="radio"/>
Energy efficiency on cooling	<input type="radio"/>
Switching energy to sustainable energy	<input checked="" type="radio"/>
Renewable energy	<input checked="" type="radio"/>
Embodied carbon	<input type="radio"/>
Circularity of building materials	<input type="radio"/>



### Future priorities

Passive design to reduce heating demand	<input type="radio"/>
Energy efficiency on heating	<input checked="" type="radio"/>
Passive design to reduce cooling demand	<input type="radio"/>
Energy efficiency on cooling	<input type="radio"/>
Switching energy to sustainable energy	<input checked="" type="radio"/>
Renewable energy	<input checked="" type="radio"/>
Embodied carbon	<input type="radio"/>
Circularity of building materials	<input type="radio"/>

## Energy poverty

### Strategies to reduce poverty and inequality via decarbonising buildings



Stronger financial support for decarbonising public housing for low-income people					<input checked="" type="checkbox"/>
Financial support to buy zero-energy/emission homes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Financial support to renovate their homes to zero-energy/emission	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Allowing partial retrofits to ease financial burden on upfront cost	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Provide energy efficient appliances (e.g. LED)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Energy bill coupon	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Energy coach/consultation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other					<input checked="" type="checkbox"/>

Note: Policies targeting specific households  Low-income  Elderly  Households with more than 3 children  Other

## 4. DEVELOPMENT OF POLICY INSTRUMENTS

### Standards and regulations for decarbonising buildings

Building codes	National level	<input checked="" type="radio"/>
	State level	<input type="radio"/>
	Local level	<input type="radio"/>

#### Type of buildings covered by the mandatory energy efficiency code

##### Residential buildings

New	<input checked="" type="checkbox"/> All	<input type="checkbox"/> Only large units
Renovated	<input checked="" type="checkbox"/> All	<input type="checkbox"/> Only large units

##### Non-residential buildings

New	<input checked="" type="checkbox"/> All	<input type="checkbox"/> Only large units
Renovated	<input checked="" type="checkbox"/> All	<input type="checkbox"/> Only large units

#### Elements of building codes (new buildings)

Insulation/heat transmission coefficient	<input checked="" type="checkbox"/>
Primary energy consumption	<input checked="" type="checkbox"/>
Primary fossil-fuel energy consumption	<input type="checkbox"/>
Energy efficiency of equipment	<input checked="" type="checkbox"/>
Operational carbon reduction	<input type="checkbox"/>
Whole life cycle carbon	<input type="checkbox"/>
Comprehensive green building assessment	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>

**Stricter standards for public buildings than private buildings**

🏠 For new construction 🔧 For renovation

	Public buildings	Public housing
Energy efficiency	🏠 🔧	🏠 🔧
Zero energy/emission	– –	– –
Renewable energy	– –	– –
Embodied carbon/life cycle	– –	– –
Locally sourced & recycled materials	– –	– –

**Certificates/labeling programme for built environment**

**Types of certificates/programme**

Energy Performance Certificate (EPC)	<input checked="" type="checkbox"/>
Energy labelling on passive house	<input type="checkbox"/>
Energy labelling on annual energy consumption	<input type="checkbox"/>
Comprehensive built environment certification	<input type="checkbox"/>
Labeling for whole life carbon emissions	<input type="checkbox"/>

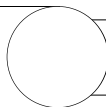
**Target for Mandatory EPC**

New buildings (residential)	<input type="checkbox"/>
New buildings (non-residential)	<input type="checkbox"/>
Existing buildings for renovation	<input type="checkbox"/>
Existing buildings for sales/rent	<input checked="" type="checkbox"/>

**Standardised calculation methods for embodied carbon/LCA**


Database of CFP/EPD	<input checked="" type="checkbox"/>	<input type="checkbox"/> Governmental	<input checked="" type="checkbox"/> Non-governmental
Grant for using the following materials	<input checked="" type="checkbox"/>	<input type="checkbox"/> Low-carbon	<input type="checkbox"/> Bio-based <input checked="" type="checkbox"/> Reused
Policy tools for reusing building materials	<input checked="" type="checkbox"/>		
Mandatory declaration	<input type="checkbox"/>	<input type="checkbox"/> Public	<input type="checkbox"/> Residential <input type="checkbox"/> Non-residential
Limit value on CO2 emissions	<input type="checkbox"/>	<input type="checkbox"/> Public	<input type="checkbox"/> Residential <input type="checkbox"/> Non-residential

Minimum energy performance standards (MEPS) regulation for existing buildings



<input type="checkbox"/> All buildings	<input type="checkbox"/> Residential (rent)	<input type="checkbox"/> Residential (sale)
<input type="checkbox"/> Office (rent/sale)	<input type="checkbox"/> Public buildings	<input type="checkbox"/> Other

## Climate resilience

**🔥 Extreme heat adaptation measures implemented in the building sector**

Strategic orientation of main building facades	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Light coloured and reflective materials	<input type="checkbox"/>	<input type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Green roof	<input checked="" type="checkbox"/>	<input type="checkbox"/> Regulations	<input checked="" type="checkbox"/> Financial incentives
Green facades	<input checked="" type="checkbox"/>	<input type="checkbox"/> Regulations	<input checked="" type="checkbox"/> Financial incentives
Other	<input checked="" type="checkbox"/>		

**🏠 Floods/storms adaptation measures implemented in the building sector**

Lowest liveable floor above ground level	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Roof drainage system	<input checked="" type="checkbox"/>	<input type="checkbox"/> Regulations	<input checked="" type="checkbox"/> Financial incentives
Hip-roof	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Hurricane straps	<input type="checkbox"/>	<input type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Impact-resistant glass	<input type="checkbox"/>	<input type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Backup generators	<input type="checkbox"/>	<input type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives
Microgrids	<input type="checkbox"/>	<input type="checkbox"/> Regulations	<input type="checkbox"/> Financial incentives

**Publicly available geographic database with climate risk information**

Flood risk	<input checked="" type="checkbox"/>
Heat wave	<input checked="" type="checkbox"/>
Storm	<input type="checkbox"/>
Wild fire	<input checked="" type="checkbox"/>
Other	<input checked="" type="checkbox"/>

**Building certificate system on climate resilience**

Resilience to flood risk	<input type="checkbox"/>
Resilience to heat	<input type="checkbox"/>
Other	<input checked="" type="checkbox"/>

This survey is designed for national governments.