

Emilia-Romagna

Inhabitants: 4,395,569
Area: 22,123 km²

Energy & CO₂ figures

- Primary energy consumption: 160 TWh/y
- Resulting in 40.580 kt CO₂/y (9.2 t CO₂/y per capita)



Regional characteristics:

Average primary energy: 170-180 kWh/m²/y

Average heating demand: NA

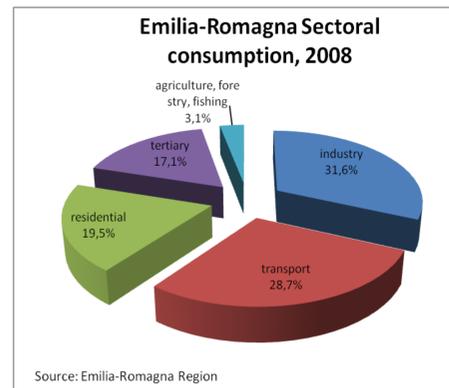
Average age of buildings / percentage of old buildings:

before 1919 18%, 1919 to 1945 13%, 1946 to 1961 18%, 1962 to 1971 19%, 1972 to 1981, 17%, 1982 to 1991 8%, after 1991 7%

Cost for new building with dwellings under current building code: about 1200 €/m²

Cost for new building with dwellings and passive house standard: (class A): 1400-1600 €/m²

Degree days in the region: Zone D: 1401 - 2100; Zone E: 2101 - 3000; Zone F: >3000

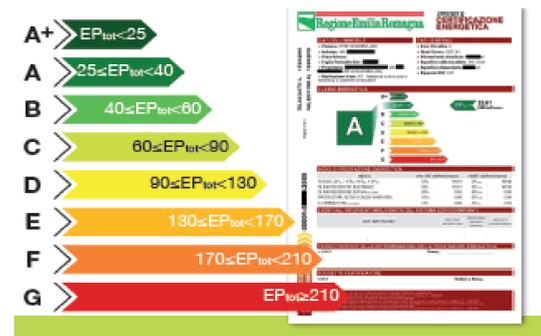


EE buildings in your region:

A+ CLASS: < 25 (kWh/m²/y)

A CLASS: 25 - 40 (kWh/m²/y)

*Including heating + domestic hot water production

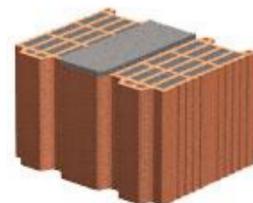


Implementation of EPBD:

Name of national directive: **D. Leg. 192/5005 + DPR 59/2009**

Other directives supporting EPBD:

- regional: DAL e.R. 156/2008 + DGR E.R. 1366/2011



Funds and incentives to support EE in buildings:

National: 55% tax rebate , Kyoto Funds

Regional: Funds for Enterprise, Rotation Funds

Local: Different incentives (eg volumetric bonus)

Main challenges in implementing EPBD:

Refurbishment of existing buildings

Citizen's awareness

Innovations in EE buildings:

- Buildings automation systems
- Integrated system with heat pump-boiler-solar panels
- BIPV – Buildings Integrated PhotoVoltaics
- Mechanical ventilation with enthalpy heat recovery
- Advanced brick with low thermal conductivity

