

### Session 1

# Challenges of the new energy performance of buildings directive

Presenter: Silvio De Nigris (Regione Piemonte)

14 March 2024



# Content

- The challenges of the new energy performance of buildings directive
- The need of local energy planning at local level
- Example of data driven support of local energy planning in Piemonte Region

# Piemonte Region

## PIEMONTE REGION



- 4.3 millions inhabitants
- Half of the territory is mountain area
- 8 Provinces and more than 1.200 Municipalities
- 12 Mtoe Gross Energy Consumption (55% based on natural gas)
- 10 Mtoe of Final Energy Consumption (50% in the building sector)
- 20% of renewables in final consumption

# The EPBD approved



The directive holds the key to unlocking the full potential of buildings in contributing to the energy system, with a particular focus on benefiting citizens, especially those facing energy poverty.

As one of the largest energy-consuming sectors, enhancing energy efficiency in buildings it is supposed not only to bolster the resilience and energy security of the EU but also elevate industrial competitiveness in the energy efficiency and renewables sectors. Moreover, it will generate thousands of job opportunities.

# The new EPBD recast. Main aspects

Each Member State shall establish a **national building renovation plan** to ensure the renovation of the national building stock with the objective to transform existing buildings into **zero-emission buildings**.

Building renovation plan shall encompass:

- an overview of the national building stock [...], an overview of market barriers and market failures and an overview of the opportunities
- a roadmap with nationally established targets and measurable progress indicators, with a view to the 2050 climate neutrality goal [...];

Type of building	After 01.01.27	After 01.01.30	After 01.01.33
Buildings and building units owned by public bodies	F	E	
Non-residential buildings and building units, other than those owned by public bodies	F	E	
Residential buildings and building units		F	E

Starting from 30.06.2024 the National Building Renovation Plans should be submitted to the Commission every 5 years, setting intermediate targets for 2030 and 2040

# The new EPBD recast. Main aspects

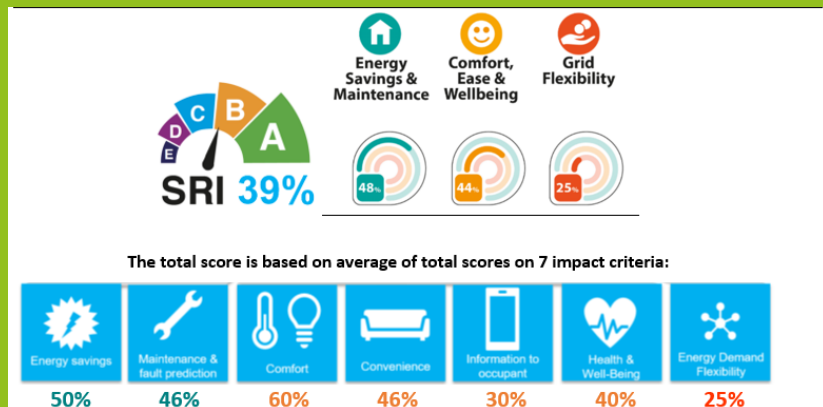
From 1 January 2027 at the latest, Member States shall not provide **any financial incentives** for the installation of boilers powered by fossil fuels,

It is foreseen a **full decarbonisation of heating and cooling**, including through district heating and cooling networks, and the phase out of fossil fuels in heating and cooling with a view to a complete phase-out by 2040 at the latest (Annex II - Template for the national building renovation plans)

Member States shall ensure that from the following dates, **new buildings are zero-emission buildings** in accordance with Annex III:

- as of 1 January 2027, new buildings occupied or owned by public authorities; and
- as of 1 January 2030, all new buildings

# The new EPBD recast. Main aspects



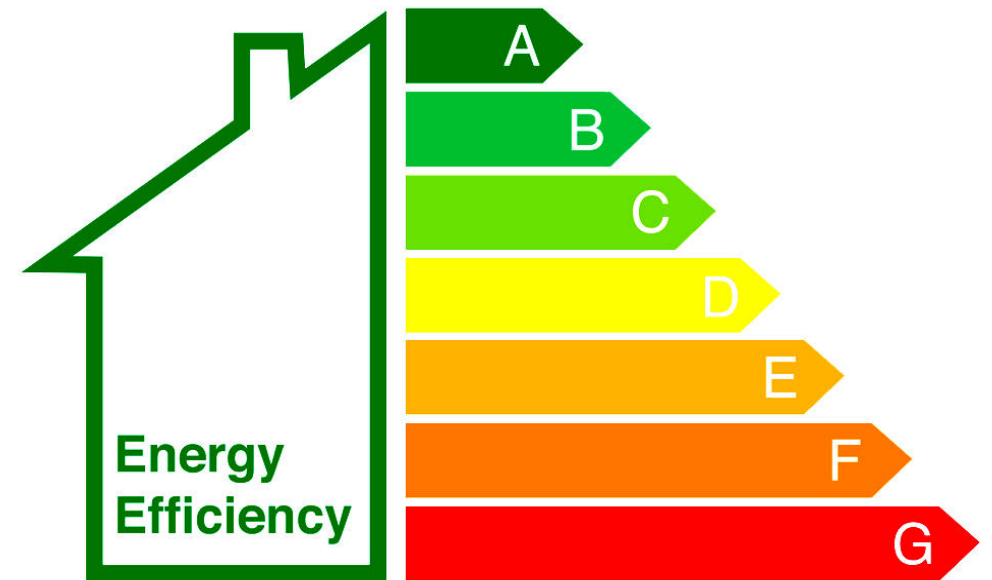
- By 31 December 2024, Member States shall introduce a scheme of **renovation passports** based on the common framework established by the Commission. The renovation passport shall comprise a renovation roadmap indicating a sequence of renovation steps building upon each other, with the objective to transform the building into a zero-emission building by 2050 at the latest.
- The Commission shall adopt delegated acts concerning an optional common Union scheme for rating the **smart readiness** of buildings. The rating shall be based on an assessment of the capabilities of a building to adapt its operation to the needs of the occupant and the grid.

# The new EPBD recast. Main aspects

By 31 December 2025 at the latest, **the energy performance certificate** shall be defined on a closed scale using only letters from A to G. The letter A shall correspond to zero-emission buildings [...] and the letter G shall correspond to the 15% worst-performing buildings in the national building stock at the time of the introduction of the scale. The remaining classes (B to F) have an even bandwidth distribution of energy performance indicators.

Each Member State shall set up a national database for energy performance of buildings.

The database shall be publicly accessible. Member States shall ensure access to the full energy performance certificate for all stakeholders.





# The new EPBD recast. Main aspects

Great emphasis to the renovation of the building stock with challenging targets in front of us.

Taking into accounts also the targets fixed by the EED 2023/1791:

- each Member State shall ensure that at least 3 % of the total floor area of heated and/or cooled buildings that are owned by public bodies is renovated each year to be transformed into at least nearly zero-energy buildings or zero-emission buildings (art. 6 of the EED)
- Member States shall ensure that the total final energy consumption of all public bodies combined is reduced by at least 1,9 % each year, when compared to 2021.





There is a new and urgent call for local energy planning from the local level!

# The Covenant of Mayors Initiative

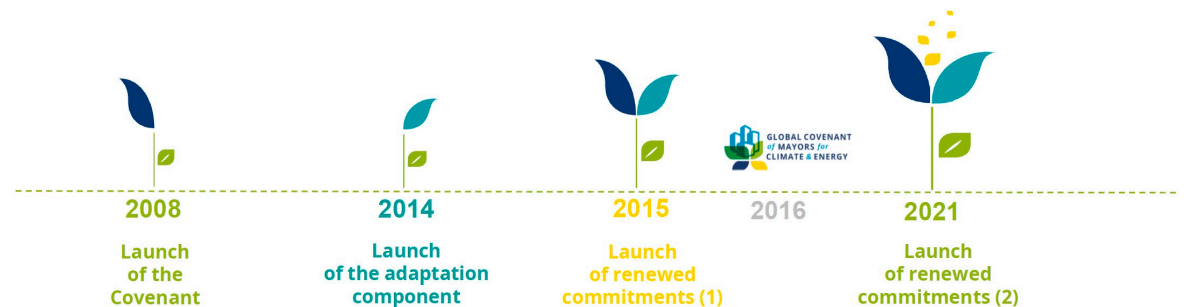


Local Authorities are invited to join the movement and commit to carbon neutrality by 2050 drafting a Sustainable Energy and Climate Action Plan, fixing the roadmap on how to reach the target.

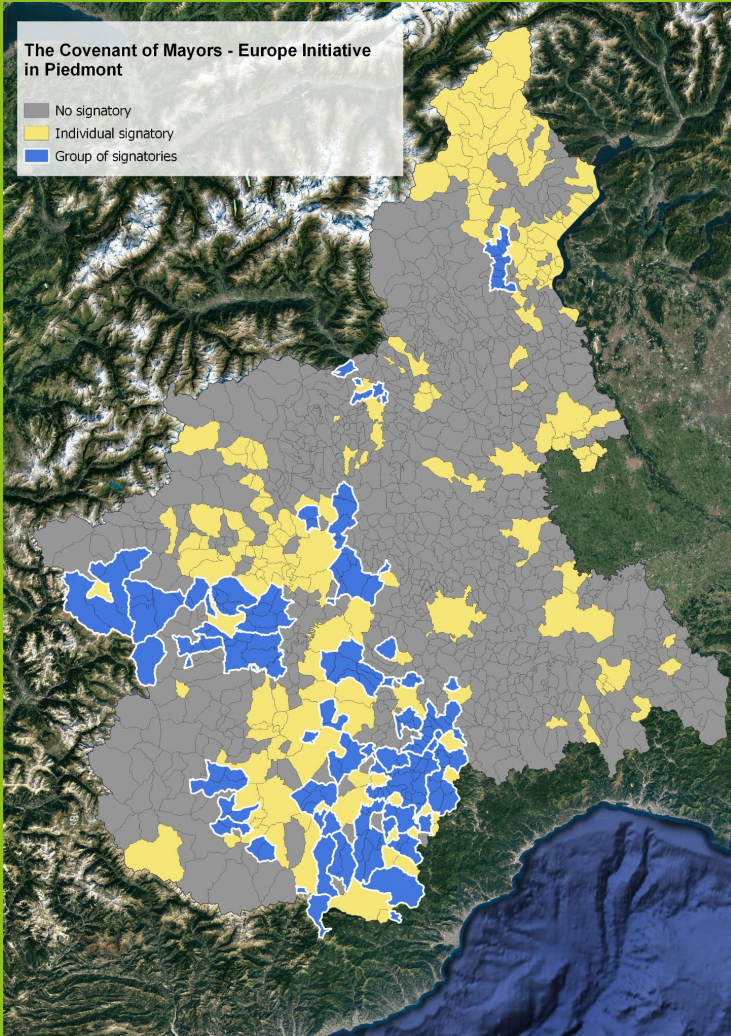
## Key figures

 <b>11963</b> Signatories	 <b>287</b> Supporters	 <b>207</b> Coordinators
 <b>20734</b> Best practices actions	 <b>8255</b> Submitted action plans	

Numbers include EU-27 countries and their signatories, coordinators and supporters

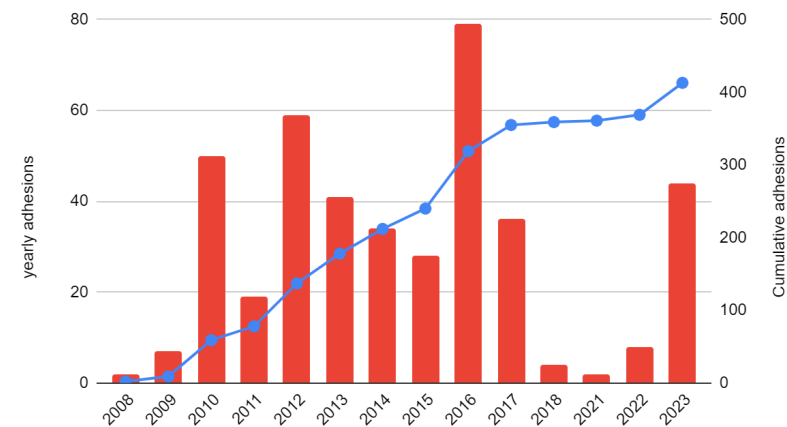


# The Covenant of Mayors in Piemonte



- About 370 adhesions as individuals or as a group of Municipalities
- More than 30 aggregations involving about 200 signatories
- A new process of adhesions undergoing with several signatories renewing the commitment

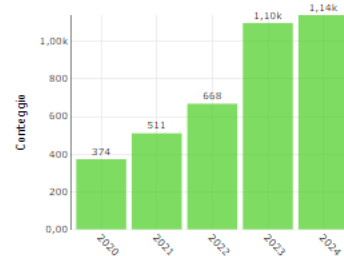
Covenant of Mayors adhesion in Piemonte



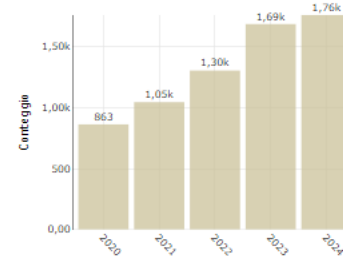
# The Covenant of Mayors in Piemonte

- We collect energy data from different providers and databases and we deliver them on a web-portal where the Municipality finds all data collected.
- Data can be downloaded and used to define the Baseline Inventory Emission.
- Data are available for several years

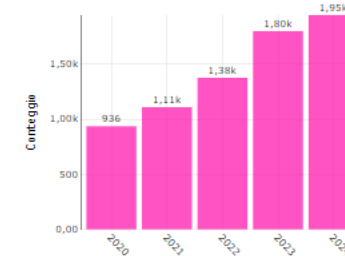
Edifici di classe A4 - storico



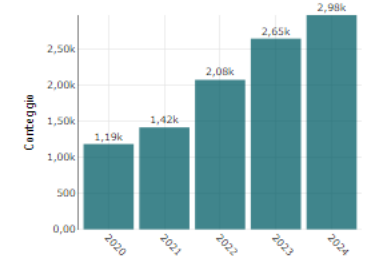
Edifici di classe A3 - storico



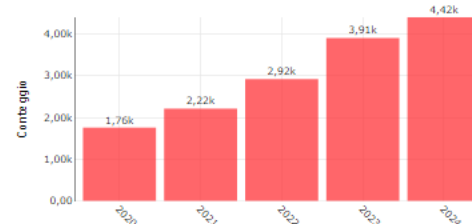
Edifici di classe A2 - storico



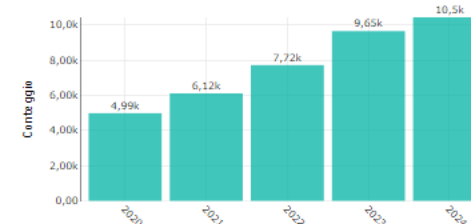
Edifici di classe A1 - storico



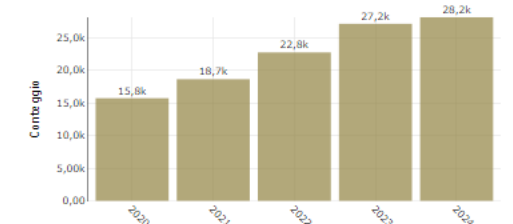
Edifici di classe B - storico



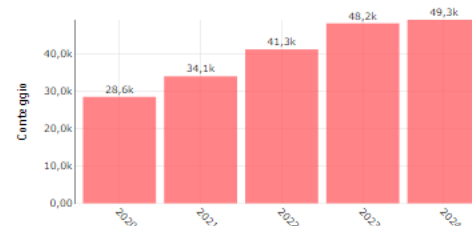
Edifici di classe C - storico



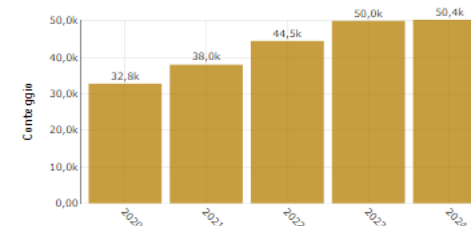
Edifici di classe D - storico



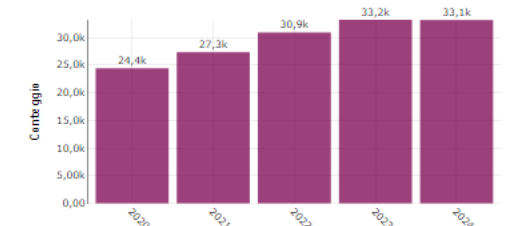
Edifici di classe E - storico



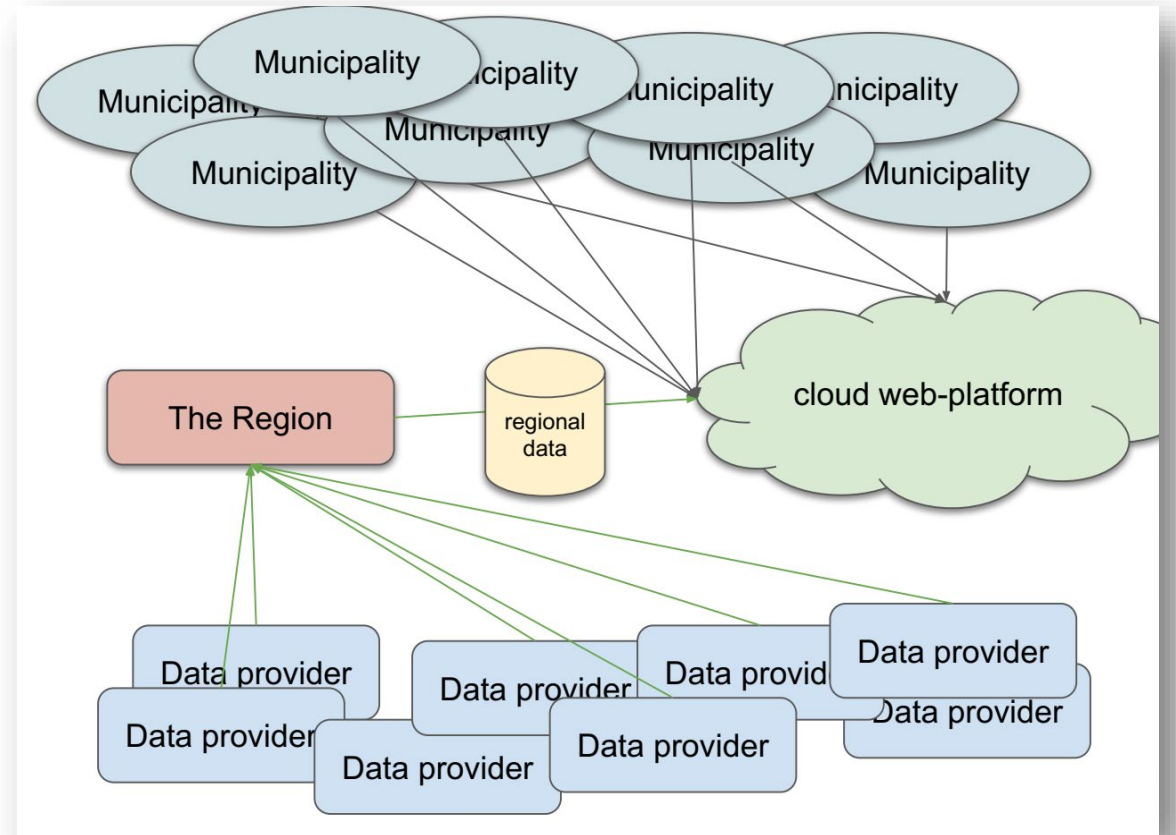
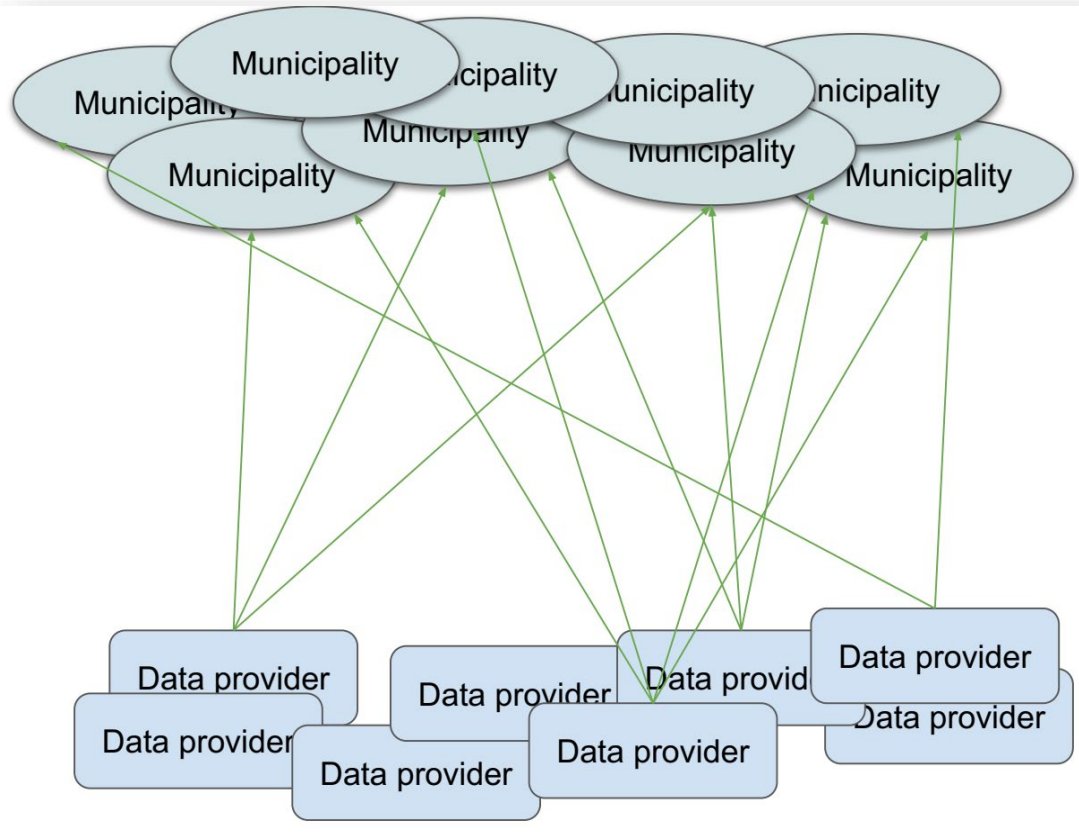
Edifici di classe F - storico



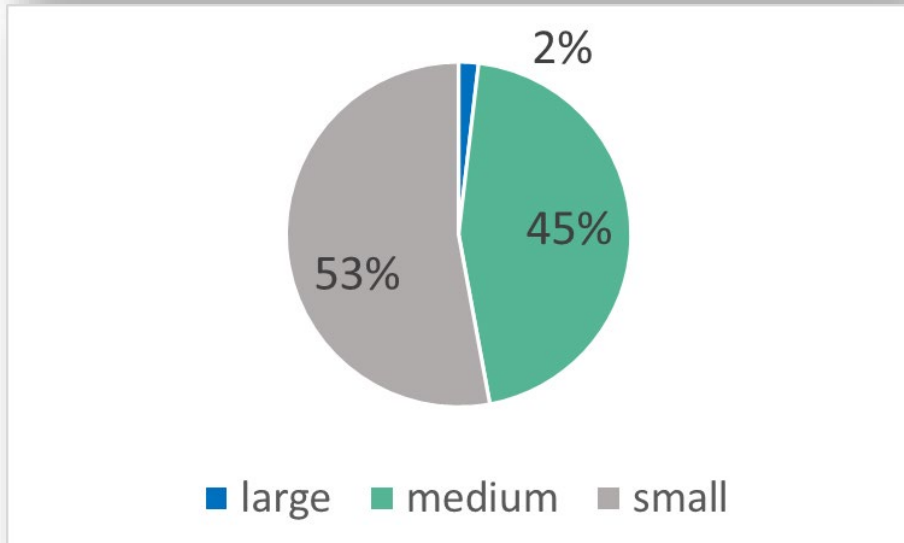
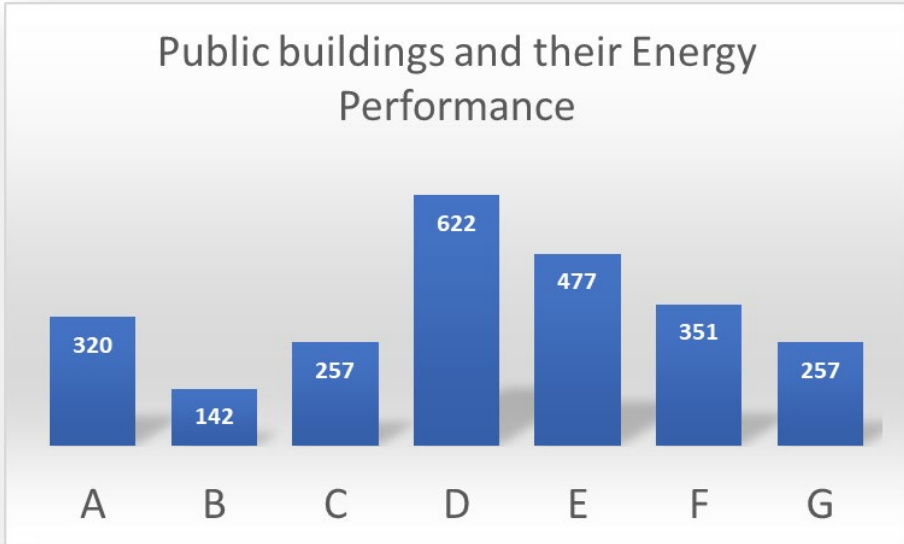
Edifici di classe G - storico



# The Energy Observatory supporting local energy planning

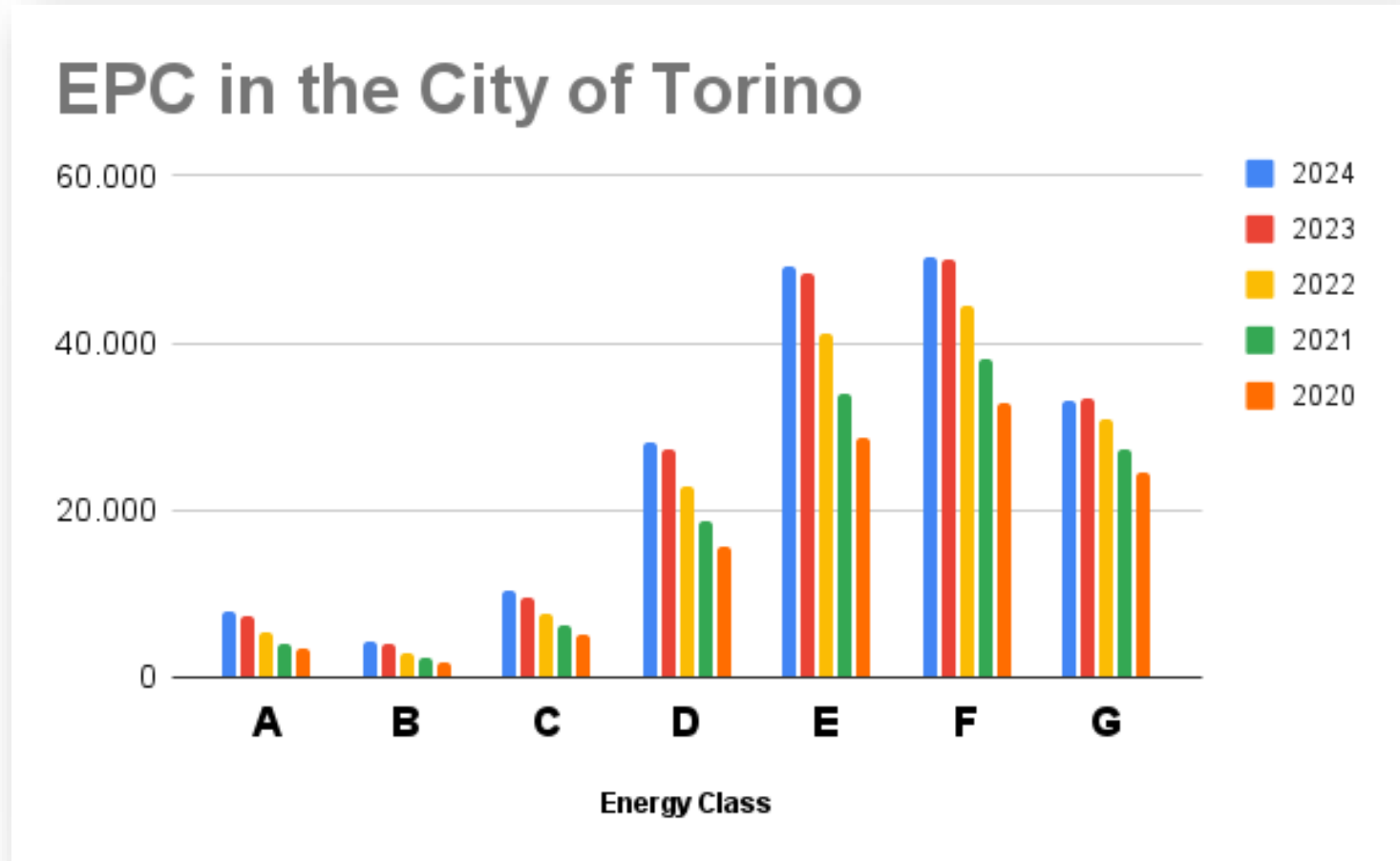


# Examples of data available



Large > 10,000 sqm

Medium > 1,000 sqm



## Take aways

- The new EPBD calls Government Bodies (from all levels) to a new wave of planning activities that need to be continuously updated and kept integrated with a multilevel governance perspective.
- Data are essential to lead this process
- Data should be available, but they should be also accessible for local authorities. It is, therefore, crucial the role of territorial coordinators.

**If you would like more information,  
please visit [www.timepac.eu](http://www.timepac.eu) or contact us at  
[silvio.denigris@regione.piemonte.it](mailto:silvio.denigris@regione.piemonte.it)**

Thanks for your attention!