

ENERPAT (Energy Planning Assessment Tool), is an application that enables professionals in the building sector (architects, urban planners, builders, technicians and municipal managers) to assess the state of the residential building stock and define rehabilitation strategies to improve the energy efficiency of the buildings



The application integrates the data obtained from the Energy Performance Certificates provided by the Catalan Institute of Energy (ICAEN), the cadastre and the census sections, together with geographic information.

The rehabilitation measures are based on the ICAEN simulation tool and the "Long-term strategy for energy rehabilitation in the building sector in Spain" (ERESEE 2014).

A 5-step process from the detection of the buildings to be rehabilitated to the cost of the reform program:

1. SELECTION OF A MUNICIPALITY:

ENERPAT shows the energy certifications of residential buildings on three scales: municipality, county and province. For the province, county or municipality selected, the overall energy certifications of the residential buildings at each scale are displayed. The municipality can be selected by either clicking on its position in the map or by clicking its name from a drop-down menu.

2. STATE OF THE RESIDENTIAL BUILDING STOCK:

ENERPAT classifies the residential buildings with energy performance certificate into 9 groups, according to their year of construction and characteristics. Within each group, a percentage of apartments to be refurbished can be selected in order to determine the cost of the refurbishment and the energy savings and improvements in the energy ratings that would be obtained.

3. REHABILITATION MEASURES:

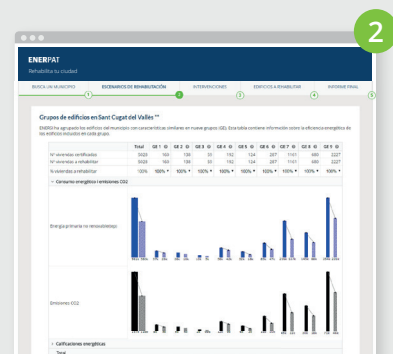
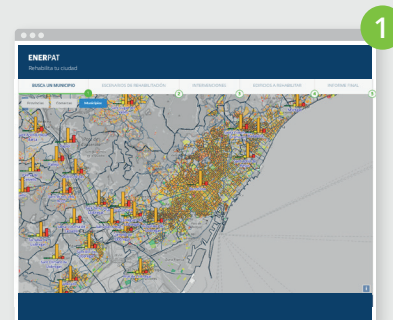
For each of the building groups to be rehabilitated, ENERPAT proposes a series of refurbishment measures for each construction system (walls, roofs, windows, etc.) and building equipment (boiler, etc.) in order to reduce energy consumption.

4. LOCATION OF BUILDINGS:

ENERPAT facilitates the location of the buildings to be refurbished on a map and in an address list.

5. REPORT:

At the end of the process, ENERPAT generates a report with the information provided in the previous steps.



Medida a aplicar	Coste por medida	Ahorro energético	Medida a aplicar
1. Suelo exterior y al exterior de la fachada	1000	10000	1000
2. Suelo exterior y al exterior de la fachada	1000	10000	1000
3. Suelo exterior y al exterior de la fachada	1000	10000	1000
4. Suelo exterior y al exterior de la fachada	1000	10000	1000
5. Suelo exterior y al exterior de la fachada	1000	10000	1000
6. Suelo exterior y al exterior de la fachada	1000	10000	1000
7. Suelo exterior y al exterior de la fachada	1000	10000	1000
8. Suelo exterior y al exterior de la fachada	1000	10000	1000
9. Suelo exterior y al exterior de la fachada	1000	10000	1000

