

Spain

National Geographic Institute of Spain

Providing insights to realise the potential of solar energy in Spain

“Energy efficiency is a priority of general interest, driven not only by economic reasons due to rising electricity and gas prices, but also for ecological and sustainability reasons. The IGN wanted to help users to know both the solar potential of their building and the optimal placement for solar panels.”

Lorenzo Garcia Asensio
Director General, National Geographic Institute, Spain

Citizens in Spain can assess whether solar energy is a viable option for their building thanks to a new service from the National Geographic Institute (IGN).

The viewer, developed from open-source software, uses a range of public data to assess solar potential, as well as the optimal placement for solar panels.

Users simply enter an address to locate the position of the building. The viewer then displays detailed building data, including the roof area, average, maximum and minimum solar potential, and total potential energy generated for one year.

The solar potential is calculated using data from buildings, a digital terrain model and solar radiation (PVGIS) obtained from different public administrations.

Results are displayed in two standard web services:



WMS:

<https://wms-potencial-solar.ign.es/potencial-solar>

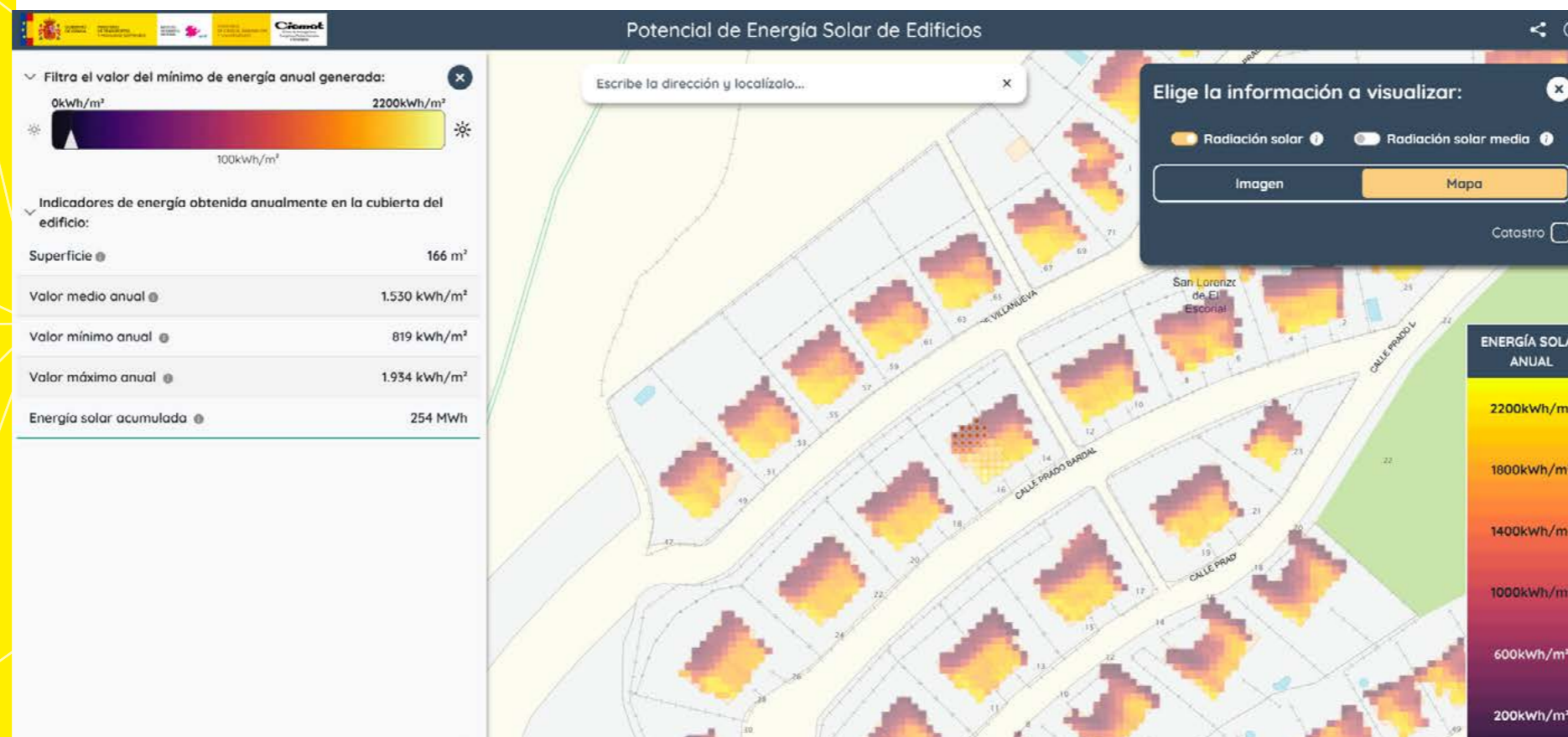
WMTS:

<https://wmts-potencial-solar.ign.es/potencial-solar>



Find out more:

<https://eficiencia-energetica.ign.es/solar>



Benefits

- Demonstrates the benefit of reusing public data.
- Shows how Spain's location is highly appropriate for realising 100% clean solar energy.
- Enables citizens to know the solar potential of their building to decide whether to install solar panels for self-consumption.
- Provides insights to identify the optimal location for solar panels.
- Enables solar panel installation companies to gather more information.
- Allows public administrations to estimate the solar energy potential of public buildings and improve the energy consumption of their premises.