

What is a Plus Energy Building (PEB)?



A Plus Energy Building is an energy efficient building that produces more final energy than it uses via locally available renewable sources over a time span of one year*.



Positive balance reached by ensuring a good dynamic matching between **load and generation** providing building flexibility.



Positive balance reached by ensuring the lowest **greenhouse gas emissions**.

*The definition applies to all-electric buildings and the energy balance is based on measured or predicted final energy between load and generation. In case of new buildings electrification is an inevitable process. In case other renewable energy vectors are used in the building (i.e. biomass, biogas...), final energy balance shall be zero.

Building uses include both building operation and **user related energy consumption**.

Heating



Cooling



Domestic Hot Water



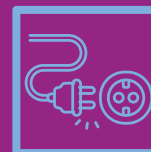
Auxiliaries



Ventilation



Plug Loads



PEBs shall ensure an **added value** providing accessible, comfortable and **healthy indoor environments**.



Energy generation shall be **performed by renewable energy systems** located within building footprint.

It can be extended to adjacent lots as long as there is a physical connection and direct control of renewable **energy generation system**.

Ownership of the buildings or lots, neighborhood grid infrastructure and building management is a must.



PEB shall ensure an added value providing easy access to **e-mobility**.



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