



Department of the Environment,
Sustainability, Climate Change
and Heritage

HM Government of Gibraltar

NEARLY ZERO ENERGY BUILDINGS

**Guidance
document**

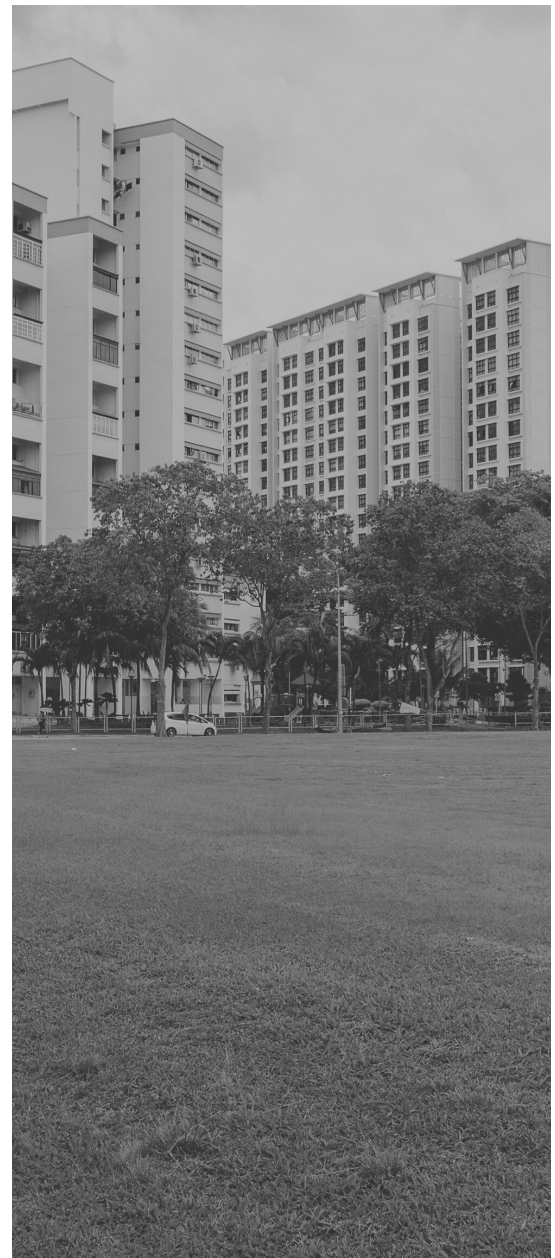


PLANNING FOR 2020 & BEYOND

Gibraltar declared a climate emergency in 2019 and has since committed to challenging CO2 emissions reductions targets for 2030 and 2050.

Buildings account for almost 70% of Gibraltar's carbon emissions and the reduction of energy consumption in this sector is therefore critical in the drive to reduce greenhouse gas emissions and tackle the climate emergency. As much as 80% of the operational costs of standard new builds can be saved through integrated design principles, often at no or little extra cost over the lifetime of the measure.

The delivery of highly energy efficient buildings not only helps to deliver our climate targets but reduces electricity bills for consumers and provides more comfortable living and working environments for building users.

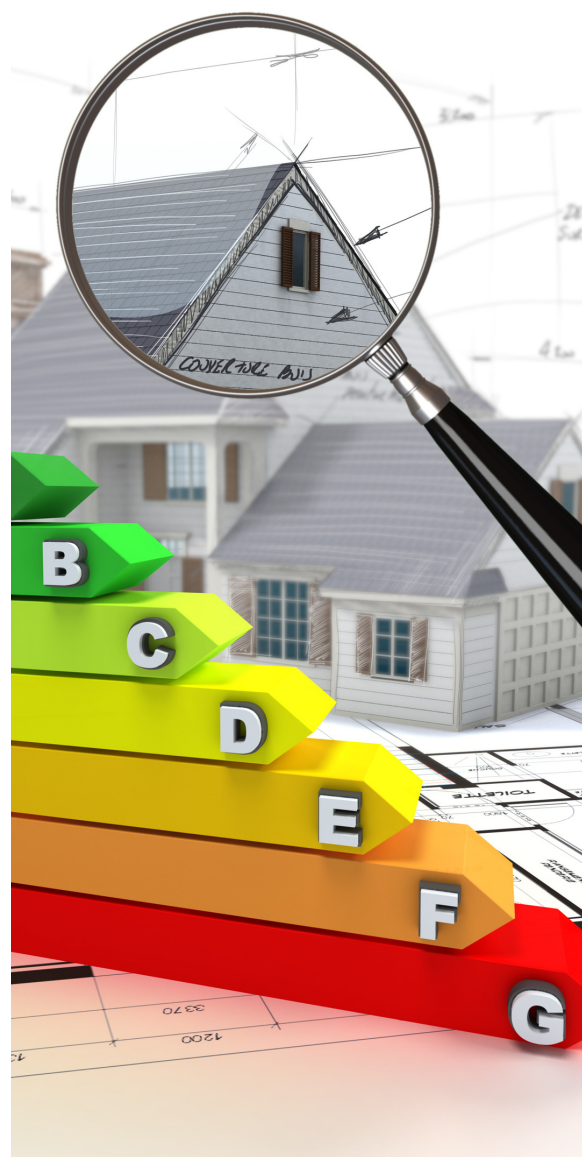


DEFINING A NZEB

HM Government of Gibraltar has drawn upon various sources in arriving at this definition of a nZEB. It is intended, however, that this definition will be further developed in light of future cost-optimality calculations, industry consultation, review and public consultation as well as further developments in relation to policy and legislation.

In developing this definition of a nZEB, HM Government of Gibraltar has had account of the recommendations of the EU Commission as well as Gibraltar specific reports produced by Ecofys and the Building Research Establishment in respect of the energy efficiency and performance of buildings in Gibraltar as well as the global cost implications of the upgrades in standards.

On the basis of this information, packages of measures for nZEB for different building types and associated numerical indicators of primary energy use have been derived.



As of the 31st December 2020, all new buildings in Gibraltar must be nearly zero energy. This means that any building that obtains its planning permission on or after the 1st January 2021 must be a nearly zero energy building.

In keeping with the current regime for monitoring the energy performance of buildings, new schemes will be assessed under the Simplified Building Energy Model - Gibraltar (SBEM-GI) which has been updated to reflect the tightening of building standards that will be required to meet the nZEB targets. All nZEBs will have to obtain a minimum asset rating and the certificate will also demonstrate what percentage of the building's renewable energy is being produced on or near site. A building will not be considered to have achieved nZEB status if it does not comply with the renewable energy provision of the target.

Building Type	Asset Rating (SBEM scale)	Renewable Energy Target (%)	Package of Measures
RESIDENTIAL	12	50	Cooling energy label class A+++ Moveable external shading 30-micron film applied to glazing 2.8kW PV array Air source heat pump HWS Solar water heating Wall construction to U-value of 0.1
NON-RESIDENTIAL	20	40	Cooling energy label class A+++ Moveable external shading 30-micron film applied to glazing 4kW PV array Air source heat pump HWS Solar water heating Wall construction to U-value of 0.1

MEETING THE RENEWABLE TARGET

The renewable energy target is a critical part of meeting the nZEB definition and of ensuring that new development in Gibraltar contributes positively to our climate change targets.

It is recognised, however, that there may be occasions where the limitations of a particular site in terms of access or location may limit the amount of RE that can be produced onsite.

As such HMGOG is also introducing a Renewable Energy Credit option. This will allow developers to purchase credits to the equivalent amount of RE that they would need to produce onsite for the government to produce elsewhere. In this way the overall objectives of minimising additional demand on the national electricity network and increasing our renewable portfolio will still be met.

Regulations setting out the renewable energy credit scheme will be published in due course.

The updated version of SBEM-Gi (version 4.1e) is available for download from the Government website. Assessors are advised that EPCs produced using old versions of the software will not be accepted after the 18th February 2021.