

Roof mounted photovoltaic panels and solar water heating panels

Interim Planning Policy

June 2024



Development and
Planning Commission

HM Government of Gibraltar

Preamble

At its meeting held on 27th June 2024 the Development and Planning Commission approved the adoption of this interim planning policy.

The Commission shall, take into account the provisions of this policy when considering applications involving the installation of photovoltaic and solar water heating panels.

Roof mounted photovoltaic (PV) panels and solar water heating (SWH) panels

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Context

The Government of Gibraltar published its Climate Change Strategy in 2021 that set out ambitious targets to reduce greenhouse gas emissions. This includes targets for 20% of total energy consumption to come from renewable sources by 2025, increasing to 50% by 2030.

The Government's policy is to encourage the provision of rooftop PV and SWH panels as one means by which these targets can be achieved, and the policy below has been developed as a result.

Gibraltar's rooftops provide a valuable opportunity to host solar based renewable energy production, in the form of, but not limited to, PV and SWH panels. The efficient and effective adaptive re-use of this significant resource is sure to have a positive impact towards the achievement of a Net Zero future.

Whilst the policy is to encourage the roll out of rooftop solar, this has to be done in a sensitive way and this is particularly so in the Old Town where there is a high density of buildings and where rooftops, that are highly visible from upper areas of the Rock, make an important contribution towards the character of the Old Town. Particular sensitivities arise with buildings of heritage value, whether within the Old Town or elsewhere.

It is worth noting that in the case of listed and heritage sensitive buildings, a 'whole building' or 'fabric first' approach is always encouraged where opportunities to improve energy efficiency, through for example, improved insulation, and thereby reduce energy consumption, should be explored before considering options for energy generation. This assists in balancing the reduction in energy and carbon emissions with heritage conservation.

The Gibraltar Development Plan 2009, includes the following policy:

POLICY GDS11 – MICRO-RENEWABLE ENERGY PROPOSALS

PROPOSALS FOR DEVELOPMENT INCORPORATING MICRO-RENEWABLE TECHNOLOGIES WILL BE ENCOURAGED SUBJECT TO ENSURING THAT THE PROPOSED DEVELOPMENT HAS NO:

- a) SIGNIFICANT ADVERSE VISUAL IMPACT; OR*
- b) SIGNIFICANT ADVERSE IMPACT ON THE CHARACTER OF THE AREA; OR*
- c) SIGNIFICANT ADVERSE IMPACT ON NEARBY USES.*

Whilst this sets out a generic policy for renewables, it is considered that a more specific policy is required against which new proposals for solar installations can be more readily assessed.

Policy Aims:

- to serve as an interim Policy, which will enable and guide solar based renewable energy developments. This interim policy will be superseded upon the adoption of the new Gibraltar Development Plan.
- to provide clear criteria against which proposals will be assessed.

The Government offers tax relief for the installation of PV and SWH panels as part of its strategy to encourage a move to renewable energy. Further details are available on the Town Planning webpage at <https://www.gibraltar.gov.gi/town-planning/tax-relief>.

Factors to consider for solar installations (including associated infrastructure such as inverters, etc)

- **Siting of panels on roof**

For solar panels to work efficiently they will need to be orientated towards the south, normally between 135 and 225 degrees. However, in certain situations, other orientations may also be viable. Within these parameters, panels should try to be sited on the roof to minimise their visibility, particularly from public views. In the case of a pitched roof, they could be set back from the eaves for example. They should also always be placed in line with the pitch of the roof. On a flat roof, positioning them behind a parapet wall or away from the edge of the building may reduce the visual impact.

Where the orientation of a pitched roof allows, the installation of integrated solar roof tiles can be considered as an alternative to the placement of solar panels units.

- **Projection of panels**

On a pitched roof, panels that do not project significantly above the surface of the roof may have less visual impact. On a flat roof, the inclination of panels should be the minimum possible. Consideration could also be given to laying them flat to reduce visual impact. Laying panels flat reduces wasted space and any loss of efficiency in the panels may be offset by allowing for a greater number of panels.

The installation of SWH systems that incorporate both the panel and the boiler on the roof will not normally be acceptable due to their high visual impact. This is particularly true of pitched roofs. On flat roofs they can still have a significant visual impact unless they can be screened from view, by for example, parapet walls or existing rooftop structures, remembering that views from above can be important too.

- **Colour**

Careful choice of the colour of modules so that they blend into the roofscape can help minimise any visual impact.

- **Minimisation physical changes**

Careful consideration should be given to how to install the modules. On listed and heritage sensitive buildings it is particularly important to minimise the extent of physical changes so as to avoid potentially adversely affecting the integrity of the building or any special architectural or historic features. This extends to any associated works as well, such as laying of pipes and cables.

- **Reversibility**

In considering impacts on listed and heritage sensitive buildings the reversibility of any works will be an important consideration.

- **Visual impact**

PV and SWH panels can have a significant adverse visual impact on a building or the surrounding area. Careful consideration needs to be given to the proposed siting of the modules to try and hide them from public view. Remember that public views will be from street level but also from surrounding higher areas that overlook the site.

Applications should be accompanied by photographs of the building shown in context. In the case of listed buildings, a heritage assessment will be required that must include a more in-depth visual impact assessment.

- **Glint and Glare**

Careful consideration should be given to the exact orientation of modules to try to minimise potential issues of light being reflected into surrounding properties or public areas. Most manufacturers are able to offer panels with anti-reflective coating that can significantly reduce glare. In the case of sites near the airport there is the potential for glare to affect aircraft and the Air Traffic Control tower. The Civil Aviation Authority may require a glare study to be undertaken where it considers that there is a risk to the safe operation of the airport.

- **Bird nests and Bat roosts**

When installing roof top panels, care needs to be taken to ensure that no damage is caused to any bird nests or bat roosts that may exist on the building.

- **Maintenance**

Consideration needs to be given to how installed PV and SWH panels will be maintained. The performance of panels will be affected if they are not regularly maintained. Whilst these panels are largely maintenance free it is important to check them periodically for dust, dirt, bird droppings, etc. Ideally, the panels should be easily accessible to allow for maintenance. Depending on the height of the roof, this may be possible from the ground with the use of appropriate equipment. Where this is not the case, other methods of accessing the panels needs to be considered such as the need for ladders or scaffolding.

Applications for the installation of PV and SWH panels will be assessed against the following criteria:

Policy on PV and SWH Panels

Planning permission for the installation of photovoltaic panels and solar water heating panels will normally be granted provided:

- a) The application is accompanied by a statement that provides a full description of the proposal including specifications, data on energy production, photographs of the proposed site in the context of the surrounding area, details of all physical interventions that will*

impact the building fabric required for the installation, and details of how the installation will be maintained.

- b) There is no significant adverse visual impact on the character or appearance of the proposed building or surrounding area.*
- c) The proposed installation will not cause nuisance to surrounding occupiers due to reflective glint or glare;*
- d) In the vicinity of Gibraltar Airport, the installation will not cause any risk to the safe operation of the airport due to reflective glint or glare. In some cases, a glint and glare study may be required before the application can be determined.*
- e) The proposed panels will not protrude significantly from the external surface of the roof or wall;*
- f) The proposed colour of the modules used in the installation are sympathetic to its setting.*
- g) In the case of solar water heating installations on pitched roofs, the boiler is not mounted on the exterior of the roof. On flat roofs, exterior boilers will only be permitted if appropriate mitigation measures can be introduced against visual impact.*
- h) The proposed installation does not have any adverse effect on any existing bird nest or bat roost.*

In addition to the above criteria, in the case of listed buildings, the following criteria also apply:

- i) The application is accompanied by a fit for purpose heritage assessment carried out by, or with advice from, a suitably qualified heritage professional. The assessment should identify the likely visual and/or physical impact of any proposals, including scale of impact and cumulative effects, on the building's character, special architectural features, historic and community interest and setting, and should also include details of any proposed mitigation measures.*
- j) There is demonstrably no significant adverse impact on the integrity of the listed building nor on its character and appearance.*
- k) The applicant can demonstrate that any adverse physical alterations to the building are reversible.*

NOTE

If the building is listed under the Heritage and Antiquities Act 2018, a separate heritage licence from the Minister for Heritage will be required. This may be applied for in parallel with the planning application process.