

Assessment Criteria for Considering Applications for Solar Photovoltaic System
made under Section 16 of the Town Planning Ordinance

Feed-in Tariff and Solar Photovoltaic System

1. Development of renewable energy (RE) is an important part of the Government's efforts in combating climate change. Increasing the use of RE, a zero-carbon energy, can help decarbonize the electricity generation sector, which contributes to about two-thirds of the carbon emissions in Hong Kong. The policy is for the Government to take the lead in developing RE where technically and financially feasible and to create conditions that are conducive to community participation. Against this background, Feed-in Tariff (FiT) was introduced under the post-2018 Scheme of Control Agreements (SCAs) between the Government and the two power companies, i.e. The Hongkong Electric Company, Limited (HKE) and CLP Power Hong Kong Limited (CLP) to provide incentives for individuals and non-Government bodies to invest in RE, including solar photovoltaic (SPV) system. Under the SCAs, FiT is offered for electricity generated by the RE systems throughout the project life of the RE systems¹ or until 31 December 2033, whichever is the earlier.
2. A SPV system includes SPV panels, inverter(s), energy meters, distribution board(s), cables and other components as necessary to form a complete grid connected SPV installation. The two key components are SPV panels and inverter(s). SPV panels convert sunlight into electricity. The inverter(s) convert the output direct current (DC) of the solar panels into alternating current (AC). A typical SPV system is shown in **Figure 1**.

Statutory Planning Provision for Solar Photovoltaic System

3. In general, SPV systems are commonly found on (i) rooftop of New Territories Exempted House (NTEH); (ii) rooftop of private buildings; and (iii) vacant land.
4. If installation of SPV system is incidental to, directly related and ancillary to and commensurate in scale with a permitted use/development within the same zone or at the rooftop of NTEH or private building, it is regarded as an ancillary use for supplementing power supply to the use/development, household or building². No planning permission for the system is required.
5. Installation of SPV system as a stand-alone facility on vacant land for the FiT Scheme would be regarded as 'Public Utility Installation' ('PUI'), which is always permitted in "Commercial", "Government, Institution or Community", "Industrial", "Industrial (Group D)", "Open Storage", "Other Specified Uses" ("OU") annotated "Business" and "OU" annotated "Industrial Estate" zones. Planning application is required for stand-alone SPV system for FiT Scheme in areas where 'PUI' is a Column 2 use under the statutory plan concerned. Any such planning permission granted would be for 'Public Utility Installation (Solar Photovoltaic System for the FiT Scheme)'. Only temporary approval would be considered where there may be potential impact generated by the proposed SPV system which needs to be closely monitored or that the long-term planning intention of the zone

¹ The lifespan of a SPV system is about 20 to 25 years.

² Installation of SPV system for generating electricity for a permitted use, such as that for a farm, green house/farm structures in the "Agriculture" zone mainly for generating electricity for agricultural purposes, or that installed in connection with NTEH in "Village Type Development" zone, are also regarded as an ancillary use.

may be frustrated by the proposed use.

Assessment Criteria for Planning Applications

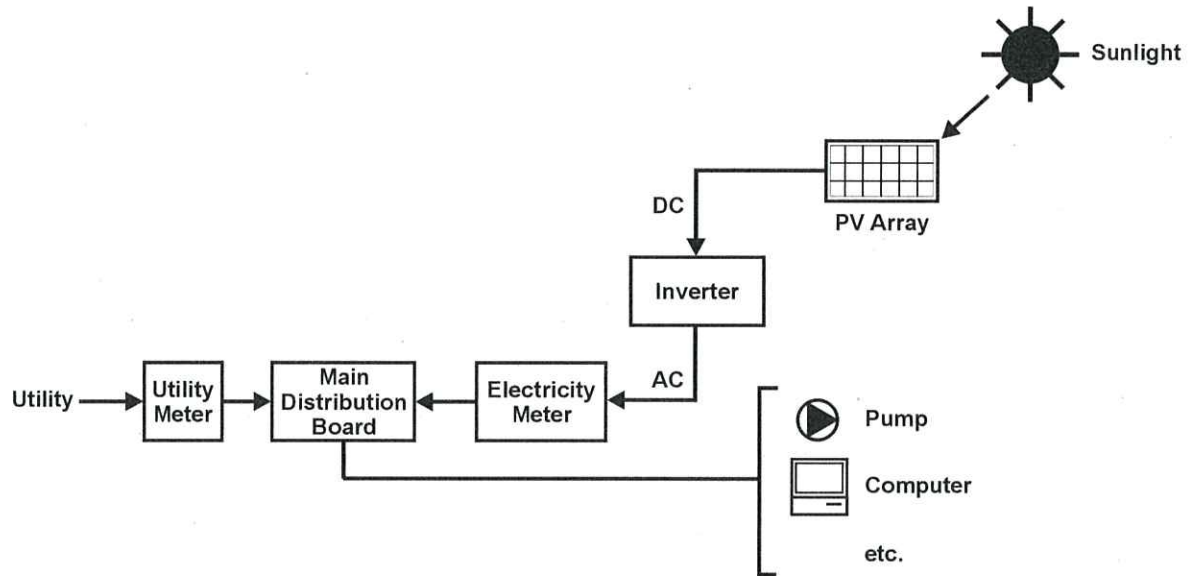
6. The following criteria should be taken into account in assessing planning applications for SPV system made under section 16 of the Town Planning Ordinance:
- a) it is a prerequisite for the applicant to obtain the 'Consent Letter' or 'Acknowledgement Letter' from HKE and CLP respectively and submit a copy of the document together with the application to demonstrate the technical feasibility of the scheme in terms of serviceability, electrical safety and output generated by the SPV system;
 - b) unless with strong justifications, the SPV system, including the height of the proposed structures, should be in keeping with the surrounding area/developments and commensurate with the function(s) it performs;
 - c) for optimisation of use of land, favourable consideration may be given if viability of co-existence of the proposed SPV system and uses that are in line with the long-term planning intention of the land use zoning of the application site could be satisfactorily demonstrated;
 - d) it has to be demonstrated to the satisfaction of the relevant government departments that the SPV system will not have significant adverse impacts, including but not limited to those relating to the environment, drainage, sewerage, traffic, geotechnical safety, landscape and visual³ and, where needed, appropriate measures are to be adopted to mitigate the impacts;
 - e) unless with strong justifications⁴, proposals involving extensive site formation, vegetation clearance/tree felling, excavation or filling of land/pond are generally not supported;
 - f) planning applications with proposed felling of existing Old and Valuable Trees (OVTs), potentially registrable OVTs, and trees of rare or protected species should not be supported. If tree removal is unavoidable, subject to the advice of relevant government departments, compensatory tree planting and/or landscape treatments should be provided within the application site as appropriate;
 - g) for SPV system falling within water gathering grounds, information should be provided to the satisfaction of the relevant government departments that the system, including its installation, maintenance and operation, will not contaminate the water supply;

³ The applicant has to demonstrate that the proposal would not affect the visual and landscape amenities/character of the area adversely by, for instance, causing a significant change of landscape resources/character, dwarfing the surrounding developments or catching the public's visual attention due to the scale and prominence of the proposed installation. Where appropriate, measures should be taken to mitigate the visual/landscape impact, for example, by peripheral screen planting.

⁴ Ground-mounted SPV system is usually on steel frame or concrete plinth. It should normally not involve extensive site formation, excavation or filling of land.

- h) where the installation is proposed to be in area close to airports and/or heliports, or major roads, it has to be demonstrated to the satisfaction of the relevant government departments that the SPV system should not cause glare to pilots/drivers and/or unacceptable adverse impact on aviation and/or traffic safety;
- i) the planning intention of “Agriculture” (“AGR”) zone is to retain and safeguard good quality agricultural farm land/fish ponds for agricultural purposes. SPV system ancillary to agricultural use would not require planning permission (as explained in Footnote 2 under Paragraph 4). Planning application for stand-alone SPV system as ‘PUI’ use in the “AGR” zone is generally not supported except those on land with no active farming activities and low agricultural rehabilitation potential. For application on fish ponds in the “AGR” zone, the applicant has to demonstrate that the SPV system will not hinder the use of the site for fisheries purposes;
- j) as there is a general presumption against development in the “Green Belt” (“GB”) zone, planning application within the “GB” zone is normally not supported unless with strong justifications. It has to be demonstrated to the satisfaction of the relevant government departments that the SPV system would not adversely affect the landscape character/resources of the “GB” zone and jeopardise the integrity of the zone as a buffer;
- k) due to the sensitive nature of the conservation zones, such as the “Conservation Area”, “Coastal Protection Area” and “Site of Specific Scientific Interest” zones, planning application for SPV system within such zones is normally not supported to avoid any possible irreversible damages caused to the ecology or environment of the area within the zone;
- l) all other statutory or non-statutory requirements of the relevant government departments must be met. Depending on the specific land use zoning of the application site, the relevant Town Planning Board guidelines should be observed, as appropriate; and
- m) approval conditions to address the technical issues, if any, within a specified time and clauses to revoke the permission for non-compliance with approval conditions may be imposed as appropriate.

Figure 1



Extracted from EMSD website HK RE Net:

https://re.emsd.gov.hk/english/solar/solar_ph/PV_Systems.html

Typical Solar Photovoltaic System

Recommended Advisory Clauses

- (a) to note the comments of the District Lands Officer/Sai Kung, Lands Department (DLO/SK, LandsD) that Environmental Protection Department should apply to LandsD to modify the engineering conditions of GLA-425(T) as appropriate with the provision of relevant policy support for the proposed use, in particular, under the FiT Scheme. However, there is no guarantee that such application will be approved. If the application is approved, it will be subject to such terms and conditions as may be imposed as appropriate;

- (b) to note the comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD) that the approval of s.16 planning application does not imply approval of tree works such as felling, transplanting or pruning under lease. The applicant is reminded to approach relevant authority/government department(s) direct to obtain necessary approval of tree works, where appropriate;

- (c) to note the comments of the Director of Fire Services (D of FS) that detailed fire services requirements will be formulated upon receipt of formal submission of general building plans or referral from relevant licencing authority; and EVA provision in the Site shall comply with the standard as stipulated in Section 6, Part D of the Code of Practice for Fire Safety in Building 2011 under the Building (Planning) Regulation 41D which is administered by the Buildings Department;

- (d) to note the comments of the Chief Engineer/Construction, Water Supplies Department (CE/C, WSD) that for provision of water supply to the development, the applicant may need to extend his/her inside services to the nearest suitable government water mains for connection. The applicant shall resolve any land matter (such as private lots) associated with the provision of water supply and shall be responsible for the construction, operation and maintenance of the inside services within the private lots, if any, to WSD's standards;

- (e) to note the comments of the Director of Electrical and Mechanical Services (DEMS) that in the interests of public safety and ensuring the continuity of electricity supply, the parties concerned with planning, designing, organizing and supervising any activity near the underground cable or overhead line under the mentioned application should approach the electricity supplier (i.e. CLP Power) for the requisition of cable plans (and overhead line alignment drawings, where applicable)

to find out whether there is any underground cable and/or overhead line within and/or in the vicinity of the concerned sites. The applicant should also be reminded to observe the Electricity Supply Lines (Protection) Regulation and the “Code of Practice on Working near Electricity Supply Lines” established under the Regulation when carrying out works in the vicinity of the electricity supply lines; and

- (f) To note the comments of the Director-General of Civil Aviation (DGCA) that the applicant is reminded that no part of any structures and equipment used during the installation and/or for maintenance after the completion of the construction works shall exceed the Airport Height Restriction.