

TOWN PLANNING BOARD

TPB Paper No. 10657

For Consideration by
The Town Planning Board on 19.6.2020

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

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

1. Purpose

This paper is to seek Members' agreement to the refined Assessment Criteria for Considering Applications for Solar Photovoltaic (SPV) System made under Section 16 of the Town Planning Ordinance.

2. Background

- 2.1 The Rural and New Town Planning Committee (the Committee) considered application No. A/NE-TK/649 for installation of SPV system for Feed-in Tariff (FiT) Scheme within "Agriculture" ("AGR") zone on 5.7.2019 and 1.11.2019 and decided to approve the application on a temporary basis of 5 years to allow monitoring of the implementation progress of the proposed SPV system and the condition of the site.
- 2.2 On 29.11.2019, in considering another application (No. A/NE-KLH/578) for SPV system for Fit Scheme in "AGR" zone, the Committee considered that some assessment criteria should be formulated to facilitate assessment of such type of applications. The Committee then decided to defer consideration of the application until the assessment criteria were available. So far, consideration of 8 applications have been deferred by the Committee while one application is scheduled to be considered by the Committee in June 2020.
- 2.3 On 27.3.2020, the Town Planning Board (the Board) considered the proposed assessment criteria for considering planning applications for SPV System as detailed in TPB Paper No. 10643 (**Appendix I**). While Members generally supported the use of renewable energy and agreed that a set of assessment criteria should be formulated to facilitate assessment of planning applications of SPV system for the FiT Scheme, they considered that the proposed assessment criteria

should be refined to take into account Members' comments in relation to the interpretation of ancillary use, the terms of approval, the approval period, the landscape and visual impacts and the impacts on agricultural development. Extract of the minutes of the Board's meeting on 27.3.2020 is at **Appendix II** for Members' reference.

3. **Refined Assessment Criteria**

A set of refined assessment criteria which has taken into account Members' comments is at **Appendix III**, with additions in *bold and italics* and deletions in '~~cross-out~~'. The refinements made are summarised as follows:

Ancillary use

- (a) regarding the interpretation of ancillary use, it is clarified in the refined assessment criteria that SPV systems installed for a permitted use, such as that for a farm, green house/farm structures in the "AGR" zone without generation of excessive amount of electricity for purposes other than agricultural production, or that installed in private gardens of New Territories Exempted House in "Village Type Development" zone, is regarded as ancillary use, and no planning permission is required [Footnote 2 of Paragraph 4];

Terms of approval/Approval period

- (b) in respect of the terms of approval, it is specified clearly that for planning applications for installation of SPV system as a stand-alone facility on vacant land for the FiT Scheme, the planning permission granted would be specially for 'Public Utility Installation' ('PUI') (SPV System for the FiT Scheme)' [Paragraph 5];
- (c) regarding the approval period, it is specified clearly that for planning applications for Column 2 use under the relevant zone of the statutory plan concerned, temporary approval would only 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 may be frustrated by the proposed use [Paragraph 5];

Landscape and visual impacts

- (d) in view of the concerns on landscape and visual impacts, it is specified clearly that the SPV system should not adversely affect the visual and landscape

amenities/character of the area 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, and appropriate mitigation measures such as peripheral screen planting should be provided, wherever appropriate [Footnote 3 of Criterion (d)];

Impacts on agricultural development

- (e) to safeguard against the proliferation of stand-alone SPV systems in areas zoned "AGR", it is specified clearly that planning application in the "AGR" zone is generally not supported except those on land with no active farming activities and low agricultural rehabilitation potential, since the planning intention of the zone is to retain and safeguard good quality agricultural farm land/fish ponds for agricultural purposes. Planning application on fish ponds in the "AGR" zone is normally not supported unless the applicant could demonstrate that the SPV system will not hinder the use of the site for fisheries purposes [Criterion (i)].

4. Consultation

The Agriculture, Fisheries and Conservation Department, the Urban Design and Landscape Section of the Planning Department and the Environment Bureau have been consulted on the refinements and their comments have been incorporated where appropriate.

5. Promulgation

Subject to Members' agreement to the set of refined assessment criteria, a press release will be issued and the assessment criteria will be uploaded to the Board's website to inform the public of the promulgation of the assessment criteria, which shall take effect upon promulgation.

6. Decision Sought

Members are invited to consider and agree to the refined assessment criteria at **Appendix III**.

Appendices

Appendix I TPB Paper No. 10643

Appendix II Extract of minutes of the Town Planning Board meeting on 27.3.2020 with respect to the subject matter

Appendix III Refined assessment Criteria for Consideration of Solar Photovoltaic System made under Section 16 of the Town Planning Ordinance

PLANNING DEPARTMENT

JUNE 2020

TPB Paper No. 10643

**For Consideration by
The Town Planning Board on 27.3.2020**

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

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

1. Purpose

This paper is to seek Members' agreement to the proposed Assessment Criteria for Considering Applications for Solar Photovoltaic (PV) System made under Section 16 of the Town Planning Ordinance.

2. Background

- 2.1 Developing renewable energy (RE) is an important part of the Government's effort in combating climate change. Feed-in Tariff (FiT) was introduced under the post-2018 Scheme of Control Agreements between the Government and the two power companies, i.e. The Hongkong Electric Company, Limited and CLP Power Hong Kong Limited to provide incentives for individuals and non-Government bodies to invest in RE, including solar PV system.
- 2.2 Installation of solar PV system as a stand-alone facility on vacant land for the FiT Scheme is regarded as 'Public Utility Installation' ('PUI')¹. Planning permission is required for solar PV system for the FiT Scheme on land use zones where PUI is a Column 2 use under the statutory plan concerned.
- 2.3 Since June 2018, a total of eight planning applications for solar PV system for the FiT Scheme have been received by the Town Planning Board (the Board).
- 2.4 The Rural and New Town Planning Committee (the Committee) of the Board considered application No. A/NE-TK/649 for solar PV system within "Agriculture" ("AGR") zone, the first of its kind, on 5.7.2019. The Committee decided to defer a decision on the application pending submission of further

¹ 'PUI' means any tank, structure or premises built on, over, or under ground level for the provision of water, sewerage, gas, electricity, broadcasting, television and telecommunications services to serve the local district.

information related to the technical feasibility of the proposal. The Committee further considered the application on 1.11.2019. Noting that there were still uncertainties on the technical feasibility and implementation of the proposed solar PV system, the Committee decided to approve the application on a temporary basis of 5 years to allow monitoring of the implementation progress of the proposed solar PV system and the condition of the site.

- 2.5 On 29.11.2019, the Committee considered another application (No. A/NE-KLH/578) for installation of solar PV system in “AGR” zone and was of the view that some assessment criteria should be formulated to facilitate assessment of such applications by the Committee. The Committee then decided to defer consideration of the application until the assessment criteria were available. At present, consideration of five planning applications for solar PV system for the FiT Scheme has been deferred and two other planning applications are scheduled for consideration by the Committee in April 2020.

3. Assessment Criteria

- 3.1 To facilitate assessment of applications for installation of solar PV system under the FiT Scheme, a set of assessment criteria setting out the requirements on technical feasibility, land use compatibility, infrastructure facilities, environmental, landscape and visual impacts has been prepared at **Annex I**. Relevant government bureau/departments have been consulted and their comments have been incorporated into the assessment criteria where appropriate. No objection or major comments have been received.
- 3.2 In addition, Members may take note of the following issues:

Approval period

- (a) Unless there is special circumstance to warrant a shorter approval period or the relevant statutory town plan only has provision to grant temporary approval of three years, planning permission for installation of solar PV system under the FiT Scheme as a ‘PUI’ can be granted on a permanent basis. The Environment Bureau (ENB) has no objection to granting a permanent approval.

Disposal of solar PV system

- (b) Solar PV panels do not have moving parts, and normally can be used for

more than 25 years. ENB considers that there is no imminent need to handle or recycle large quantities of solar PV panels and will make reference to international trends and practices to formulate suitable solution for disposal/recycling of solar PV panels in a timely manner. In this regard, there is no need for specific requirement on disposal of solar PV panel in granting planning permission for its installation.

4. Promulgation

Upon Members' agreement to the set of assessment criteria, a press release will be issued and the assessment criteria will be uploaded to the Board's website to inform the public of the promulgation of the assessment criteria, which shall take effect upon promulgation.

5. Decision Sought

Members are invited to consider and agree to the assessment criteria at **Annex I**.

Annex

Annex I Assessment Criteria for Consideration of Solar Photovoltaic System made under Section 16 of the Town Planning Ordinance

**PLANNING DEPARTMENT
MARCH 2020**

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 (PV) 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 solar PV system includes solar PV panels, inverter(s), energy meters, distribution board(s), cables and other components as necessary to form a complete grid connected PV installation. The two key components are PV panels and inverter(s). Solar PV panels convert sunlight into electricity. The inverter(s) convert the output direct current (DC) of the solar panels into alternating current (AC). A typical solar PV system is shown in Figure 1.

Statutory Planning Provision for Solar Photovoltaic System

3. In general, solar PV 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 solar PV 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 building and no planning permission for the system is required.
5. For Installation of solar PV system as a stand-alone facility on vacant land for the FiT Scheme, it would be regarded as 'Public Utility Installation' ('PUI'). PUI 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.
6. Planning application is required for stand-alone solar PV system for the FiT Scheme in areas where 'PUI' is a Column 2 use under the statutory plan concerned.

Assessment Criteria for Planning Applications

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

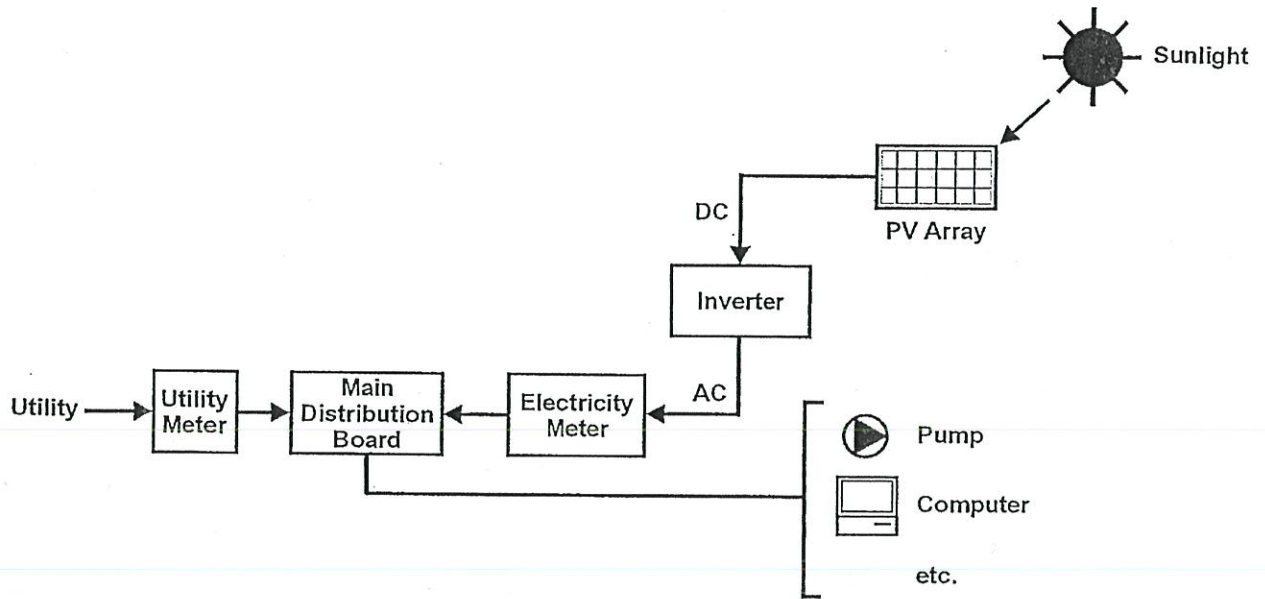
7. The following criteria should be taken into account in assessing planning applications for solar PV system made under section 16 of the Town Planning Ordinance:
- a) it is a prerequisite for the applicant to obtain the 'Consent Letter' or 'Acknowledgement Letter' from HKE and CLP respectively and 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 solar PV system;
 - b) unless with strong justifications, the proposed solar PV 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 solar PV 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 proposed solar PV system will not have significant adverse impacts, including those relating to the environment, drainage, sewerage, traffic, geotechnical safety, landscape and visual and, where needed, appropriate measures are to be adopted to mitigate the impacts;
 - e) unless with strong justifications², 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 solar PV 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;
 - 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 solar PV system should not cause glare to pilots/drivers and/or unacceptable adverse impact on aviation and/or traffic safety;
 - i) the applicant(s) of application on active agricultural land/fish ponds or land with agricultural rehabilitation potential in the "Agriculture" zone should demonstrate to the satisfaction of the relevant government departments that the solar PV system

² Ground-mounted solar PV system is usually on steel frame or concrete plinth. It should normally not involve extensive site formation, excavation or filling of land.

proposal is compatible with and proportionate to the agricultural or fisheries operation on site;

- 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 proposed solar PV 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 solar PV 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

Agenda Item 4

[Open Meeting]

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

(TPB Paper No. 10643)

[The item was conducted in Cantonese.]

26. The following government representatives were invited to the meeting at this point:

- | | | |
|----------------------|---|--|
| Mr Stephen K.S. Lee | - | Senior Town Planner/ Ordinance Review,
Planning Department (STP/OR, PlanD) |
| Ms Anita M.Y. Wong | - | Town Planner/Ordinance Review, PlanD |
| Ms Ellen S.M. Chan | - | Assistant Secretary for the Environment
(Electricity Reviews)2, Environment Bureau
(AS for the Env (Electricity Reviews)2,
ENB) |
| Miss Ellen Y.T. Chow | - | AS for the Env (Electricity Reviews)2, ENB
(designate) |

27. The Chairperson extended a welcome and invited the representative of PlanD to brief Members on the proposed assessment criteria for considering applications for solar Photovoltaic (PV) system made under section 16 of the Town Planning Ordinance (the Ordinance).

28. With the aid of a PowerPoint Presentation, Mr Stephen K.S. Lee, STP/OR, briefed Members on the background and the proposed assessment criteria as detailed in TPB Paper No. 10643.

29. As the presentation of PlanD's representative was completed, the Chairperson invited questions from Members.

Statutory Planning Provision for Solar PV System

30. Noting that installation of solar PV system as a stand-alone facility on vacant land for the FiT Scheme was regarded as a 'Public Utility Installation' ('PUI'), the Chairperson and some Members raised the following questions:

- (a) the land use zones in which 'PUI' was a Column 2 use;
- (b) whether the use granted under planning approval for a stand-alone solar PV system would be 'PUI' or specifically 'PUI' for FiT Scheme;
- (c) if the use for solar PV system subject to planning permission was terminated by the applicant, whether there was a need to cancel the planning permission; and if the use was then replaced by another use, whether enforcement action would be taken;
- (d) the handling of the equipment of solar PV system on sites upon termination of the use;
- (e) whether granting planning permissions for solar PV system on a permanent basis would pre-empt upgrading of the renewable energy system to keep pace with technology advancement; and
- (f) whether land filling would be a consideration in assessing application for solar PV system.

31. In response, Mr Stephen K.S. Lee, STP/OR, made the following main points:

- (a) 'PUI' was a Column 1 use within areas zoned "Commercial", "Government, Institution or Community", "Residential (Group E)" (Schedule II), "Industrial", "Industrial (Group D)", "Open Storage", "Other Specified Uses" ("OU") annotated "Business", "OU (Industrial Estate)" and "OU (Mixed Use)" (Schedules I and III). 'PUI' was a Column 2 use in other land use zones

including “Agriculture” (“AGR”) and “Green Belt” (“GB”). In “OU (Sports and Recreation Club)” zone, ‘PUI’ was neither a Column 1 nor Column 2 use, but temporary permission up to a maximum of 3 years could be granted under rural Outline Zoning Plans (OZPs);

- (b) planning permission was given on the terms of the application as submitted to the Town Planning Board (the Board). For an application specified for solar PV system, the planning permission, if granted, would only cover the solar PV system rather than for a general public utility installation;
- (c) cancellation of planning permission was not required for termination of the applied use. If the use for solar PV system under planning permission was terminated and subsequently replaced by a use not permitted under the relevant zone of the OZP or without planning permission, it would be subject to enforcement action taken by the Planning Authority;
- (d) for solar PV panels no longer in use, ENB would make reference to international trends and practices to formulate suitable solution for disposal or recycling of solar PV panels in a timely manner;
- (e) granting planning permission for solar PV system on a permanent basis would not discourage the adoption of new technology as it was the use itself and not the technology involved that was granted with planning permission ; and
- (f) for a proposal involving land filling, depending on the site condition, the impact generated by land filling would be a consideration in assessing the application.

32. Mr Raymond K.W. Lee, Director of Planning, pointed out that planning permissions were granted on a scheme basis. If a solar PV system for FiT Scheme was specified under a planning application, the permission granted would cover the solar PV system for FiT Scheme. He also said that whether an approved use would be implemented was subject to the applicant’s decision and the applicant could terminate the use at any time. Nevertheless, for areas where the Planning Authority had authority to take enforcement action, any use not

conforming to the provisions under the OZP concerned, or not covered by a planning permission, would be subject to enforcement action.

33. The Secretary supplemented that if the application site was subject to the control related to land/pond filling and/or excavation of land under the OZP, the filling/excavation works would also be subject to the Board's permission and such details in addition to the applied use should be included in the application for the Board's consideration.

Applications in "Agriculture" ("AGR") Zone

34. Members raised the following questions:

- (a) regarding the criterion (i) that the solar PV system should be compatible and proportionate to the agricultural or fisheries operation, there was doubt on how it could be applicable to applications on idle agricultural land without such operation;
- (b) using fish farming as an example, how to determine that the proposed solar PV system was proportionate to such operation; and
- (c) whether planning permission was required for solar PV system to support agricultural use in "AGR" zone.

35. In response, Mr Stephen K.S. Lee, STP/OR, made the following main points:

- (a) the Agriculture, Fisheries and Conservation Department (AFCD) would assess the impacts of solar PV system within "AGR" zone from the agricultural point of view. For idle agricultural land, AFCD would make assessment on whether the proposal would affect the agricultural rehabilitation potential of future agricultural use on the site;
- (b) planning applications were assessed on individual merits. Subject to the circumstances of individual scheme including the size of the pond under fish farming, the proposed area to be covered by the solar PV panels, and the

impacts on the ecosystem, AFCD would give advice from the fish farming perspective; and

- (c) for installation of solar PV system incidental to, directly related and ancillary to and commensurate in scale with an agricultural use in "AGR" zone, it would be regarded as an ancillary use for supplementing power supply to the agricultural use and no planning permission was required.

36. A Member was of view that flexibility should be given to allow solar PV system to co-exist with agricultural use in "AGR" zone. This would promote the use of renewable energy (RE) whilst not defeating the planning intention of "AGR" zone. Another Member expressed doubt that if planning permission was required for agricultural activities with solar PV panels to generate electricity for the use, it would discourage farmers from using RE and hence defeating the Government policy of promoting RE. The Member said that the circumstances under which planning permission would be required for solar PV system should be clearly stated. Mr Stephen K.S. Lee, STP/OR, explained that solar PV system used to supplement power supply to agricultural activities was considered as ancillary use not requiring planning permission from the Board. He further said that criterion (c) was to address optimisation of the use of land. Favourable consideration might be given if viability of co-existence of the proposed solar PV system and uses that were in line with the long-term planning intention of the land use zoning of the application site could be satisfactorily demonstrated.

37. The Chairperson remarked that the assessment criteria were formulated to facilitate assessment of the applications for stand-alone solar PV system for the FiT Scheme, and were not meant to create hurdles for agricultural use with solar PV panels as an ancillary use. She said that paragraph 4 of the assessment criteria could be refined to clearly reflect that the intention.

38. Mr Raymond K.W. Lee, Director of Planning, pointed out that for solar PV system supplementing power supply to the agricultural use in "AGR" zone, the system would be regarded as an ancillary use to the permitted use in "AGR" zone and no planning permission was required. Planning application was required for stand-alone solar PV system in areas where 'PUI' use was a Column 2 use under the OZP concerned, including stand-alone solar

PV system on vacant agricultural land in “AGR” zone. The assessment criteria were proposed to facilitate assessment of applications involving stand-alone solar PV system joining the FiT Scheme.

Impacts

39. Some Members raised the following questions:

- (a) whether the glare impact on residents living near the solar PV system should be a consideration in assessing application for solar PV system; and
- (b) whether the assessment criteria related to landscape and visual aspects could be elaborated more.

40. In response, Mr Stephen K.S. Lee, STP/OR, made the following main points:

- (a) according to the power companies, solar PV panels could be coated with anti-reflective materials to address the glare issue. Approval conditions regarding mitigation measures to address glare impact could be imposed as appropriate; and
- (b) the relevant government departments including the Urban Design and Landscape Section of PlanD would provide comments on the applications from landscape planning and urban design perspectives, based on the specific circumstances of individual schemes. In addition to the proposed criterion (d) related to technical aspect, criterion (b) also required the proposed solar PV system to be in keeping with the surrounding area/developments and commensurate with the functions it performed.

Others

41. A Member pointed out that development of renewable energy was an important part of the Government’s efforts in reducing carbon emissions in Hong Kong. The introduction of the FiT Scheme was to provide incentives for individuals and organisations to invest in

renewable energy. The capital cost of setting up solar PV system was considerably high and it was therefore reasonable to grant a planning approval at least for the payback period. The Member recalled that the Rural and New Town Planning Committee (the Committee) had approved an application for solar energy PV system on a temporary basis of 5 years, and upon the consideration of another application, the Committee was of the view that assessment criteria should be formulated to facilitate assessment of future applications.

42. A Member expressed his support to the use of RE and had no strong view on the assessment criteria. However, given the scarce land supply in Hong Kong, there was concern about the large scale conversion of abandoned agricultural land for installation of solar PV system, resembling the proliferation of brownfield operations in the New Territories over the years.

43. The Chairperson concluded the discussion. Members generally supported the use of RE and agreed that a set of assessment criteria should be formulated to facilitate assessment of planning application of solar PV system for the FiT Scheme. With regard to Members' concerns on the proposed assessment criteria in relation to the terms of approval, the approval period, the landscape and visual impacts and the impacts on agricultural development, the Chairperson suggested and Members agreed that PlanD would take account of Members' comments in refining the assessment criteria.

44. Members noted that the proposed assessment criteria for considering applications for solar VP system made under section 16 of the Ordinance at Annex I of the Paper would be refined for the Board's further consideration.

45. The Chairperson thanked the government representatives for attending the meeting. They left the meeting at this point.

Agenda Item 5

[Open Meeting]

Any Other Business

[The meeting was conducted in Cantonese.]

**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 solar SPV system includes solar SPV panels, inverter(s), energy meters, distribution board(s), cables and other components as necessary to form a complete grid connected PV installation. The two key components are SPV panels and inverter(s). Solar 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 solar SPV system is shown in **Figure 1**.

Statutory Planning Provision for Solar Photovoltaic System

3. In general, solar 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 solar 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. ~~and~~ No planning permission for the system is required.
5. ~~For~~ Installation of solar SPV system as a stand-alone facility on vacant land for the FiT Scheme, it would be regarded as 'Public Utility Installation' ('PUI'), ~~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*

¹ The lifespan of a solar-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 without generation of excessive amount of electricity for purposes other than agricultural production, or that installed in private gardens of NTEH in "Village Type Development" zone, are also regarded as an ancillary use.*

Scheme)'. Temporary approval would only 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 may be frustrated by the proposed use.

- ~~6. Planning application is required for stand-alone solar PV system for the FiT Scheme in areas where 'PUI' is a Column 2 use under the statutory plan concerned.~~

Assessment Criteria for Planning Applications

7.6. The following criteria should be taken into account in assessing planning applications for solar SPV system made under section 16 of the Town Planning Ordinance:

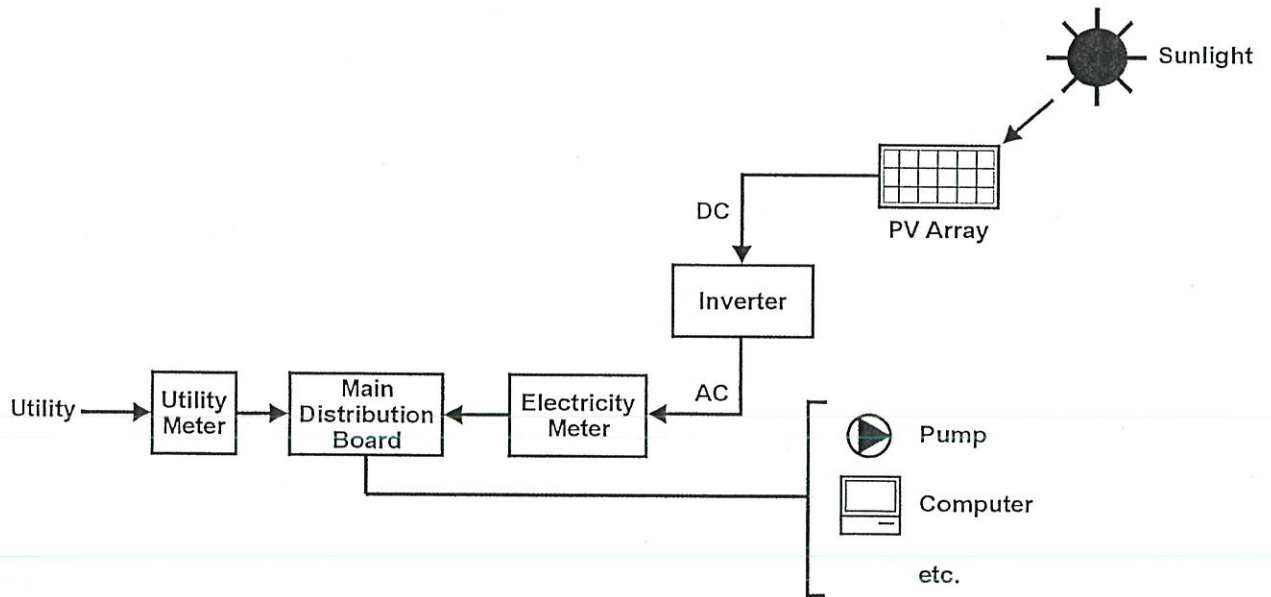
- a) it is a prerequisite for the applicant to obtain the 'Consent Letter' or 'Acknowledgement Letter' from HKE and CLP respectively and submit a copy of the document together with the application to demonstrate the technical feasibility of the scheme in terms of serviceability, electrical safety and output generated by the solar SPV system;
- b) unless with strong justifications, the proposed solar 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 solar 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 proposed solar SPV system will not have significant adverse impacts, including 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;

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

- g) for solar 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;
- 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 solar SPV system should not cause glare to pilots/drivers and/or unacceptable adverse impact on aviation and/or traffic safety;
- i) ~~the applicant(s) of application on active agricultural land/fish ponds or land with agricultural rehabilitation potential in the~~ *as the planning intention of "Agriculture" ("AGR") zone is to retain and safeguard good quality agricultural farm land/fish ponds for agricultural purposes, planning application 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* ~~should demonstrate to the satisfaction of the relevant government departments that the solar SPV system~~ *will not hinder the use of the site for fisheries purposes* ~~proposal is compatible with and proportionate to the agricultural or fisheries operation on site;~~
- 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 proposed solar 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 solar 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