

REVIEW OF APPLICATION NO. A/TM-SKW/105
UNDER SECTION 17 OF THE TOWN PLANNING ORDINANCE

**Proposed Public Utility Installation (Solar Energy System) in “Green Belt” Zone,
Lot 37 in D.D. 383, So Kwun Wat Village, Tuen Mun**

1. Background

- 1.1 On 30.9.2019, the applicant, Mr. KONG Wai Keung, sought planning permission for proposed public utility installation (solar energy system) at the application site (the Site) under s.16 of the Town Planning Ordinance (the Ordinance). The Site falls within an area zoned “Green Belt” (“GB”) on the approved So Kwun Wat Outline Zoning Plan (OZP) No. S/TM-SKW/13 (**Plan R-1**).
- 1.2 On 29.11.2019, the Rural and New Town Planning Committee (the RNTPC) of the Town Planning Board (the Board) decided to defer consideration of the application pending the formulation of assessment criteria on applications for installation of solar energy system, which was subsequently promulgated on 21.7.2020.
- 1.3 On 18.12.2020, the RNTPC of the Board decided to reject the application for the following reasons:
 - (a) the proposed development was not in line with the planning intention of the “GB” zone, which was primarily intended for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl, as well as to provide passive recreational outlets. There was a general presumption against development within this zone. There was no strong planning justification in the submission for a departure from the planning intention;
 - (b) the proposed development was not in line with the Town Planning Board Guidelines No. 10 for Application for Development within Green Belt Zone in that the applicant failed to demonstrate that the proposed system was essential, no alternative site was available for the proposed system, and there would be no adverse landscape and visual impacts on the surrounding areas and Tai Lam Country Park;
 - (c) the proposed development did not fulfil the Assessment Criteria for Considering Applications for Solar Photovoltaic System in that the applicant failed to demonstrate that the proposed Solar Photovoltaic system would not adversely affect the landscape character of the “GB” zone; and
 - (d) the approval of the application would set an undesirable precedent for similar applications in the area. The cumulative effect of approving such similar applications would result in a general degradation of the natural environment

and landscape quality of the “GB” zone.

- 1.4 The Site is about 1,650m² and is only accessible by a local track via private lots and Government land (**Plan R-2**). The proposed solar energy system involves 616 solar panels (each about 1.65m long x 0.992m wide x 0.035m thick) installed on stands (with the total height of 1.262m) and two converted containers (each about 6.06m long x 2.44m wide x 2.59m high) for accommodating electricity metres covering nearly the whole site (**Drawings R-1 and R-2**).
- 1.5 Part of the Site is subject to on-going planning enforcement action against unauthorised development (UD) involving storage use. Enforcement Notice (EN) was issued on 18.12.2019 requiring the discontinuance of the UD. Since the UD had not been discontinued upon expiry of the EN, the EN recipients were prosecuted and convicted on 13.1.2021.
- 1.6 For Members’ reference, the following documents are attached:
 - (a) RNTPC Paper No. A/TM-SKW/105A (**Annex A**)
 - (b) Extract of minutes of the RNTPC meeting held on 18.12.2020 (**Annex B**)
 - (c) Secretary of the Board’s letter dated 8.1.2021 (**Annex C**)

2. Application for Review

- 2.1 On 27.1.2021 and 2.2.2021, the applicant applied, under section 17(1) of the Ordinance, for a review of the RNTPC’s decision to reject the application. The applicant has submitted written representations in support of the review application (**Annexes D and E**).
- 2.2 On 15.3.2021 and 16.3.2021, the applicant submitted further information (FI) in response to comments of the Director of Agriculture, Fisheries and Conservation (DAFC) and the Chief Town Planner/ Urban Design and Landscape of Planning Department (CTP/UD&L, PlanD) by clarifying that the reflective rate of solar panel is lower than windows of residential flats and proposing measures to minimise the adverse impact on landscape character (**Annexes F to I**).

3. Justifications from the Applicant

The justifications/responses put forward by the applicant in support of the review application are detailed in the applicant’s letters and FI at **Annexes D to I** which are summarised as follows:

- (a) It is noted that the Environmental Bureau (ENB) is in collaboration with CLP to promote the ‘Renewal Energy Feed-in Tariff Scheme’ (FiT Scheme). The FiT Scheme was widely supported by local village representative, villagers and village committee members of So Kwun Wat Village.
- (b) ENB supported the application while Fire Services Department (FSD), Transport Department (TD) and Electrical and Mechanical Services Department (EMSD) had no objection to the application. CLP also issued a letter indicating that they will carry

out the necessary network reinforcement works for the applicant's participation in the FiT Scheme.

- (c) The application was rejected on the grounds that the proposal would cause adverse landscape impact on the surrounding area and set an undesirable precedent. However, the Site is just a meadow and the proposal will not affect anyone nearby. Solar energy system is one of the 'Green initiatives' introduced by the Government. It is questionable why the proposed system would adversely affect the local landscape character and set an undesirable precedent.
- (d) It is the global trend to develop and promote environmental friendly and low carbon technology, such as adoption of solar energy system and electric vehicles. The benefits brought by the solar energy system is far outweigh the adverse impact on landscape character.
- (e) A fence of 2m high for climbing plants will be provided along the south-eastern boundary of the Site and the proposed containers will be painted in green, so that the proposed system will be compatible with the surrounding area.
- (f) The solar community guidebook published by the Hong Kong Baptist University states that the reflective rate of solar panel is about 9.5%, which is lower than windows of residential flats.

4. **The Section 16 Application**

The Site and Its Surrounding Areas (Plans R-2 to R-4c)

- 4.1 The situation of the Site and its surrounding areas at the time of consideration of the s.16 application by RNTPC was described in paragraphs 8.1 and 8.2 of **Appendix F-I in Annex A**. There has not been any major change in the situation since then.
- 4.2 The Site is:
 - (a) mostly covered by meadow with some trees (**R-4a to R-4c**);
 - (b) surrounded by vegetated slopes on its north, west and east (**Plans R-3, R-4b and R-4c**);
 - (c) adjacent to a stream to its southeast (**Plan R-2**); and
 - (d) only accessible through private lots and the Government land located between the Site and the footbridge (**Plans R-2, R-3 and R-4b**). Vehicular access is only available at the local track adjacent to the footbridge which links to So Kwun Wat Tsuen Road.
- 4.3 The surrounding areas have the following characteristics:
 - (a) rural in character with scattered vacant land set against green and vegetated land/ hillslopes (**Plans R-2, R-3, R-4b and R-4c**);
 - (b) further to its west is a goat farm with sheds (**Plan R-2**); and

- (c) further to its north about 100m is Tai Lam Country Park and MacLehose Trail Section 10 (**Plan R-3**).

Planning Intention

- 4.4 There has been no change to the planning intention of “GB” zone as mentioned in paragraph 9 of **Appendix F-I in Annex A**. The planning intention of “GB” zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl, as well as to provide passive recreational outlets. There is a general presumption against development within this zone.

Town Planning Board Guidelines

- 4.5 The Town Planning Board Guidelines for ‘Application for Development within the Green Belt zone under Section 16 of the Town Planning Ordinance’ (TPB PG-No. 10) is relevant to the application. The relevant assessment criteria are summarised as below:
- (a) There is a general presumption against development (other than redevelopment) in a “GB” zone.
 - (b) An application for new development in a “GB” zone will only be considered in exceptional circumstances and must be justified with very strong planning ground.
 - (c) Applications for Government, Institution or Community (G/IC) uses and public utility installations must demonstrate that the proposed development is essential and that no alternative sites are available.
 - (d) The design and layout of any proposed development should be compatible with the surrounding area. The development should not involve extensive clearance of existing natural vegetation, affect the existing natural landscape, or cause any adverse visual impact on the surrounding environment.
 - (e) The proposed development should not overstrain the capacity of existing and planned infrastructure such as sewerage, roads and water supply. It should not adversely affect drainage or aggravate flooding in the area.
 - (f) The proposed development should not be susceptible to adverse environmental effects from pollution sources nearby such as traffic noise, unless adequate mitigating measures are provided, and it should not itself be the source of pollution.
 - (g) Any proposed development on a slope or hillside should not adversely affect slope stability.

Assessment Criteria for Considering Applications for Solar Photovoltaic System

- 4.6 The set of assessment criteria for considering applications for Solar Photovoltaic (SPV) system made under Section 16 of the Town Planning Ordinance was

approved by the Board on 3.7.2020 and promulgated on 21.7.2020. The relevant assessment criteria are summarised as follows:

- (a) It is a prerequisite for the applicant to obtain the ‘Consent Letter’ or ‘Acknowledgement Letter’ from the Hongkong Electric Company, Limited 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) 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 visual¹ and, where needed, appropriate measures are to be adopted to mitigate the impacts.
- (d) Unless with strong justifications², proposals involving extensive site formation, vegetation clearance/ tree felling, excavation or filling of land/ pond are generally not supported.
- (e) 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.
- (f) As there is a general presumption against development in “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.
- (g) 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.
- (h) 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.

¹ 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.

² 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.

Previous Application

4.7 There is no previous application covering the Site.

Similar Application

4.8 There is no similar application within the same “GB” zone on the OZP.

5. Comments from Relevant Government Departments

5.1 For the review application, the following government departments have been further consulted and their updated comments are summarised as follows:

Landscape

5.1.1 Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD):

(a) He maintains his view of reservation to the application from landscape planning perspective.

(b) It is noted that the applicant proposes to plant climbers on the boundary fence along the southeastern boundary of the Site for screening. However, in view that the Site is situated in an area of miscellaneous rural fringe landscape character surrounded by dense woodland, the extensive area of hard surfaces of the proposed solar panels is considered incompatible with the surrounding natural environment and the proposed system would inevitably alter the landscape character of the "GB" zone and affect the integrity of the woodland. Moreover, the plinths of solar panel will impose adverse impact on the existing landscape resources.

Nature Conservation

5.1.2 Comments of the Director of Agriculture, Fisheries and Conservation (DAFC):

The FI submitted by the applicant has not addressed the potential visual impacts of the solar panel system on Tai Lam Country Park (TLCP), given that the Site is located 100m downhill of the popular MacLehose Trail. Moreover, the effectiveness of the proposed landscape/ screen planting at the southern fringe of the Site to mitigate the potential landscape and visual impacts is also questionable. As such, his previous comments provided on the s.16 application are still valid, which recapitulated as follows:

(a) It is noted from the applicant’s further information (**Appendix Ig of Appendix F-1 in Annex A**) that jib crane would be used to transport solar panels and containers to the Site, and would not cause adverse impacts on the stream to the south-east of the Site. The applicant also revealed that no vegetation clearance would be carried out.

- (b) However, the Site is located 100m (**Plans R-1 and R-3**) downhill of the MacLehose Trail and the TLCP. The applicant shall provide information to demonstrate if the proposed system would induce any indirect environmental impacts including visual impacts on the surrounding TLCP, and if mitigation measure(s) such as the use of non-reflective solar panels, would be adopted under the project.

5.2 The following government bureau/ departments maintain their previous comments on the s.16 application as stated in paragraph 4 of **Annex A** and paragraph 10 of **Appendix F-1 in Annex A**:

- (a) Secretary for the Environment (SEN);
- (b) District Lands Officer/Tuen Mun, Lands Department (DLO/TM, LandsD);
- (c) Commissioner for Transport (C for T);
- (d) Chief Highway Engineer/New Territories West, Highways Department (CHE/NTW, HyD);
- (e) Director of Environmental Protection (DEP);
- (f) Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD);
- (g) Chief Building Surveyor/New Territories West, Buildings Department (CBS/NTW, BD);
- (h) Director of Fire Services (D of FS);
- (i) Director of Electrical and Mechanical Services (DEMS);
- (j) Chief Engineer/Construction, Water Supplies Department (CE/C, WSD); and
- (k) District Officer (Tuen Mun), Home Affairs Department (DO(TM), HAD).

5.3 The following government departments maintain their previous views of having no objection to or no comment on the review application:

- (a) Project Manager (West), Civil Engineering and Development Department (PM(W), CEDD);
- (b) Head of the Geotechnical Engineering Office, CEDD (H(GEO), CEDD);
- (c) Director of Leisure and Cultural Services (DLCS);
- (d) Director of Health (D of H);
- (e) Commissioner of Police (C of P);
- (f) Director of Food and Environmental Hygiene (DFEH); and
- (g) Executive Secretary (Antiquities and Monuments), Antiquities and Monuments Office (ES(A&M), AMO).

6. Public Comments Received During Statutory Publication Periods

6.1 On 5.2.2021, the review application was published for public inspection for three weeks. During the statutory public inspection period, which ended on 26.2.2021, five comments were received from a Tuen Mun District Councillor, Kadoorie Farm and Botanic Garden, Hong Kong Bird Watching Society and two members of the public. All the public comments raised objection to the application (**Annex J**). The major objection grounds are as follows:

- (a) The Site is located within “GB” zone and close to a country park. The proposed system is in conflict with the planning intention as it will involve vegetation clearance. Solar energy system should be restricted in developed

area. The Site should be for agricultural use.

- (b) The proposed installation involves considerable size of land. However, there is no information provided regarding the average and highest amount of electricity that will be generated. Cost effectiveness of the proposed installation is unknown. Besides, no information is provided regarding the users of the electricity generated by the proposed installation.
- (c) An enforcement notice for unauthorised development of open storage at the Site was issued in 2019. Approval of the application will set an undesirable precedent to similar applications associated with 'destroy first, develop later' within the GB zone.
- (d) The government and CLP can initiate self-funded solar panel programmes. However, the consumer has legitimate expectations that the power company provides energy in the most cost effective manner. It is unacceptable that the CLP customers be burdened with the additional costs that would be generated via FiT Scheme.

6.2 At the s.16 application stage, nine public comments were received objecting to the application. The summary of the comments is in paragraph 11 of **Appendix F-1 in Annex A**.

7. Planning Considerations and Assessments

- 7.1 The application is for proposed public utility installation (solar energy system) at the Site zoned "GB" on the OZP (**Plan R-1**). The proposal involves 616 solar panels (each 1.65m (L) x 0.992m (W) x 0.035m (H)) installed on stands (with the total height of 1.262m) and two containers (each 6.06m (L) x 2.44m (W) x 2.59m (H)) for meter installation at a site of about 1,650m² (**Drawings R-1 and R-2**). The application was rejected for the reasons that the proposed development was not in line with the planning intention of the "GB" zone, not in line with the TPB PG No. 10 as the applicant failed to demonstrate that the proposed system is essential, no alternative site is available for the proposed system, and there will be no adverse landscape and visual impacts on the surrounding areas; not in line with the assessment criteria for considering applications for SPV system in that the applicant failed to demonstrate that the proposed SPV system would not adversely affect the landscape character of the "GB" zone; and would set an undesirable precedent for similar applications in the area.
- 7.2 In support of the review application, the applicant clarifies that the reflective rate of solar panel is 9.5%, which is lower than windows of residential flats. Besides, a fence of 2m high with climbing plants will be provided along the south-eastern boundary of the Site and the proposed containers will be painted in green so that the proposed system will be integrated and compatible with the surrounding area.

Planning Intention of "GB" zone

- 7.3 The proposed use is not in line with the planning intention of the "GB" zone which is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl, as well as to provide passive

recreational outlets. There is a general presumption against development within this zone. The applicant has not provided any strong planning justification in the submission to merit a departure from such planning intention.

Land Use Compatibility, Visual and Landscape Impacts

7.4 According to the Town Planning Board Guidelines for ‘Application for Development within the Green Belt zone under Section 16 of the Town Planning Ordinance’ (TPB PG-No. 10), development in “GB” zone should not affect the existing natural vegetation and landscape or cause any adverse visual impact on the surrounding area. The applicant clarifies that the reflective rate of proposed solar panels is low. Moreover, planters will be provided along the boundary and the proposed containers will be painted in green. However, the Site is currently a meadow with goat farm, abandoned farmland and vegetated hillslope linking to Tai Lam Country Park (TLCP) and MacLehose Section 10 in the surrounding area. The proposed system with 616 solar panels and two converted containers covering most of the Site will inevitably change the natural environment of the Site and the extensive area of hard surfaces of the proposed solar panels is considered incompatible with the surrounding natural environment. Besides, the applicant did not provide any information to address the landscape impact arising from the plinths of solar panel. The FI submitted by the applicant could not address concerns of CTP/UD&L, PlanD and DAFC on the potential impact on the rural fringe landscape character and the indirect environmental impacts, including visual impacts on TLCP, respectively. The CTP/UD&L, PlanD maintains his reservation on the application from the landscape planning perspective while DAFC opines that the effectiveness of the proposed measures to mitigate the potential landscape and visual impacts is questionable. The application does not meet the TPB PG-No. 10 as it will affect the existing landscape and cause adverse visual impact. Moreover, although the proposed solar energy system would be able to contribute to increase the use of Renewable Energy (RE) in Hong Kong, no information has been provided by the applicant to demonstrate that the proposed system is essential in the area and there is no alternative site available.

Assessment Criteria for Considering Applications for SPV System

7.5 While SEN supports the development of RE system, and relevant departments including DEP, DEMS, C for T, CE/MN of DSD and D of FS have no adverse comment on/ objection to the application from environmental, electricity regulatory service, traffic, drainage and fire safety perspectives, there are adverse departmental comments on visual and landscape aspects, and the applicant failed to demonstrate that the proposed system would not adversely affect the landscape character of the “GB” zone and jeopardise the integrity of the “GB” zone as a buffer. As there is a general presumption against development in “GB” zone, planning application for SPV system within the “GB” zone is normally not supported unless with strong justifications. In this regard, the proposed development does not fulfil the assessment criteria for considering application for SPV system.

No Similar Application Approval

7.6 There is no similar application for solar energy system within the “GB” zone on the same OZP. Approval of the application would set an undesirable precedent for

similar uses to proliferate in the “GB” zone. The cumulative effect of approving such similar applications would result in a general degradation of the rural environment and landscape quality of the area.

Public Comments

7.7 Regarding the public comments objecting to the review application as mentioned in paragraph 6 above, the planning considerations and assessments in paragraphs 7.1 to 7.6 are relevant.

8. Planning Department’s Views

8.1 Based on the assessments made in paragraph 7, and having taken into account the public comments mentioned in paragraph 6, the Planning Department maintains its previous view of not supporting the review application for the following reasons:

- (a) the proposed development is not in line with the planning intention of the “GB” zone, which is primarily intended for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl, as well as to provide passive recreational outlets. There is a general presumption against development within this zone. There is no strong planning justification in the submission for a departure from the planning intention;
- (b) the proposed development is not in line with the Town Planning Board Guidelines No. 10 for Application for Development within the Green Belt zone in that the applicant fails to demonstrate that the proposed system is essential, no alternative site is available for the proposed system, and there will be no adverse landscape and visual impacts on the surrounding areas and Tai Lam Country Park;
- (c) the proposed development does not fulfil the Assessment Criteria for Considering Applications for Solar Photovoltaic System in that the applicant fails to demonstrate that the proposed SPV system would not adversely affect the landscape character of the “GB” zone; and
- (d) the approval of the application would set an undesirable precedent for similar applications in the area. The cumulative effect of approving such similar applications would result in a general degradation of the natural environment and landscape quality of the “GB” zone.

8.2 Alternatively, should the RNTPC decide to approve the application, it is suggested that the permission shall be valid until **23.4.2025**, and after the said date, the permission shall cease to have effect unless prior to the said date either the development hereby permitted is commenced or this permission is renewed. The following condition of approval and advisory clauses are suggested for Members’ reference:

Approval Conditions

- (a) the submission and implementation of fire services installation proposal to the

satisfaction of the Director of Fire Services or of the Town Planning Board;
and

- (b) the submission and implementation of drainage proposal to the satisfaction of the Director of Drainage Services or of the Town Planning Board.

Advisory Clauses

The recommended advisory clauses are attached at **Annex K**.

9. Decision Sought

- 9.1 The Board is invited to consider the application for a review of RNTPC's decision and decide whether to accede to the application.
- 9.2 Should the Board decide to reject the review application, Members are invited to advise what reason(s) for rejection should be given to the applicant.
- 9.3 Alternatively, should the Board decide to approve the review application, Members are invited to consider the approval condition(s) and advisory clause(s), if any, to be attached to the permission, and the date when the validity of the permission should expire.

10. Attachments

Drawing R-1	Layout plan
Drawing R-2	Schematic drawing for the proposed system and solar panel
Plan R-1	Location Plan
Plan R-2	Site Plan
Plan R-3	Aerial Photo
Plans R-4a to 4c	Site Photos
Annex A	RNTPC Paper No. A/TM-SKW/105A
Annex B	Extract of minutes of the RNTPC Meeting held on 18.12.2020
Annex C	Secretary of the Board's letter dated 8.1.2021
Annex D	Letter from the applicant applying for review received on 27.1.2021
Annex E	Letter received from the applicant on 2.2.2021
Annex F	FI received on 15.3.2021
Annex G	FI received on 15.3.2021
Annex H	FI received on 15.3.2021
Annex I	FI received on 16.3.2021
Annex J	Public comments
Annex K	Recommended advisory clauses