

Document Checklist for Approval of Pico PV system

- **Document checklist for approval:**

1. Forwarding letter to ED and CEO of IDCOL mentioning model number and capacity (in lumen hour) of the respective equipment.
2. Lighting Global approval certificate (IEC Technical Specification 62257-9-5) as proof for satisfactory manufacturing and technical soundness of the system as well as compliance with output specifications and honest labelling (<http://lightingglobal.org/activities/qa/testing>)
3. Data specification sheet of the system and system components e.g. solar panel, battery, LED luminaries.
4. Warranty certificate for individual component and system.
5. Agency agreement between the supplier and the manufacturer.
6. Latest financial audit report of the supplier.
7. Company profile of the supplier mentioning years of operation and status of sister concern organizations etc.

Additional documents:

1. IEC 61215 certificate for crystalline modules and IEC 61646 for thin film modules.
2. In case of panel and battery manufacturers', ISO 14001:2004/2005 and OHSAS 18001:2007 certificates from a certification body approved by International Accreditation Forum (IAF) or American International Accreditation Organization (AIAO).

Application Guideline:

1. Model names of the components must be clearly mentioned in the submitted documents. Supplier cannot change any component of the total system without taking approval.
2. Model names of the system or system components must be unique to avoid confusion with other applied models.

Application fee:

BDT 30,000 must be paid as approval Fee in pay order in favor of 'Infrastructure Development Company Limited'.

N.B. Any equipment sample or any document not mentioned here are not required to be submitted.

Technical requirements of Pico-PV system:

- A panel rating of 5-10Wp
- Panel must be separate from the battery containing unit with a cable length larger than 3m
- Rechargeable NiMH or lithium-ion based (preferably LiFePo4) batteries
- Provision of at least 4hours daily runtime of the system from a full battery.
- 4h:4h charge to use ratio (charge under STC : resulting use time) to ensure at least 4-5h daily runtime under average Bangladeshi solar conditions
- A minimum output of 30lm for 5 hours (150 lmh) per light source must be ensured even under 2.5hp irradiation per day to ensure minimum lighting as backup.
- A daily lighting performance 1200 lumen-hour from the full system under standard conditions (as certified by lighting global ([IEC Technical Specification 62257-9-5](#))).
- Batteries must have sufficient protection against deep discharge and overcharge if required
- Light sources with integrated energy storage must be protected against water and insect ingress at IP class 41 or greater; alternatively the lamp shall be protected from an equivalent level of environmental exposure
- In the case of lamps with separate Light sources and energy storage all parts must be protected against water and insect ingress at IP class 21 or greater; alternatively the lamp shall be protected from an equivalent level of environmental exposure
- 3 years system warranty
- Lighting Global approval certificate ([IEC Technical Specification 62257-9-5](#)) as proof for satisfactory manufacturing and technical soundness of the system as well as compliance with output specifications and honest labelling (<http://lightingglobal.org/activities/qa/testing>) or test report from IDCOL certified testing authorities.