



**STANDARD OPERATING PROCEDURE FOR ISSUANCE OF SOLAR HOME  
LIGHTING SYSTEM (SHLS)**

**DEPARTMENT OF ENERGY**

**MINISTRY OF ENERGY AND NATURAL RESOURCES**

**June, 2025 (Revision-01)**

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## **1. Introduction**

The Royal Government of Bhutan (RGoB) is prioritizing the deployment of Solar Home Lighting Systems (SHLS) to provide clean, reliable, and affordable electricity to off-grid households, particularly in rural areas where grid connectivity is challenging due to the country's rugged terrain. The deployment of SHLS, aims to uplift rural living standards through improved access to clean energy electricity for lighting and telecommunications to reduce its dependence on biomass.

To ensure consistent technology deployment and effective service delivery, the Department of Energy, MoENR has developed a Standard Operating Procedure (SOP) specifically for the issuance of SHLS to off-grid settlements.

## **2. Objective**

The objective of the SOP is to clearly define the eligibility criteria and the processes and the responsibilities to issue new SHLS and spare parts to off-grid households/communities/Tshamkhangs that require lighting facilities.. This SOP aims to ensure timely and efficient delivery of SHLS support in accordance with established guidelines and within the stipulated time frame.

## **3. Scope**

The SOP sets down the process and the responsibilities of both the service providers and service users including the roles of relevant agencies related to SHLS.

## **4. Institutional Arrangements**

The following institutions shall be responsible for the matters related to the SHLS:

- i. Department of Energy (DoE)
- ii. The DoE under the Ministry of Energy and Natural Resources (MoENR) shall serve as the Nodal Agency of the RGoB responsible for exploring & securing fund, procurement, assessing the requisitions, issuance of SHLS to the eligible beneficiaries Local Government (LG) and Bhutan Power Corporation Ltd. (BPCL)

The LG and BPCL shall be responsible for assessing and verifying that the applicant's establishment is within the off-grid.

## **5. Roles and Responsibilities**

### **i. Department of Energy (DoE)**

- DoE will issue Solar Home Lighting Systems (SHLS) to eligible off-grid beneficiaries as and when required, upon verification, and recommendation provided by the LG and BPC.
- DoE shall record and update the Government Inventory Management System (GIMS) for the issuance of SHLS with effect from June 2025. The lists prior to June 2025 shall be continued to be maintained on stock ledger and excel sheets.
- DoE shall provide basic operation and maintenance (O&M) training to beneficiaries during the issuance of the SHLS sets.
- DoE shall provide technical support in installing the SHLS upon the request from beneficiaries.
- The DoE shall ensure the proper retrieval and disposal of damaged or end-of-life materials, in accordance with environmental and waste management guidelines of RGoB. The retrieved systems shall be handed over to the Department of Procurement and Property (DoPP), Ministry of Finance (MoF) for further disposal or recycling.

### **ii. Local Government (LG) and Bhutan Power Corporations (BPC)**

- The LG shall verify the authenticity of applicants and ensure that requisitions are submitted for properties located within legally designated off-grid areas. The LG shall also sign the application form, affirming that the information provided by the applicant is true and accurate.
- The LG shall inform DoE if grid electrification has reached the property or if the beneficiary has vacated and abandoned the property. This is to enable the proper retrieval and reallocation of usable systems or the appropriate disposal of non-functional or end-of-life materials.
- BPC shall verify that the requisitions submitted pertain to properties located within designated off-grid areas and shall inform the DoE of any existing or planned grid electrification in those areas. BPC shall also notify the DoE if grid electricity reaches a property after the issuance of the SHLS to facilitate appropriate follow-up actions.

### **iii. Beneficiaries**

- Beneficiaries shall complete the DoE solar requisition forms fully and accurately, and submit it to the LG and BPC for verification and recommendation.
- Beneficiaries shall submit the duly signed forms along with a copy of their CID to the DoE via email or in person.
- Beneficiaries must receive hands-on training from DoE on installation, operation, and maintenance of SHLS upon receiving the materials at the DoE office.

- The beneficiaries shall be fully responsible for collecting and transporting the materials from the DoE store in Thimphu to their respective properties.
- If beneficiaries require installation support from the Department, they shall bear the transportation and daily subsistence allowance (DSA) costs for the technicians, where relevant.
- Beneficiaries shall inform both the DoE and LG and deliver the materials to the Gewog Office or the nearest motorable road once grid electricity access has reached their property, to enable the DoE to retrieve the materials regardless of their working condition.

## 6. Assessment Criteria

i. The assessment criteria prior to the issuance of **NEW SHLS** shall be as follows: :

- Any establishment within the off-grid area without the access to grid connection will be provided with new SHLS, provided the settlement is permanent
- The signed forms from LG and BPC will be assessed along with CID copy.

ii. The assessment for issuance of SHLS **Spare Parts** shall be based on the criteria below:

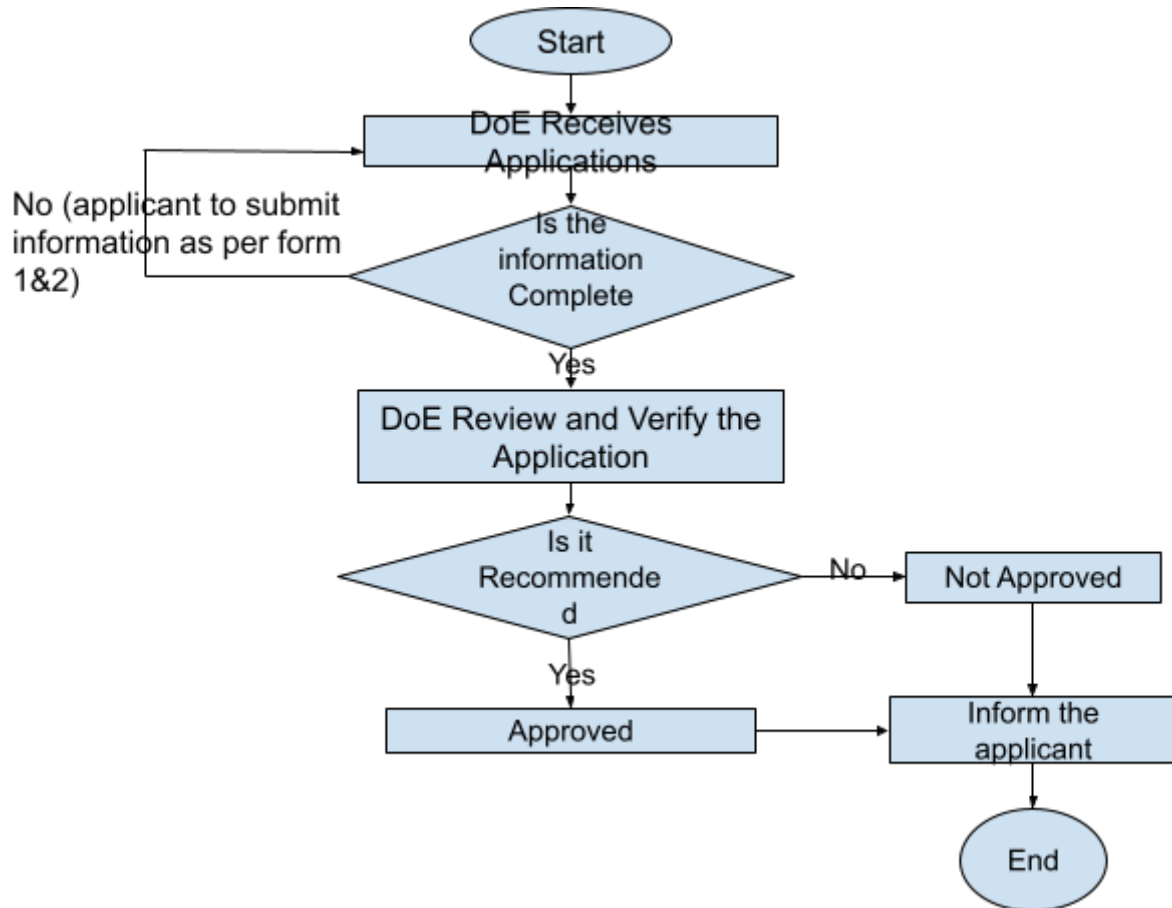
- DoE shall check the past records of the issued lists of the concerned beneficiaries and accordingly issue the spare parts.
- The signed forms from LG and BPC will be assessed.

## 7. Issuance of SHLS

The beneficiaries must submit the SHLS application forms - **FORM 1 - For New System** and **FORM 2 - For Spare Part** to the Department of Energy via email or in person.

### i. Process flow Chart

The flow chart below shall be used for both issuances of new and spare SHLS.



### ii. Turn-Around-Time (TAT)

The turnaround time for the issuance of SHLS will require a maximum of 10 working days which includes the receipt of the signed forms till the applicant is informed of the outcome of the application.

## 8. Adoption and Review

- a) The revised SOP shall come into effect from 1st June 2025.
- b) The SOP will be reviewed and amended, as and when required.

## Annexure



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DEPARTMENT OF ENERGY  
MINISTRY OF ENERGY AND NATURAL RESOURCES  
THIMPHU, BHUTAN

**BHUTAN**  
Believe

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### **Application form for New sets of Solar Home Lighting System**

Dear Sir/Madam,

I would like to request your office to kindly issue .....(nos.) of new set(s) of Solar Home Lighting systems for lighting purposes.

#### **1. Property Details:**

1. Tshamkhang/ Households/ Lhakhangs:
2. No. of Rooms:
3. Distance from nearest Grid (km/walking hours):

#### **2. Installation Details**

Village :  
Chiwog/Gewog :  
Dzongkhag :

#### **3. Beneficiary Details:**

Name :  
CID No :  
Village :  
Chiwog/Gewog :  
Dzongkhag :  
Contact No :

**(Signature of Applicant)**

**Date:**

**Place:**

**Note: CID copy to be attached**



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**4. To be verified by Local Government and Bhutan Power Corporation, ESD**

(Tshogpa/Mangmi/Gup)

**(Sign and Seal)**

Name :  
Dzongkhag :  
Chiwog/Gewog :  
Contact No :

(Manager, ESD/BPC)

**(Sign and Seal)**

Name :  
Dzongkhag :

**5. Approval by the Head of Department of Energy (DoE)**

Recommended by:

Approved by:

**(Director General)**  
Department of Energy





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**Application form for Spare parts for Solar Home Lighting Systems**

Dear Sir/Madam

I would like to request your office to kindly issue spare parts for Solar Home Lighting systems for lighting purposes. .

**1. Property details:**

1. Tshamkhang/ Households/ Lhakhangs:
2. No. of Rooms:
3. Distance from nearest Grid (km/walking hours):

**2. Installation details:**

Village :  
Chiwog/Gewog :  
Dzongkhag :

**3. Spare part details:**

Solar Panel :  
Controller :  
Battery :  
Lights :

**4. Beneficiary details:**

Name :  
CID No :  
Village :  
Chiwog/Gewog :  
Dzongkhag :  
Contact No :

**(Signature of Applicant)**

Date:

Place:

**Note: CID copy to be attached**



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**5. To be verified by both Local Government and BPC,ESD**

(Tshogpa/Mangmi/Gup)

**(Sign and Seal)**

Name :  
Dzongkhag :  
Chiwog/Gewog :  
Contact No :

(Manager, ESD/BPC)

**(Sign and Seal)**

Name :  
Dzongkhag :

**6. Approval by the Head of Department of Energy (DoE)**

Recommended by:

Approved by:

**(Director General)**

Department of Energy