ASSAM ENERGY DEVELOPMENT AGENCY
(State Nodal Agency of MNRE, Govt. of India)

Presented by- Hemanga Deka,
Scientific Officer, AEDA
**Assam Energy Development Agency (AEDA)**

- Formally constituted in 2002 as an independent body.

- Acts as the State Nodal Agency for implementation of non-conventional energy programmes in the state of Assam under MNRE.
ACTIVITIES

RENEWABLE ENERGY APPLICATION

• Solar
  – Solar Photovoltaics Power Projects
• Wind Resource Assessment.
• Biomass
• Improved Chulhas
• Renewable energy awareness
• Small Hydro
• Energy Conservation
• Accreditation of new RE projects under REC mechanism etc.
## Off-Grid Solar Programme

**A. Name of Scheme- Solar Street Lights (SLS) under Off-grid and Decentralised Solar PV applications Programme Phase–III of MNRE, GoI.**

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Districts</th>
<th>Nos. of SLS installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baksa</td>
<td>635</td>
</tr>
<tr>
<td>2</td>
<td>Barpeta</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Biswanath</td>
<td>775</td>
</tr>
<tr>
<td>4</td>
<td>Bongaigaon</td>
<td>2830</td>
</tr>
<tr>
<td>5</td>
<td>Cachar</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>Dhemaji</td>
<td>255</td>
</tr>
<tr>
<td>7</td>
<td>Dibrugarh</td>
<td>360</td>
</tr>
<tr>
<td>8</td>
<td>Dima Haso</td>
<td>190</td>
</tr>
<tr>
<td>9</td>
<td>Goalpara</td>
<td>28</td>
</tr>
<tr>
<td>10</td>
<td>Golaghat</td>
<td>112</td>
</tr>
<tr>
<td>11</td>
<td>Jorhat</td>
<td>750</td>
</tr>
<tr>
<td>12</td>
<td>Kamrup Metro</td>
<td>261</td>
</tr>
<tr>
<td>13</td>
<td>Kamrup</td>
<td>400</td>
</tr>
<tr>
<td>14</td>
<td>Karbi Anglong</td>
<td>40</td>
</tr>
<tr>
<td>15</td>
<td>Karimganj</td>
<td>100</td>
</tr>
<tr>
<td>16</td>
<td>Lakhimpur</td>
<td>2004</td>
</tr>
<tr>
<td>17</td>
<td>Nagaon</td>
<td>150</td>
</tr>
<tr>
<td>18</td>
<td>Nalbari</td>
<td>20</td>
</tr>
<tr>
<td>19</td>
<td>Sivasagar</td>
<td>1785</td>
</tr>
<tr>
<td>20</td>
<td>Sonitpur</td>
<td>2932</td>
</tr>
<tr>
<td>21</td>
<td>Tinsukia</td>
<td>290</td>
</tr>
<tr>
<td>22</td>
<td>Udalguri</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>13959</strong></td>
</tr>
</tbody>
</table>

Images: [Karimganj](image1), [Sivasagar](image2), [Lakhimpur](image3), [Kamrup](image4)
Off-Grid Solar Programme

Major Projects

- 100 kW in Dibrugarh University
- 50 kW in Guwahati High Court, Kamrup Metro
- 50 kW in Srikishan Sarda College, Hailakandi
- 100 kW in the Assam Secretariat, Guwahati Kamrup Metro
Off-Grid Solar Programme

Hill Areas

2 kWp in Hamren Sub-Divisional Civil Hospital, West Karbi Anglong

5 kWp in Dengaon MPHC, West Karbi Anglong

Manas Fringe Areas

1 kWp (2 Nos.) & 2 kWp (4 Nos.) Power plants in Schools not having Grid Connectivity/unreliable Grid
# Grid Connected Rooftop Solar Programme

## 14 MW Grid Connected Rooftop Solar Programme

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Type of Beneficiary</th>
<th>Nos. of sites</th>
<th>kWp</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Residential</td>
<td>120</td>
<td>700.43</td>
</tr>
<tr>
<td>2</td>
<td>Institutional</td>
<td>45</td>
<td>2652.58</td>
</tr>
<tr>
<td>3</td>
<td>Social Sector</td>
<td>32</td>
<td>2067.10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>197</td>
<td>5420.11</td>
</tr>
</tbody>
</table>

## 8 MW Grid Connected Rooftop Solar Programme

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Type of Beneficiary</th>
<th>Nos. of sites</th>
<th>kWp</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Residential</td>
<td>258</td>
<td>1549.92</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>258</td>
<td>1549.92</td>
</tr>
</tbody>
</table>

- **24 kWp Rooftop Solar Plant at Gurudwara, Dhubri (CAPEX Mode)**
- **80 kWp Rooftop Solar Plant at Srimanta Sankardev Nethralaya, Guwahati (CAPEX Mode)**
- **230 kWp Rooftop Solar Plant at North Eastern Regional Institute of Management, Guwahati (RESCO Mode)**
- **500 kWp Rooftop Solar Power Plant at Guwahati Medical College & Hospital (RESCO Mode)**
- **100 kWp Rooftop Solar Plant at Down Town University, Chandrapur (CAPEX Mode)**
- **160 kWp Rooftop Solar Plant at Assam Don Bosco University, Azara (CAPEX Mode)**
SOLAR COLD STORAGE INITIATIVES SUPPORTED BY UNDP

2 locations
  • Birangana Mahila Producer Company Ltd.
    Boitamari, Bongaigaon District

  • Abad Agro Producer Company Ltd.
    Bhergaon, Udalguri, Assam
REMOTE VILLAGE ELECTRIFICATION PROGRAMME UNDER AEDA

771 villages 37782 no. Home lights & 2436 no. Street lights aggregating to over 1.6 MWp of solar PV installation
SOLAR ENERGY AS AN ENABLER FOR UPSCALING RURAL LIVELIHOOD

SOLAR HOME LIGHTING SYSTEM CONVERTED TO SOLAR MOBILE CHARGING UNIT

RURAL WOMEN WEAVERS PROVIDED WITH SOLAR HOME SYSTEMS ENHANCES RURAL ECONOMY

A typical rural setup supported by solar lighting facility
RURAL SOLAR MICRO ENTERPRISE

VIDEO CINEMA HALL
AT AMARPUR, SADIA
FIRST FLOATING SOLAR PLANT OF NORTH EAST
AT BHURBONDHA, MORIGAON
Location: Village: Thanagorah, Block: Bhurbondha, District-Morigaon

Stake Holders: Assam Energy Development Agency
Bhurbondha Gaon Panchayat
Quant Solar
Villagers of Thanagorah
STAGES OF CONSTRUCTION

PVC FLOATERS

MODULE MOUNTING PLATFORM

TRANSPORTING PLATFORM TO SITE

BAMBOO WALKWAYS ON PLATFORM
FACILITIES PROVIDED

- SOLAR HOME LIGHTS FOR 20 HOUSEHOLDS
- SOLAR HOME LIGHT FOR A COMMUNITY PRAYER HOME
- SOLAR STREET LIGHTS
- AERATOR FOR POND

Livelihood avenues:
- Mobile charging facility
- E rickshaw charging
- Computer kiosk
- Bamboo mat and incense sticks making
- Fish drying and dry fish packaging etc.
IMMENSE POTENTIAL IN THE STATE FOR ANY CAPACITY

VILLAGE PONDS FOR DECENTRALISED POWER GENERATION

WATERBODIES LIKE BEELS AND HORSE-SHOE LAKES FOR MEGAWATT POWER GENERATION
 IMMENSE POTENTIAL IN THE STATE FOR ANY CAPACITY IN WATERBODIES

UNUSED WATERBODIES, RIVER BANKS, BEELS AND FISHERIES FOR POWER GENERATION

THOROUGH ASSESSMENT OF SUCH POTENTIAL SITES BE TAKEN UP
 USING INDEGENOUS MATERIALS LIKE BAMBOO AS FLOATERS IN FLOATING SOLAR POWER PLANTS CAN BE EXPLORED

The North Eastern region has the highest concentration of Bamboo resources in the country. Bamboo, which is the fastest growing plant has the potential to replace wood in the future. India ranks 2nd largest in bamboo resources in the world, next only to China.

A COLLABORATIVE R&D INITIATIVE WITH ACADEMIC/R&D INSTITUTES IN ASSAM REQUIRED
FLOATING SOLAR POWER PLANTS WITH STATE GOVERNMENT SUPPORT

1. Shree Shree Hayagriv Madhav Mandir Temple Pond, Hajo
2. Krishi Vigyan Kendra, Barpeta
3. Dawkapara Shiv Mandir, Chakapara PT-II, Bongaigaon-783383
4. Kolong Kopili NGO, Bagibari, Sonapur Kamrup 782402
5. Choran Ahem Karbi Ethnic Food Centre, Vill- Natun Danga, Kaliabor, Nagaon-782136,
6. Krisha Vigyan Kendra, Assam Agricultural University, Morigaon-782411, Assam
7. Uttaran Fish Farmer Producer Company Limited, Village- Gosai Solamari, P.O. Bardal-781354, Rangia
8. Gohpur Fish Farmer Producer Company Limited, Village- Khatarbari, P.O. Barangabari-784172,
9. Bholanath High School campus at Bilasipara, Dist- Dhubri. Assam 783345
Krishi Vigyan Kendra, Barpeta
Floating Solar Plant at KVK Barpeta 10 KW capacity
Dawkapara Shiv Mandir, Chakapara PT-II, Bongaigaon
Dawkapara Shiv Mandir, Chakapara PT-II, Bongaigaon-783383
Choran Ahem Karbi Ethnic Food Centre, Vill- Natun Danga, Kaliabor, Nagaon
Krisha Vigyan Kendra, Assam Agricultural University, Morigaon-782411, Assam
Uttaran Fish Farmer Producer Company Limited, Village- Gosai Solamari, P.O. Bardal, Rangiya
Bholanath High School campus at Bilasipara, Dist- Dhubri, Assam 783345
Bholanath High School campus at Bilasipara, Dist-Dhubri. Assam 783345
Gohpur Fish Farmer Producer Company Limited,
Village- Khatarbari, P.O. Barangabari
THANK YOU