

Concept Note:

Renewable Energy Program

Organization: Kachua Dalima Association (KDA)

Location: Bangladesh

1. Background and Rationale

Bangladesh faces increasing energy demands while millions remain without reliable access to electricity, especially in rural, remote, and climate-vulnerable areas. The country's reliance on fossil fuels not only contributes to climate change but also hampers the development of sustainable and inclusive energy systems. Energy poverty disproportionately affects women, children, and marginalized populations by limiting opportunities for education, income, healthcare, and communication.

The Kachua Dalima Association (KDA), committed to climate justice and inclusive development, proposes a comprehensive Renewable Energy Program to bridge energy access gaps. This program prioritizes clean, affordable, and locally adapted renewable energy solutions, including solar, biogas, and hybrid models, tailored to the socio-economic and environmental realities of underserved communities in Bangladesh.

2. Objectives

Overall Objective:

- To improve energy access and climate resilience in underserved communities through the promotion of renewable energy technologies.
- Specific Objectives:
 - Expand access to solar, biogas, and hybrid renewable energy systems in rural and off-grid areas.
 - Build local capacity in clean energy installation, repair, and entrepreneurship.
 - Create sustainable green jobs, especially for women and youth.
 - Promote environmental sustainability by reducing dependence on fossil fuels and firewood.
 - Enhance productivity in agriculture, education, and small businesses through reliable energy access.

3. Key Components/Activities

1. Energy Access Interventions

- Installation of solar home systems (SHS) in remote villages.
- Solar mini-grids for schools, health centers, and cyclone shelters.
- Deployment of biogas digesters for clean cooking and organic farming.

2. Capacity Building & Awareness

- Technical training for youth and women in solar and biogas technologies.
- Awareness campaigns on energy efficiency and environmental benefits.
- Collaboration with universities and local innovators.

3. Green Enterprise Development

- Incubation support for renewable energy-based small businesses.
- Financial assistance and seed grants for clean tech startups.

4. Policy Advocacy & Research

- Engagement with policymakers to advocate for inclusive energy policies.
- Community-led energy planning and impact documentation.

4. Target Beneficiaries

- Marginalized rural households, including women-headed families
- Local smallholder farmers and micro-entrepreneurs
- School children and patients at rural health facilities
- Youth, especially those seeking vocational training in clean energy

5. Expected Outcomes

- Over 10,000 individuals gain access to clean, reliable energy.
- 500+ women and youth trained and employed in renewable energy sectors.
- Enhanced agricultural and business productivity using clean energy tools.
- Measurable reduction in carbon emissions and deforestation.

6. Budget Estimate (Indicative)

Component	Estimated Budget (USD)
Technology Installation (solar, biogas)	\$120,000
Capacity Building and Training	\$25,000
Enterprise Support and Seed Grants	\$30,000
Awareness and Advocacy	\$10,000
Monitoring and Evaluation	\$10,000
Total	\$195,000

7. Implementation Approach

The program will be implemented using a participatory, community-driven model. KDA will collaborate with local governments, renewable energy providers, technical institutions, and civil society to ensure contextual relevance, gender inclusiveness, and sustainability. Community Energy Committees will be formed to oversee operations, ensure transparency, and maintain infrastructure.

8. Sustainability and Scaling

- Train local technicians and entrepreneurs for long-term servicing.
- Introduce co-financing and micro-loan models for household energy systems.
- Establish monitoring systems for impact assessment and learning.
- Integrate with national initiatives like IDCOL, SREDA, and Climate Bridge Fund.