Initiatives for ecology and environment preservation by Jesuit Chennai Province

Project Context:

This project aims to install a 10KW photovoltaic solar system in educational institutions in northern Tamil Nadu under the Jesuit Chennai Province, which primarily serves students from poor and marginalized backgrounds. Solar energy offers a cost-effective, renewable, and sustainable solution, producing no greenhouse emissions and requiring minimal maintenance due to its lack of moving parts. With Tamil Nadu's high annual temperatures (33.77 C/92.79 F) and over 8 hours of daily sunlight, the system can eliminate annual electricity expenses of INR 120,000), redirecting these savings to student support and institutional development. Additionally, the project will promote environmental sustainability through tree planting and the creation of green campuses. Coupled with outreach initiatives, students can engage in agriculture-oriented programs, leveraging their agro-based backgrounds to benefit the rural communities where these institutions are located.

Rationale:

The installation of a solar photovoltaic (PV) system is essential to meet the domestic energy needs of our establishment while addressing financial and environmental challenges. The college incurs an annual electricity expense of INR 900,000 a significant burden for an institution serving students from poor rural families, who pay minimal tuition

fees that do not cover the cost of education. By installing a solar system, we can reduce electricity bills by 64%, alleviating financial pressure and allowing resources to be redirected to student welfare and institutional development. Beyond cost savings, the solar PV system offers a sustainable and durable energy solution, reducing carbon dioxide emissions by nearly 15 tons annually and contributing to global efforts against climate change. With India facing severe climate impacts, adopting renewable energy is critical. Additionally, rooftop solar systems will enable students to learn about sustainable technologies, complementing their agricultural studies and fostering soil preservation. As part of this initiative, planting more trees on campus will further enhance our green efforts, creating an environmentally conscious and financially resilient institution.

Beneficiaries:

- Various institutions and establishments of Jesuit Chennai Province

Objective of the project:

- To Create Environmental Consciousness Among Students.
- To Build a Self-Sustainable Society and Community Empower communities to adopt eco-friendly and cost-effective solutions, promoting long-term sustainability and reduced dependence on non-renewable energy sources.
- Install solar photovoltaic systems in educational institutions to reduce energy costs, and achieve energy independence.

Activities of the Project:

- Community Outreach Programs: Encourage students to educate rural communities about solar energy, water conservation, and sustainable agriculture.
- Organize sessions on renewable energy, climate change, and sustainable living practices.
- Conduct tree-planting drives, waste management initiatives, and awareness rallies.

  Plan and execute the installation of solar PV systems across campuses.

Expected outcome of the Project:

- The installation of solar panels will significantly lower electricity expenses in educational institutions.
- Students will develop a greater understanding of environmental issues and sustainable energy practices.
- Outreach programs will educate rural communities on the benefits of renewable energy and sustainable farming.

Possible Collaboration:

- NGOs focused on environmental sustainability and rural development enhance outreach programs, community engagement, and tree-planting drives.
- Engage with rural communities by providing capacity building on renewable energy and sustainable practices.
- Organize awareness campaigns to promote the adoption of renewable energy.