Statement of Work (SOW)

Project Title: Solar Energy Community Management System

Date: March 20, 2025

1. Introduction:

This Statement of Work (SOW) defines the objectives, scope, deliverables, timeline, and responsibilities for the development and implementation of a Solar Energy Community Management System. The purpose of this system is to manage solar energy production, consumption, distribution, and community participation effectively.

2. Objectives:

- Provide a centralized platform to monitor solar energy production & consumption.

- Manage user accounts and energy credits within a community.

- Facilitate peer-to-peer (P2P) energy trading between community members.

- Offer detailed analytics, reporting, and real-time dashboards.

- Ensure data security, scalability, and regulatory compliance.

3. Scope of Work:

3.1 Features:

- User Management:

  - Registration/Login (Admin, Residents, Utility Providers)

  - Role-based access control

- Energy Monitoring:

  - Real-time solar energy production tracking

  - Consumption data visualization

Statement of Work (SOW)

  - Grid connection status

- Credit System:

  - Energy credit allocation

  - P2P energy trade facilitation

- Community Dashboard:

  - Energy production, consumption, trading insights

  - CO2 savings & sustainability metrics

- Billing & Payment Integration

- Notification System:

  - Alerts for system status, trades, billing

- Mobile & Web Access:

  - Responsive UI for all devices

- Reports & Analytics:

  - Monthly/Annual energy reports

  - Custom reporting options

- Admin Portal:

  - Manage community settings, users, tariffs

4. Deliverables:

- Requirements Specification Document (Week 2)

- Wireframes & UI/UX Design (Week 4)

- Prototype (Week 6)

- Development Phase (Week 12)

- Testing & QA (Week 14)

- Deployment (Week 16)

Statement of Work (SOW)

- Documentation (Week 16)

- Maintenance Plan (Ongoing)

5. Timeline:

Start Date: April 1, 2025

End Date: July 15, 2025

6. Responsibilities:

- Client: Provide requirements, approvals, access to infrastructure

- Development Team: Design, development, testing, deployment

- QA Team: Testing and validation

- Support Team: Post-deployment maintenance

7. Assumptions & Constraints:

- Client will provide access to energy meters & APIs.

- Cloud hosting costs are covered by the client.

- Regulatory compliance advice is provided by the client.

8. Payment Terms:

- 20% on project initiation

- 30% upon prototype delivery

- 30% after UAT completion

- 20% after deployment