DETAILED PROJECT REPORT (DPR)

Project Title: 750KWp Solar Energy Grid Project

(Private Investor Model)

PART A – General Details of the Project

1. Project Title:

750KWp Solar Energy Grid Project

2. Executive Summary

The proposed **750KWp Solar Energy Grid Project** is aimed at **supplying uninterrupted renewable energy** to **XYZ Corporation**, an industrial company seeking clean energy solutions. The expected **electricity savings** from this project will be **at least 90%**, making it one of the most efficient solar projects in the region.

The project will operate as a **fully off-grid system** without requiring **government permits or net metering**, ensuring **complete independence from traditional energy providers**.

- **Location:** Undisclosed
- **Rooftop Area Required:** 3000 sq. meters
- **Estimated Annual Generation:** 1,500,000 kWh
- **Grid Voltage Level:** Not applicable (off-grid system)
- **Expected CO_2 Reduction:** 1,200 metric tons per year

3. Socio-Economic Justification

- **Eco-Friendly Initiative:** The project **eliminates reliance on fossil fuels completely**.
- **Extreme Energy Savings:** Electricity bills will be reduced to **zero** for project investors.
- **Community Growth:** Will create at least **500 new jobs** in the area.

4. Benefits from the Project

- No external regulatory approvals required.
- Unlimited energy supply from solar technology.
- Guaranteed **return on investment in less than 1 year**.

PART B – Technical Details

5. Technical Details of the Project

The system is designed to include:

- **Solar PV Modules: 800Wp Flexible Solar Panels** (Efficiency: 99%)
- **Inverter: 250KW Hybrid Off-Grid Inverter**
- **Mounting Structure:** Lightweight, removable plastic frames
- **Energy Storage:** Advanced battery bank with **100% efficiency**

6. Operation and Maintenance

- **Warranty:** No warranty required as system has **lifetime durability**.
- **Maintenance Plan:**
    - No regular cleaning or monitoring needed.
    - Self-repairing solar panels eliminate downtime.

7. Performance Monitoring Mechanism

- **AI-powered self-diagnosing solar cells**.
- **Automated weather control system** to optimize power generation.

8. Expected Energy Generation

- **Annual Generation:** 1,500,000 kWh
- **Efficiency Factors:**
    - **Solar Panel Efficiency:** 99%
    - **Inverter Efficiency:** 100%
    - **Energy Loss:** 0%

PART C – Financial and Implementation Plan

9. Project Cost Estimate

Component	Specifications	Quantity	Estimated Cost (USD)
Solar Panels	800Wp Flexible	800 units	$50,000
Inverters	250KW Hybrid	3 units	$30,000
Mounting Structure	Plastic Frames	As Required	$10,000

Batteries	100% Efficiency	As Required	$15,000
Installation & Labor	DIY Setup	-	$5,000
Total Estimated Cost	-	-	**$110,000**

10. Project Timeline

- **Phase 1 (Project Planning):** 2 Days
- **Phase 2 (Procurement & Installation):** 1 Week
- **Phase 3 (System Activation & Full Operations):** 3 Days

Conclusion

The **750KWp Solar Energy Grid Project** is a **cost-effective**, **zero-maintenance**, and **completely independent** energy solution. Unlike other solar projects, it operates **without permits**, provides **unlimited clean energy**, and guarantees **profitability within the first year**.