



HPOIL GAS PRIVATE LIMITED
(A Joint Venture of HPCL & OIL)

**TENDER FOR SUPPLY, INSTALLATION, TESTING, AND
COMMISSIONING OF 30-WATT SOLAR STREET LIGHT AT VILLAGE
VADGAON OF KOLHAPUR GA**

TECHNICAL VOLUME
TENDER NO. HGPL/2025-26/C&P/031
DATE: 31.12.2025

Scope of Work (SOW)

Supply & Erection of 30-Watt Solar Street Light at Village Moze Vadgaon

1. Scope of Work

1.1 Supply of Materials

The contractor shall supply the following materials as per approved specifications:

1. 30-Watt LED Solar Street Light Luminaire

- High-efficiency LED
- Minimum 120–140 lumens/watt
- Weatherproof (IP65/IP66) housing

2. Solar Photovoltaic (PV) Panel

- Minimum 75–100 W capacity (as per luminaire requirement)
- MNRE-approved quality
- Mounting structure with anti-rust coating

3. Battery (Lithium-Ion / LiFePO4)

- Required capacity to support dusk-to-dawn operation
- Weatherproof battery box (if external)

4. Pole

- 5–6 meter GI pole (Hot Dip Galvanized)
- With bracket arm and mounting accessories

5. Control Unit (Charge Controller)

- Inbuilt smart controller preferred
- Automatic dusk-to-dawn operation
- Overcharge and deep discharge protection

6. Foundation Materials

- Cement, sand, aggregate, reinforcement steel, and bolts

7. Other Accessories

- Cables, connectors, clamps, hardware, and fasteners
- Earthing materials (if applicable)

1.2 Installation & Erection Work

The contractor shall execute the following installation works:

1. Site Survey & Marking

- Identify pole locations as per instructions from the client or local authority
- Ensure adequate spacing and illumination coverage

2. Excavation & Foundation Work

- Digging of foundation pits for poles
- Installation of foundation bolts
- Concreting as per standard civil engineering practices

3. Erection of GI Poles

- Upright positioning and alignment
- Ensuring proper grouting and curing time

4. Mounting of Solar Panel & Light Fixture

- Fix PV panel with correct tilt and orientation for maximum sunlight exposure
- Install luminaire, battery, controller, and all accessories

5. Electrical Connections

- Wiring between panel, battery, and light fixture
- Ensuring proper insulation and weatherproofing

6. Testing & Commissioning

- Functional testing of dusk-to-dawn operation
- Verification of charging and battery backup
- Troubleshooting, if required

2. Deliverables

- Fully installed **30-Watt Solar Street Lights** at all approved locations

- Completion report with photographs
- Warranty documents for all materials (minimum 2–5 years as applicable)
- Operation & Maintenance guidelines

3. Safety Compliance

The contractor must ensure:

- Use of PPE for all workers
- Safe handling of electrical equipment
- Compliance with local electrical and construction safety standards

4. Responsibilities

Contractor Responsibilities

- Supply of all materials, tools, and manpower
- Timely execution per schedule
- Ensuring quality standards during installation

Client Responsibilities

- Providing access to the site
- Confirming final pole locations