**Site preparation Checklist**

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| **SN** | **Checklist Item** | **Yes** | **No** | **Remarks** |
| **1** | **Site Assessment** |  |  |  |
| 1.1 | Evaluate site location (latitude, longitude, and elevation) |  |  |  |
| 1.2 | Assess the site's solar potential (sunlight hours, shading analysis) |  |  |  |
| 1.3 | Check for obstacles that may cause shading (trees, buildings, etc.) |  |  |  |
| 1.4 | Confirm site accessibility for personnel and equipment |  |  |  |
| 1.5 | Review soil type and composition (for ground-mounted systems) |  |  |  |
| 1.6 | Conduct environmental impact assessment (EIA) if required |  |  |  |
| **2** | **Regulatory and Legal Requirements** |  |  |  |
| 2.1 | Verify land ownership and obtain necessary permissions |  |  |  |
| 2.2 | Ensure compliance with local zoning laws and building codes |  |  |  |
| 2.3 | Obtain permits and approvals from local authorities |  |  |  |
| 2.4 | Review grid connection requirements and obtain necessary approvals |  |  |  |
| **3** | **Design and Layout** |  |  |  |
| 3.1 | Confirm the final layout of the PV array on the site |  |  |  |
| 3.2 | Determine the orientation and tilt angle of solar panels |  |  |  |
| 3.3 | Plan the placement of inverters, batteries, and other system components |  |  |  |
| 3.4 | Design cable routing and conduit paths |  |  |  |
| 3.5 | Review and validate the single line diagram (SLD) |  |  |  |
| **4** | **Site Clearing and Preparation** |  |  |  |
| 4.1 | Clear vegetation and debris from the site |  |  |  |
| 4.2 | Level the ground for ground-mounted systems |  |  |  |
| 4.3 | Mark the layout for mounting structures, trenches, and conduits |  |  |  |
| 4.4 | Excavate and prepare foundations for mounting structures (if required) |  |  |  |
| 4.5 | Ensure proper drainage and water management at the site |  |  |  |
| **5** | **Safety and Risk Management** |  |  |  |
| 5.1 | Conduct a risk assessment and hazard identification |  |  |  |
| 5.2 | Establish safety zones and signage |  |  |  |
| 5.3 | Ensure availability of personal protective equipment (PPE) |  |  |  |
| 5.4 | Implement safety procedures for working at heights (for roof-mounted systems) |  |  |  |
| 5.5 | Train personnel on emergency response procedures |  |  |  |
| **6** | **Utility and Infrastructure Preparation** |  |  |  |
| 6.1 | Coordinate with utility companies for grid connection |  |  |  |
| 6.2 | Verify the availability of necessary infrastructure (water, power supply for construction, etc.) |  |  |  |
| 6.3 | Set up temporary facilities (storage, shelters, etc.) |  |  |  |
| **7** | **Material and Equipment Preparation** |  |  |  |
| 7.1 | Ensure the availability of all required materials and equipment |  |  |  |
| 7.2 | Inspect materials for damage or defects |  |  |  |
| 7.3 | Store materials in a safe and secure location |  |  |  |
| 7.4 | Organize tools and equipment for easy access during installation |  |  |  |
| **8** | **Communication and Coordination** |  |  |  |
| 8.1 | Hold a pre-construction meeting with all stakeholders |  |  |  |
| 8.2 | Establish communication protocols for the project |  |  |  |
| 8.3 | Confirm roles and responsibilities of the installation team |  |  |  |
| 8.4 | Set up a project timeline and milestones |  |  |  |