



Business Environment Assessment of the Distributed Solar Energy Sector

Unlocking the potential of solar energy to boost private sector growth

WHAT ARE SECTORAL STUDIES?

The Subnational Studies unit (DECSN), part of the Global Indicators Group (DECIG) at the World Bank, conducts specialized assessments of the business environment to support the development of a dynamic and resilient private sector.

Sectoral studies are part of a workstream that focuses on challenges and conditions faced by firms operating within particular sectors, either at the national or regional level.

These studies provide targeted, high-impact recommendations to improve the business environment and help countries make better use of their natural endowments and sector-specific potential.

WHY ASSESSING THE BUSINESS ENVIRONMENT IN THE DISTRIBUTED SOLAR ENERGY SECTOR?

- **Jobs Potential:** Projects in the distributed solar energy sector generate employment across multiple skill levels—from manufacturing to installation and maintenance—making it a critical contributor to inclusive economic growth. This sector creates jobs while allowing the shift to cleaner, more sustainable industries.
- **Specialized Regulatory Framework:** Firms installing distributed solar panels operate within a distinct regulatory environment designed to minimize safety risks and power quality issues, while ensuring financial sustainability of the electricity sector. Understanding whether these rules are

enabling or constraining the market is essential to support growth of the sector.

- **Subnational Variation:** Significant differences in approvals, permits, and interconnection procedures across regions create differences in costs and timelines. These differences point to clear opportunities for local-level reforms and the replication of good practices.
- **Burdensome Procedures Carry Hidden Risks:** When regulations are unclear or overly complex, installers may bypass formal channels, leading to non-compliant or unauthorized systems. Such installations jeopardize safety, disrupt grid stability, and lower utility revenues.
- **Potential for Efficiency Gains:** Streamlining local permitting and connection procedures increases efficiency, resulting in lower project costs and shorter timelines for deploying solar panels.

HOW IS THE BUSINESS ENVIRONMENT ASSESSED?

The Business Environment Study of the Distributed Solar Energy Sector collects information through questionnaires from public and private experts, ensuring a well-balanced and accurate assessment.

The study is structured around three pillars. Together, these pillars provide a comprehensive evaluation of regulatory effectiveness, supporting targeted reforms to improve sector performance, reduce costs, and accelerate solar deployment.

Pillar I analyzes the legal and institutional framework governing key market actors, focusing on regulations that enable private sector operations, while ensuring grid stability and financial sustainability of utilities. It examines incentives for solar panel installation, enforcement mechanisms, and limits on distributed solar generation capacity, among other indicators.

Pillar II assesses quality, transparency, and digitalization of permitting and interconnection procedures. This includes online availability of key information, the extent to which procedures can be completed digitally, and enforcement practices to prevent unauthorized grid connections.

Pillar III maps the end-to-end process a commercial customer follows to install and connect solar panels, detailing required licenses, permits, technical authorizations, and involved public agencies. It aims to identify bottlenecks and opportunities to streamline procedures and improve overall market efficiency.

The methodology and parameters can be adjusted to country-specific needs to provide relevant, actionable data and recommendations to support targeted reforms.

WHAT DOES THIS BUSINESS ENVIRONMENT ASSESSMENT DELIVER?

- ✓ Micro-level data that is specifically collected for the distributed solar energy sector, providing valuable insights into local business climate.
- ✓ Sectoral profiles with detailed process mapping of regulatory and administrative procedures, offering actionable insights for improvement in each covered sector.
- ✓ In-depth analysis of administrative constraints at both national and local levels, revealing areas for improvement.
- ✓ Identification and documentation of sectoral good practices that can be replicated to improve the business environment in the distributed solar energy sector, often without the need for national legal changes.
- ✓ Better visibility to donors and investors by showcasing the sector's commitment to improving its business environment.
- ✓ Tailored quantitative assessments, upon client request.

COLLABORATION WITH DEVELOPMENT PARTNERS

Subnational studies are designed to meet the needs of client governments, with funding provided both by the governments and through strategic partnerships with key development donors. These partnerships have been instrumental in supporting subnational business environment assessments across various countries, including Kenya and Nigeria, Central America, Afghanistan, Colombia, Peru, South Africa, Mozambique, and the European Union.

With the support of our development partners, these assessments have driven tangible outcomes for client countries such as:

- ✓ Streamlined regulatory processes.
- ✓ Cost savings for entrepreneurs.
- ✓ Strengthened private sector development agendas.
- ✓ Effective delivery of technical assistance and lending operations to improve investment climate.
- ✓ Enhanced policy dialogue and greater engagement between national and local governments.



CONTACT:

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