Unlocking Private Investment in Large-Scale Solar Power
Scaling Solar brings together a suite of World Bank Group services under a single engagement aimed at creating viable markets for solar power in each client country. This “one stop shop” program aims to make privately funded grid-connected solar projects operational within two years and at competitive tariffs.

We offer a package that includes:

- **ADVICE** to assess the right size and location for solar PV power plants in a country’s grid.
- **SIMPLE AND RAPID TENDERING** to ensure strong competition from committed industry players.
- **FULLY DEVELOPED TEMPLATES** of bankable project documents that can eliminate negotiation.
- **COMPETITIVE FINANCING AND INSURANCE** attached to the tender and available to all bidders.
- **RISK MANAGEMENT AND CREDIT ENHANCEMENT PRODUCTS** to lower financing costs and tariffs.

**A One Stop Shop for Solar Power**

The World Bank Group has a long track record in the power sector. **IFC** is experienced in developing bankable power projects and has a substantial track record in both tendering and financing solar plants. The **World Bank** supports client country governments with financing and advice to extend access to electricity, expand least-cost generation, create sustainable regulation and leverage the private sector. **MIGA** provides a range of political risk insurance products to attract private capital into emerging markets.

**The Challenge**

Solar power has enormous potential as a quick-to-build electricity source in emerging markets, where needs are great. It is also increasingly affordable—the cost of solar photovoltaic technology has fallen more than 80% in the past six years. Still, many countries have struggled to develop utility-scale solar plants due to challenges that include:

- **INSTITUTIONAL CAPACITY**: Many governments have limited capacity to manage, structure and negotiate private power concessions.
- **LACK OF SCALE**: Navigating small and distinct power markets can deter investors and small grids can only absorb small projects.
- **LACK OF COMPETITION**: Many power projects are not competitively tendered.
- **HIGH TRANSACTION COSTS**: Individually negotiated contracts have high transaction costs.
- **HIGH PERCEIVED RISK**: Poor credit utility off-takers and political risks increase the cost of capital, driving up tariffs.

**The Solution**

Scaling Solar brings together a suite of World Bank Group services under a single engagement aimed at creating viable markets for solar power in each client country. This “one stop shop” program aims to make privately funded grid-connected solar projects operational within two years and at competitive tariffs.
### THE BENEFITS

#### Benefits to Governments and Utilities

- **SPEED:** Templates for all processes and documents enable rapid preparation, tendering and financial close.
- **CERTAINTY:** Balanced, bankable documents that can be offered to bidders on a non-negotiable basis with the comfort of pre-approved financing available to all suitable bidders.
- **LOW COSTS:** Tenders designed to attract competition among top-tier investors and minimize resulting tariffs.

#### Benefits to Project Developers and Investors

- **MARKET CREATION:** Consistent tendering and bankable documentation will open up regional opportunities for qualified developers looking for new markets.
- **REDUCED DEVELOPMENT TIME AND COSTS:** Technical diligence and approval requirements in place. Set of bankable documents and preapproved financing.
- **A LEVEL PLAYING FIELD:** Clear and transparent award process allowing developers and investors to compete on the basis of lowest tariffs and long-term commitment.

#### Benefits to International Donors and Development Partners

- **REACH:** Support to multiple low-income, fragile and conflict-affected states to achieve energy security and sustainable low-carbon growth.
- **LEVERAGE:** Donor support will leverage significant amounts of private capital through transparent, competitive tenders.
- **IMPACT:** Rapid delivery of low-cost, sustainable electricity, helping African countries meet urgent needs.

### CHEAPER SOLAR

<table>
<thead>
<tr>
<th>Country</th>
<th>Cost per kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>UAE</td>
<td>3¢</td>
</tr>
<tr>
<td>Mexico</td>
<td>3.9¢</td>
</tr>
<tr>
<td>Peru</td>
<td>4.8¢</td>
</tr>
<tr>
<td>Zambia</td>
<td>6¢</td>
</tr>
<tr>
<td>Chile</td>
<td>6.5¢</td>
</tr>
<tr>
<td>UK</td>
<td>6.9¢</td>
</tr>
<tr>
<td>India</td>
<td>7.6¢</td>
</tr>
<tr>
<td>Germany</td>
<td>8.7¢</td>
</tr>
<tr>
<td>France</td>
<td>9.5¢</td>
</tr>
<tr>
<td>Uganda</td>
<td>16.4¢</td>
</tr>
<tr>
<td>Ghana</td>
<td>18.2¢</td>
</tr>
</tbody>
</table>

Zambia's cost is fixed: it won't rise with inflation as most others will.

### FASTER SOLAR

<table>
<thead>
<tr>
<th>Country</th>
<th>Time from start of procurement to start of first construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scaling Solar: Zambia</td>
<td>1 year</td>
</tr>
<tr>
<td>South Africa</td>
<td>2 years</td>
</tr>
<tr>
<td>Namibia</td>
<td>3 years</td>
</tr>
<tr>
<td>Ghana</td>
<td>5 years</td>
</tr>
<tr>
<td>Mali</td>
<td>5.5 years</td>
</tr>
<tr>
<td>Kenya</td>
<td>6.5 years</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>7 years</td>
</tr>
</tbody>
</table>

### BETTER SOLAR

Developers that have participated in Scaling Solar tenders include:

- EDF Energy Nouvelles
- Marubeni
- Biogas Energy
- Engie
- Building Energy
- Abengoa Solar
- CHINT
- Scatec Solar
- ACCESS
- Lekela
- Acciona
- Actis
- neoen
- Mainstream Renewable Energy
- Guggenheim
- Green Power
- First Solar
- f-solar
- SunEdison
- eren
- SolarReserve
- Tata Power
- FRV
- Total
The Process

Solar generation can be achieved within two years of engaging Scaling Solar advisers.

8 months 6 months 10 months

1 PROJECT PREPARATION
- Technical and economic analysis
- Site investigation
- Legal & regulatory analysis

2 BID PREPARATION
- Localization of tender and project documents
- Attachment of financing, insurance, and credit enhancement

3 TENDER PROCESS & AWARD
- Request for qualification
- Bidder consultation
- Request for proposals
- Proposal review and award
- Signing of project documents

4 FINANCIAL CLOSE
- Finalization of contracts
- Final project approvals
- Finalization of loan agreements, insurance, and risk management

5 CONSTRUCTION & OPERATION
- Construction
- Commissioning
- Operations

For more information, visit www.scalingsolar.org
Contact the Scaling Solar team: scalingsolar@ifc.org

IN PARTNERSHIP WITH:
- Ministry of Foreign Affairs of the Netherlands
- Ministry of Foreign Affairs of Denmark
- USAID’s Power Africa Initiative