



WORLD BANK GROUP ROLE IN SUPPORTING SOLAR POWER

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World Bank

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The World Bank Group

Mandate:

- Support sustainable growth and poverty reduction.

Composed of:

- **International Bank for Reconstruction and Development (IBRD) and International Development Agency (IDA) – World Bank** – policy development support, institutional capacity building, government-backed investment and risk mitigation
- **International Finance Corporation (IFC)** – private sector arm of WBG: Investment support for private sector project developers and manufacturers in development-focused projects
- **Multilateral Insurance Guarantee Agency (MIGA)** – political, investment and credit guarantees



Support Instruments

- **Global Environmental Facility (GEF)** – In coordination with GEF, provide finance for policy and transactions
- **Carbon Finance (CF)** – for enhancing the viability of investments in mitigation projects
- **Clean Technology Fund (CTF)** – Investment project support to promote low-carbon and climate change mitigation technologies
- **Scaling Up Renewable Energy in Low Income Countries (SREP)** Pilot programs for low carbon development
- **Energy Sector Management Assistance Program (ESMAP)** – donors' trust funds to support upstream policy and sector work in energy sector

WBG Development Support for Clean Energy Programs: Comprehensive Approach...Discrete Activities

Policy and Capacity Building

- Enhance policy framework incl. pricing and risk issues
- Transaction support for developed projects including private financing
- Long-term domestic institutional capacity building

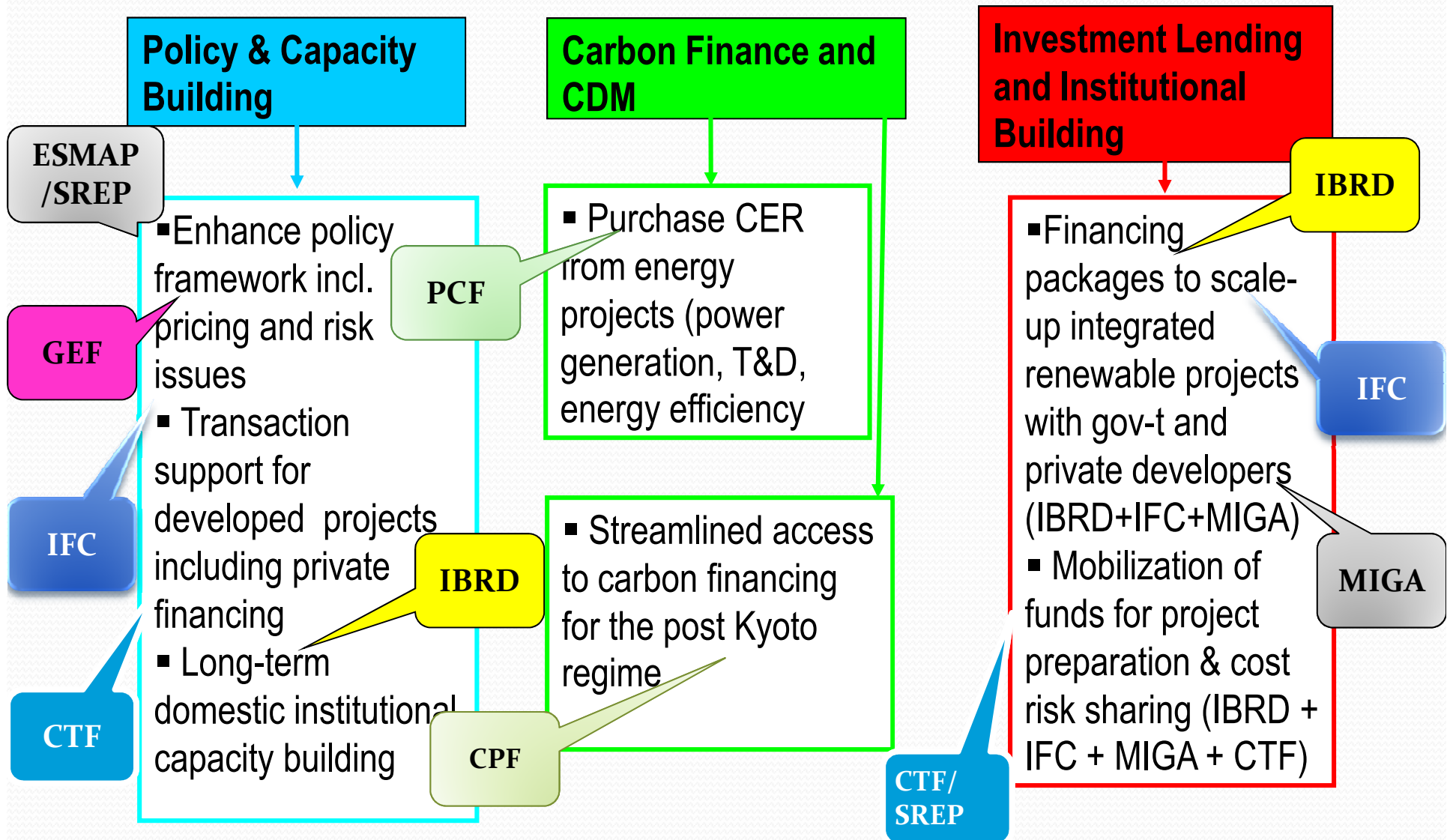
Carbon Finance and CDM/CIFs

- Purchase CER from energy projects (power generation, T&D, energy efficiency)
- Streamlined access to carbon financing for the post-Kyoto regime

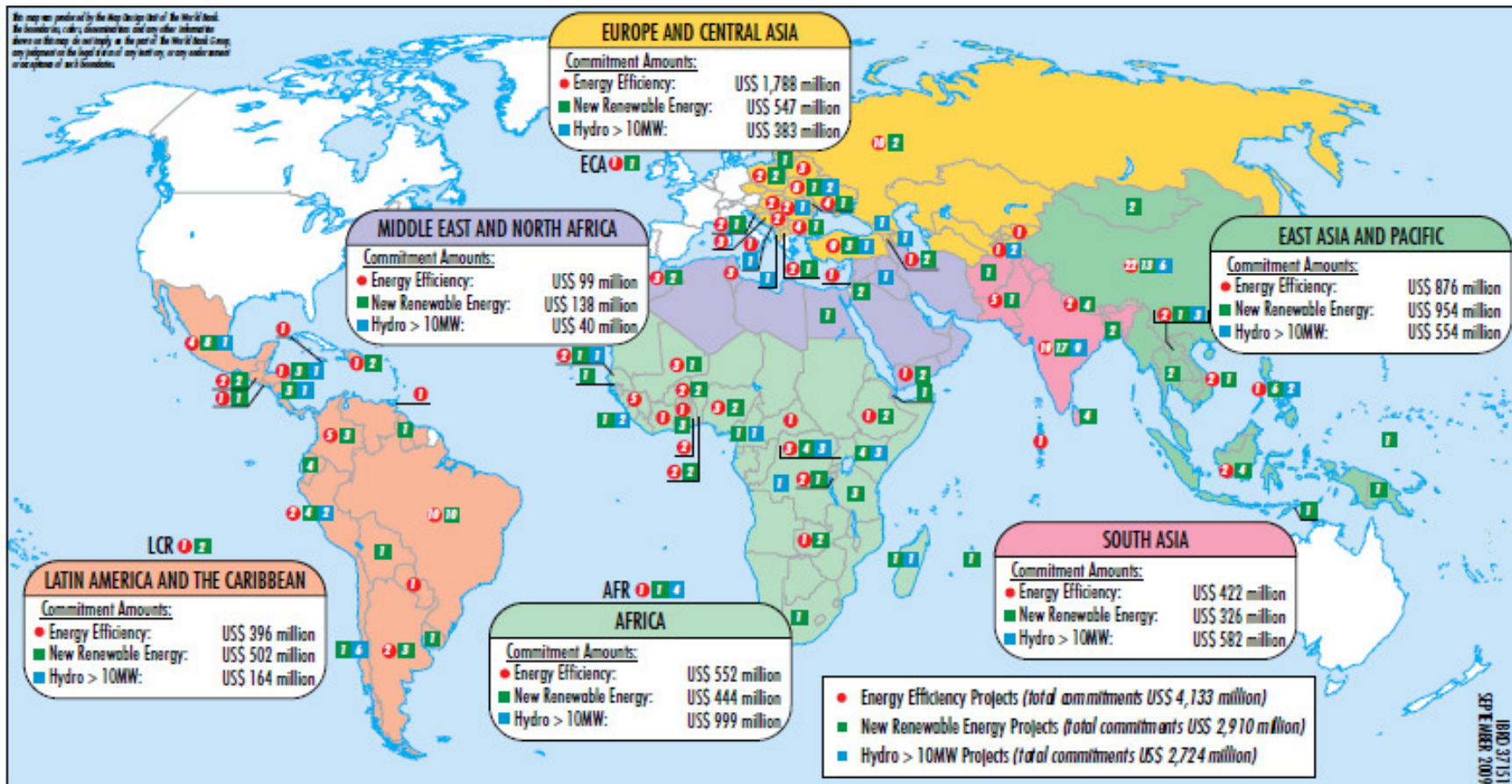
Investment Lending and Institutional Building

- Financing packages to scale-up integrated renewable projects with govt. and private developers (IBRD + IFC)
- Mobilization of funds for project preparation & cost risk sharing (IBRD + IFC + MIGA)

Multiple Instruments towards strategic objective...



WBG Energy Lending Operations: Extensive experience globally and increasing lending



Increasing commitment

- Recent Green Bonds – *“to help stimulate and coordinate public and private sector activity to combat climate change”*
 - *“An opportunity to invest in climate solutions through a high quality credit fixed income product”*
- Three issuances in USD (\$1.1 billion) and SEK (\$2.85 b SEK) so far
- Further such issuances expected



For more details, go to:
<http://go.worldbank.org/LFS55Z7LLO>

Clean Technology Fund (CTF) financing

- A new multi-billion fund (\$5 billion pledged so far), managed by World Bank, for climate change mitigation to finance “transformational” projects
- Terms are very concessional; 40 year term, 10 year grace, 0.25 % service fee, zero interest rate, for renewable energy projects
- Countries with large emission mitigation prospects
- WBG is implementing several CSP projects in MENA with CTF funding
- Bank client countries representatives in CTF Trust Fund Committee (as of Dec 09): Egypt, Morocco, India and Brazil
- **Four programs approved in Africa: Egypt, Morocco, South Africa, Egypt/North Africa-CSP**



Scaling Up Renewable Energy in Low Income Countries (SREP)

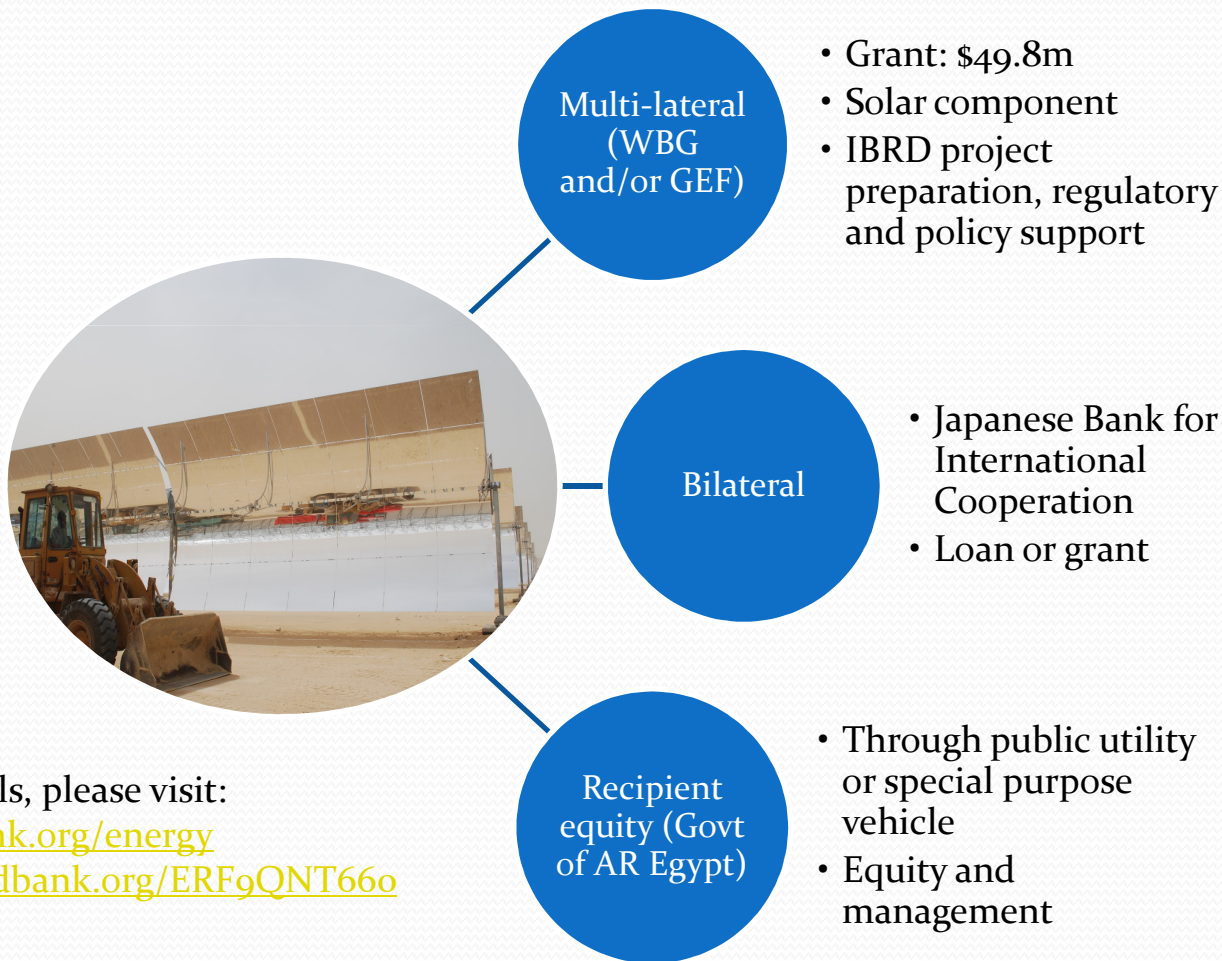
- Financing for proven renewable energy technologies towards low carbon development path (Initial financing: \$250 million)
- Six countries recently selected for pilot programs: **Mali, Ethiopia, Kenya, Honduras, Maldives, Nepal**
- Next step: Define scope of program with support from development banks
- In the case of Mali: joint mission by WB and AfDB



Project Investment Types: Public

- IBRD/IDA: Sovereign guarantee-backed debt investments or guarantees in energy projects
 - Special consideration under the Development and Climate Change Framework to alternative energy projects
 - IDA loans are interest-free for qualifying countries
 - Clean Technology Fund - Additional concessional funds for transformative energy projects through the specially created trust fund. Plan for CSP in MENA endorsed in end-2009 for 13 projects, about \$750m on concessional terms
 - Can include GEF financing, like 3 CSP-hybrid (ISCC) plants in Egypt, Mexico and Morocco
- CF: Carbon Finance tools to enhance quality of generation projects, structures to assist developers in getting carbon revenues.

Public Sector Investment Example: Egypt Kureimat ISCC



For more details, please visit:

www.worldbank.org/energy

<http://go.worldbank.org/ERF9QNT66o>



Project Investment Types: Private

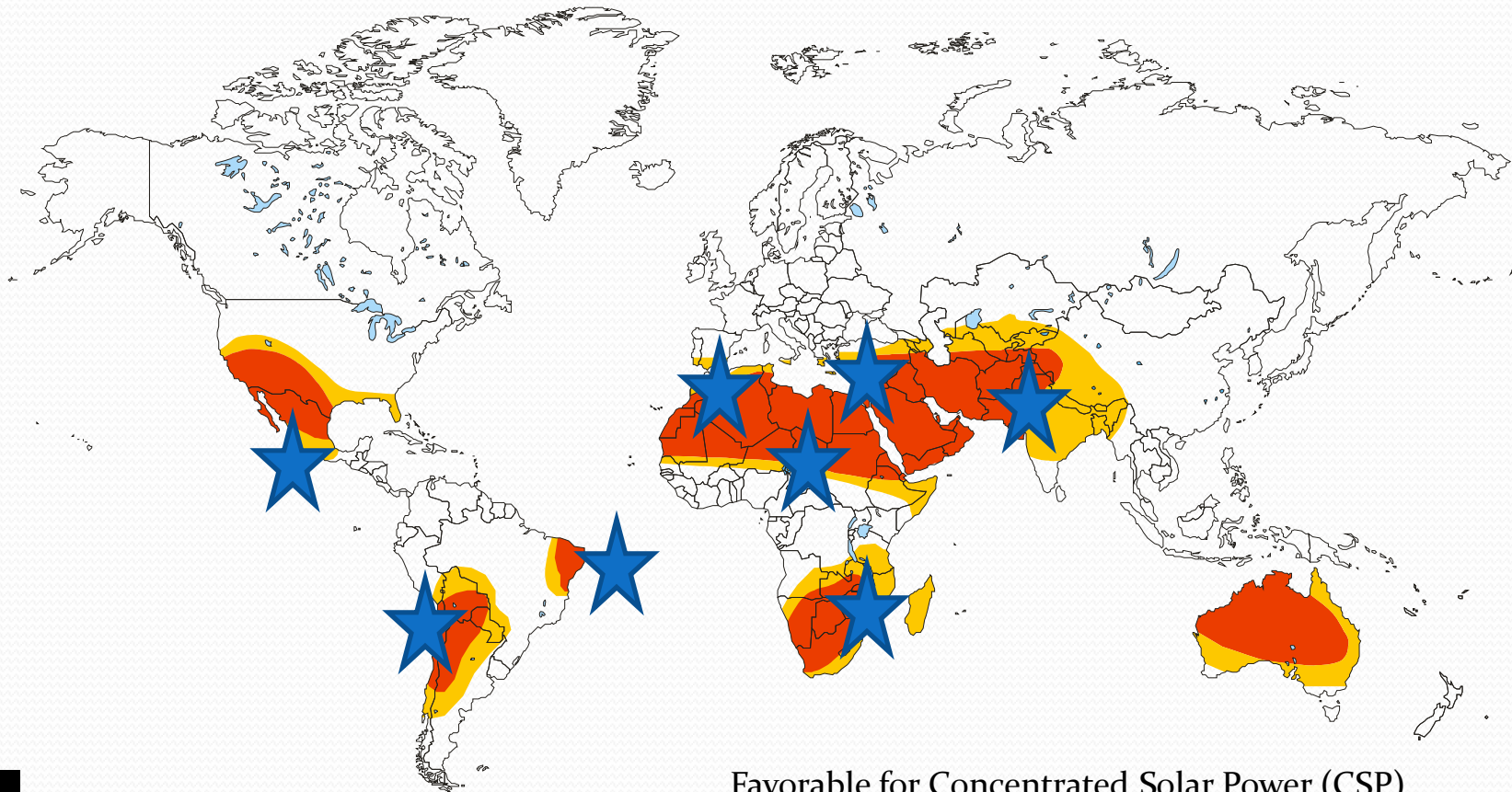
- IFC: Investments in private sector solar plants, PPP, etc.
 - Debt, equity, hybrid or mezzanine: flexible and innovative structures offered
- MIGA: Partial Risk Guarantees and Partial Credit Guarantees
- Carbon Finance tools
- Local and international currencies, hedging products
- Deep experience for Indian energy investments



Analytical and advisory activities

- Non-lending support and advice for:
 - regulatory and institutional capacity building
 - policy guidance, policy framework,
 - Transactional support and advice
- Available through:
 - Bank AAA,
 - as part of policy lending,
 - through trust funds managed by the WBG like ESMAF, etc

Majority of areas physically suitable for solar energy located in WBG client countries



- Favorable for Concentrated Solar Power (CSP)
- Worth considering for CSP
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WBG SUPPORT TO SOLAR INITIATIVES IN SUB-REGION



Current Projects

- Rural Electrification under Public Private Partnerships (e.g. Mali, Senegal)
 - Stand-alone PV systems
 - Hybrid systems (PV/diesel, etc)
 - LEDs
- Senegal RE concession; financing by both WB (subsidy) and IFC (debt for concessionaire)
 - Regional operator: COMASEL (Morocco ONE)



Prospects

- Carbon Finance for PV investments in concessions (eg Senegal)
- Scaling up of Rural Electrification concessions with increased PV share
- SREP: Pilot CSP in Northern Mali? PV scaling up?
- Solar water heating programs (peak-shaving tool)



Continued partnership

- The WBG will remain to be engaged with the renewable energy development agenda in the ECOWAS region through the public and private sector arms.
- We look forward to a constructive dialog on possible assistance from the WBG



Thank you!

