

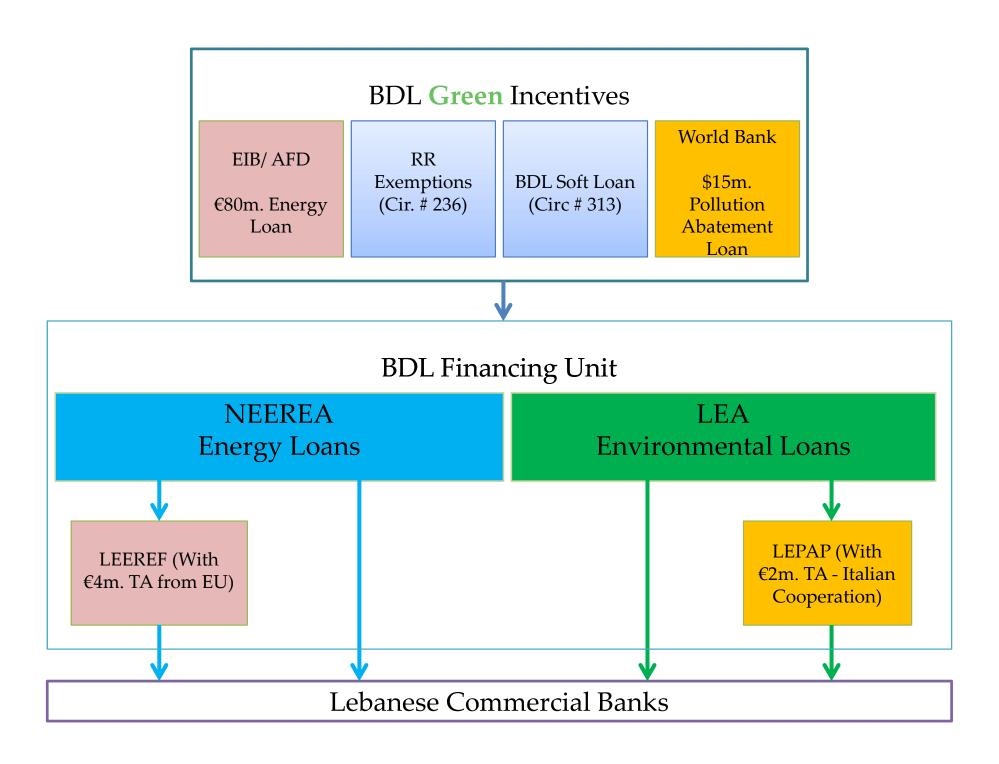
Regional Energy Project Development, Finance and Business Planning

3-4 May 2016, Rabat, Morocco



#### Lebanon

- $\approx 4$ m. In population
- ≈ \$45bn. In GDP
- Fiscal Problems
- Sizable Energy Bills
- Well developed Financial sector (Size and bankability)
- Influential Monetary Policy → BDL Incentives





# Cost on Private Sector



**New Projects** 

- Up to 14 years maturity
- Up to 4 years grace period

Re-Modeling Existing Projects

- Up to 10 years maturity
- Up to 2 years grace period



# National Energy Efficiency and Renewable Energy Action

- Energy Efficiency measures.
- Renewable energy base, i.e. Solar and Wind energy.





#### **NEEREA**

was initiated after an MOU was signed between BDL and UNDP on March 2, 2010 to promote energy efficiency and renewable energy on several fronts:

- Private sector,
- Commercial banks,
- Public entities, and
- International organizations.

#### **NEEREA** Stakeholders

NEEREA
National Energy Efficiency
S. Renewable Energy Action





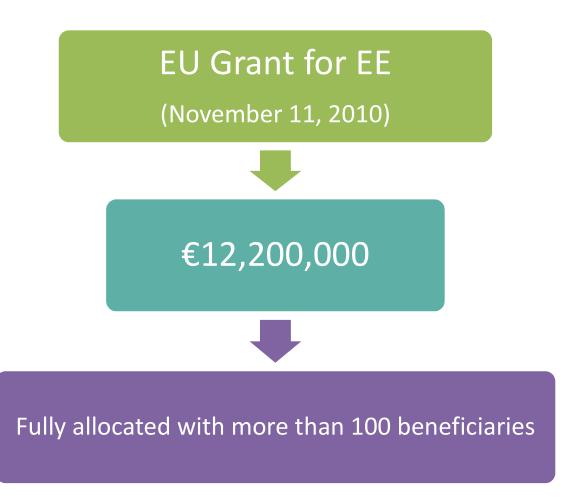








#### **NEEREA Mechanism**



#### **NEEREA**: \$1.5m MOEW Grant





# Consumer Solar Water Heaters

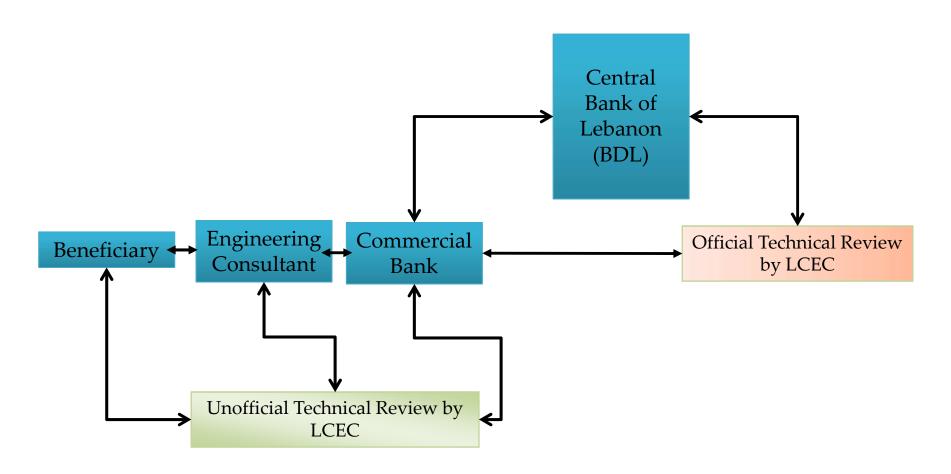
0% Interest Rate

Up to 5 Years Maturity

\$200 Grant from the MOEW for 7,500 Applicants

# **NEEREA Structure**





## **NEEREA Projects**

- More than 325loans approved with a total of 350 million USD with a total projects value of more than \$600 million USD
- Around 53 projects in the pipeline with a total of 35million USD
- 280 PV projects of a total installed capacity of 21 MWp

Green building loans took the biggest part with a total budget of

218million USD



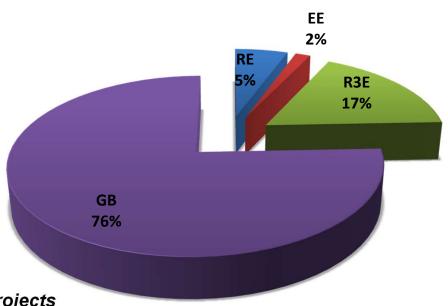


#### **NEEREA Market**

- NEEREA helped create more than 10,000 direct and indirect jobs in the sustainable energy sector in Lebanon
- The number of companies working in the field of solar water heaters rose from 25 in 2010 to more than 170 companies today.
- The number of companies working in the green energy and energy audits business rose from 4 in 2010 to more than 30 companies in 2015.
- The number of companies working in solar photovoltaic sector increased from **5** in 2010 to more than **70** companies today.

## **NEEREA Indicators - Statistics**

#### **Loans by Amount**



RE: Renewable Energy Projects

EE: Energy Efficiency Projects

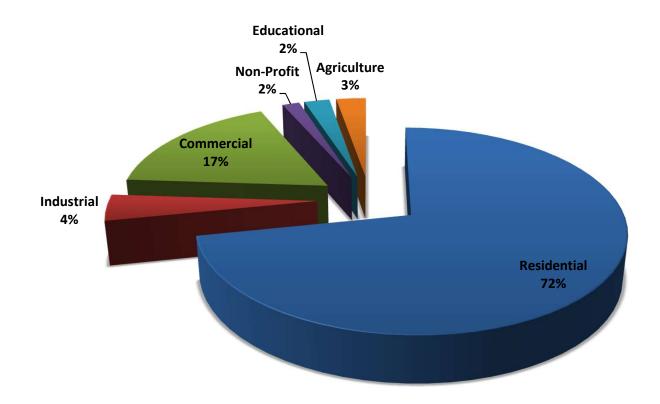
R3E: Renewable Energy and Energy Efficiency

**Projects** 

GB: Green Certified Buildings Projects

# **NEEREA Indicators - Statistics**

#### **Per Sector**



#### **NEEREA Mechanism**











DREG Decentralized Renewable Energy Power Generation Project



**Private Sector RE Investments** 



Grant co-financing of \$150,000 or 25% of project's cost

#### **NEEREA Mechanism**







# €80m. EE Loan



**Productive Sectors** 

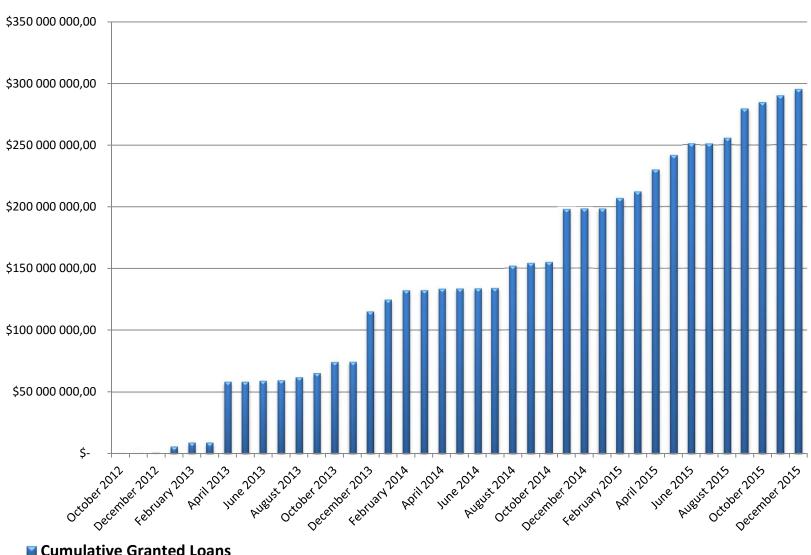


12 to 14 Yrs. maturity



≈ 1% interest rate

#### **NEEREA Granted Loans**

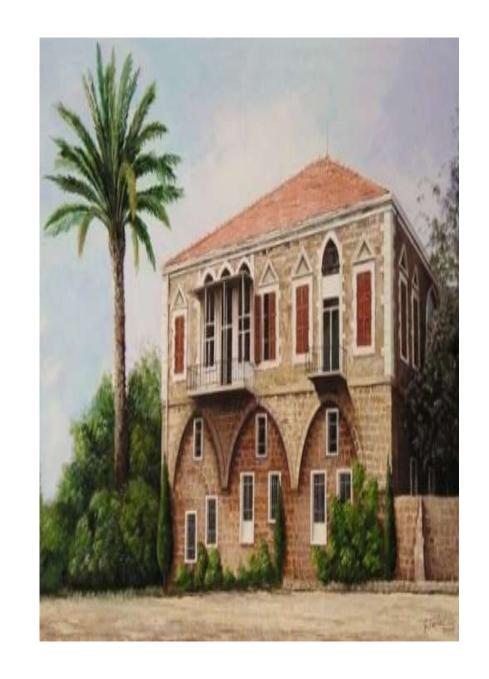


**■** Cumulative Granted Loans

# The Lebanese Environmental Action (LEA)

For Water, Air, and the Environment

A National Financing Mechanism by Banque du Liban and assistance of LCEC



# What are the Environmental projects covered by LEA?

Recycling



Landscape



Organic Farming



**Green Roofs** 



Ecotourism



**Green Walls** 



# What are the Environmental projects covered by LEA?

Stones cladding



Roof Tiling



Wastewater Treatment



RainwaterCollection



#### LEA: Environmental Requirements by Measure

# Stone Cladding

- Recycled stones
- (visual impact, conservation of the traditional architecture)

# Roof tiling

- Durable Materials
- Environmental Specifications (LCA, EDS)
- (visual impact, conservation of the traditional architecture, insulation and water proofing)

# Landscaping

- Plantings adapted to the local conditions (natives)
- Organic Fertilizer
- Drip Irrigation

   (air and water quality improvement, biodiversity enhancement...)

#### BDL Green Incentives: LEA











\$15m. WB Loan Or

**BDL** Direct



**Industrial Sector** 



≈ 0% interest rate

7 Years Maturity



Financing Scheme	Cost on Beneficiary	Multiplier
EIB/AFD Energy	0% - 0.75%	150%
Energy Loans	3.75%- (50%*1Yr. Tbs )	150%
Kafalat Energy	3.5%	100%
Solar Panels Loans	0.75%	150%
Solar Energy – Rural Areas	0.75%	150%
Pollution Abatement - Industry	2 Yr. Tbs – 1% LIBOR 3mths. + 4.5%	60%
World Bank – Pollution Abatement	WB rate + BDL Comm + 3.5% Bank Spread - (100%*1Yr. Tbs)	100%
Non Subsidized – Environmental Loans	3.75%- (50%*1Yr. Tbs )	100%
<b>Environmental Subsidized Loans</b>	2 Yr. Tbs – 0.75%	60%



# Thank You

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