



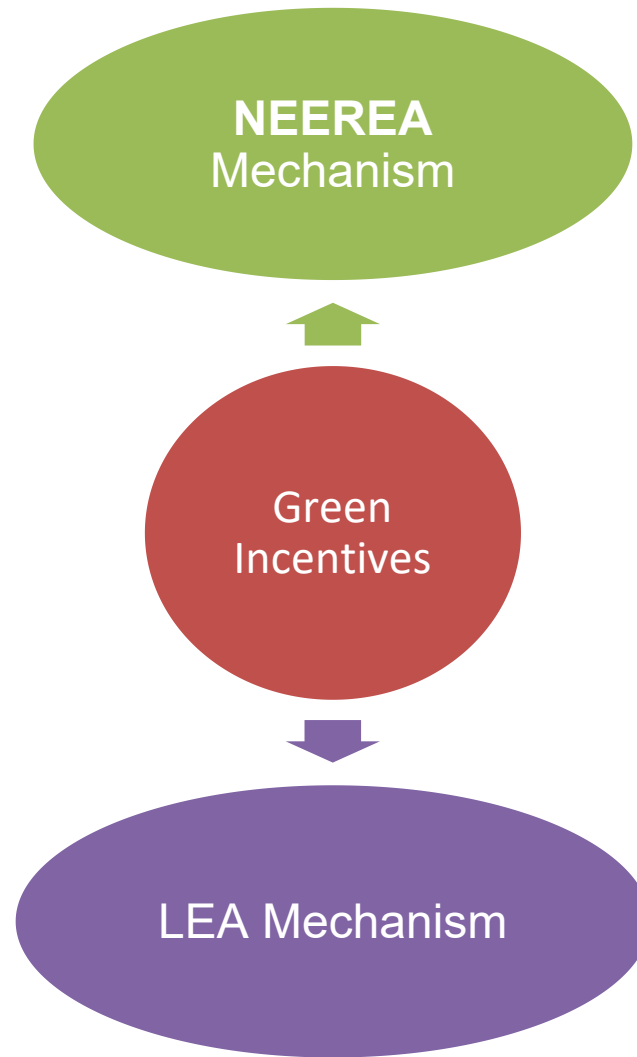
مصرف لبنان
BANQUE DU LIBAN

BDL Green Incentives

EcoMondo

Rimini, November 8, 2016

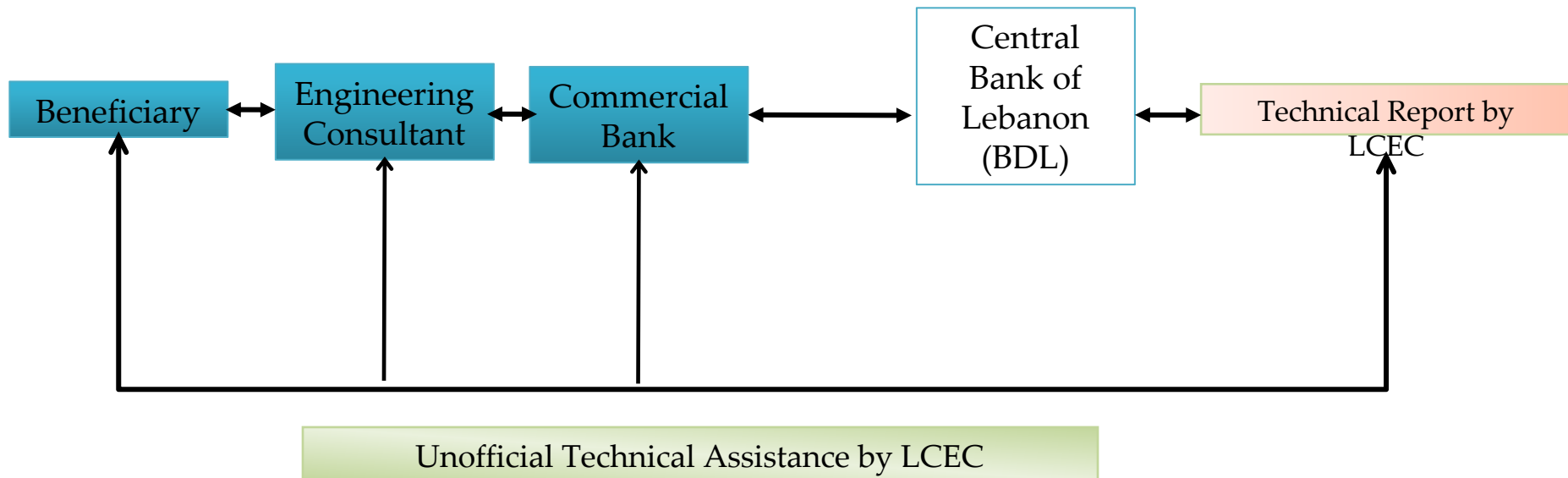
Green Incentives



National Energy Efficiency and Renewable Energy Action

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





Cost of EE & RE Investment

$\leq 1\%$

BDL **Energy** Incentives

New Projects

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

Re-Modeling Existing Projects

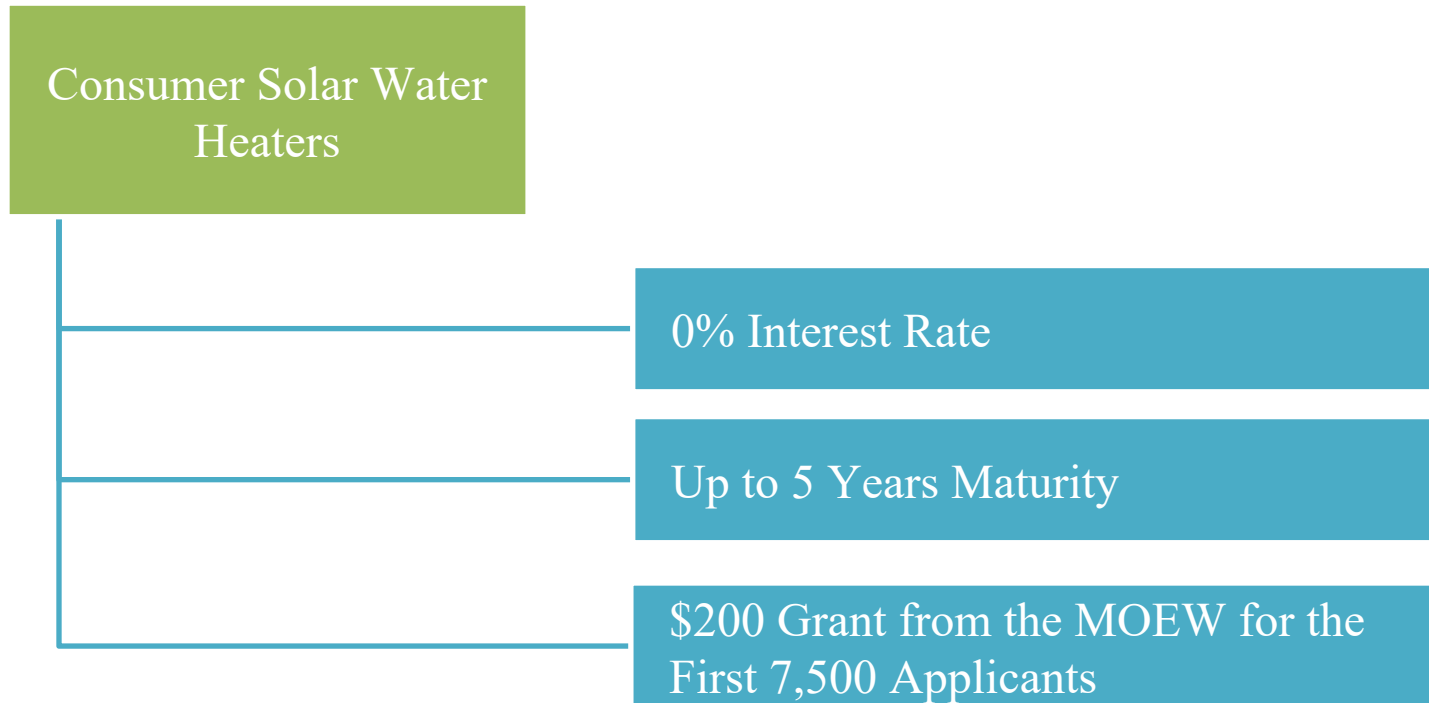
- Up to 10 years maturity
- Up to 2 years grace period

Certified Green Buildings

- The amount of the Energy loan extended would be based on the following:

Nature of Project	Rating	Energy Loan Amount
New Project	Not rated	EE & RE Cost
	Certified	15% of Total Project Value
	Silver	25% of Total Project Value
	Gold	35% of Total Project Value
	Platinum	45% of Total Project Value
Existing Project	Rated or Not Rated	EE & RE Cost

- The certification system developed by LEED is adopted, or equivalent classifications from other internationally recognized systems.*



Number of granted SWH loans $\approx 20,000$

Number of SWH loans that benefited from MOEW = 6,000

EU Grant for EE

(November 11, 2010)



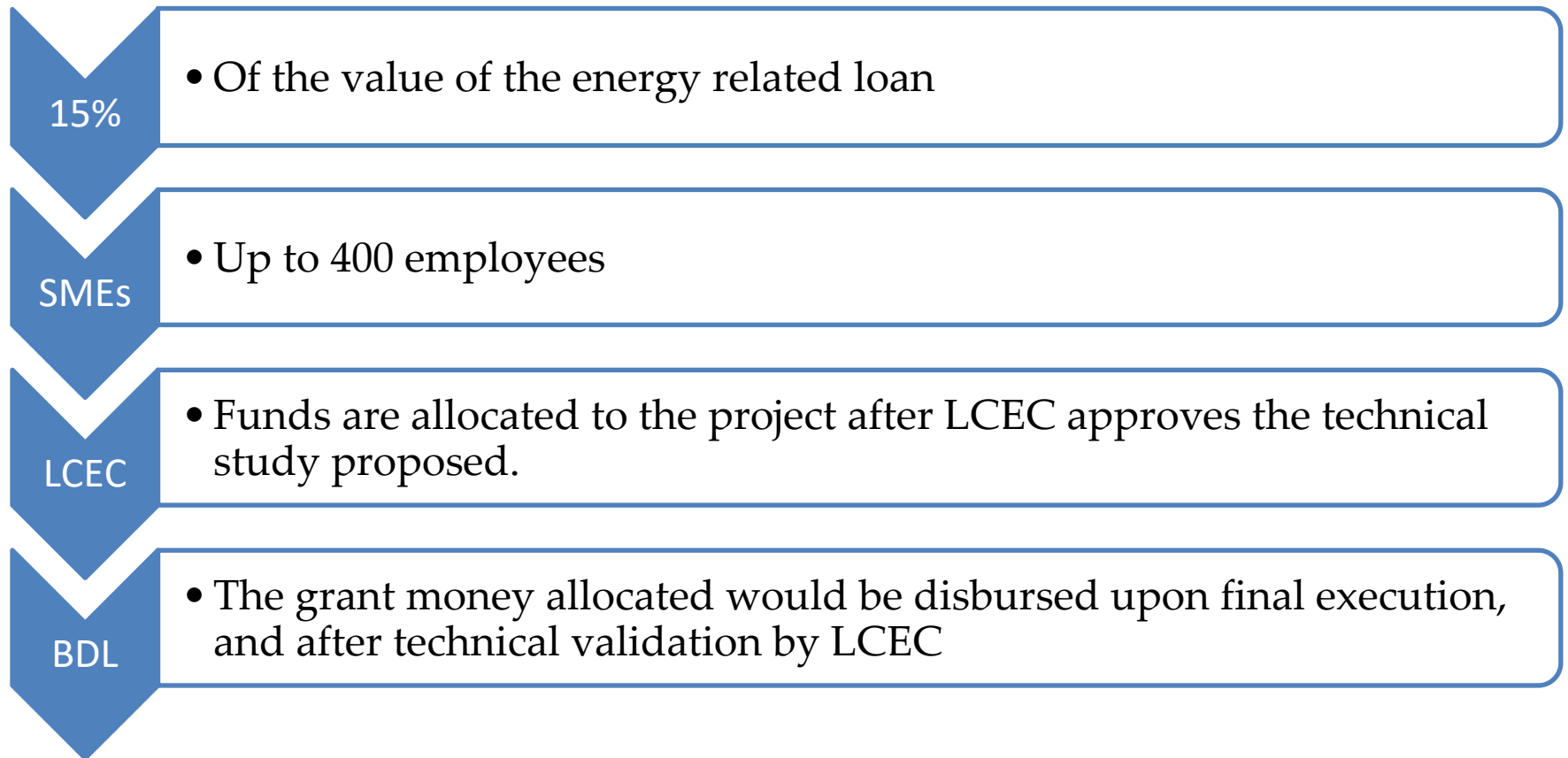
€12,200,000



Fully allocated with more than 100
beneficiaries

EU Grant

▪BDL would pay a grant to subsidize loans extended to finance energy projects, with a maximum grant of \$750,000 per project:



DREG

Decentralized Renewable Energy Power Generation
Project

Private Sector RE Investments

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



€80m. EE Loan



Productive
Sectors



12 to 14 Yrs. maturity



≈ 1% interest rate

- More than **480** loans approved with a total of **322 million USD**
- Around **42** projects in the pipeline with a total of **12 million USD**
- **338** PV projects of a total installed capacity of **13.5 MWP**



Green Buildings

- On average, green buildings loans have the Silver certification (loan amount is around 25% of total project cost)
- Around 205 Million USD of loans are invested in certified green buildings projects (LEED, BREEAM)
- Direct projects size exceeds 820 Million USD.



Solar Photovoltaic Systems Loans

Number of PV projects	Granted Loan	Installed Capacity	Annual Energy Savings	Annual Cost Savings	CO2 Savings in tons
152	7.7 Million USD	2.4 MWp	3.55 MWh	1.2 Million USD	2210

- Analysis of 152 approved photovoltaic projects
- The total installed capacity till date is 2.4 MWp
- An average of 16 kW per project (projects above 100 kW started to be explored especially pumping)

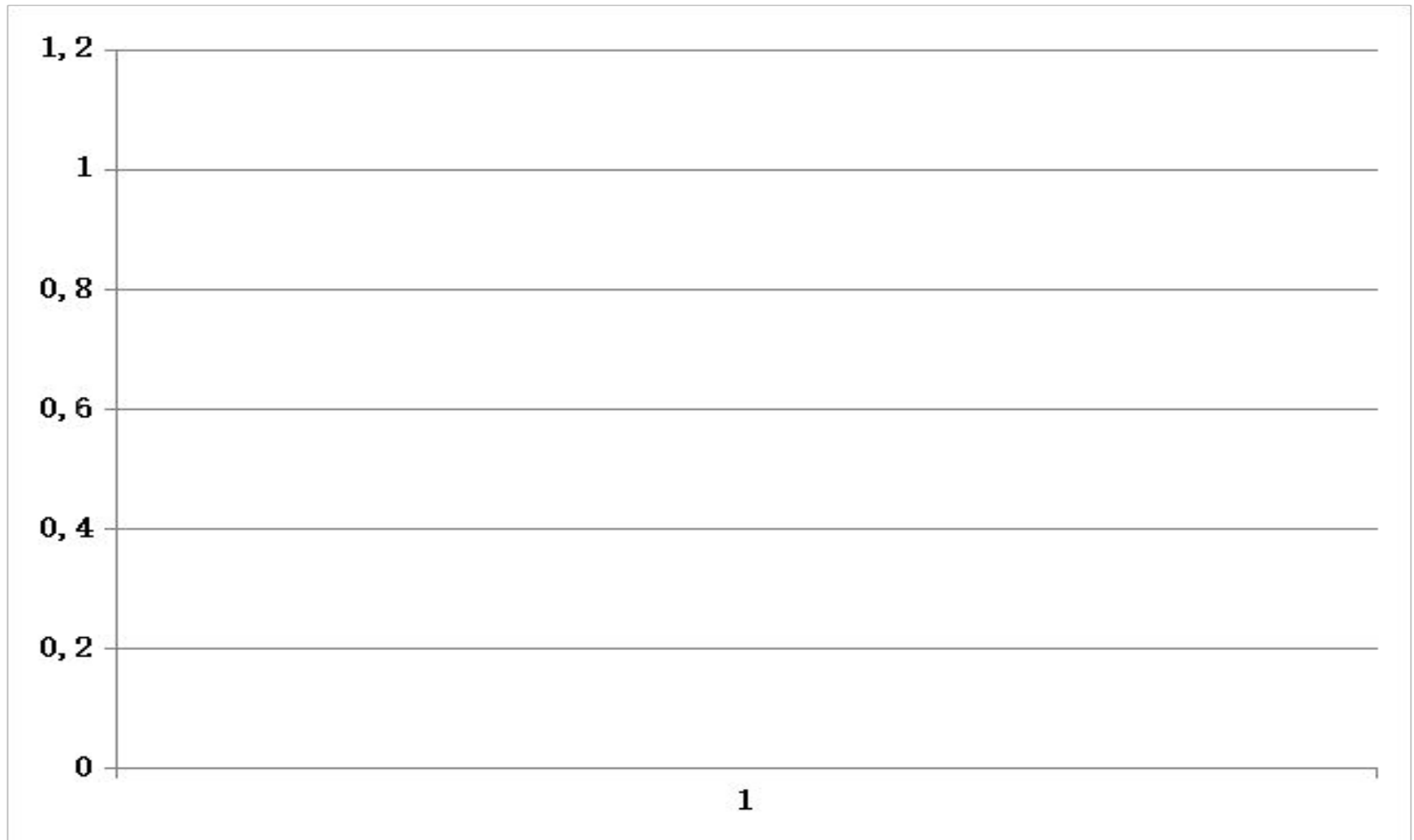


LED Lighting Loans

Number of LED projects	Granted Loan	Annual Energy Savings	Annual Cost Savings	CO2 Savings in ton
Twenty Three	3 Million USD	5.32 MWh	940,000 USD	3010

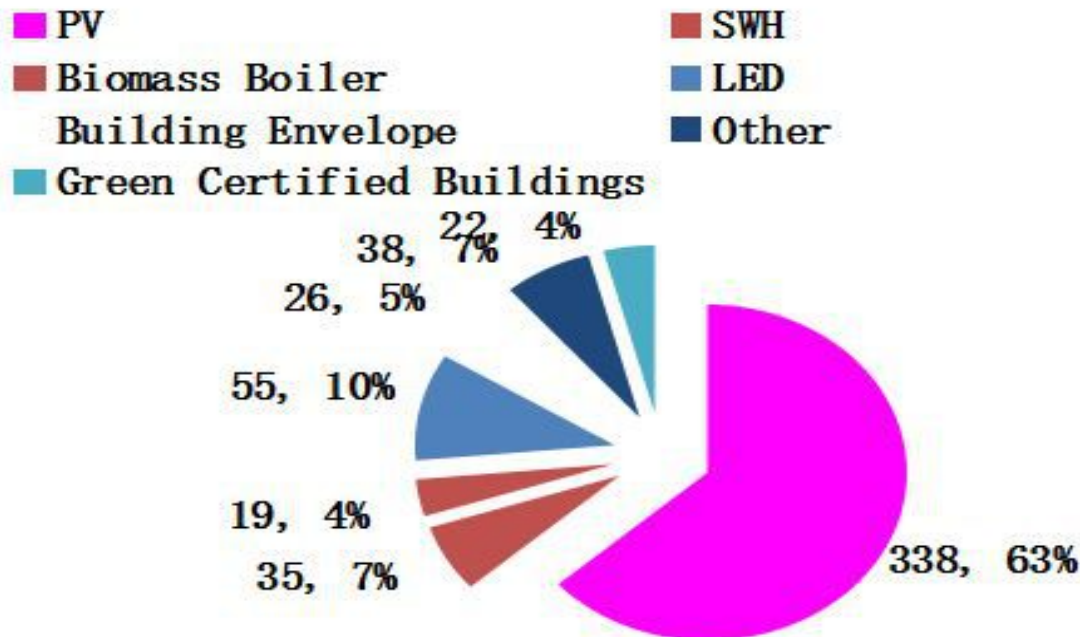


Investments Under



Distribution of Projects Under NEEREA

Number of Projects by Technology



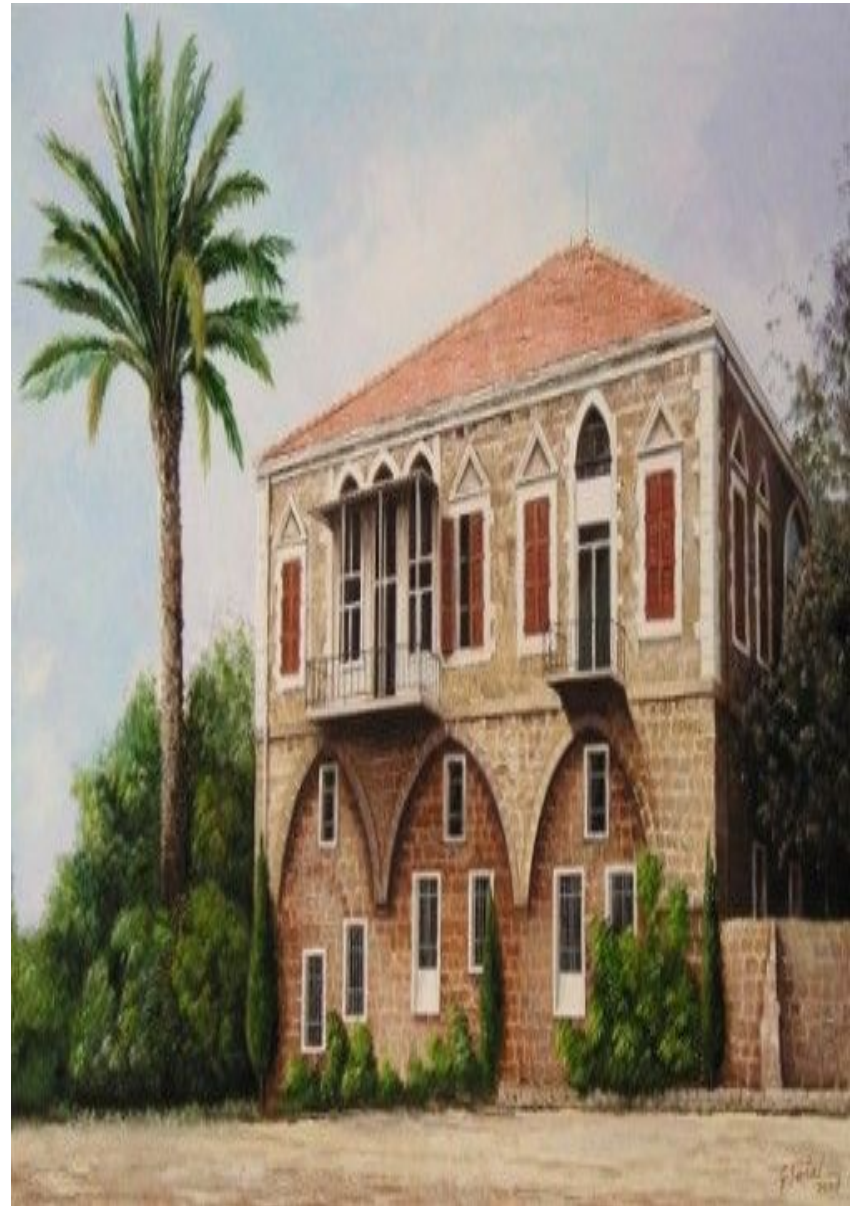
Loans Amount Distribution of Projects Per Sector

- 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 now.
- The number of companies working in solar photovoltaic sector increased from **5** in 2010 to more than **70** companies today.

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



- Rainwater Collection



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



LEPAP



\$15m. WB Loan or BDL Direct



Industrial Sector



≈ 0% interest rate
7 to 10 Years Maturity

Financing Scheme	Cost on Beneficiary	Multiplier
EIB/AFD Energy	0% - 0.75%	150%
Energy Loans	3.75%- (50%*1Yr. Tbs)	150%
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%
Environmental Subsidized Loans	2 Yr. Tbs – 0.75%	60%



Thank You

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