

The Solar Water Heaters Market From 2009 to 2013 and the Way Beyond



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An Overview of the Achievements of the GEF-Funded “Global Solar Water Heating Market Transformation and Strengthening Initiative”



Framework of the GEF GSWH Initiative

- In 2009, The Government of Lebanon signed a new project with UNDP entitled “The Country Programme of Lebanon under the Global Solar Water Heating Market Transformation and Strengthening Initiative”
- This global initiative is funded by the Global Environment Facility (GEF) and co-managed by UNEP and UNDP (a total budget of 1.1 Million USD over 5 years)
- The initiative involves 6 countries: Albania, Algeria, Chile, India, Lebanon and Mexico
- The 5-year initiative in Lebanon is managed by UNDP Lebanon and the Ministry of Energy and Water and implemented by the Lebanese Center for Energy Conservation (LCEC)

3 National Objectives for the GSWH Project

This initiative aims at accelerating the market development of solar water heating in Lebanon with an objective to facilitate:

- 1- the installation of 190,000 m² of new installed collector area over the period 2009-2014;
- 2- an annual sale of 50,000 m² reached by the year 2014;
- 3- and with expected continuing growth to reach the set target of 1,050,000 m² of total installed SWH capacity by 2020.

Work on 4 Axes

1. Policy and Financing

- Enabling Environment to promote the SWH market

2. Information and Communication

- Marketing and awareness raising on SWH strengthened

3. Technical and Pilot Projects

- Implementation, certification and quality control schemes established

4. Management and Institutionalization

- Support and lessons learnt

Main Pillars for SWH Market Development

Policy and
Finance

Info and
Marketing

Technical and
Pilot Projects

Institutionalization
of Efforts

Integrated Approach



Policy and Finance

√ Declaration of the Lebanese Government

√ Policy Paper for the Electricity Sector

√ National Energy Efficiency Action Plan (NEEAP 2011-2015)

√ Energy Conservation Law

√ Proposed amendment to the building code

Integrated Approach



Info and Marketing

- √ MEW regular media campaigns (TV and billboards)
- √ All LCEC workshops and events
- √ Constant visibility in Lebanese media (newspapers and magazines)
- √ More than 5,000 persons directly involved over 5 years

Integrated Approach



- √ Testing facility operational at IRI (Greek grant)
- √ More than 30 collective SWH projects already installed (CEDRO Project)
- √ Active participation in the SHAMSI scheme developed by RCREEE
- √ Continuous qualification and control of SWH companies

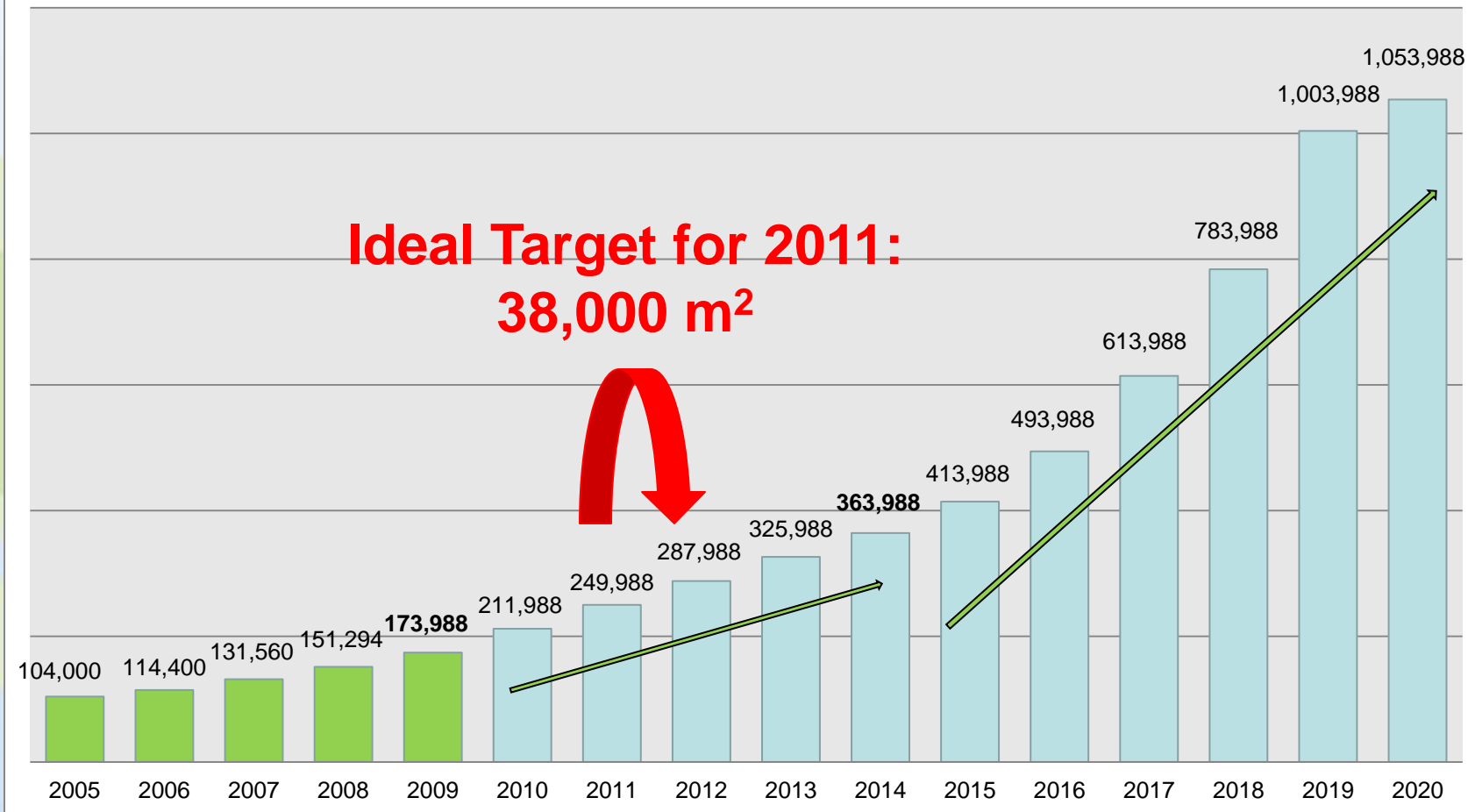
Integrated Approach



- √ Publications and reports made available to MEW and public
- √ Culture of SWH embedded at MEW
- √ Work on SWH will continue with the LCEC
- √ Qualification and control of SWH companies will continue, and will be modified to ensure a better control

Ideal Projected Estimations

**Estimated Current and Future Solar Installations (in m²)
(2005-2014)**



NEEREA for SWH

NEEREA is the National Energy Efficiency and Renewable Energy Action

- NEEREA is a national financing mechanism initiated by the Central Bank of Lebanon in collaboration with the Ministry of Energy and Water, UNDP, and the LCEC.
- NEEREA offers loans for SWH installation with 0% interest rate and a repayment period of 5 years (applicable starting 2010)
- MEW offers 200 USD grant money for the first 7,500 installations (a total of 1.5 Million USD)

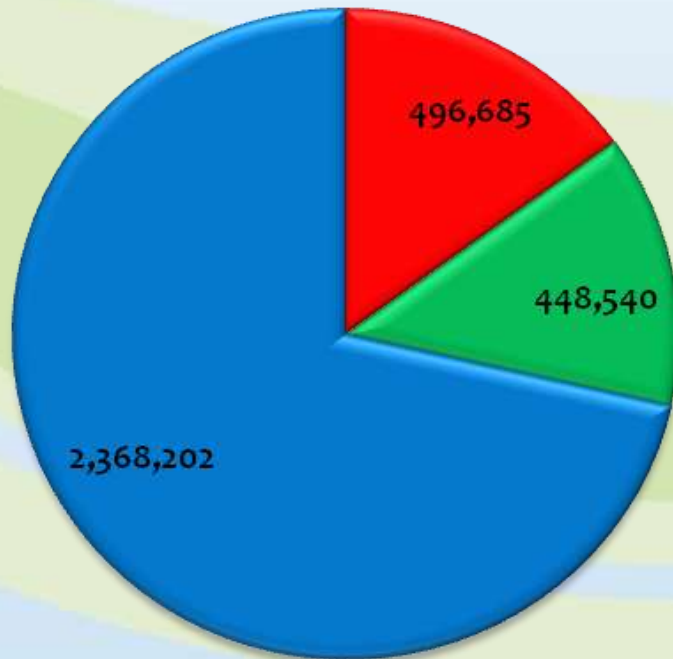


Ideal Versus Real

**Ideal Target for 2011:
38,000 m²**

**Actual Real
Target in 2011:
43,500 m²**

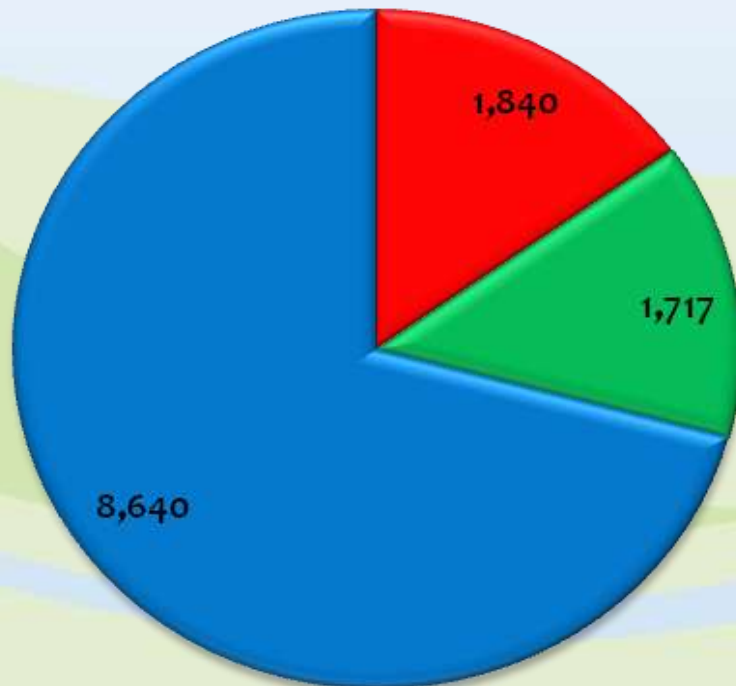
■ Loan ■ Loan with Subsidy ■ Cash Payments



12,197 solar water heaters are installed in the residential sector of Lebanon in 2011.

The estimated market value for solar water heaters in Lebanon reached **18,131,183 USD** in 2011.

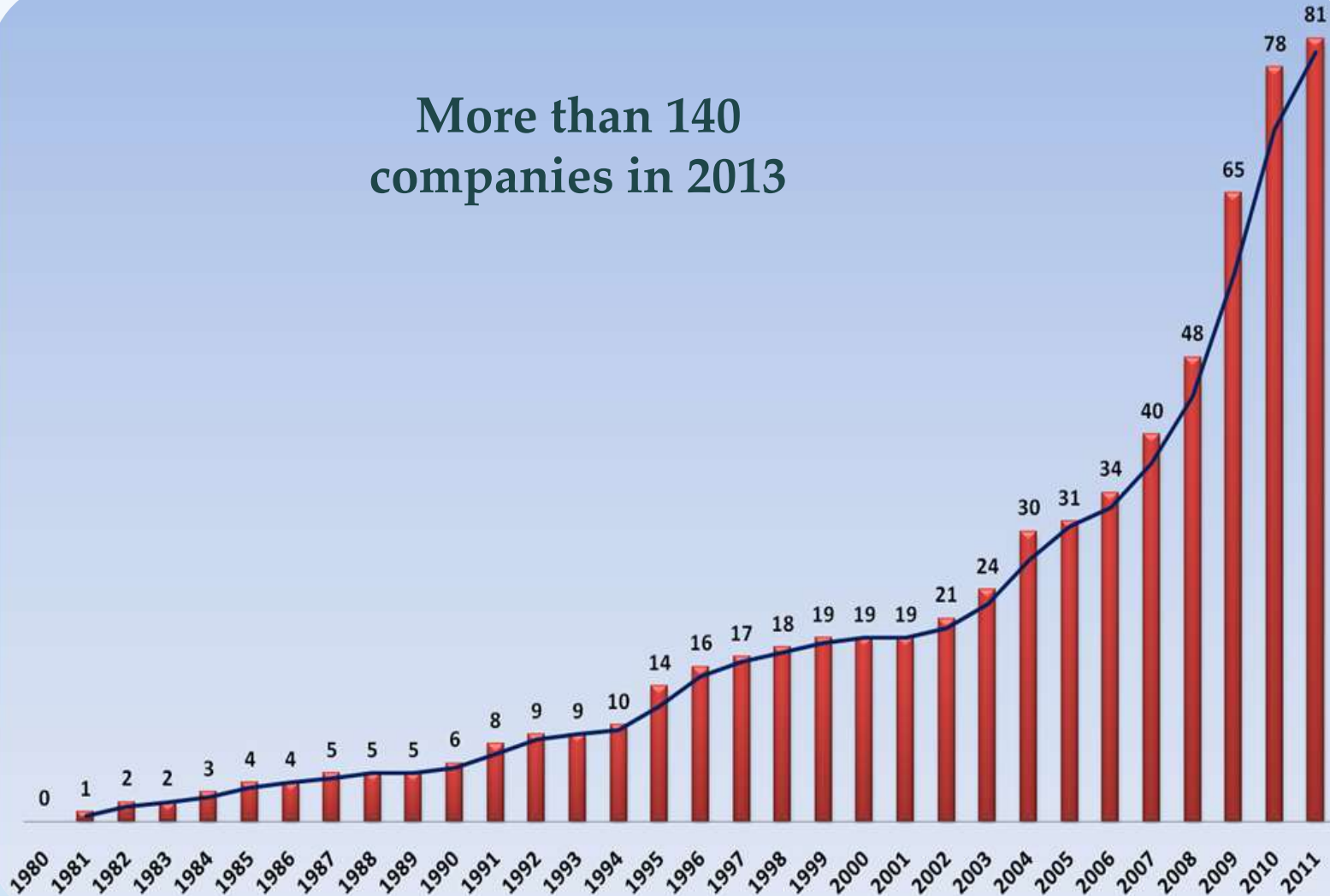
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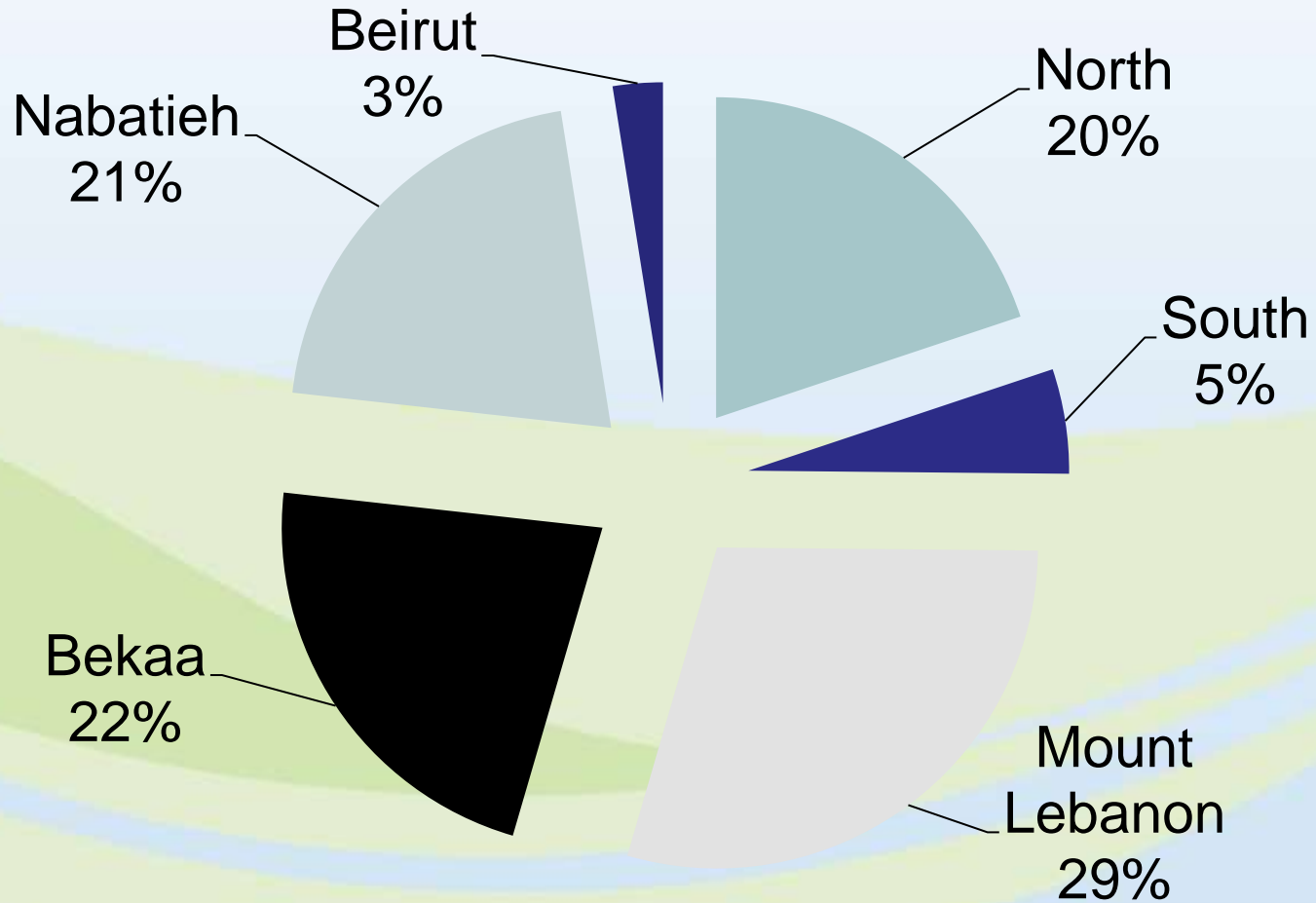
3,557 citizens
benefitted from
interest-free loans

Integrated Approach

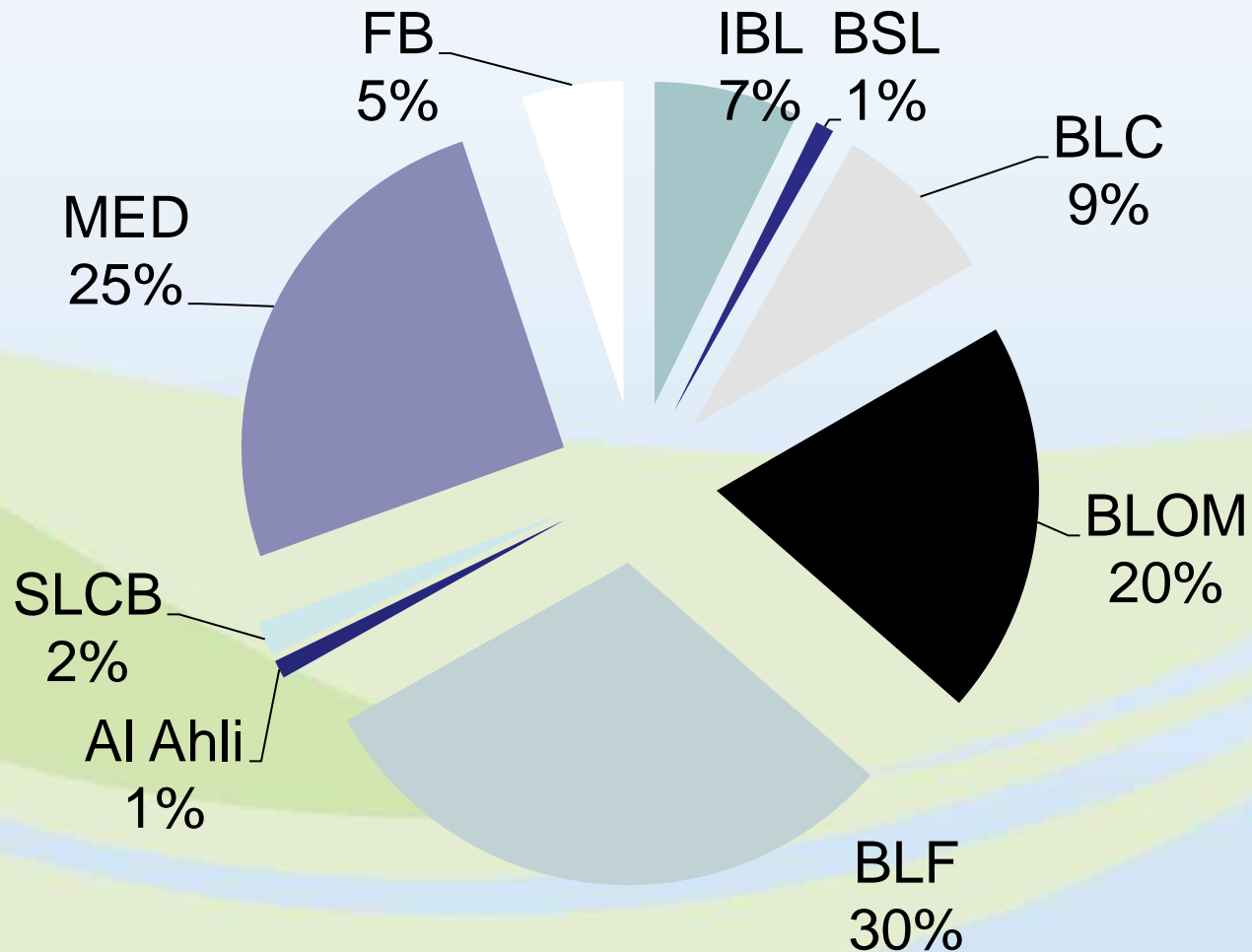
More than 140
companies in 2013



2013 Indicators: Regional Distribution



Market Share by Bank



Subsidy Approval Percentage

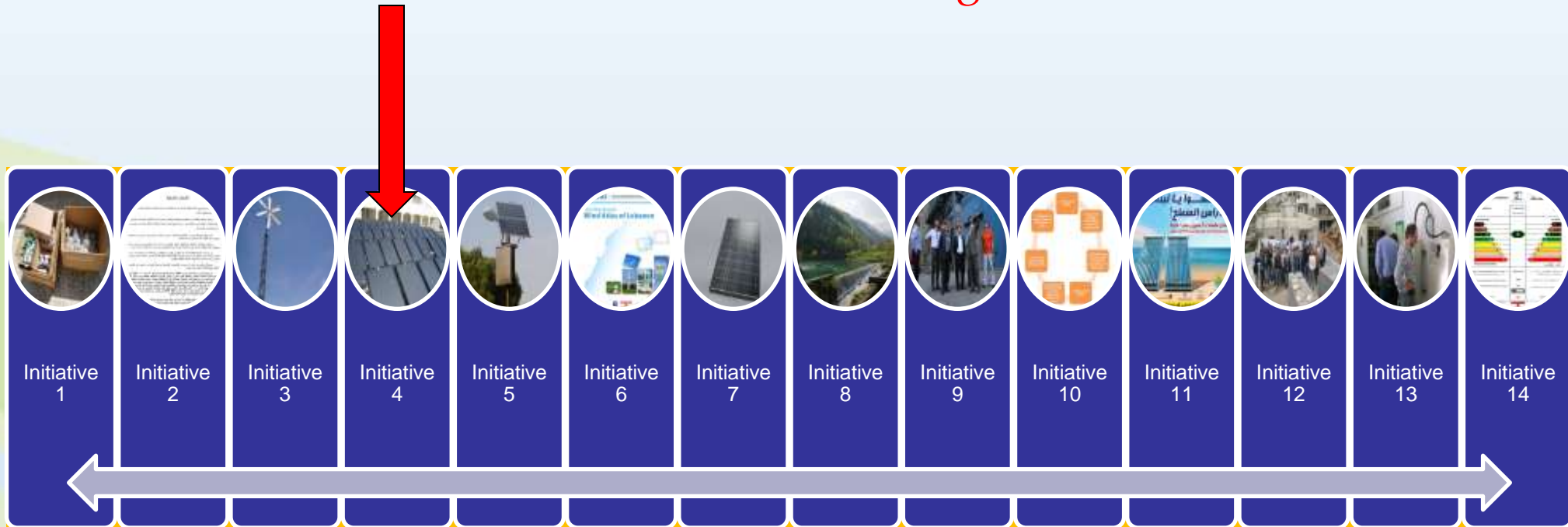


Items to Go

- Vocational training to technicians
- Database of SWH companies
- Market survey
- New qualification procedure for SWH companies based on a survey of actual installations
- Active involvement in the SHAMSI network

The Way Beyond

Initiative 4: Solar Water Heaters for Buildings and Institutions





Thank You!

The Lebanon Component of the Global Solar Water Heater Project
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