Financing and insuring photovoltaics
History and future prospects

Société Nationale d’Horticulture de France
84 rue de Grenelle
75 007 Paris
Tuesday, 3 July 2012

Department for Sustainable Development
Introduction

Grid parity =

- The problem of economic competitiveness has been solved
- The market is becoming «infinite»
- Specific financial issues: contracting models, cost of accessing capital, abandoning the system of feed-in tariffs?

Irrelevant since today’s « infinite » market is primarily focussed on =

- Production capacity
- Financing capacity
- Ability to guarantee

With the emergence of grid parity, the economic challenge will be resolved; the challenge will then be the provision of financing and guarantees.

Crucial questions: Who will receive the money? And who will benefit from it?

There are many lessons to be learned from the history of financing Franco-German photovoltaic plants.
Summary

1. Banking history of photovoltaics
2. Future banking trends
3. Conclusion
Financing of photovoltaics
Division of banking roles

General overview

Profitability

- 10-12%
- 5-6%

Expertise

- Philanthropic financing:
  - NGO
  - Social networks
  - Foundations
  - Federations

Specific economic conditions

- Cooperative and institutional banks
- Investment banks
- Merchant banks

Expertise

- 72% ecoPTZ
- 85% MC pro
- 85% loans with (FA)

- Large projects
- PPP
- Private equity
- Asset management

Profile

- First mutual ISR
- Recognition by ENR

First mutual savings
First MC pro
First green housing loans
First subsidised eco-loans

First MC share 33 M€ 2011 sponsorship

Arnaud BERGER 06 76 75 53 17
I am not sure what the difference is between the banques de marche and the banques d'affaires. An explanation would be good.

Maybe
Investment banks
Commercial banks
Financing of photovoltaics
Banking history

General overview

Profitability

Photovoltaics 2007 - 2010
Cooperative and institutional banks

Photovoltaics 2005 - 2007

Photovoltaics 2001 - 2005

Philanthropic financing:
• NGOs
• Foundations
• Federations

10-12%

5-6%

Moratorium

Investment banks
Merchant banks

• Tender
• Bank guarantee for completion
• Financial guarantee for decommissioning

France 2011 (Source: Observer):
• +1,600 Mw connected to grid: 79,291 plants
• 3rd European market in 2011.
• New approach in distinguishing between feed-in costs and the actual cost per solar kWh
• Enerplan: 15,000 redundancies

Typology
Summary

1. Banking history of photovoltaics
2. Future banking trends
3. Conclusion
Future banking trends
Potential of loans in the eco sector - 2016

- Electric vehicles
- Photovoltaics
- Sector
  - Geothermal
  - Hydro
  - Urban transport
  - Green buildings
  - Electric vehicles
  - Photovoltaics
  - Biofuels
  - Green chemicals
  - Waste
  - Biomass

- French debt market
- Maturity
- Appeal

- 1.9 bn €
- 1.1 bn €
- 2.3 bn €
- 0.9 bn €
- 1.2 bn €

- 2.16 bn €
- 5.6 bn €

- 0.6
- 0.8
- 0.48

- 0.48
- 0.6
- 0.8
- 1.2

- 0.9 bn €
- 1.1 bn €
- 2.3 bn €

- 5.6 bn €
- 2.16 bn €

- 0.8
- 1.2

- 0.48
- 0.6
- 0.8

- M=2
- M=5
- M=10
- M=15
- M=20

- 5.6 bn €
- 2.16 bn €

- 0.48
- 0.6
- 0.8

- Arnaud BERGER 06 76 75 53 17
Future banking trends
Potential of loans in the eco sector - 2016

Companies and joint ventures: needs and segments are in transition

- Individual segments => MDE + emerging means of transportation
- PRO => As for individual segments + innovative companies.
- Companies => All markets. Wind power is becoming very attractive. PV is in total transition.
- Joint ventures => Major projects between DSP and PPP may emerge.

Share the vision of market experts regarding certain sectors

Arnaud BERGER 06 76 75 53 17
Future banking trends
After photovoltaics, energy efficiency

Developments on the energy efficiency market

- Energy efficiency market driven by the installers/PME
- Financial market
  - Supervision:
    - T1 CPE
    - T2 subsidiaries
  - CPE = CIB

- Cooperative and institutional financing
- Philanthropic financing:
  - NGOs
  - Social networks
  - Foundations
- CEE/CO₂

- Supervision:
  - Dedicated private equity funds
  - Repurchasing

Arnaud BERGER 06 76 75 53 17
Summary

1. Banking history on photovoltaics
2. Future banking trends
3. Conclusion
Financing of photovoltaics

Conclusion

Findings:
• The development of a European photovoltaic sector depends less on tariffs than on the type of financing available
• In case of slippage in CIB financing: brief advantage for Germany but general weakening of the European market
• Specific to Europe: preponderance of cooperative and local banks: know-how that is difficult to duplicate

3 banking tools for the European photovoltaic sector:
• A green bank pass: refinancing of locally sourced eco-business
• Green bank guarantee fund (guaranteed results)
• Domestic carbon market

A boost in innovation
• BPCE agreement of the European Commission on the Elena programme of banking tools (green pass, local guarantee fund for third party financing of energy efficiency)