Financing Renewable Energies for Smart Regions

Dieter D. Genske  dieter.genske@env.ethz.ch
Ariane Ruff  ruff@fh-nordhausen.de
Anthroposphere Dynamics Group  www.adg.ethz.ch

Project  Financing renewable energies for Smart Regions

Problems addressed

- climate change
- energy shortage
- food shortage
- aging society

Smart-Region Funds
1. Why are renewable energies (RE) an issue?
   - The global energy demand is rising
   - We are running out of conventional energy resources
   - Conventional energy production damages the climate
   - Energy prices are rising / Food prices are rising
5. Why do we use the term “Smart” Regions

The Smart Region-Concept aims at synergies between
• introducing renewable energies and
• making cities more efficient and compact while
• having citizen benefit from the investments made in this process

A case file: In the United States, a “Superfund” was introduced to decontaminate and remediate degraded terrain. The money is solely invested for this purpose. The European Fund for Regional Development EFRE, on the other hand, cleans up degraded sites only, if a sound redevelopment concept is proposed, including measures to strengthen the regional economy. Recently, the US-Environmental Protection Agency has adopted this approach, which they refer to “Smart Growth Projects”.

7. How could a financing mechanism look like?

• Establishing a capital investment company (holding)
• Attracting money from public and private investors (including rotating national and international development funds)
• Investing a share of this money in regional energy initiatives to create revenue and stimulate growth on a regional level (private equity)
• Investing a share of this money in stocks and bonds to participate in the global market and reduce volatility of the portfolio
• Marketing “Smart Region Certificates” for public and private investors
• Constantly improving the investment strategy to compete with “Smart Region”-Funds from other regions
How could a financing mechanism look like?

- Funding through private investors
- Public investors
- Strategic development funds (e.g., the JESSICA program of the EU)

- Holding as capital investment company
  - Fund manager
  - Scientific advisors

- Private equity:
  - Venture capital, mezzanine financing, etc.
  - 20%

- Public:
  - Debentures, green bonds, green stocks, money market
  - 20%

- 50% to each
2. Which options of RE-production are available?