

InnovFin Energy Demonstration Projects

*A financial instrument to support
SET Plan implementation*

InnovFin
Energy Demo Projects

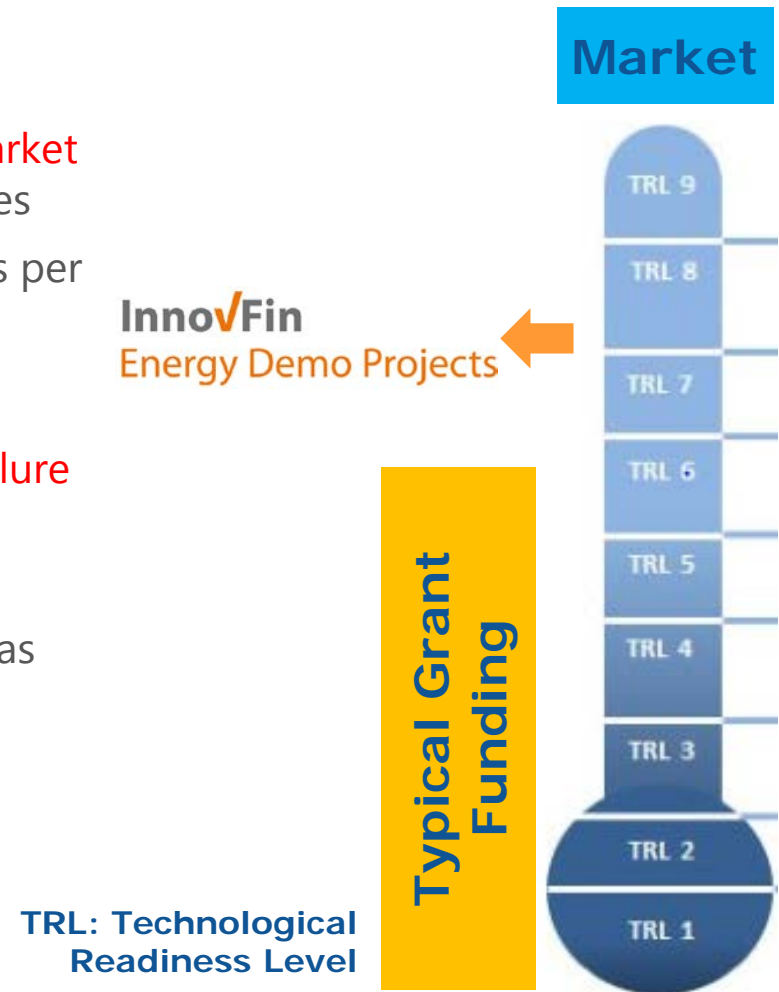


Energy Info Days
2017/10/23

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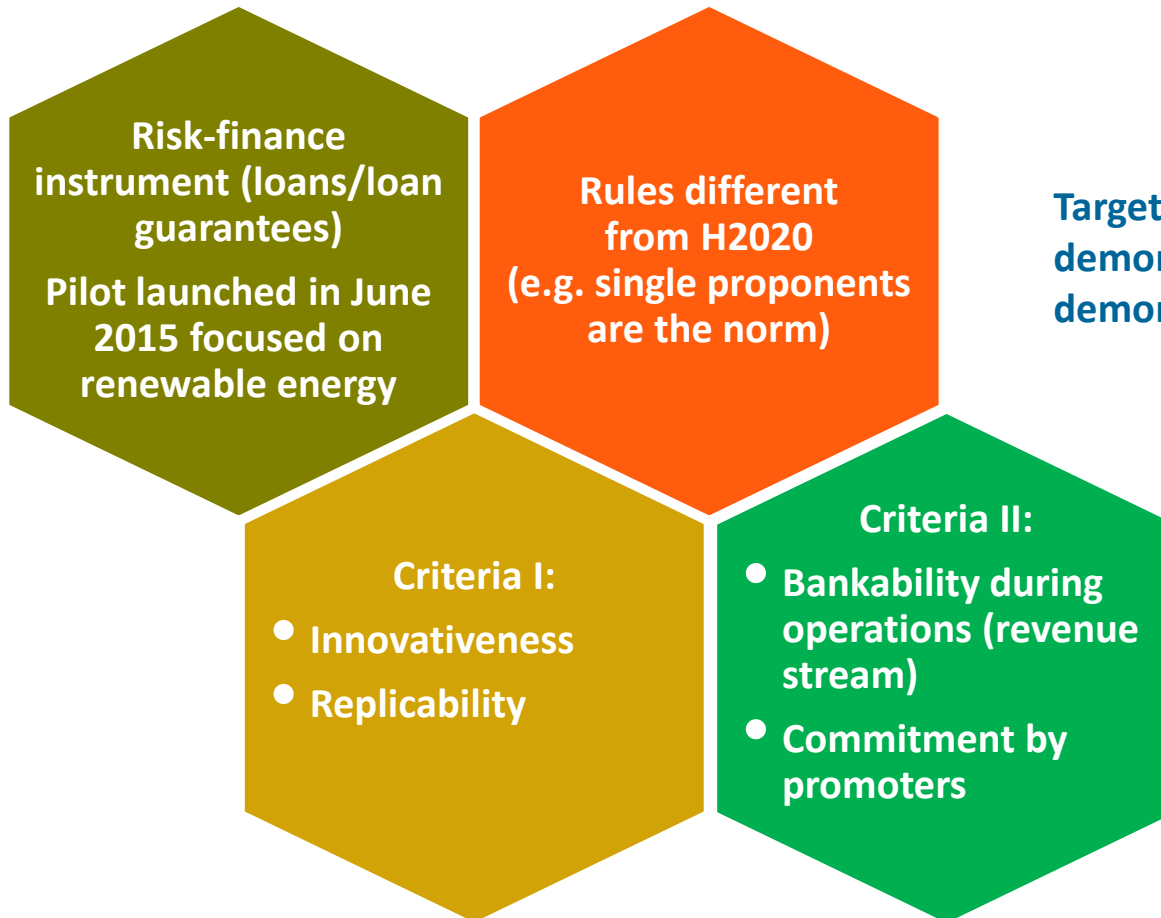
Why? First-of-a-Kind demonstration projects

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 - Crucial to move technologies from demo to the market & ensure EU leadership in clean energy technologies
 - Foreseen by the SET Plan to achieve specific targets per technology
- **But...**
 - First demonstration at commercial scale: market failure in access to finance ("valley of death")
 - Large investment needs
 - In 2016: up to €28 billion by 2020 in SET Plan areas except nuclear and energy efficiency



What? EDP: Basic features

InnovFin Energy Demo Projects



Targets innovative First-of-a-Kind demonstration projects ready to be demonstrated at commercial scale

Designed for a higher level of risk than any other EU financial instrument

Basic features

InnovFin Energy Demo Projects

Enlarged Scope

Renewable energy
Smart energy system
Energy storage

Carbone Capture Storage & Use

*Incl. manufacturing plants & services
for these technologies*

- Implemented by the EIB
- EC involved in eligibility check (scope & criteria I)

Budget

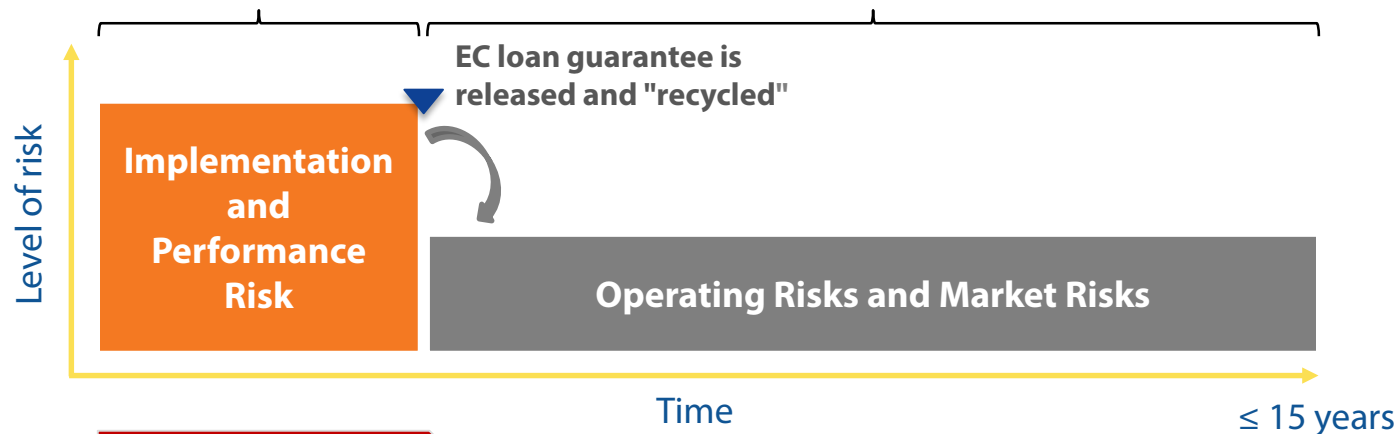
Up to € 800 million

How it works

- Projects apply to the EIB
<http://www.eib.org/products/blending/innovfin/products/energy-demo-projects.htm>
- EIB process: Eligibility (confirmation by EC) → due diligence → approval
- EIB provides loans with max. tenor of 15 years & covering up to 50% of project costs
- EC (via Horizon 2020) provides guarantee on loan covering riskiest phase of the project

Design, Construction and Early Operational Phase

Operating Phase



EU: First loss piece

EIB

Example: Wave Energy Device - first project signed

■ Project characteristics

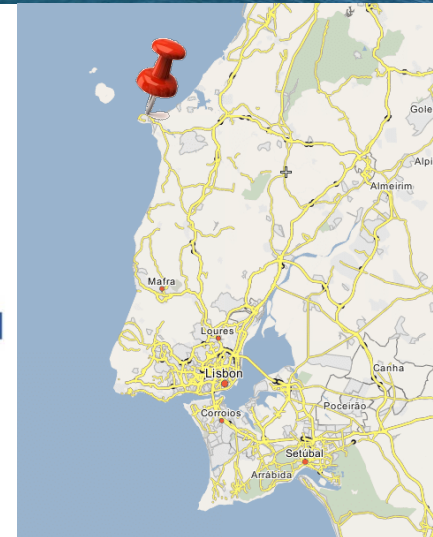
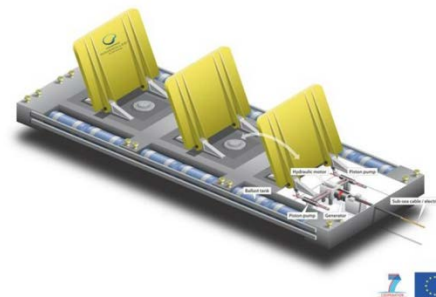
- First-of-a-kind 350 kW wave energy demonstration unit
- Finnish company AW-Energy
- Installation near Peniche (Portugal)

■ Finance

- EU loan (EC+EIB): €9.5 million provided by InnovFin EDP
- Total project cost: €19 million

■ Technological development

- 2003 – concept and first tests
- 2007/2008 – prototypes
- 2009-2013 – FP7 project "SURGE"
- 2012 – Pilots deployed



Conclusion

- InnovFin EDP supports EU ambition to lead on low-carbon clean technologies – by helping move technologies from demo to market
- Public fund is needed to address market failure in access to finance
 - *The case of First-of-a-Kind energy demonstration projects (first demonstrations at commercial scale) due to their high risk*
- The European Programme for Research & Innovation Horizon 2020 is among pioneers in Europe to design such a risk-finance scheme



**Help us making
InnovFin EDP a success!**