



***Mayors' Geothermal Club Conference***

***Some Elements for the  
Roundtable***

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*Support of the sector*

- **H2020**
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## Barriers to the sector

- ✓ *High upfront investment*  
50% of investment is exploration
- ✓ *Lack of risk mitigation scheme*
- ✓ *Reduced interest of large industry*
- ✓ *Reduced exploitation of cross-fertilization*
- ✓ *Lack of regulatory framework (licencing)*
- ✓ *Public acceptance*



# Horizon 2020

## *2016/17 WP: call priorities*

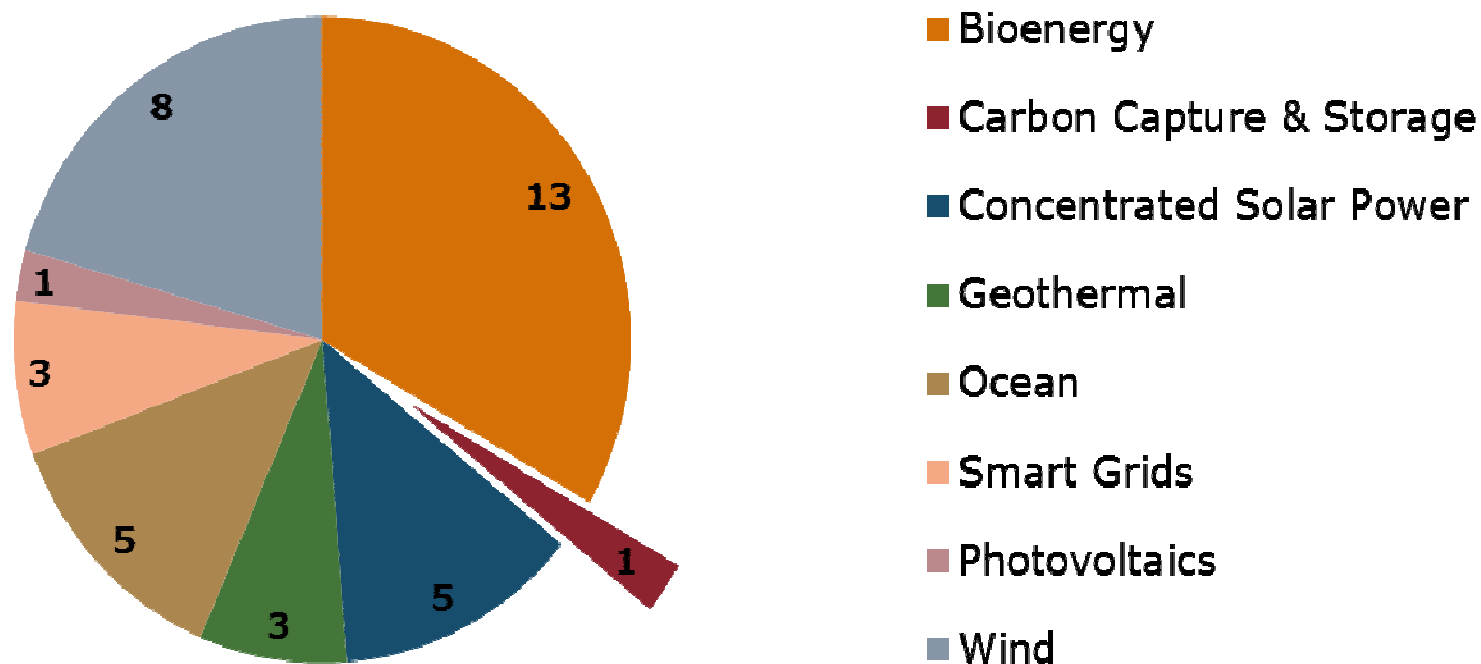
- LCE-17-2017: Easier to install and more efficient geothermal systems for retrofitting buildings (IA)
- LCE-18-2017: EGS in different geological conditions (IA)
- LCE-21-2017 (5): Market uptake of renewable energy technologies (CSA)
- LCE-23-2016: International Cooperation with Mexico on geothermal energy (RIA)
- LCE-26-2016: Cross-thematic ERA-NET on Applied Geosciences



# NER300 Call for Proposals (2012, 2014)

Calls funded by monetizing 300 million allowances

Approved projects per category





# NER300 Geothermal Projects

Project	Entry into operation	NER300 funding (EUR)	Description
South Hungarian EGS Demonstration Project, HU	31/12/2015	39 295 008	<ul style="list-style-type: none"><li>✓ Development of EGS reservoir</li><li>✓ 8,9 MW capacity</li><li>✓ Battonya, HU</li></ul>
Geothermae, HR	31/01/2016	14 740 181	<ul style="list-style-type: none"><li>✓ Electricity &amp; heat from geothermal aquifer</li><li>✓ 3,1 MW capacity (ORC)</li><li>✓ Draskovec, (≈ Prelog), HR</li></ul>
GEOSTRAS, FR	01/04/2018	16 839 180	<ul style="list-style-type: none"><li>✓ Electricity &amp; heat from geothermal aquifer</li><li>✓ 6,7 MW capacity + 34,7 MW (th)</li><li>✓ FR-DE cross border project (≈Strasbourg), FR</li></ul>



## InnovFin EDP

- ✓ InnovFin Energy Demonstration Projects (EDP) in June 2015 (EC+EIB)
- ✓ Loans and loan guarantees for first-of-a-kind, commercial-scale industrial demonstration projects in renewables
- ✓ Complement grant-based programmes
  - ✓ **NER300 and its successor (the Innovation Fund) which will draw on an endowment of 400 million emission allowances**





# ESIF (2014-2020)

*European Structural and Investment Funds* includes

- **European Regional Development Fund (ERDF)**
- **European Social Fund (ESF)**
- **Cohesion Fund (CF)**
- **European Agricultural Fund for Rural Development (EAFRD) and**
- **European Maritime and Fisheries Fund (EMFF)**







# European Structural and Investment Funds (2014-2020)

- ✓ ESIF Funds managed under 'shared management' principle
  - ✓ **Programming of spending developed in dialogue between MS and Commission**
  - ✓ **MSs responsible for selection, implementation and monitoring of co-funded projects**
  - ✓ **Operation based on Common provisions regulation (Regulation N°1303/2013) and Fund's specific Regulations**
  
- ✓ EUR 40,2 billion allocated by MSs and regions to *Strengthening RTD&I*
- ✓ EUR 37,6 billion to *Supporting the shift towards a low-carbon economy* (EE, RES, Smart Grids and Sustainable Urban Mobility)





# Elements of discussion / 1

- ✓ *Robust legal framework to trigger private investment*
- ✓ *Risk mitigation strategies and funding needed*
- ✓ *Information and data sharing (success stories!)*
- ✓ *Better and harmonised data collection*
- ✓ *Further research*
- ✓ *Training to installers*
- ✓ *Early involvement of public and municipalities*





## Element of discussion/2

- ✓ *To make EU H/C system more sustainable and secure, MSs support schemes are necessary?*
  - ✓ Options for support schemes: technology neutral or not?
- ✓ *All new buildings should be NZEB by 2020. Which standards necessary to achieve that?*
- ✓ *MS preparing countrywide analysis on DH (EE directive - art. 14)*
- ✓ *H/C Strategy by Jan 2016 (Winter energy package)*





# Final remarks

- ✓ Multi-level governance for the Energy Union
- ✓ Implementing the Energy Union strategy and contributing towards the energy transition requires involvement of local and regional authorities
- ✓ Commitment among citizens becoming ever more crucial to drive this change
- ✓ Empowering consumers on local projects

