THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

Orkukynning, 19 nóvember 2015

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Árangur 2014-2015

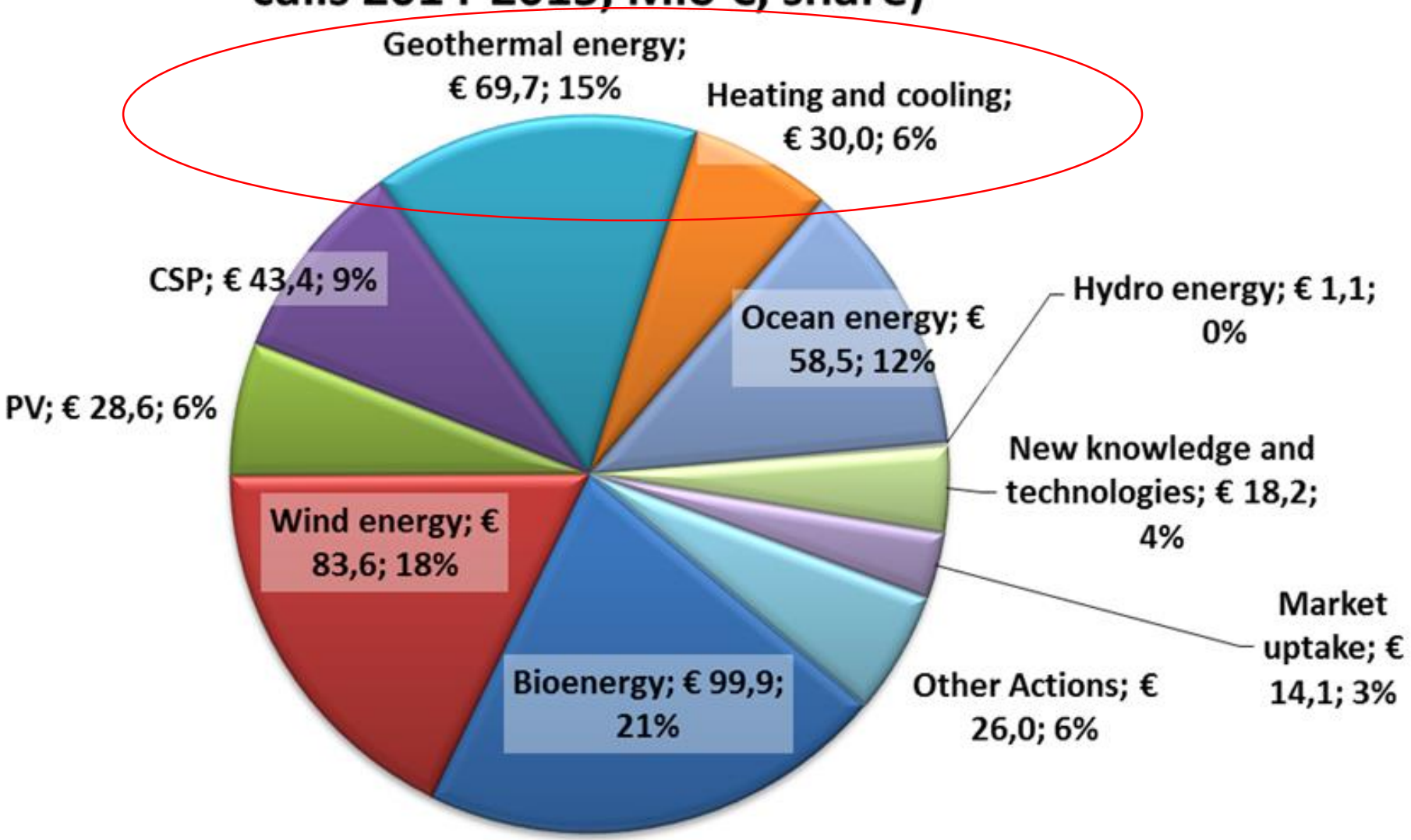
Topic	Fjöldi umsókna	> lágmarks-einkunn	Styrkt verkefni	# ísl þátttakenda	Fjármagn til Íslands	Heildarstyrkupphæð verkefnis
LCE-04-2014	1			1		
LCE-11-2014	1	1		1		
LCE-15-2014	1			3		
SCC-02-2014	1	1		1		
ICT-37-2014	1			1		
EE-02-2015	2			1		
LCE-02-2015	4	4	3	2	2.763.505 €	**14.902.891 €**
LCE-03-2015	1	1	1	4	8.730.985 €	**19.999.740 €**
LCE-04-2015	1			1		
LCE-06-2015	2	2	1	1	397.776 €	**16.735.374€**
LCE-11-2015	1	1	1	1	605.250 €	**5.999.894 €**
LCE-12-2015	1			1		
SFS-08-2015	1			1		
SIE-01-2015	1			1		
	19	**10**	**6**		**12.497.516 €**	**57.637.899,73 €**

32% árangurshlutfall

~1.760Mkr

~8.120Mkr

EU contribution per renewable technology area (Energy calls 2014-2015, Mio €, share)



Mikil tilvísun í evrópska stefnumótun

Horizon 2020
Rannsókna- og nýsköpunaráætlun

2030 Climate-Energy Package

- 40% reduction of Greenhouse Gases
- 27% of renewable energy
- 27% improvement in energy efficiency

Energy Union

- *Energy security, solidarity and trust*
- *A fully integrated internal energy market*
- *Energy efficiency first*
- *Transition to a low-carbon society*
- *An Energy Union for Research, Innovation and Competiveness*

SET-Plan

- *Integrated Roadmap*
- *Communication on Integrated SET-Plan (COM[2015]6317)*

rannís

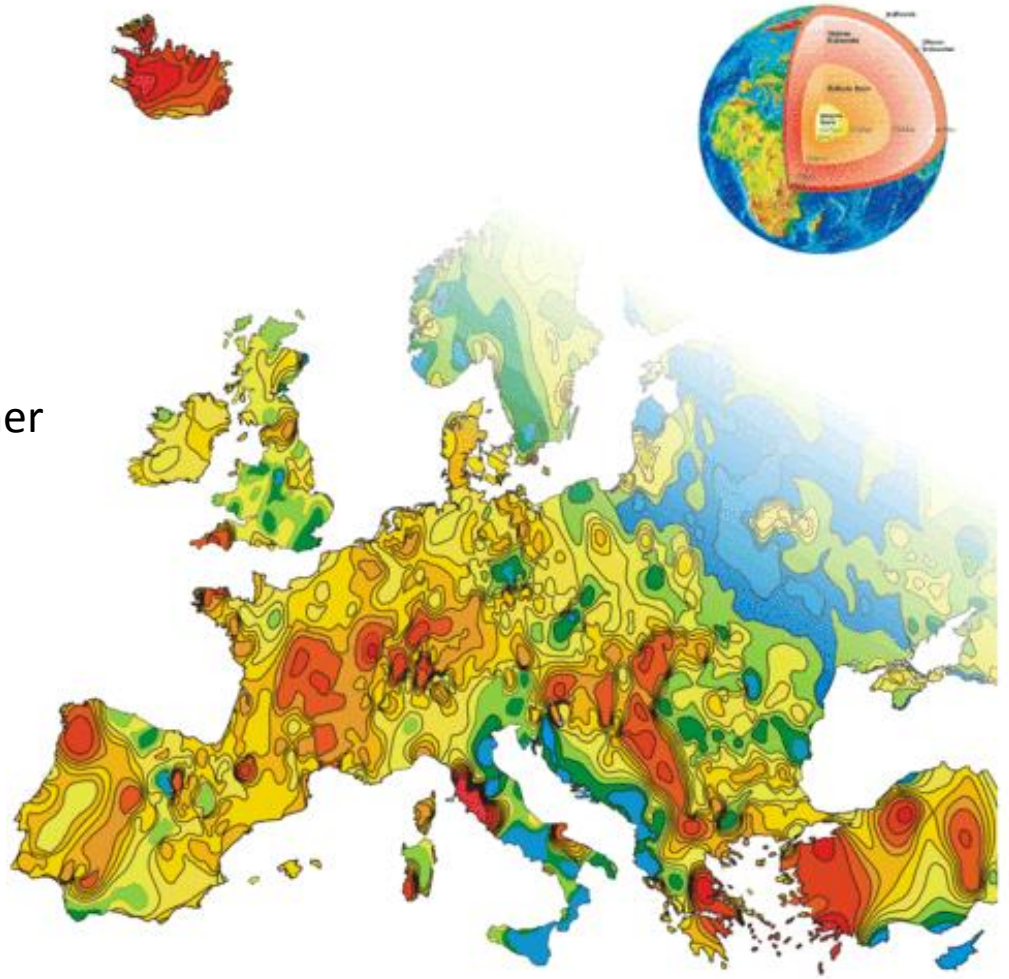
Geothermal energy contributes to the Energy Union

Geothermal energy is environmentally friendly.

It produces reliable baseload **power** and **heat** – all the more important to balance intermittent supplies from other renewable energy sources

Geothermal is a renewable energy source and independent of weather conditions.

Geothermal energy is indigenous and contributes to Europe's security of supply.



Geothermal ERA NET
Coordination Office
Orkustofnun, Iceland

The Geothermal ERA-NET Consortium

IS	Orkustofnun (National Energy Authority),
NL	Rijksdienst voor Ondernemend Nederland
CH	Swiss Federal Office of Energy (SFOE)
I	National Research Council of Italy (CNR)
D	Jülich (PTJ)
F	ADEME (BRGM as third party)
IS	Icelandic Centre for Research (RANNÍS)
TR	TÜBITAK (Scientific and Technological Research Council of Turkey)
SVK	Slovak Ministry of Education, Science, Research and Sport
MFIG	Hungarian Geological and Geophysical Institute
SED	Slovenian Energy Directorate
EAD	Electicidade dos Acores

Lead partner is Orkustofnun
operating the
Geothermal ERA NET Coordination Office

Started 2012 for 4 years
Budget 2 millj. €

Good geographical balance (North-West to South-East Europe) Partner countries chosen a.o. on basis of their 2020/2050 geothermal ambitions

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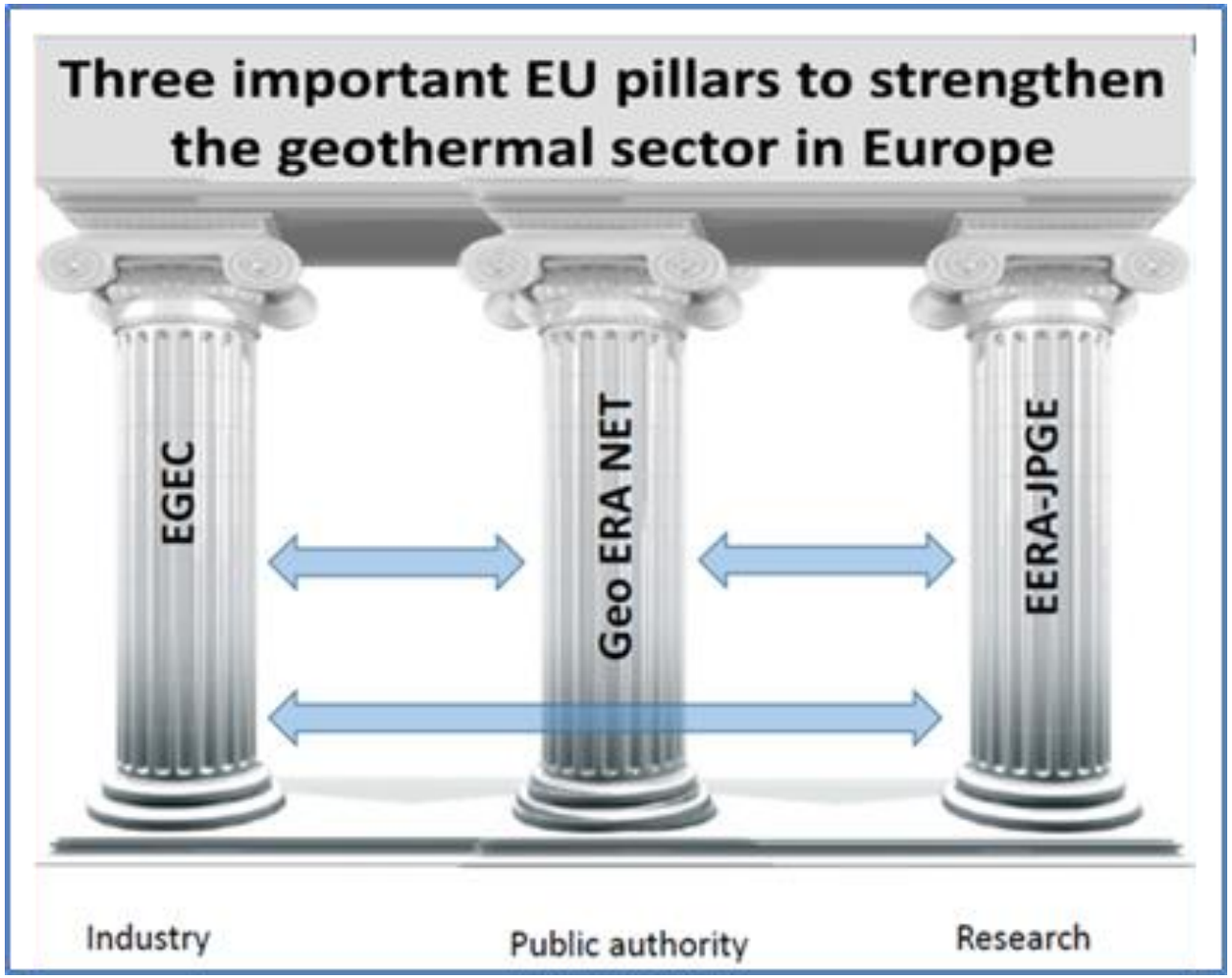
The three Pillars of the EU Geothermal Policy

ERA NET vision is to

- *minimize the fragmentation of geothermal research,*
- *build on European know-how and know-who to utilize geothermal energy*
- *structure large opportunities in the utilization of geothermal energy through* ***Joint Activities (JAs)****.*

One important element of the Geothermal ERA NET is to

- *link together the geothermal industry pillar, the research pillar and the policy pillar*
- *increasing cooperation and consultation between those pillars and stakeholders*
- *strengthen geothermal assessment and policy recommendation.*



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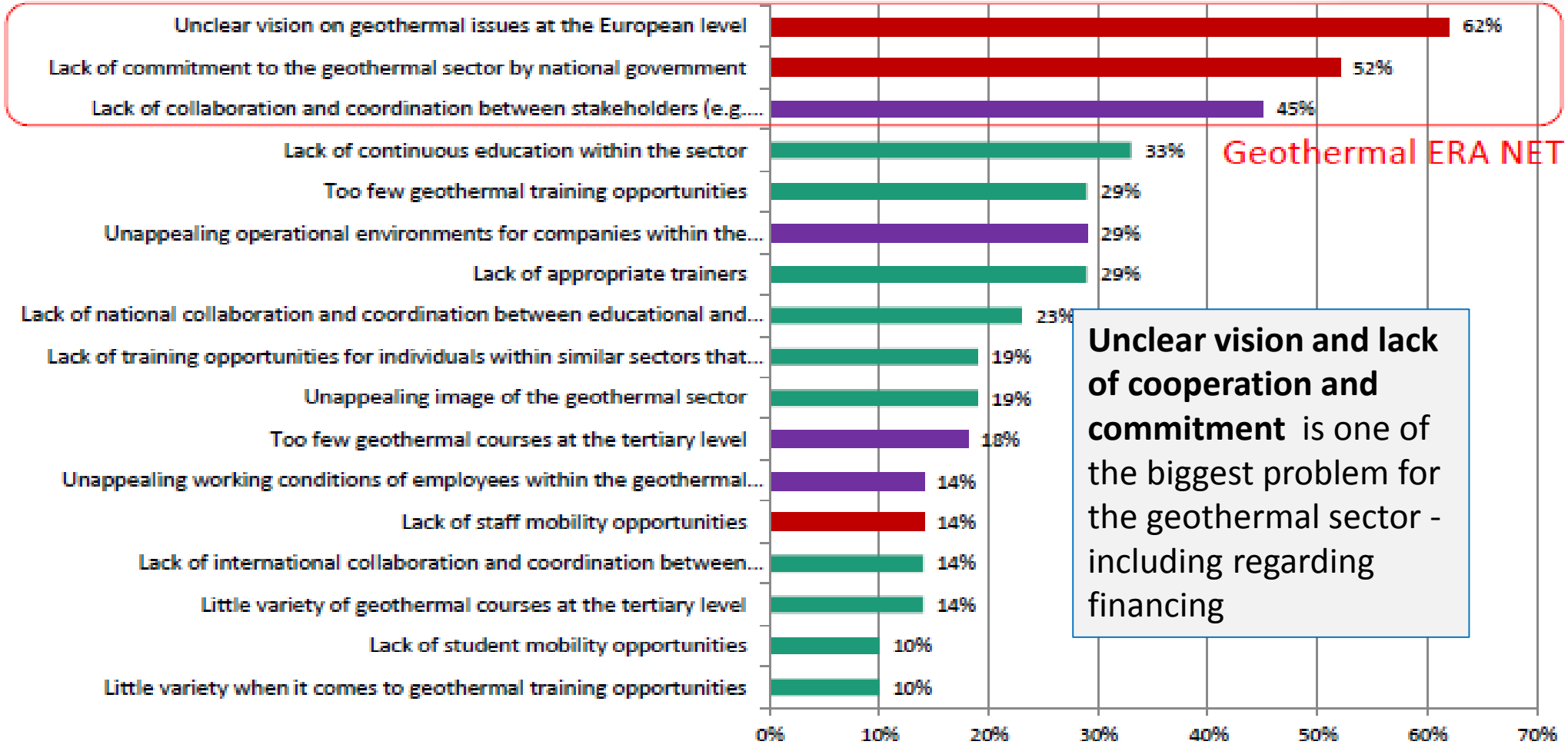
The Main Geothermal Challenges

Assessment of barriers



Unclear vision and lack of cooperation and commitment is one of the biggest problem for the geothermal sector - including regarding financing

Factors deemed of high importance as contributors to a lack of human resources within the geothermal sector. Educational factors are coloured green, policy/sectorial factors red and industry factors purple

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Issue Papers on geothermal - input

- The Issues Papers **propose to stakeholders strategic targets** in different areas of the energy sector.
- The input from, and positions of, stakeholders for each area will be used to come to an agreement on targets in a dedicated meeting of the **SET Plan Steering Group**

  - Látið heyra í ykkur vegna þessa – hvaða **strategic targets** viljið þið sjá

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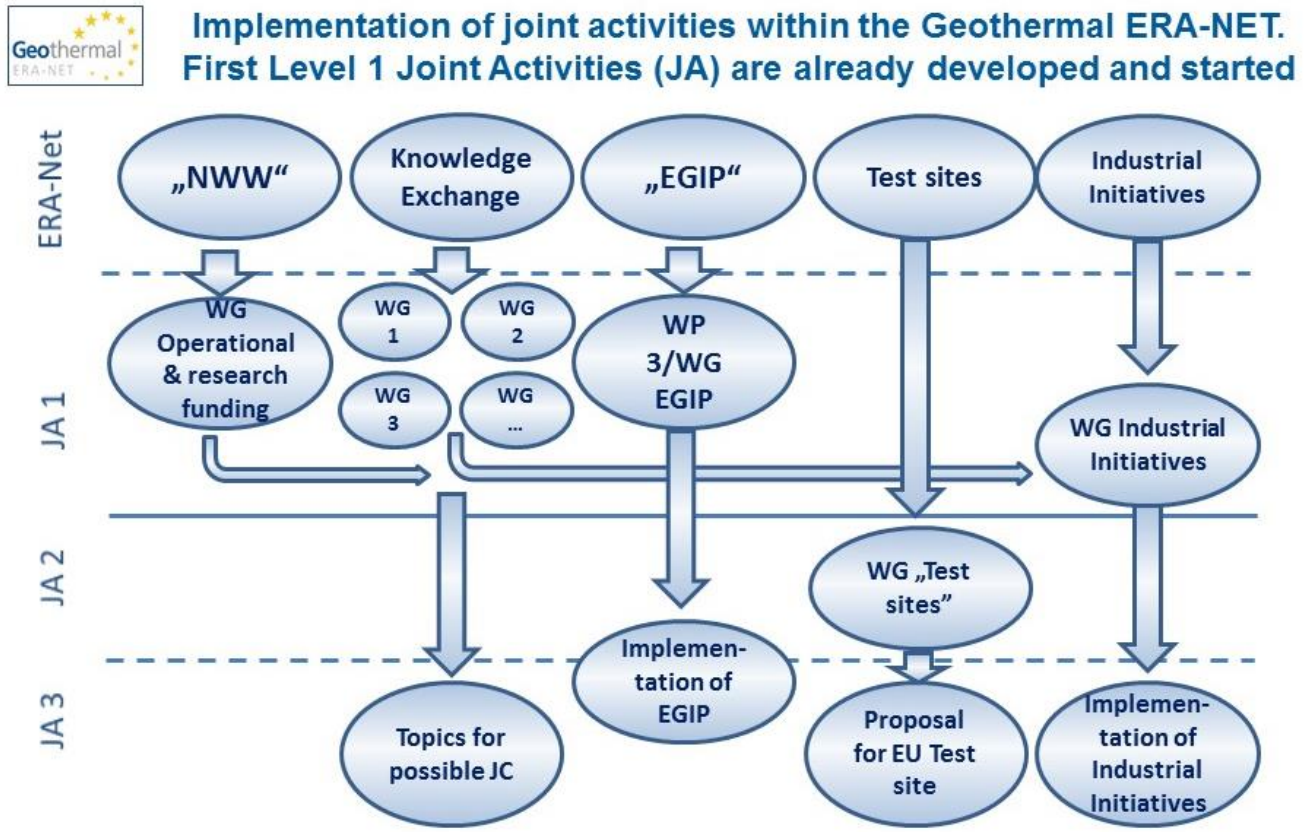
Joint Activities – Several Actions are in the process of implementation

As a result 7 Joint Activities (JA) on different topics were proposed:

- **NWW** – New ways of working: Financial Instruments and Funding of RD&D and Geothermal Projects
- **OpERA** – RD&D Knowledge Exchange on operational issues of geothermal installations in Europe
- **PRGeo** - RD&D Knowledge Exchange on public relations for geothermal energy
- **New Concepts** for geothermal energy production and usage
- **ReSus** - RD&D Knowledge Exchange on reservoir sustainability
- **Tuning EGIP** (European Geothermal Information Platform) for target users
- **Geostat** - Towards Consistency of geothermal data



Joint tender planned early next year

Geothermal ERA NET Cofund Action

creating a European research and innovation framework

- The objective is to organize and pool national financial and human resources as well as national research infrastructures, **to accelerate research and innovation**.
- Building on relationships with industry and researchers and bridge the gap between research and the market with **innovative solutions**.

- Focus on what is often called “deep” geothermal energy.
  - The scope includes the integration of geothermal reservoirs into novel energy system concepts (e.g. use of reservoirs for energy storage, CO2 storage, integration with near-surface geothermal applications).

www.geothermaleranet.eu