ERA-NET on Solar Electricity for the Implementation of the Solar Europe Industry Initiative

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Framework. The SET Plan.

The STRATEGIC ENERGY TECHNOLOGY PLAN (SET- PLAN)

Why?

“Europe needs to act now, together, to deliver sustainable, secure and competitive energy.”

Framework. The SET Plan.

The inter-related challenges:

- Climate change,
- Security of energy supply
- Competitiveness.

→ Multifaceted and require a coordinated response

Targets:

- To reduce greenhouse gas emissions by 20%.
- To ensure 20% of renewable energy sources in the EU energy mix.
- A plan to reduce EU global primary energy use by 20%

.....by 2020.

Framework. The SET Plan.

The SET Plan includes:

8 European Industrial Initiatives (EII).

- The European Industrial Bioenergy Initiative.
- The European CO2 Capture, Transport and Storage Initiative.
- The European Electricity Grid Initiative.
- The Fuel Cells and Hydrogen (FCH) Joint Technology Initiative.
- The Sustainable Nuclear Initiative.
- Energy Efficiency – The Smart Cities Initiative.
- The Solar European Initiative (**SEII**).
- The European Wind Initiative

The EIIs aim to strengthen industrial participation in energy research and demonstration, boost innovation and accelerate deployment of low-carbon energy technologies.

The SET Plan Information System(SETIS)

Framework. The SET Plan.

Who defines the SET Plan?

National representatives (Ministries, National agencies...+ COM) → The SET-Plan Steering Group (SET-Group)

Industries (Wind, PV, CSP...) → T. Platforms: Wind, Solar...

Research institutions → The European Energy Research Alliance (EERA)

Framework. Implementation.

How do conclusions of the SET Plan are implemented?

European Union.

Rules, Directives, Communications...

EUROPEAN COMMISSION

Brussels, 30.11.2011
COM(2011) 808 final

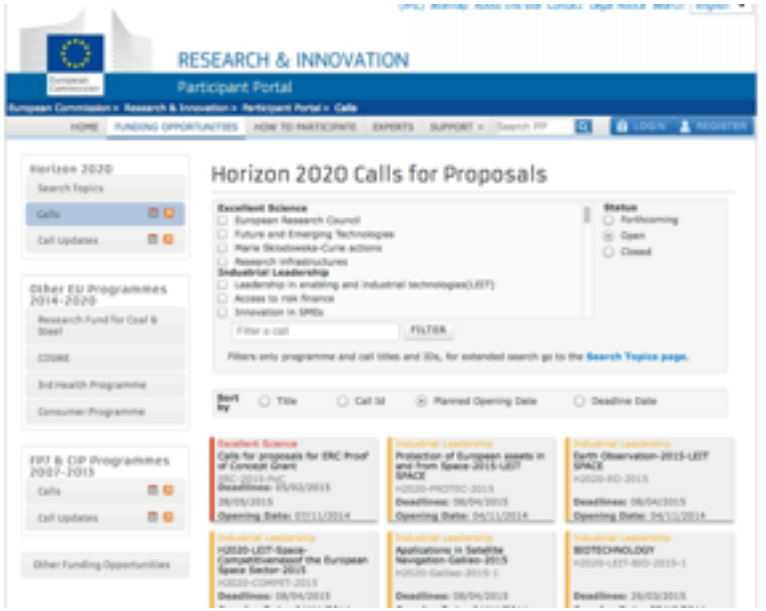
COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

Horizon 2020 - The Framework Programme for Research and Innovation

Funding. Open calls

NER 300; 400...

Implementation Plan for PV & CSP 2013 – 15



Participant portal

Framework. Implementation.

How? Implementation. II

Member States.

Funding.

- National calls and bilateral calls

  VG1: Indo – Spanish Call in Cleantech.

  - Implementing organisations:

  - Call for proposal: Deadline: 15/04/2015.
  - Thematic areas: ICT and Smart cities:

    Clean Energy; Energy Storage; Energy Efficiency; Transportation; Air & Environment; Clean Industry; Water and Agriculture

VG2. Indo-Spanish Renewable Energy Call 2015 (MNRE-CDTI). Pending.

National rules / laws

Framework. Implementation.

How? Implementation. III

Member States + COM.

Funding.

- Join initiatives: EG FUEL CELLS AND HYDROGEN JOINT UNDERTAKING
- Thematic ERANETs;
- EG SOLAR-ERA.NET

New European Wind Atlas ERA-NET PLUS

- ...
- Geographic ERANETs:
  - EG with Renewal energies call

ERANETMED INNO INDIGO POLICY ERANet LAC

- ...

Policy level:

Projects such as BILAT, ICONET.

EG with Renewal energies priorities

INNO INDIGO POLICY ALCUE NET

SOLAR-ERA.NET

INNO INDIGO POLICY

SOLAT ERANET. Introduction.

- It is a FP7 project.
- It is a network of national and regional funding organisations.
- It focuses on the field of solar electricity generation, ie:
  - Photovoltaics (PV)
  - Concentrating Solar Power (CSP) / Solar Thermal Electricity STE.

- Start November 2012
- Duration 4 years (2016)

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From SET Plan Brochure. ISBN 978-92-79-15667-0

Solar ERANET. Objectives and Goals.

- Overarching objective ... is to effectively implement the Solar European Industry Initiative (on the transnational level).

*The goal of SOLAR-ERA.NET is to undertake joint strategic planning, programming and activities for RTD and innovation in the area of solar electricity generation. Joint activities, namely **joint calls**, are defined for key topics and priorities in accordance with the Solar Europe Industry Initiative (SEII). These transnational calls are part of these activities.*

4 joint calls:

- To support innovative, industry-led projects.
- To improve cooperation between RDI programmes.
- To strengthen Europe‘s position in the solar sector.

→

It is expected to mobilise:

- 50 MEUR funding from national and regional programmes.
- 125 MEUR total funding.

Solar ERANET. Objectives and Goals.

Double mission

ERA-NET: scheme for improving cooperation between national / regional programmes

SOLAR-ERA.NET

SEII: European industrial initiative boosting solar power technologies

Solar ERANET. Participants.

European network bringing together …

- 20 partners (programme owners and managers)
- 18 countries and regions.

> 20 national and regional programmes

Further programmes and countries interested can join in

+Israel

Solar ERANET. Call procedure.

Two main ideas:

- COM funds ERANET management and coordination activities.
- Virtual common pot.
- A single procedure at European level.
- Two steps procedure: pre-proposal and full proposal.
- 2 partners from 2 different participating countries or regions.

Call Procedure:

Preparation and definition

Guidelines for proposers:

- Definition of the general and national rules. Each funding agency grants according to its strategy and administrative rules. Applicants must know if their eligibles.
- Topics and funding agencies.

SOLAR ERANET. Topics

Topics

SOLAR-ERA.NET transnational call PV2:

- PV3.1 Innovative processes for inorganic thin-film cells & modules
- PV3.2 Dedicated modules for BIPV design and manufacturing
- PV3.3 Grid integration and large-scale deployment of PV
- PV3.4 High-efficiency PV modules based on next generation c-Si solar cells
- PV3.5 Solar glass and encapsulation materials
- PV3.6 Concentrator PV technology
- PV3.7 Si feedstock, crystallization and wafering

- SOLAR-ERA.NET transnational call CSP2:

- CSP3.1 Cost reduction and efficiency increase in components
- CSP3.2 Dispatchability through storage and hybridisation
- CSP3.3 New fluids for CSP plants
- CSP3.4 Innovative thermodynamic cycles

SOLAT ERANET. Topics & Organisations

Country / Region	Organisation	Topic PV1.1 Innovative processes for inorganic thin-film cells & modules	Topic PV1.2 Dedicated modules for BIPV design and manufacturing	Topic PV1.3 Grid integration & large-scale deployment of PV	Topic PV1.4 High-efficiency PV modules based on next generation c-Si solar cells	Topic PV1.5 Solar glass and encapsulation materials
Austria	FFG	I+E	I+E	I+E	I+E	I+E
Belgium-Flanders	IWT	I	I	I	I	I
Belgium-Wallonia	SPW	I	I	I	I	I
Cyprus	RPF	I+E	I+E	I+E	I+E	I+E
Denmark	energinet.dk		I + E	I + E		
Finland	TEKES	I+E	I+E	I+E	I+E	I+E
France	ADEME	I+E+F	I+E+F		I+E+F	
Germany	PtJ	I+E	I+E	I+E	I+E	I+E
Netherlands, the*	NL Agency	I+E (+F)	I+E (+F)	I+E (+F)	I+E (+F)	I+E (+F)
Poland	NCBR	I+E+F	I+E+F	I+E+F	I+E+F	I+E+F
Spain	MINECO	I+E+F	I+E+F	I+E+F	I+E+F	I+E+F
Sweden	SWEA	I+E+F	I+E+F	I+E+F	I+E+F	I+E+F
Switzerland	SFOE	I+E	I+E	I+E	I+E	I+E
Turkey	Tübitak	I+E	I+E	I+E	I+E	I+E
UK	TSB	I+E	I+E	I+E	I+E	I+E

** For the Netherlands, participation and specifications are to be clarified in March 2013.*

I = Industrial / applied research, E = Experimental development, F = Fundamental / basic research

Solar ERANET. Call procedure.

Announcement Promotion → **Pre-proposal**

- A single European call. www.solar-era.net
- Filing the pre-proposal

Recommen-dation full proposal

- Pre-proposal evaluation.
- Funding organisations carry out their eligibility check and pre- evaluation based on the pre-proposal and their national / regional funding rules.
- Feed back to the applicants.

Full proposal

- Application of full proposals

Evaluation, ranking and suggestions for funding

- Evaluation
- Ranking list based only on scientific criteria.
- Ranking list accepted by all funding agencies.

Solar ERANET. Call procedure.

Funding decisions

- Selection of projects to be funded. Based on the ranking list and budget of funding organisations.

Negotiation and start of first projects

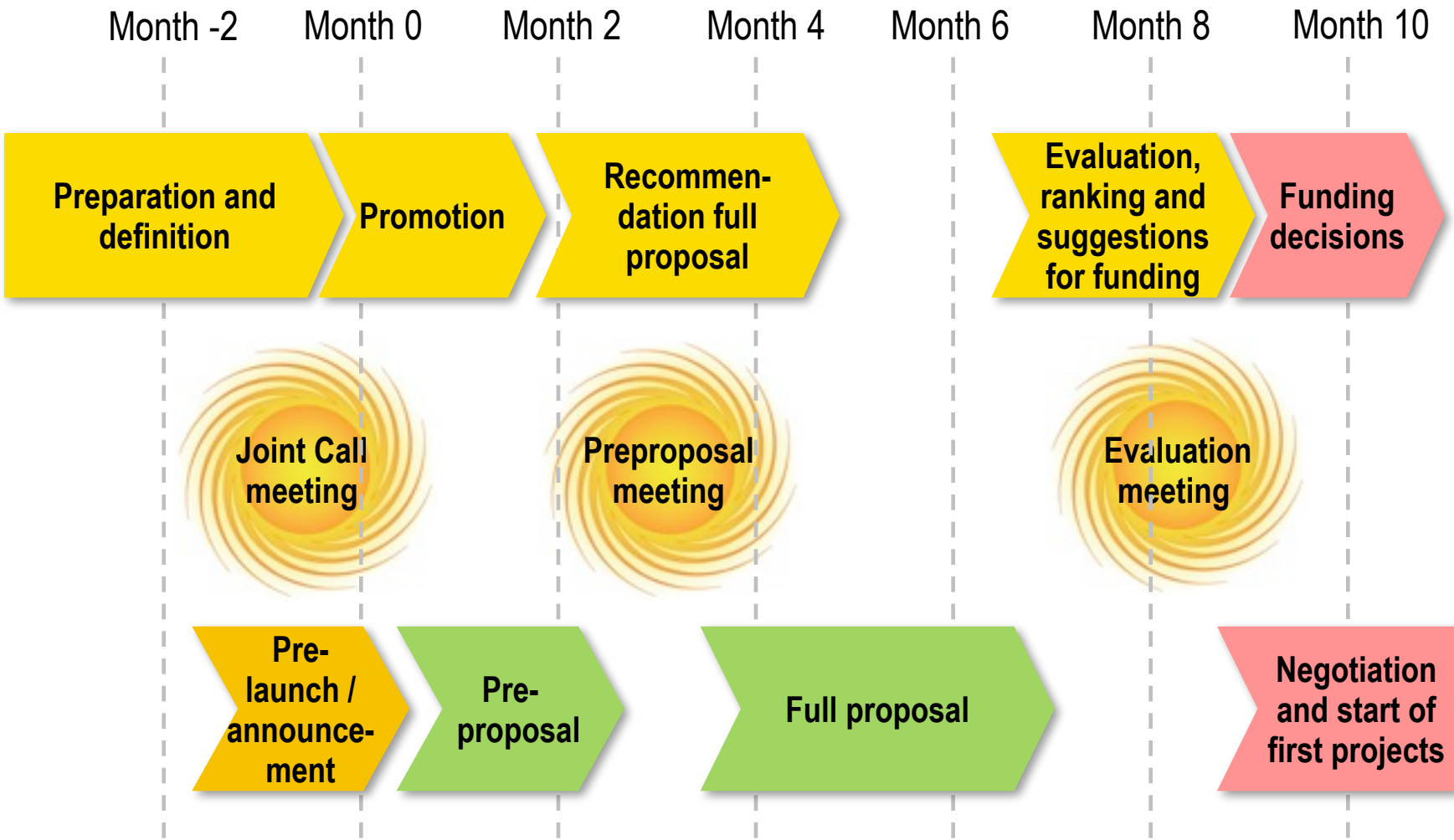
- National funding agencies grants their national research groups according to national rules

Main issue: 20 programmes. Each funding organisation grants their national research groups according to national rules::

- Resources (critical mass).
- Timing (synchronisation, readiness).
- Competition and competitiveness.
- Innovation potential.
- Complementarity (topics).
- Subsidiarity (programme levels).
- Scope and scale (large / targeted call).

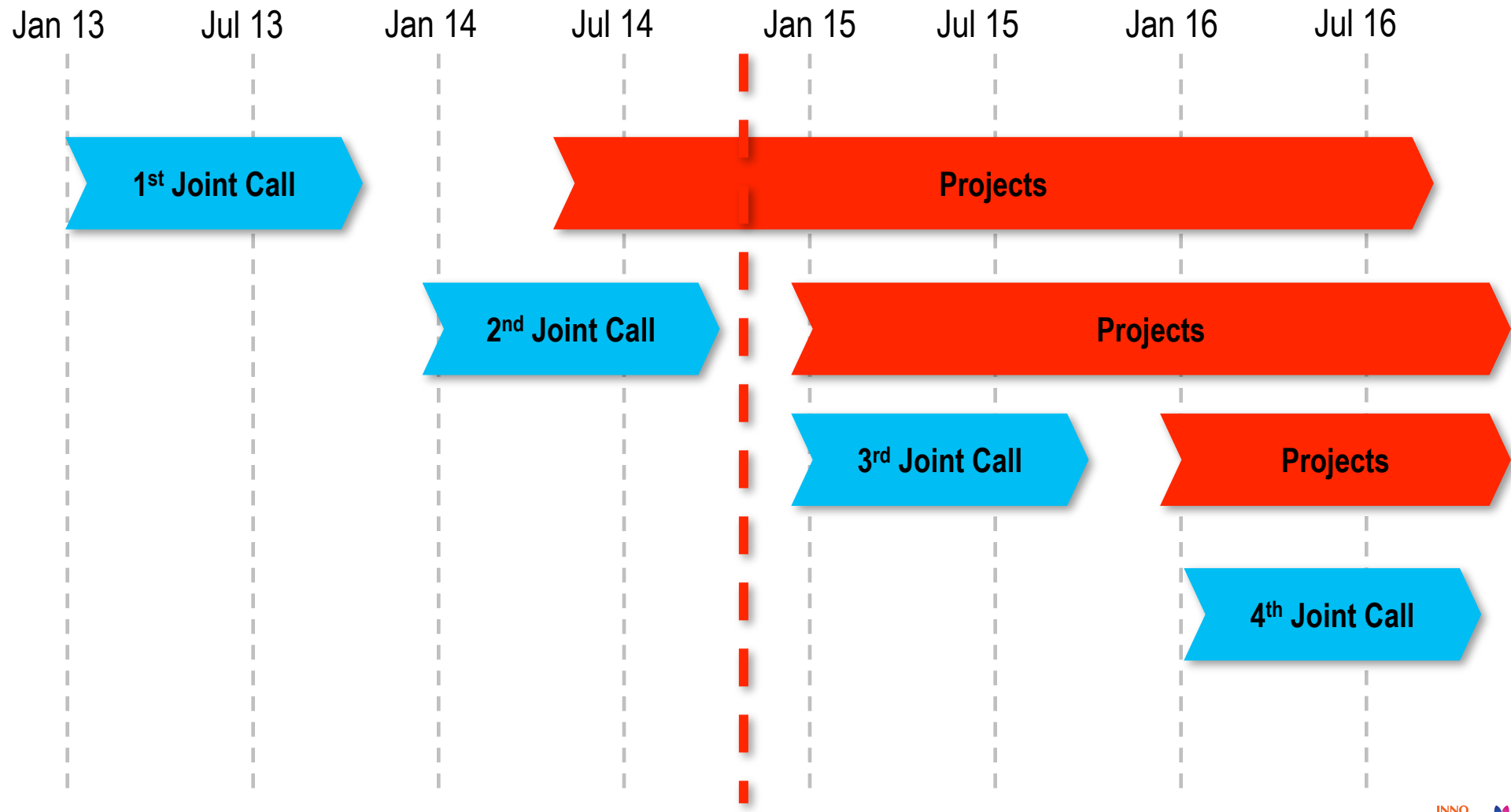
SOLAR ERANET. Call procedure.

Timeline and Actions



SOLAR ERANET. Joint Calls

Each call: two stage process including international evaluation

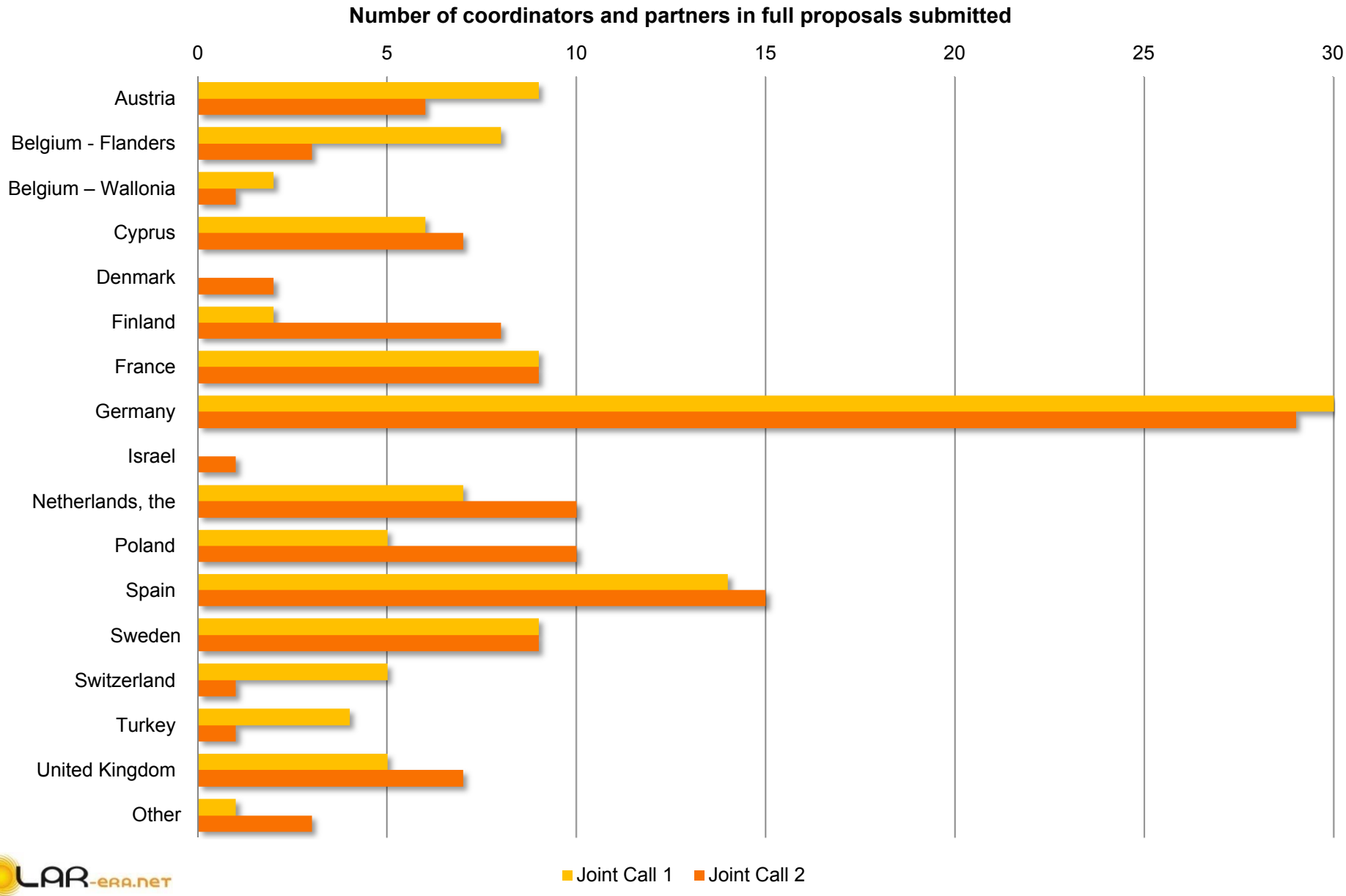


SOLAR ERANET. Some Statistics.

Two joint calls.

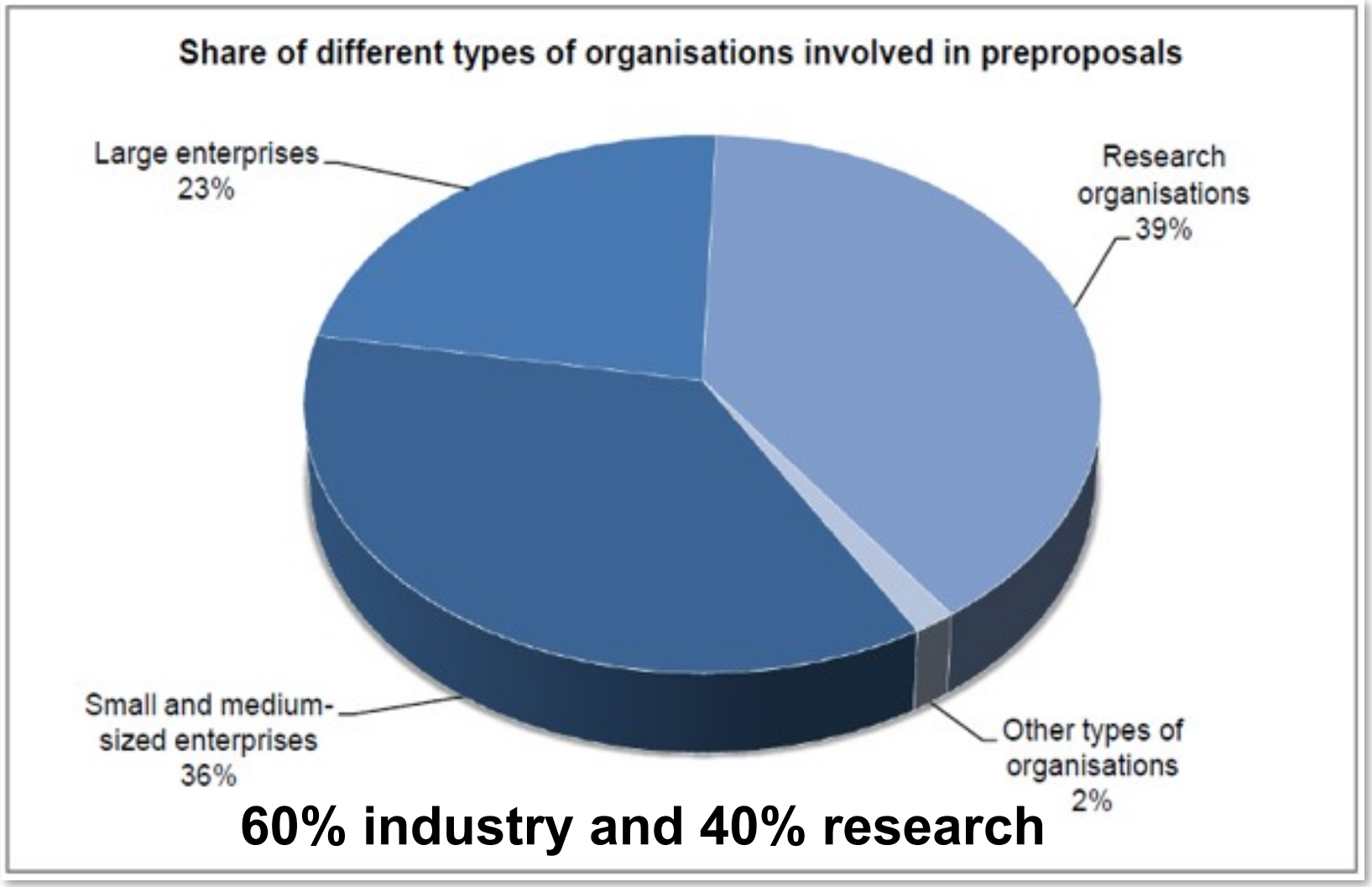
- (18) 17 countries and regions.
- 7 PV topics and 4 CSP topics.
- 109 preproposals submitted.
- 478 partners involved in preproposals.
- 45 full proposals submitted.
- 27 full proposals suggested for funding.

Country spread (1st & 2nd call)



SOLAR ERANET. Some Statistics.

Participant spread (1st & 2nd call)



60% industry and 40% research

SOLAR ERANET. Conclusions.

- Network of relevant funding agencies throughout Europe.
- Successful launch of joint calls.
- Good / very good interest and participation in joint calls.
- Innovative projects and strong partnerships.
- Relatively smooth and efficient procedure on transnational level.
- Some challenges with the timing of funding decisions.

- Indian partners are welcome.
- The proposal should include at least two partners from 2 different participating countries or regions.
- National or regional funding.

SOLAR ERANET. Outlook.

3rd joint call – preliminary timeline

- Pre-announcement in December 2014
- Launch latest in January 2015
- Preproposal by April 2015
- Full proposal by September 2014
- Start of projects end 2015 / early 2016

→ Further information soon on **solar-era.net.net**

With many thanks to …

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