



Hacia una política conjunta de I+D en SHIP

Julian Blanco

Director de la Plataforma Solar de Almería

WP Number:

WP 7

WP Name:

Integration of EU resources and
Dissemination

Person months (national + EC):

67,8

WP leader:

CYI

Partners:

F-ISE, CIEMAT, INTEC, FBK, UEVORA,
CRES, ETHZ, CEA, METU, EERA

Objectives:

To define a European Common Research and Innovation Agenda (ECRIA) in the context of the SET Action Plan, leading to:

- A more effective cooperation between the EU research institutions participating in INSHIP;
- Alignment of different SHIP related national research and funding programs;
- Acceleration of knowledge transfer to the European industry in order to ensure the industrial European leadership on SHIP;
- The reinforcement and expansion of the joint activities amongst research centres;
- To be the reference organization to promote and coordinate the international cooperation in SHIP research from and to Europe

European Workshop for SHIP RTD alignment



INSHIP ECRIA: a European common RTD strategy for the support of Solar Heat for Industrial Processes

An EU-Industry Week 2019 local event

21st
February
2019

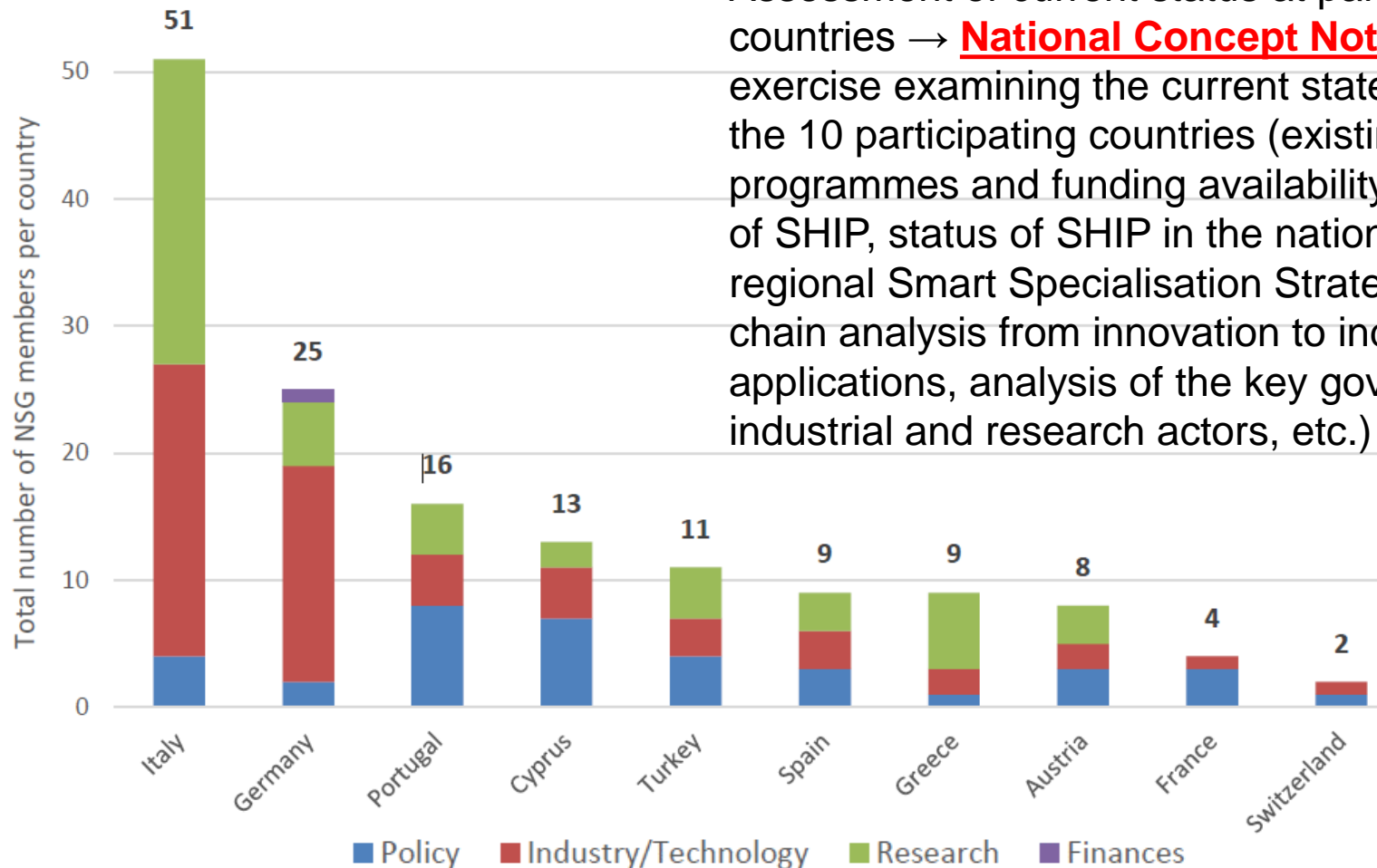
Venue: Fraunhofer EU-Büro Brüssel

Address: 94, Rue Royale 1000 Brussels, Belgium

09:00	Introductory Note by the Landesvertretung Hessen
09:05	Introductory Note Piero de Bonis (EC)
09:15	Keynote speech by Industry Representation (ESTIF?)
09:25	Keynote speech by EERA
09:35	Keynote speech by representation of national funding (SET-PLAN?)
09:45	Presentation of INSHIP by Pedro Horta
10:15	Presentation of Deliverable 8.1
11:00	Coffee Break
11:15	Presentation of Deliverable 7.3
12:00	Plenary Session/Brainstorming/Open session
13:00	End of Workshop

Workshop developed in Brussels (21.02.2019, under the frames of the EU Industry Days, included in the programme as a local event) to present main INSHIP results and achievements to date to policy, finance and industrial stakeholders.

Stakeholder composition per country

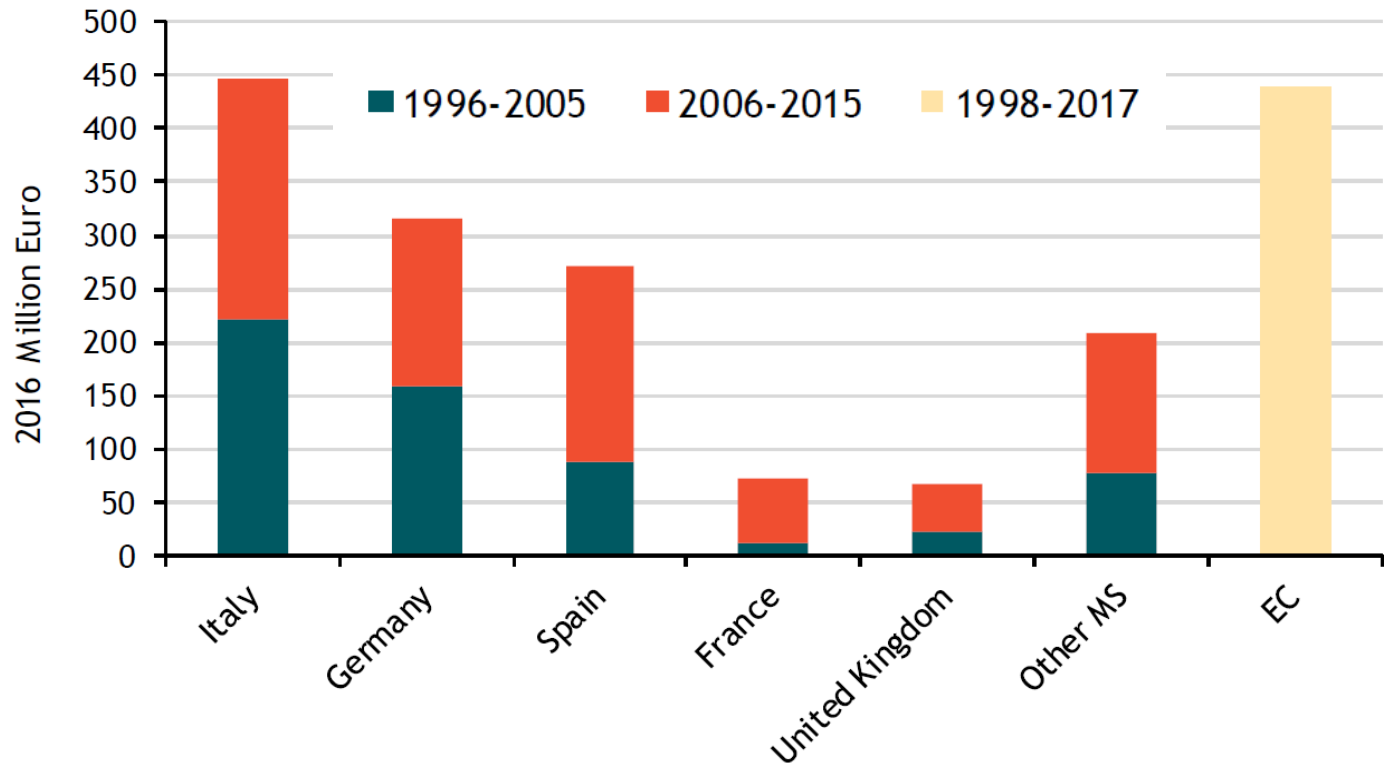


Assessment of current status at participant countries → **National Concept Notes**: scoping exercise examining the current state of play in the 10 participating countries (existing RTD programmes and funding availability in the field of SHIP, status of SHIP in the national and regional Smart Specialisation Strategies, value-chain analysis from innovation to industrial applications, analysis of the key government, industrial and research actors, etc.)

Suitable existing funding resources

- H2020. Grant: Solar Energy in Industrial Processes (LC-SC3-RES-7-2019).
- Interreg Sudoe Programme. Supports regional development in SW Europe by financing transnational project through the ERDF.
- Eurogia2020 (a cluster of EUREKA network).
- European Institute of Innovation and Technology (EIT) InnoEnergy (Knowledge Innovation Community).
- EEEF - European Energy Efficiency Fund.
- Marguerite Fund (2020 European Fund for Energy, Climate Change & Infrastructure).

Solar thermal R&D budgets of the Member States with the largest R&D budgets for solar thermal (1996-2015) and the EC (1998-2017)



Suitable existing funding resources

EU funding per framework programme (1998 to mid-March 2018)

Framework programme	Solar thermal		Solar thermal and other RES	
	EU funding	No. of projects	EU funding	No. of projects
FP5	56.48	47	1.91	4
FP6	21.92	22	7.75	2
FP7	207.95	53	22.77	9
Horizon 2020 (H2020) (data available up to mid-March 2018)	113.15	46	5.93	1
Total funding	EU 399.50	168	38.36	16

Since FP5, SHIP technologies have received 400 M€ for 168 research projects, and another 38 M€ for 16 projects on solar thermal in combination with other technologies

Source: CORDIS (2018)

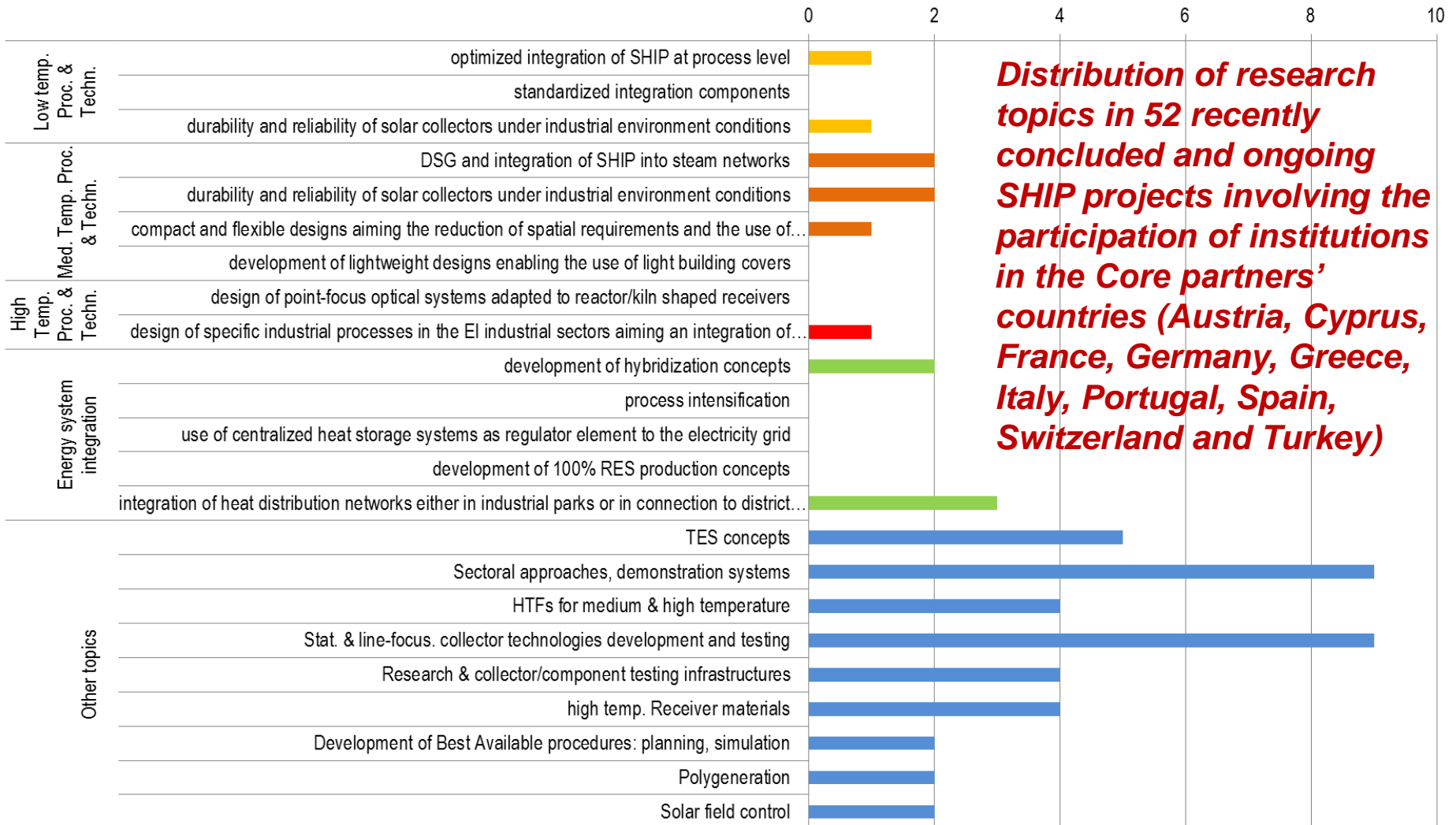
Suitable existing funding resources

Top 10 recipients of EU funding by country (2008 – mid-March 2018)

Rank	Country	Funding (2016 Euros)
1	Spain	56 594 944
2	Germany	38 801 344
3	Italy	32 227 030
4	France	24 786 685
5	United Kingdom	14 785 561
6	Switzerland	7 538 961
7	Austria	5 081 884
8	Cyprus	4 969 840
9	Israel	4 187 347
10	Greece	4 067 424

Source:
CORDIS (2018)

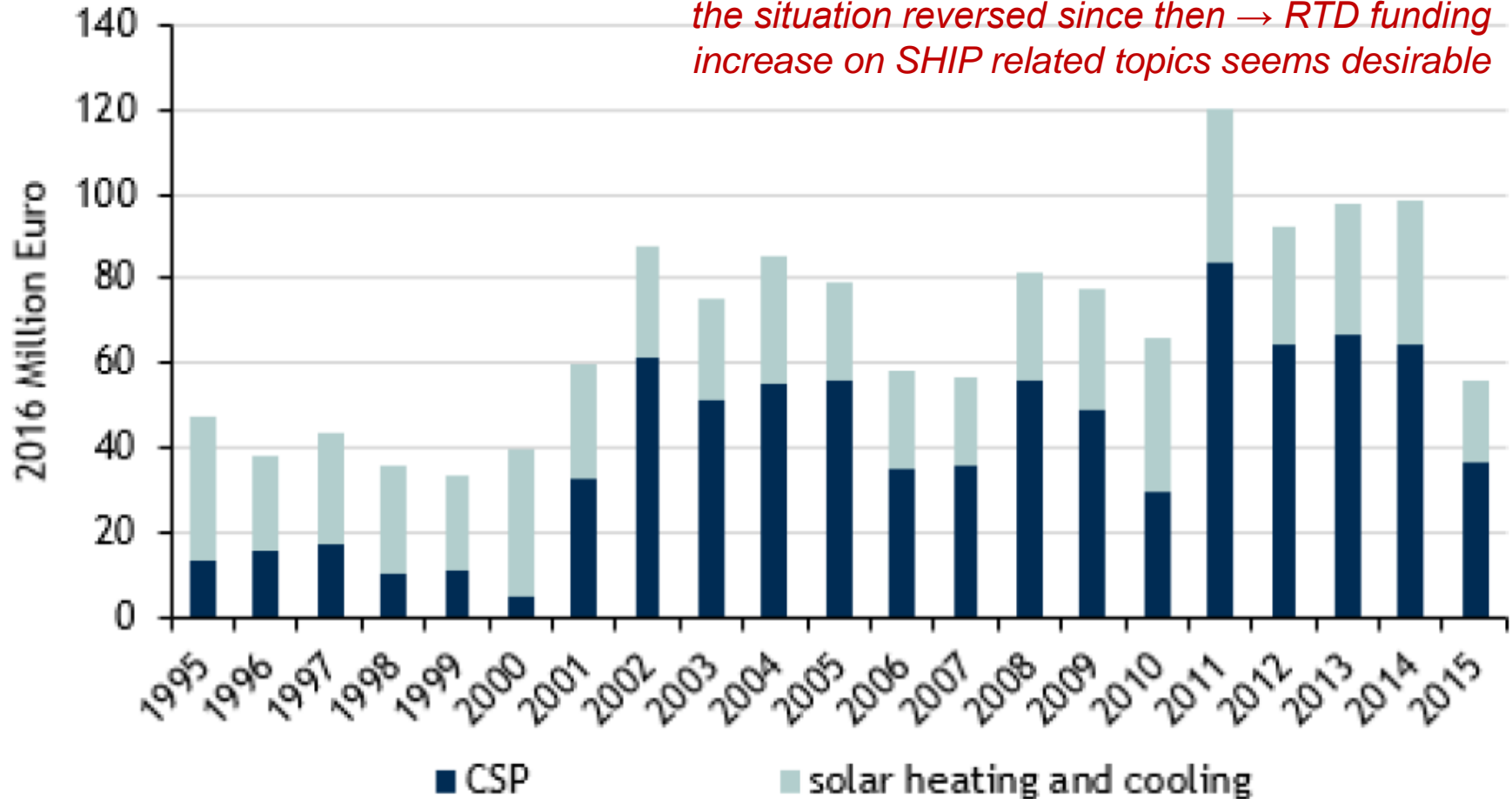
Outlining an RTD Strategy



Outlining an RTD Strategy

Member State R&D funding

Until year 2000, solar heating and cooling has received more national funding than CSP/STE, but the situation reversed since then → RTD funding increase on SHIP related topics seems desirable



Main problems identification

Critical issues related to RTD:

- Competitiveness and cost reduction
- Perception of SHIP being a reliable heat source
- SHIP integration with industrial processes
- Suitable thermal storage

Related to industrial development

- Lack of project developers to foster industrial applications.
- Need for demonstration projects (flagship demos)
- Availability of suitable technical and financial due diligence tools

Common RTD topics

Research existing topics:

- Technology integration aspects
- Solar technology development aspects
- Energy systems integration aspects

Additional topics

- Technology cost reduction
- Financing
- Standardized information
- Impact (value creation potential, away from purely cost-based analyses)
- Behavioural aspects (of sectorial driven motivation)
- Specialization of research at various TRL levels

Proposal / Tentative objectives to be achieved (WP7)

- Acknowledgement of the **European relevance of SHIP** to contribute to the decarbonisation of the European industry (*target* → **European Commission**)
- Inclusion of the topic within **SET-Plan priorities**, raising the interest of member countries and promoting the definition of an specific **Implementation Plan on SHIP** (*target* → **SET-Plan**)
- Identification of **Research Priorities and goals to be achieved** at European level, following a similar approach to CSP Implementation Plan (*target* → **RTD Stakeholders**)
- Identification of **Key Demonstration Projects** (flagship demos) with high solar fraction (*target* → **Industrial Stakeholders**)
- Identification of **suitable funding mechanisms** for such demo projects (venture capital, equity or commercial banking, etc.)