

The logo for FCT (Fundação para a Ciência e a Tecnologia) features the letters 'FCT' in a bold, green, sans-serif font.

Fundação para a Ciência e a Tecnologia  
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR



AGÊNCIA NACIONAL  
DE INOVAÇÃO

# Nanotecnologia, Materiais Avançados e Processos de Produção

*Prioridades no médio prazo (2018-2020)*

**Marta Candeias | Sofia Azevedo**

[marta.candeias@gppq.pt](mailto:marta.candeias@gppq.pt) | 93 200 38 41

[sofia.azevedo@gppq.pt](mailto:sofia.azevedo@gppq.pt) | 939 290 920

# O QUE É O HORIZONTE 2020?

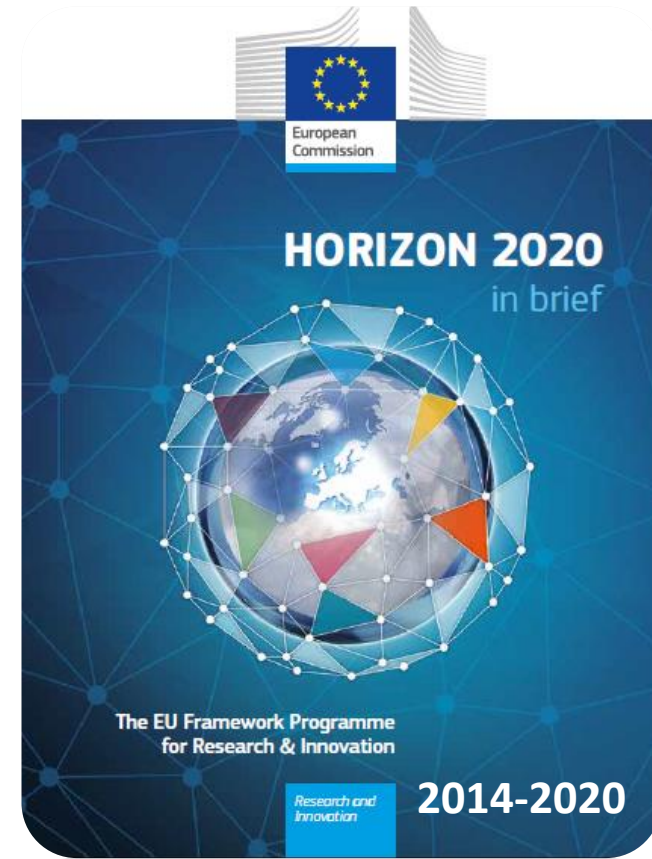
## 8<sup>th</sup> Framework Programme for Research & Innovation

Integração de financiamento para a  
investigação & inovação, da  
investigação ao mercado

Desafios Societais | Liderança Industrial |  
Excelência Científica

**Fácil acesso a todos os atores  
envolvidos em investigação & inovação**  
(empresas, universidades, centros de investigação,  
outras entidades públicas/privadas)

~79 b€ of funding  
available over 7 years



[H2020 in brief](#)



Gabinete de Promoção dos Programa Quadro ID&I

**FCT**  
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# ESTRUTURA DO H2020

## Excellent Science

~ 24 400 M€

- **European Research Council**  
Frontier Research by the best individual teams
- **Future and Emerging Technologies**  
Collaborative research to open new fields of innovation
- **Marie Skłodowska-Curie Actions**  
Opportunities for training and career development
- **Research Infrastructures**  
(including e-infrastructure)  
Ensuring access to world class facilities

*Bottom up*

## Industrial Leadership

~ 17 800 M€

- **Leadership in enabling and industrial technologies**  
ICT, NMBP (nanotechnologies, advanced materials, biotechnology, manufacturing), Space *Top down*
- **Access to Risk finance**  
Leveraging private finance and venture capital for research
- **Innovation in SMEs**  
Fostering all forms of innovation in all types of SMEs

## Societal Challenges

~ 29 700 M€

1. **Health**, demographic change and wellbeing
2. Food security, sustainable agriculture, marine and maritime research & the **bioeconomy**
3. Secure, clean and efficient **energy**
4. **Smart**, green and integrated transport
5. **Climate action**, resource efficiency and raw materials
6. Inclusive, innovative and reflective **societies**
7. Security **society**

*Top down*

European Institute of Innovation and Technology (EIT) (~2700 M€)

Spreading Excellence and Widening Participation (~1900 M€)

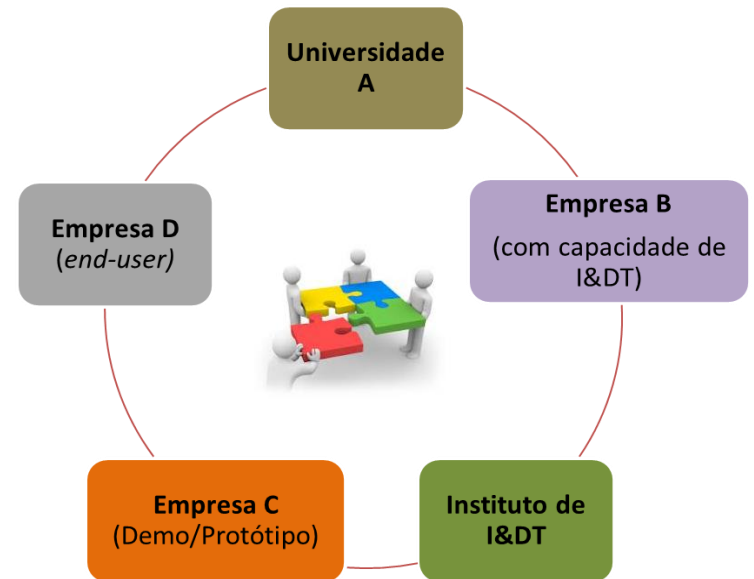
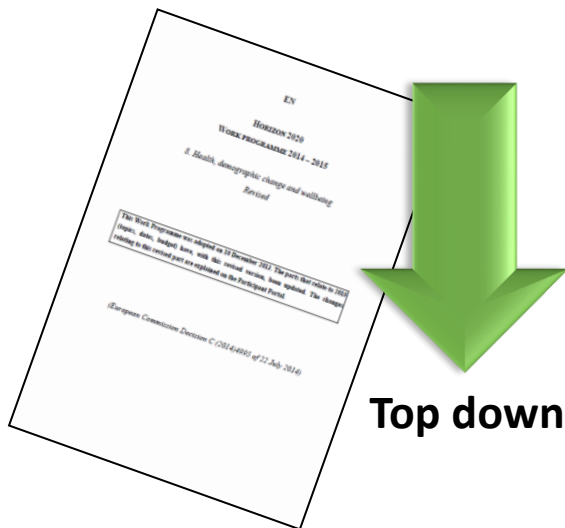
Science with and for Society (~1600 M€)

Joint Research Centre (JRC)



# FINANCIAMENTO NO H2020 – COMO FUNCIONA?

- Programas de Trabalho bianuais
- Projetos em colaboração (mínimo 3 MS ou AC)





Gabinete de Promoção dos  
Programa Quadro ID&I

# Enquadramento, resultados H2020 e casos de sucesso NMP

Roadshow NMP, Porto

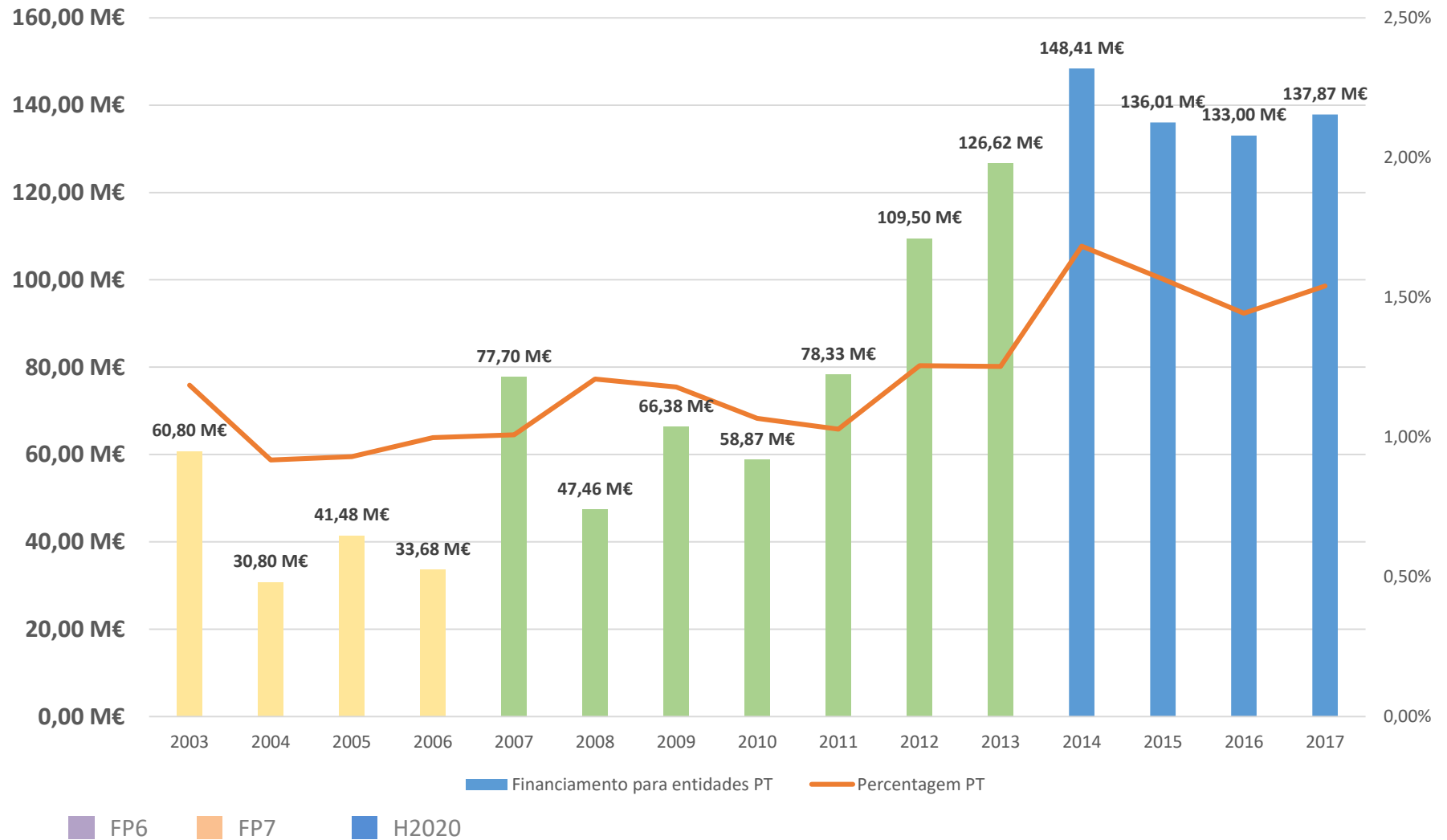
25/05/2017



# Participação PT no H2020 (2014-2017)



# Participação PT | FP 2003-2017



# Participação PT I H2020 2014-2017

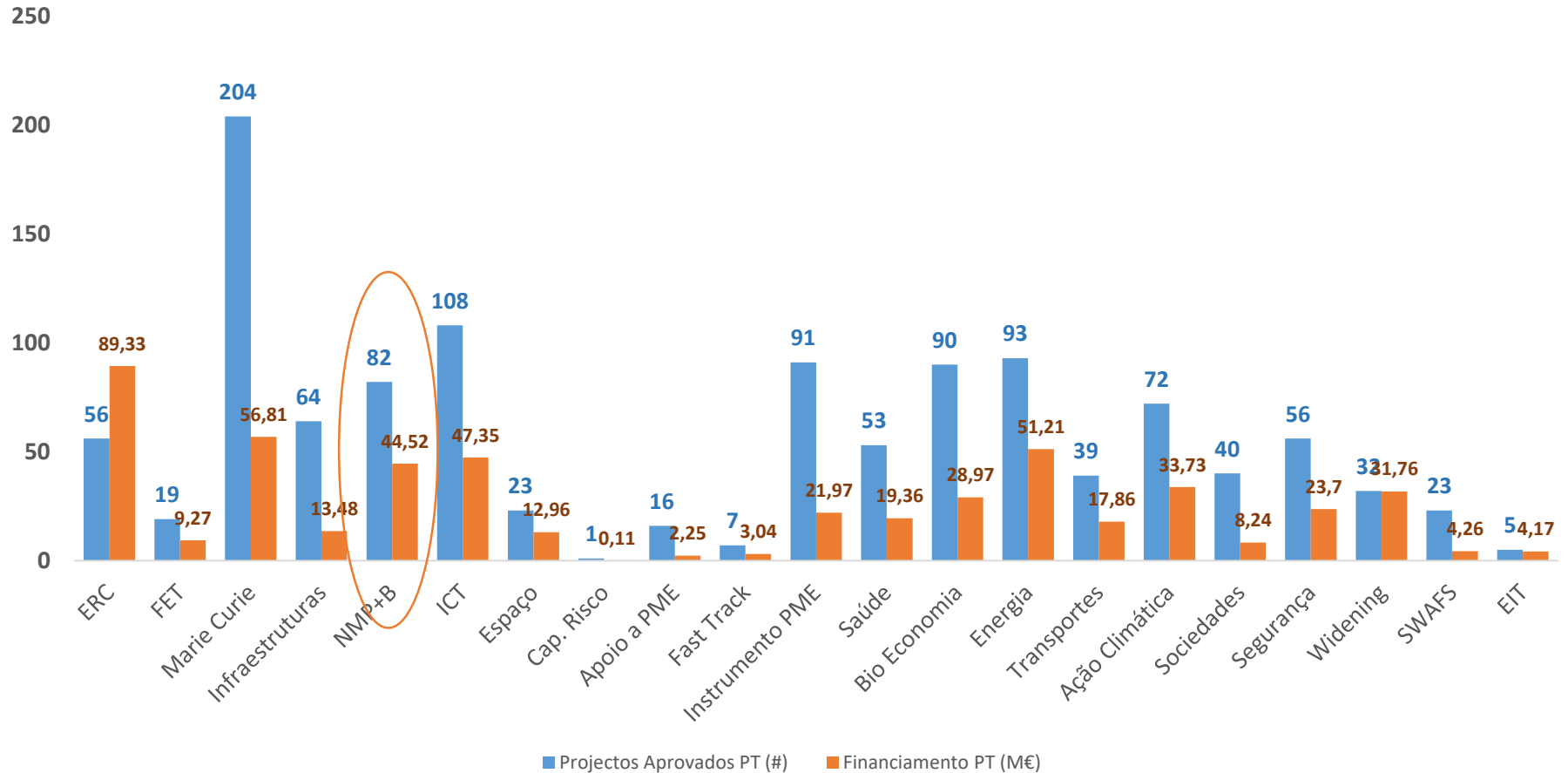
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- ✓ **Propostas: 9043**
- ✓ **Projetos : 1269**
- ✓ **Coordenações : 363**
- ✓ **Participações: 1829**
- ✓ **Total PT funding: 555,29 M€**

Dados: Calls 2014 – 2017



# Participação PT | H2020 2014-2017



Dados: Calls 2014 – 2017

PT Total Funding: 55,29 M €

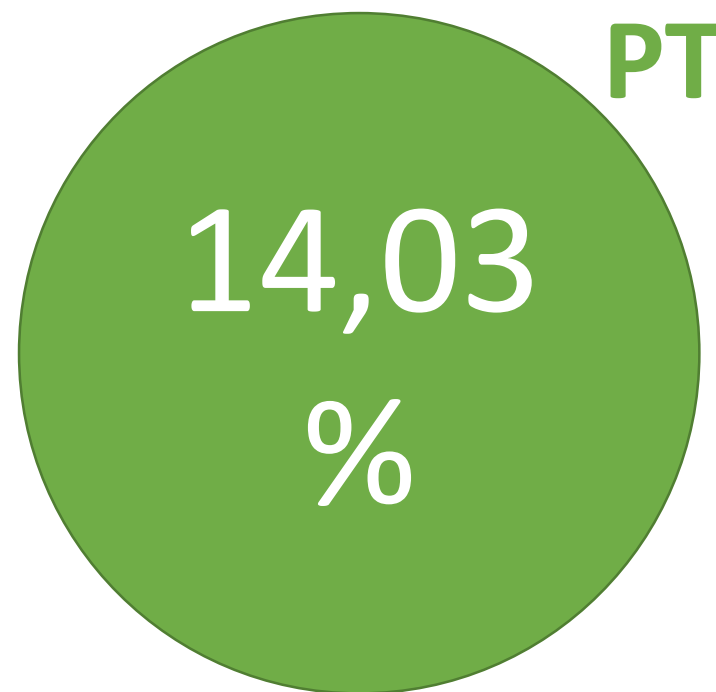
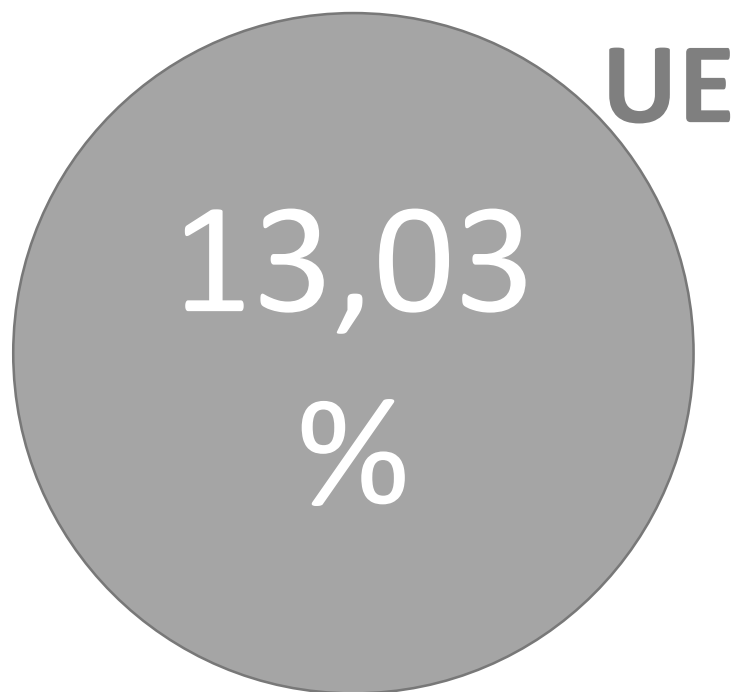


Gabinete de Promoção dos Programa Quadro ID&I



# PARTICIPAÇÃO PT NO H2020 (2014 – 2017)

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*Taxa de sucesso – número de propostas*

Para vossa motivação...

# Participação Nacional no NMP (2014 - 2017)



# Participação PT I H2020 2014-2017

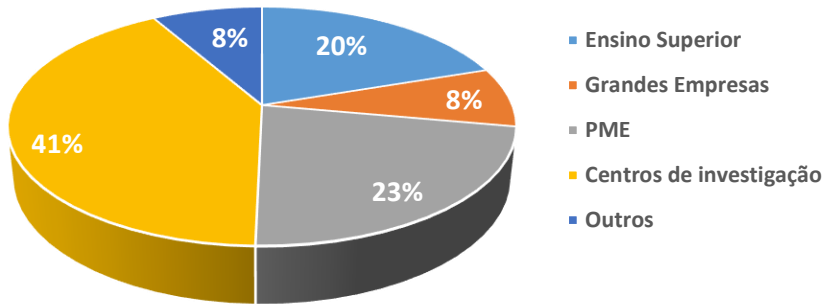
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- ✓ **Propostas: 436**
- ✓ **Projetos : 82**
- ✓ **Coordenações : 14**
- ✓ **Participações: 132**
- ✓ **Total PT funding: 44,52 M€**

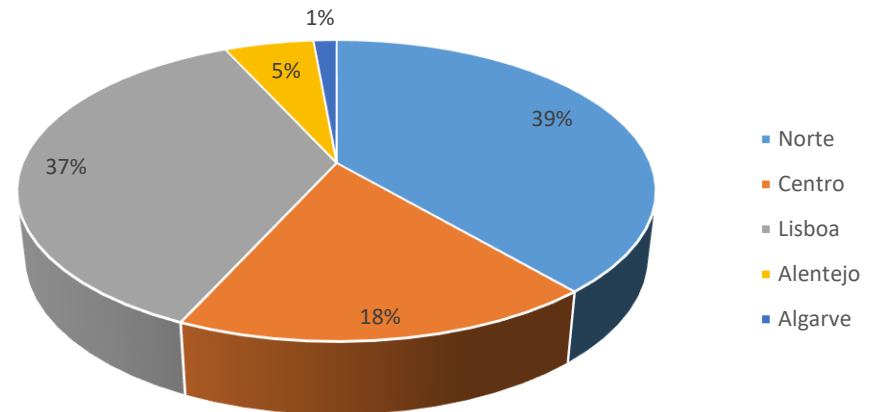
Dados: Calls 2014 – 2017

# Participação PT NMBP I H2020 2014-2017

## NMP: Financiamento por tipo de entidade

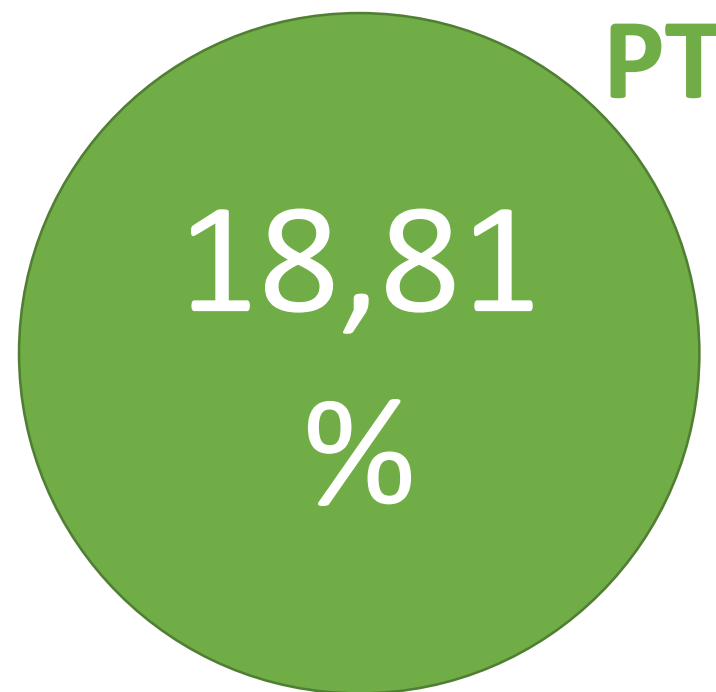
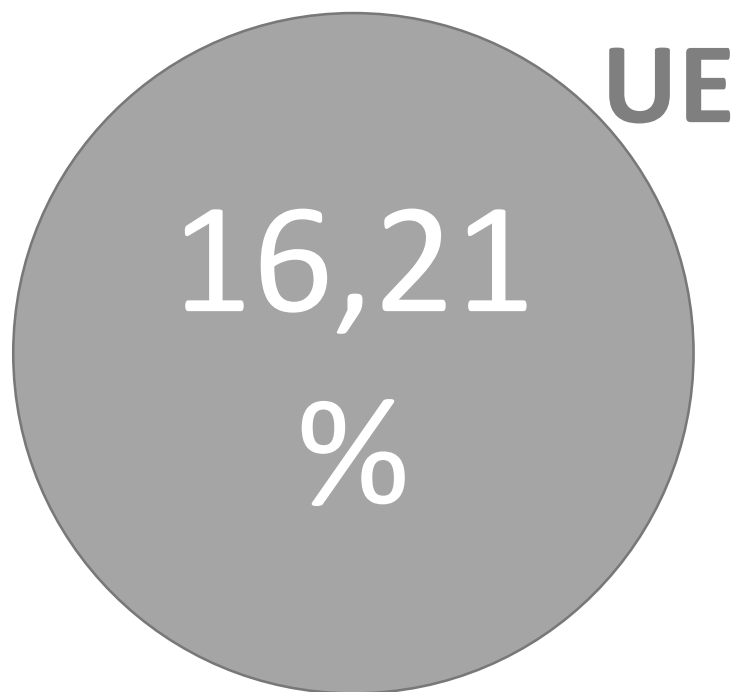


## NMBP: Financiamento por Região



# PARTICIPAÇÃO PT NO H2020 (2014 – 2017)

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*Taxa de sucesso – número de propostas*

# NMP – CASOS DE SUCESSO

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Coherently with these gaps, MAESTRI intends to develop an innovative and integrated platform combining holistic efficiency assessment tools, a novel management system and an innovative approach for industrial symbioses implementation. Each one of these components intends to assist the companies in the following:



### Efficiency Assessment tools

- Assess production system efficiency and eco-efficiency performance
- Identification of major inefficiencies
- Optimization of the use of energy, resources, process variables, etc.
- Prioritize options to support decisions for improvement measure (both cost-saving and efficiency improvements)
- Underpin sustainability efforts via resource and energy efficiency improvement
- Perform and evaluate Life Cycle Assessment
- Perform and evaluate Life Cycle Costing Analysis
- Cost Assessment Expected vs Real Gains and Payback analysis
- Identification of the most relevant KPIs



### Management System

- Embed energy and resource efficiency in strategy and daily improvements routines
- Keep track of KPIs via Eco Lean Management Board and an alert system
- Provide a toolkit of low cost improvement methods (based on Lean Tools)
- Assess and improve cultural behaviour
- Support Continuous improvement both in term of economical and sustainability issues
- Inputs to other Legal, Management and Communication Instruments



### Industrial Symbiosis

- Identification and characterisation of wastes (physical waste, by-products, energy, emissions, etc.)
- Creation of a waste database to support the identification of the potential (re)use of those wastes as a resource either internally or externally; i.e. synergies within one site or across multiple sites through the creation of new activities and potentially new products, synergies in regional eco-parks, wider synergies taking into consideration longer-distance material flows.

Coordenação Nacional : ISQ







<http://www.skhincaps.eu/>

Coordenação  
Nacional : CENTI



## skin healthcare by innovative nanocapsules

[www.skhincaps.eu](http://www.skhincaps.eu)

Using an innovative and sustainable in situ self-assembly technology, SKHINCAPS addresses the development of customised and safe nanocapsules to deliver novel products for skin healthcare applications, with increased efficiency and cost benefits:

- First layer garments containing nanoencapsulated phase-change materials (PCMs) for thermal management and skin comfort;
- Anti-ageing creams containing nanoencapsulated vitamins and antioxidants cocktail to improve skin anti-ageing effect;
- Antimicrobial lotions and textiles natural containing nanoencapsulated essential oils to prevent or mitigate bacterial infections on skin.

**EU contribution: EUR 3 265 920,75**

[http://cordis.europa.eu/project/rcn/207604\\_en.html](http://cordis.europa.eu/project/rcn/207604_en.html)

Coordenação Nacional :  
Universidade de Évora

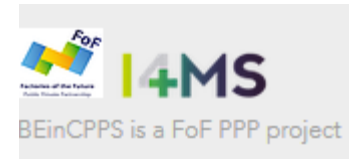


### Objective

NewSOL proposal addresses the specific challenge towards high efficiency solar energy harvesting by advance materials solutions and architectures that are in line with those specified in SET-plan. Its main objective is to develop advance materials solutions based on innovative storage media and concepts for Concentrated Solar Power (CSP) up to validation in field of their performance by real time monitoring. This will be supported by an innovative thermal energy storage desi...

**EU contribution: EUR 4 981 423,27**

# REGIONAL MANUFACTURING DIGITAL INNOVATION HUBS



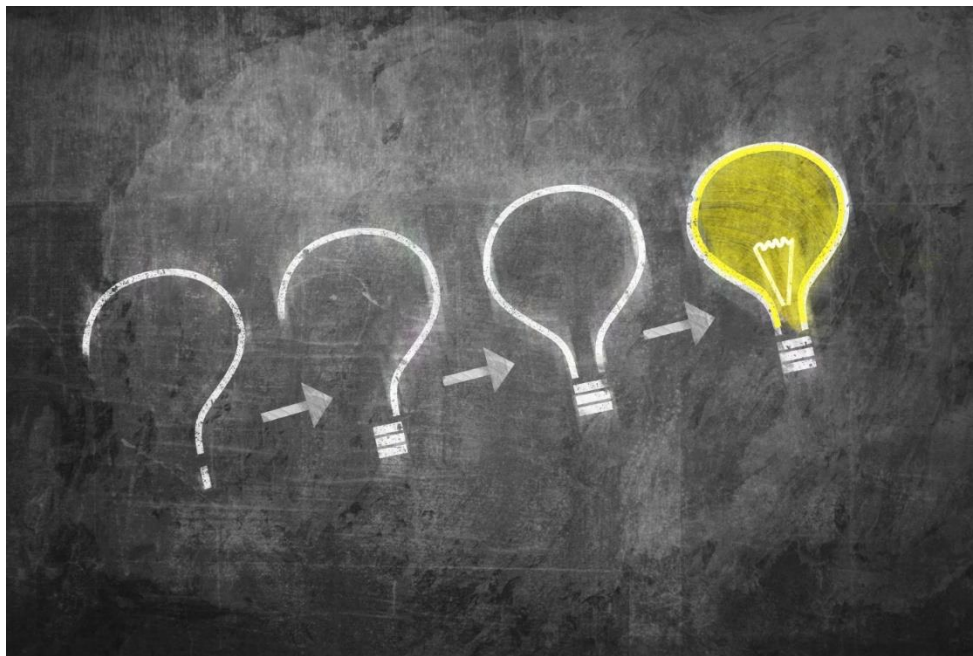
- **Regional Manufacturing DIH Lombardy**  
Competence Center: Politecnico di Milano
- **Regional Manufacturing DIH Rhone-Alpes**  
Competence Center: CEA List
- **Regional Manufacturing DIH Euskadi**  
Competence Center: Innovia
- **Regional Manufacturing DIH Baden Württemberg**  
Competence Center: Fraunhofer IPA
- **Regional Manufacturing DIH Norte Portugal**  
Competence Center: INESC TEC

Click [here](#) to learn more about each Hub.



<http://www.beincpps.eu/>

**EU contribution: EUR 7 999 485,75**



## Contact us!

**NMP+B**  
Apoio a PME  
Fast Track



Marta Candeias

✉ [marta.candeias@gppq.pt](mailto:marta.candeias@gppq.pt)

☎ +351 93 200 38 41

**Questões legais e financeiras**  
NMP+B  
RFCS



Sofia Azevedo

✉ [sofia.azevedo@gppq.pt](mailto:sofia.azevedo@gppq.pt)

☎ +351 93 929 09 20

