

### Stimulating Knowledge Transfer

**OECD** Workshop

8 Nov'17

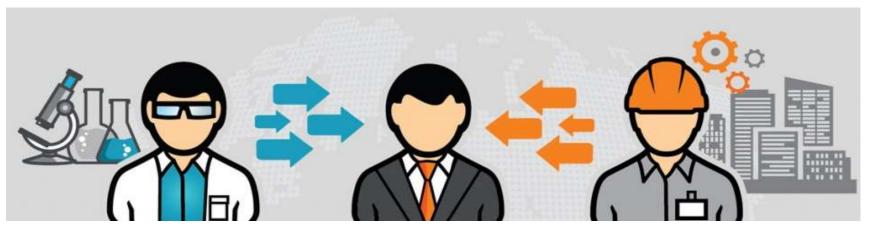
José Carlos Caldeira ANI - President jcaldeira@ani.pt

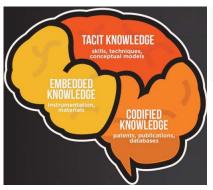


## FOREWORD - KNOWLEDGE & COLLABORATIVE INNOVATION:

At the heart of ANI Mission

#### Better Collaboration Between Business and Academia











Collaborative R&D

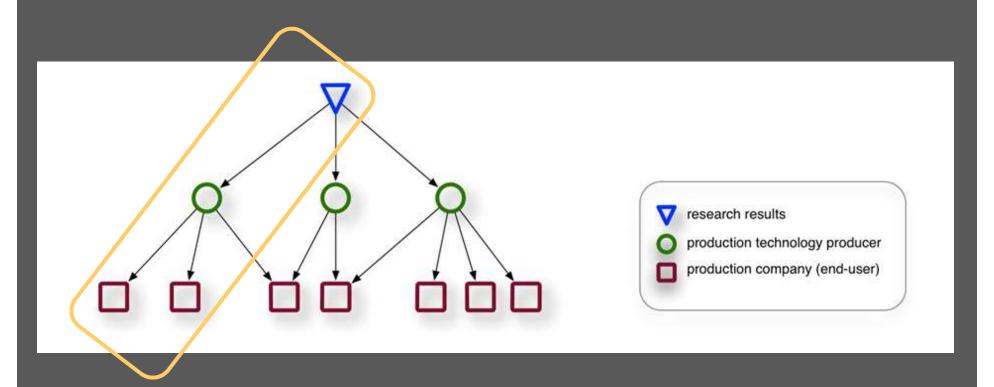
Students & Researchers (PhD)

IP commercialization
Scientific publications
entrepreneurship



## CHALLENGES AND OPPORTUNITIES Critical Success Factors

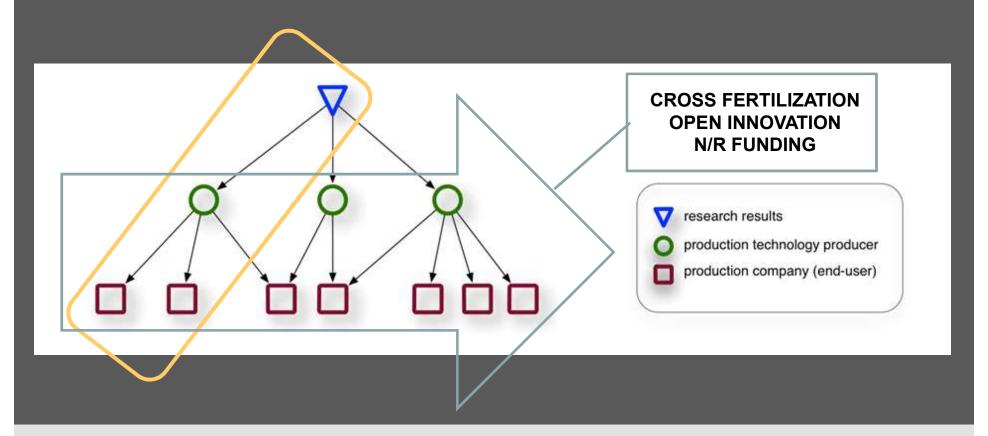
#### **KEY ENABLING TECHNOLOGIES: A VALUE CHAIN PYRAMID**





## CHALLENGES AND OPPORTUNITIES Critical Success Factors

#### KEY ENABLING TECHNOLOGIES: A VALUE CHAIN PYRAMID



### AGÊNCIA NACIONAL DE INOVAÇÃO

#### **KNOWLEDGE & COLLABORATIVE INNOVATION:**

Challenges towards the 2020 milestone

#### RDI Ecosystem - Flow of Knowledge (and People)

LARGE COMPANIES
MID SIZE TECH.
COMPANIES

MID SIZE COMPANIES
SMALL TECH
COMPANIES

MICRO AND SMALL SIZE COMPANIES

DIFERENTIATION
OF INTERFACE
SERVICES AND
RELATED LEVEL
OF
SOFISTICATION

UNIVERSITIES RESEARCH UNITS

INTERFACE ORGANIZATIONS

ENGINEERING CENTERS

SECTORIAL TECH.
CENTERS

INCUBATORS
SCIENCE PARKS



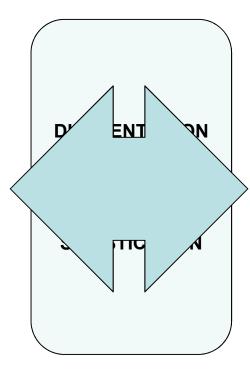
Challenges towards the 2020 milestone

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## CHALLENGES AND OPPORTUNITIES Critical Success Factors

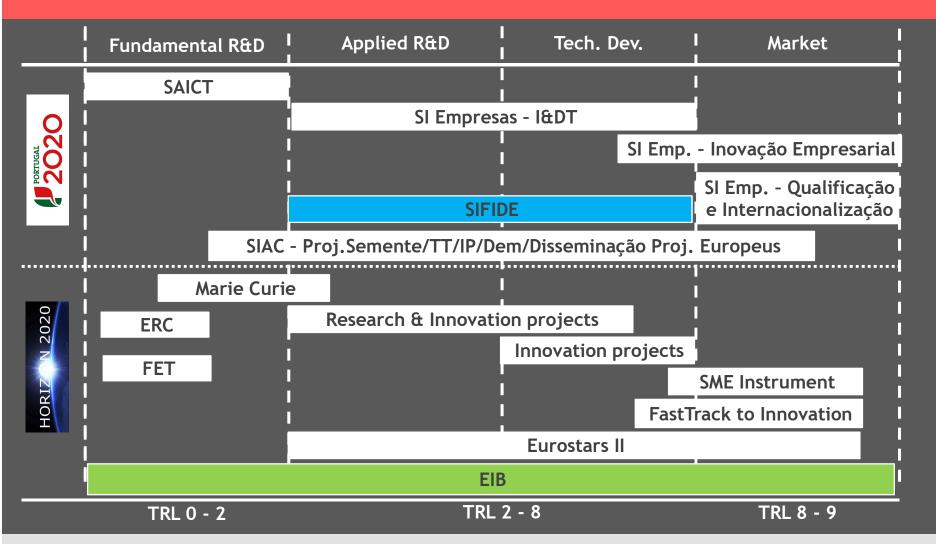
#### FUNDING AND FINANCING

INCREASE OF TECHNOLOGY DEVELOPMENT SPEED AND DIVERSIFICATION + PRODUCT AND SERVICE LIFECYCLE REDUCTION = HIGHER PRESSURE FOR R&D&I INVESTMENT (volume and ROI)

- Need to take advantage of all funding opportunities (international, national and regional)
- Need to combine and integrate complementary funding sources to cover the entire innovation cycle (different rules, time windows, etc.)
- One of the main challenges at European level

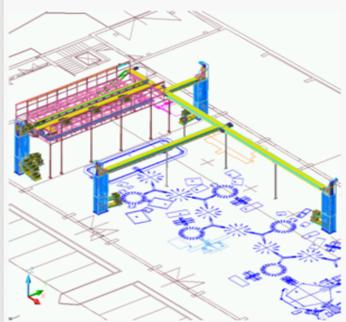


Opportunities towards the 2020 milestone Integrated approach to the R&I cycle





Opportunities towards the 2020 milestone Integrated approach to the R&I cycle



Development of a Highly Flexible Logistic System for Customized Products





Cross Fertilization
Metalworking Sector (Company)
Demonstrator
Porto – Portugal
Funded with Structural Funds

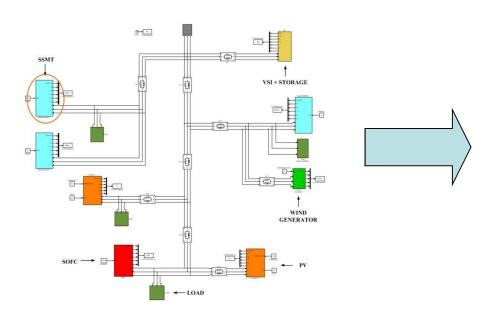






Opportunities towards the 2020 milestone Integrated approach to the R&I cycle

#### MICROGRIDS (EU Project)

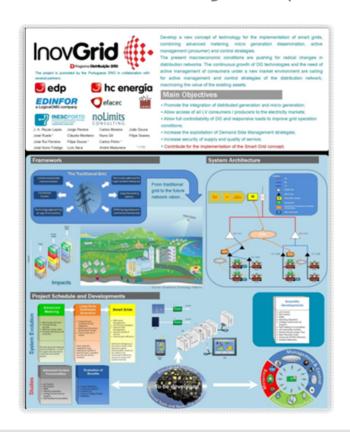


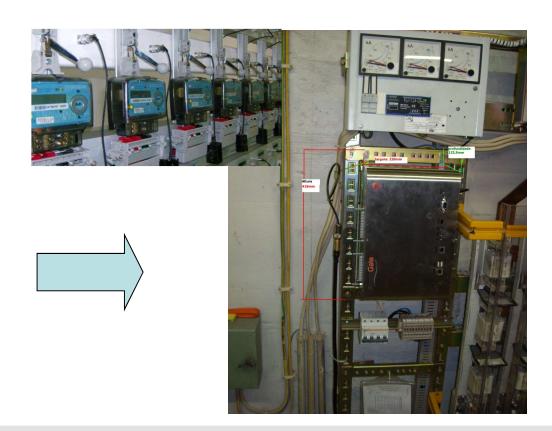




Opportunities towards the 2020 milestone Integrated approach to the R&I cycle

#### National Project (Pilot > 33.000 consumers)







#### ANI: Value creating integrative approach to the R&I cycle

## incentives services

financial/tax - internationalization - support















## Challenges towards the 2020 milestone PT2020 FUNDING INSTRUMENTS (2014-2020)

Incentive Systems for companies (Areas)	Project Typologies	Contract
Research and Technological Development (R&TD)	Companies – R&TD	Consortium/Individual
	Pilots and Demonstrators (new)	Consortium/Individual
	Large scale mobilizing projects	Consortium
	R&TD Teams in enterprises (new)	Consortium/Individual
	Protection of intellectual and industrial property (new)	Consortium/Individual
	R&TD Internationalisation (new)	Consortium/Individual
	R&TD Voucher	Individual
Entrepreneurship and Business Innovation	Productive innovation for non-PME's	
	Productive innovation for PME's	
	Qualified and creative Entrepreneurship	
	Entrepreneurship Voucher	
Qualification and Internationalisation of SMEs	Internationalisation of SMEs	
	Qualification of SMEs	
	Internationalisation and Innovation Vouchers	

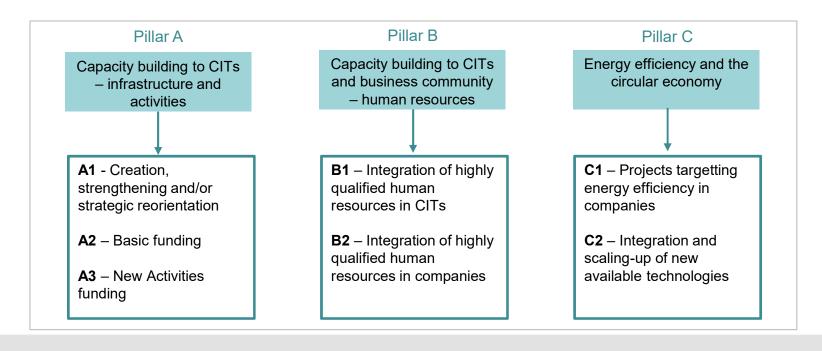
## AGÊNCIA NACIONAL DE INOVAÇÃO

#### KNOWLEDGE & COLLABORATIVE INNOVATION:

Challenges towards the 2020 milestone

#### **Technological Interface Centers (CIT)**

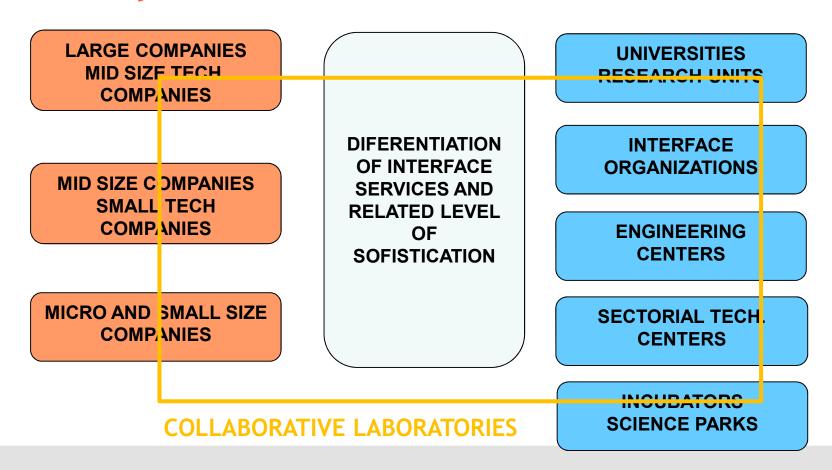
- Mapping of national technological infrastructures
- New dedicated funding programme under development:





Challenges towards the 2020 milestone

#### **RDI Ecosystem**



## AGÊNCIA NACIONAL DE INOVAÇÃO

#### KNOWLEDGE & COLLABORATIVE INNOVATION:

Challenges towards the 2020 milestone

#### **CHALLENGES AHEAD**

- Reinforce investments in knowledge creation and education and training (no knowledge and human resources -> no innovation)
- Boost the transfer (EXCHANGE) of knowledge and people along the entire innovation value chain
- Bring more actors to the innovation eco-system (companies and research organizations) and push for more collaboration
- Diversify funding sources (mainly in the case of Universities and Polytechnics), including international ones.



# Thank you! José Carlos Caldeira

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