



# Supporting energy efficient heating & cooling through the Horizon 2020 Energy Challenge

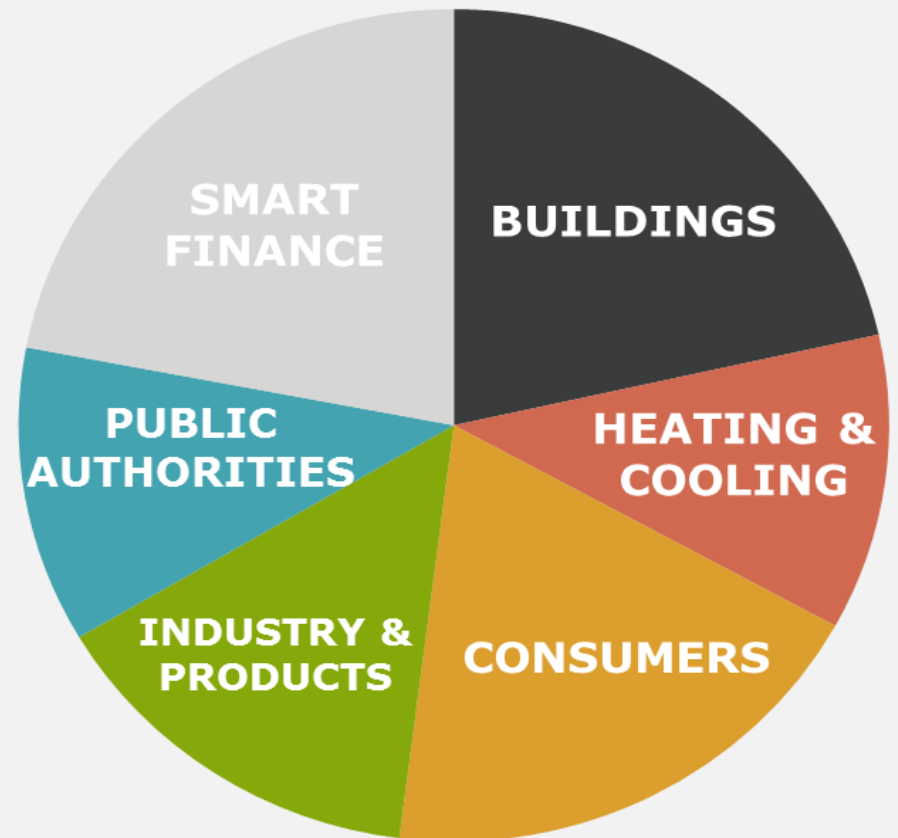
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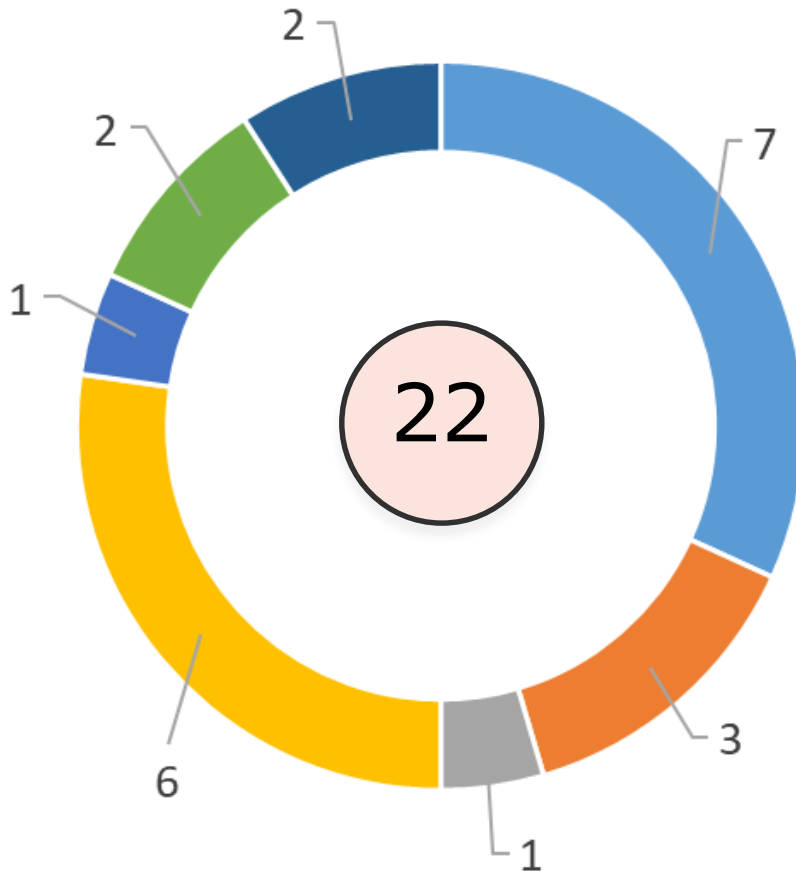
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# Horizon 2020 Energy Challenge: 200 Collaborative Projects on Energy Efficiency





## 22 projects\* focusing on heating and cooling

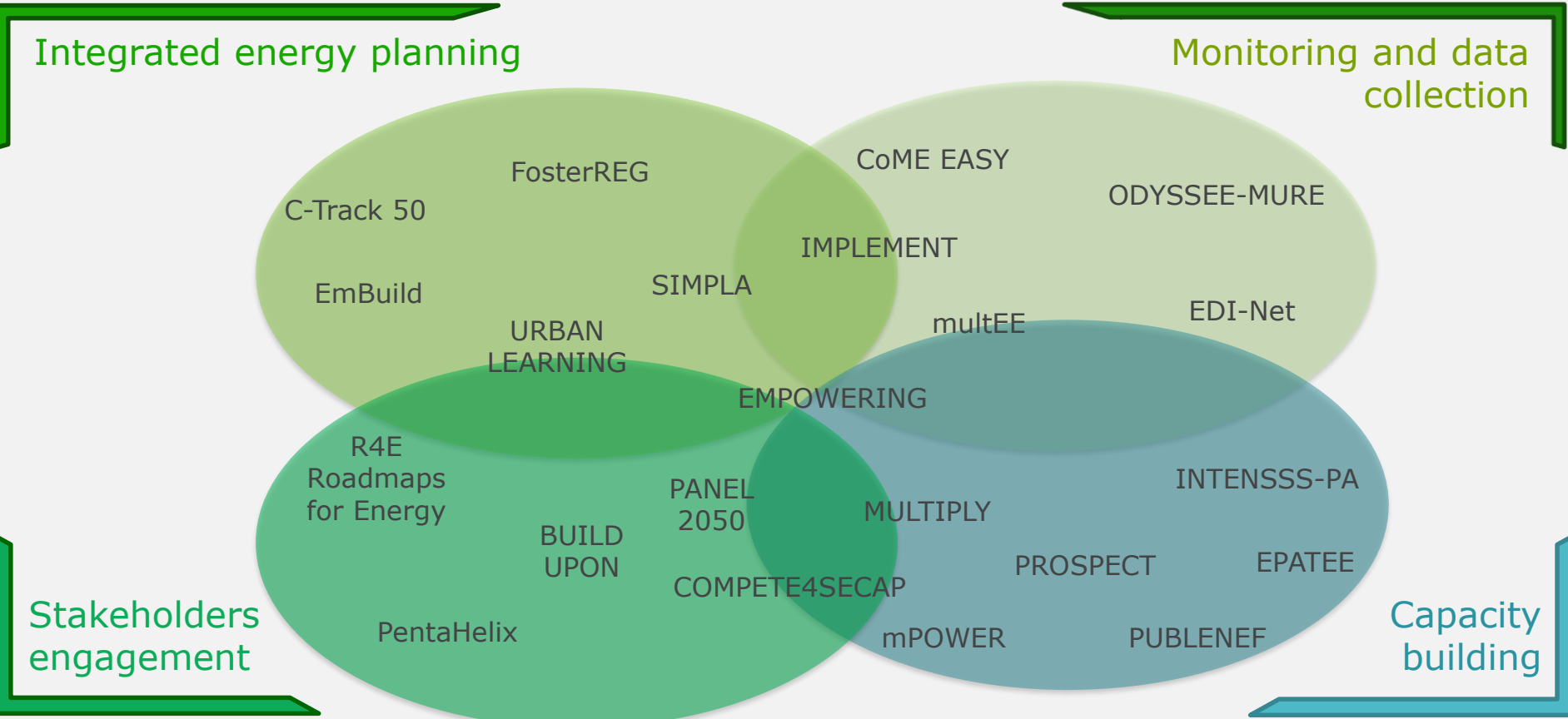


**EU support: 62 M€**

\* 13 RIA, 5 IAs, 4 CSAs

- Technology for district heating and cooling (RIA)
- Models and tools for heating and cooling mapping and planning (RIA)
- Packages integrating renewable and energy efficiency solutions (IA)
- Solutions using low grade sources of thermal energy (IA)
- Waste heat recovery from urban facilities (IA)
- Removing market barriers to the uptake of efficient heating and cooling solutions (CSA)
- Improving the performance of inefficient district heating networks (CSA)

# In addition: 22 projects supporting local energy planning



## 7 projects supporting heat recovery in industry

Project	Industry	Main innovation	Final result
TASIO	Cement	ORC	Heat to Power
I-ThERM	Steel & food	Two-phase heat transfer	Heat & Electricity for process reintegration
SUSPIRE	Iron-steel casting	Storage (Phase change materials)	Heat for commercialisation over-the-fence
Indus3ES	Petrochemical	Absorption Heat Transformer	Low temperature waste heat recovery for process reintegration
DRYficiency	Ceramic, pet care/ feed and agro-food	Vapour compression heat pumps	High temperature recovery through closed loop for air drying and open loop for steam drying
Smartrec	Non-ferrous and ceramic	Storage (molten salts)	Waste heat recovery through custom Heat Pipe Heat Exchanger for process reintegration
ETEKINA	Non-ferrous, steel and ceramic	Heat Pipe Heat Exchanger	Technology highly adaptable to various industrial sectors for process reintegration

## Concerted actions

- Gathering of National Implementing Bodies to make sustainable energy policy implementation more effective and efficient
- **Concerted Action on Energy Efficiency Directive** includes one working group (Domain) on efficiency in energy supply, high efficiency CHP and heating / cooling (Contact: Stane Merse from Jozef Stefan Institute)

## Project Development Assistance

- Technical assistance to develop sizable projects
- Buildings, Street Lighting, Urban Transport, Industry, Infrastructure such as street lighting, **district heating/cooling** and water/wastewater services
- Funding for “project development” - actual investment by other public and private funds
- Requirement for leverage of 1:15

## Project Development Assistance

Example of Efidistrict project in Navarra:

- 600 apartments renovated reducing energy bills by €560/year/household
- Renewal of the old district heating system in Pamplona and creation of a new network using biomass



## New Calls!

Call 2019: Deadline  
3 Sept 2019  
112 M€



Buildings



Consumers  
& Services



Industry

Call 2020: in preparation

Post 2020: follow-up of  
activities under Horizon  
Europe (R&I) and LIFE  
(market uptake)



Financing  
Energy  
Efficiency



Public  
Authorities  
& Policy Support



European  
Commission

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**THANK YOU  
FOR YOUR ATTENTION**

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