

H2020 Energy Efficiency - Background and Opportunities -

HORIZON 2020 Project Factory
1st October 2019
Enterprise Europe Network

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Energy Efficiency vision...



EU Energy targets by 2030

- At least **40%** cuts in greenhouse gas emissions
- At least **32%** renewables in energy consumption
- **32.5%** energy efficiency

2030 Clean Energy Package - The EU committed to ambitious climate and energy targets for 2030 in line with the Paris Agreement.

2050 Long term vision

A Clean Planet for all

Commission proposes in its long-term strategy that the EU achieves net-zero GHG emissions by 2050.



18 Topics

117.5 million EUR

60+ projects to be funded
(success rate: 25% last year)

Two Deadlines:
15 January & 10 September
2020

Call managed by EASME
Energy Unit

Call 2020 on Energy Efficiency

- Building in energy transition (B4E)
- Smart and clean energy for consumers (EC)





European
Commission



**Cities &
Regions**



Consumers



Buildings



**Finance for
Sustainable
Energy**



**Industry &
Products**

Innovation Actions

EU Support: 70%
Deadline 15/1/2020

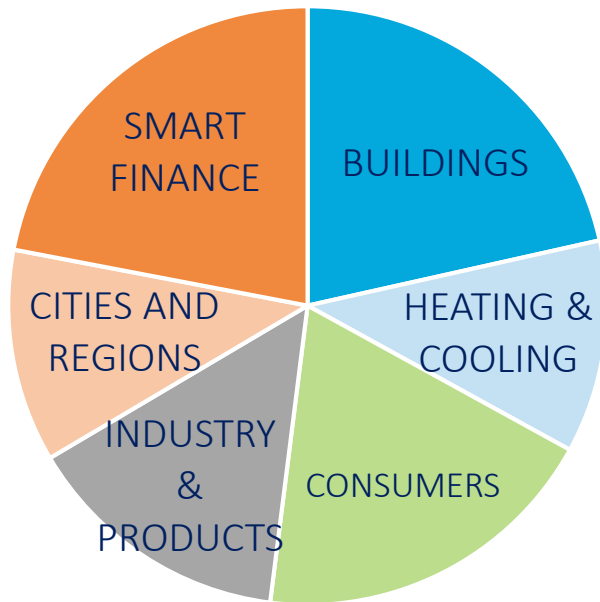
- Socio-Economic Research (RIA @100%)
- Self-optimisation of buildings and appliances
- Buildings smartness (legacy)
- ICT in buildings
- Big data
- H&C Multi-apart.

Coordination & Support Actions

EU support: 100%
Deadline 10/9/2020

- Public Authorities
- Active Consumers
- Energy Poverty
- Smart Services
- **Decarbonisation***
- Skills
- Next Generation EPC
- Building Stock Data
- **Smart Building Community***
- National roundtables
- Project Development Assistance
- Smart Finance

Energy Efficiency funding...

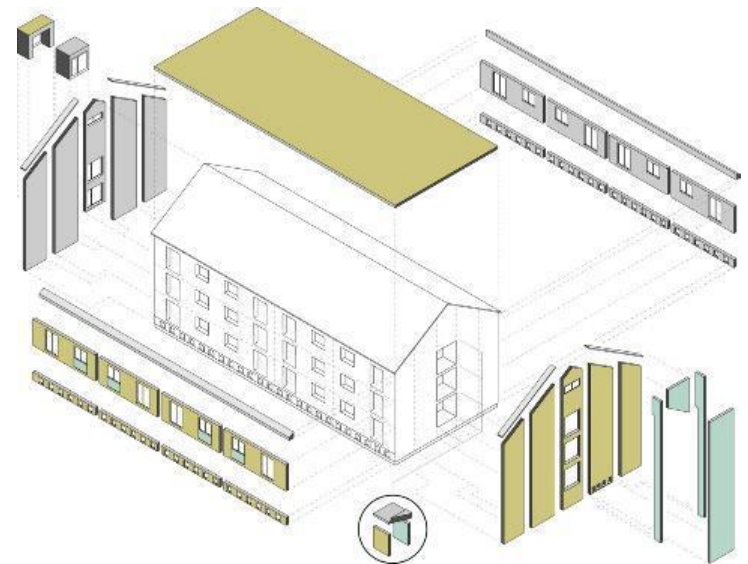


Implement the vision with projects- impacts expected, e.g.:

- Decarbonisation of building stock:
 - Demonstrate that deep renovation is more reliable, faster, cheaper & easier to implement than standard practices (e.g. 20% reduction of renovation time)
 - Demonstrate seamless & cost-effective integration of clean energy solutions enabling buildings to play active role in energy system
- Home renovation: Large locally developed investment pipelines for home renovation
- Consumers: Innovative support schemes for energy poor households
- Finance: New green finance products for consumers

Development & advanced prefabrication of innovative, multifunctional building envelope elements for Modular Retrofitting and Smart Connections

- Design, production and construction of cost effective modular pre-fabricated panel systems for façades and roofs
- Development and demonstration fully automated production lines for multifunctional modular renovation elements
- design and implementation of Plug-and-play concept connectors including integration and connection of HVAC & RES
- Demonstration in 5 pilots + 2 RLLL (real life learning labs)
- Integration of advanced, high tech processes throughout the supply chain
3D scanning / 3D printing / advanced geomatics / BIM



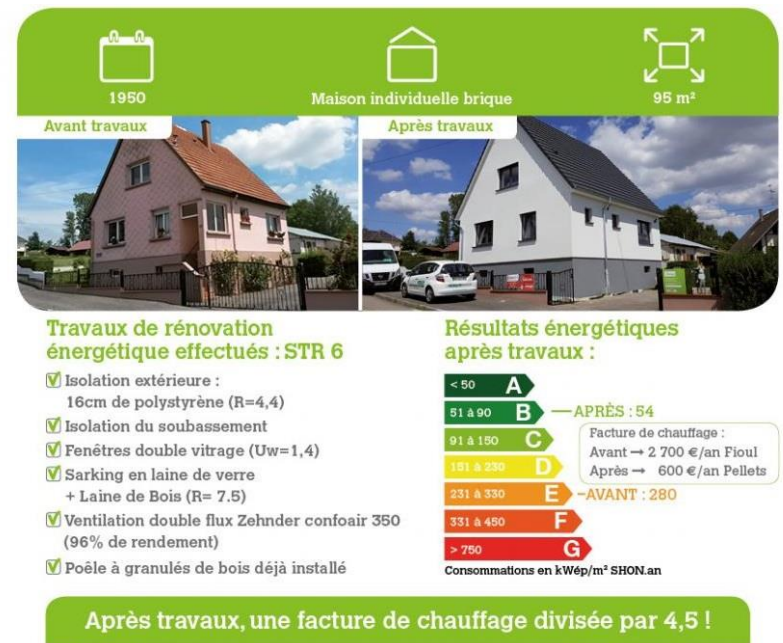
Expected impacts

Energy savings: 80%

Investment Return: 8 Years

Getting more demand : the special case of home renovation

- OKTAVE: standardised low energy renovation packages in detached houses, target of 1.500 renovations/y
- Service at real cost paid by home owners
- Cooperation with local banks, special finance for low income households
- 35 clusters of local companies created, in-depth training of 250+ craftsmen
- OKTAVE: "Industrial prototype for other economic actors in the building renovation industry"



OktaVe
La rénovation à votre portée

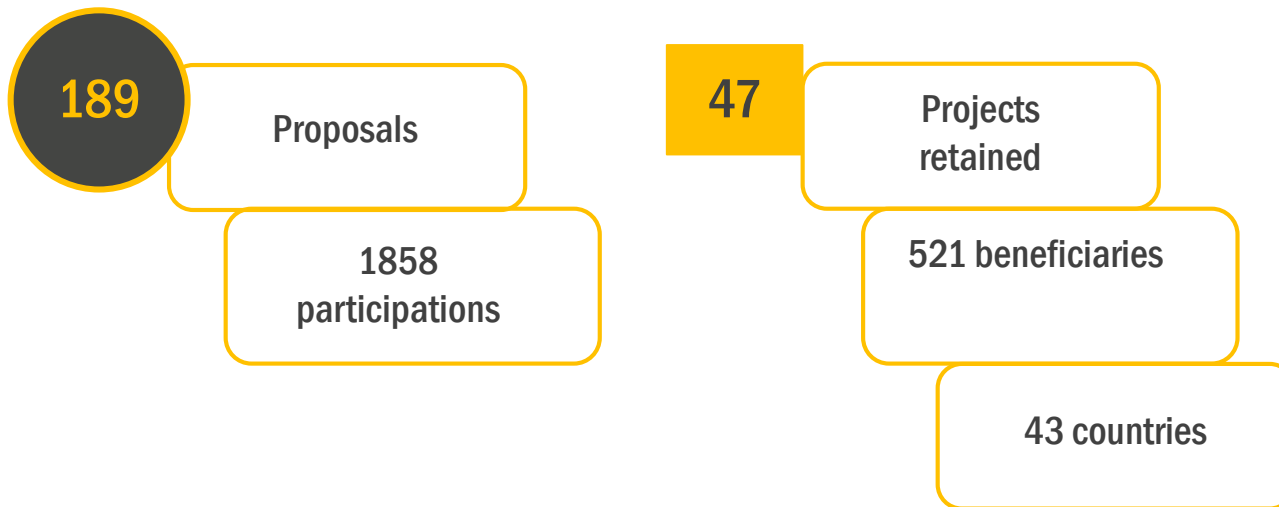
Getting more demand : consumer segmentation and industrialisation

- Net-zero energy renovation of large housing units, 30 year performance guarantee, pre-fabricated modules, 1-2 weeks on-site works
- H2020 TransitionZero in France: strict segmentation to housing organisations, i.e. social housing
- Activation of construction industry, 3 clusters in France
- "Attractive, comfortable, beautiful"



Transition
Zero

Horizon 2020 Energy Efficiency Call for Proposals 2018 in numbers...



Award Criteria

- Excellence

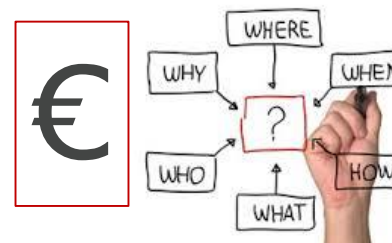
- Impact

- Implementation -
Quality & Efficiency



Before

After





INGREDIENTS FOR SUCCESSFUL PROJECT

- PEOPLE - MOTIVATED
- REAL NEEDS / APPLICABLE
- VISION / MILESTONES
- SUPPORT / NETWORK
- ADAPTIBILITY
- GOOD DEMO-SITES
- USER INVOLVEMENT
- SUSTAINABLE PLAN
- TEAM / LEADERSHIP
- PROJECT LEGACY → IMPACT^(?)
- SMART COMMUNICATION

EU funding for sustainable energy investment after 2020



Increased mainstreaming
across EU budget (25%)

- Cohesion Funds
- Invest EU
- **Horizon Europe**
 - €15 bn to *Climate, Energy, Mobility*
- **LIFE**
 - € 1 bn to *Clean Energy Transition*
- Connecting Europe Facility
- Innovation Fund

Partial agreements reached during the first half of 2019



ENERGY UNION

EnergyUnion #EnergyUnion

European Commission
Commission européenne

Commission européenne
European Commission

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THANK YOU!

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- ✓ H2020 Funding 2020 - All you need to know: <https://ec.europa.eu/easme/en/horizon-2020-secure-clean-and-efficient-energy-info-day>
 - ✓ Questions on Energy Efficiency H2020 Funding – Write to us, the Energy Efficiency team: Easme-energy@ec.europa.eu
 - ✓ Apply for ELENA support: elena@eib.org
 - ✓ Apply for EASME PDA support: <https://ec.europa.eu/easme/en/horizon-2020-secure-clean-and-efficient-energy-info-day>
 - ✓ Engage in the Sustainable Energy Investment Forum: <https://ec.europa.eu/energy/en/financing-energy-efficiency/sustainable-energy-investment-forums>
 - ✓ Are you an Energy Agency? ManagEnergy: Apply for Energy Efficiency finance Master Classes: <https://ec.europa.eu/easme/en/managenergy-leaders-energy-transition>
 - ✓ Covenant of Mayors: www.eumayors.eu

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