



European
Commission



SHERPA Final Event
**Integrated Strategies for the Energy
Renovation of Public Buildings in the
Mediterranean**

The exemplary role of the public sector

Brussels, 22 January 2020





European
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New European Commission



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Ursula von der Leyen



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Commissioner-designate
Kadri Simson



Director-General – DG ENER
Ditte Juul-Jørgensen

Kadri Simson

Commissioner-designate for Energy



The mission:

- Focus on the **rapid implementation** of energy-efficiency and renewable-energy legislation
- **Work closely with the Member States** to set out their National Energy and Climate Plans
- Given the increased ambition of the European Green Deal, there is a need to **review legislation**
- Ensure Europe follows the **energy-efficiency-first principle** across the board
- Look at how Europe can further **improve the energy performance of buildings and speed up renovation rates**

European Green Deal, 10 main points:

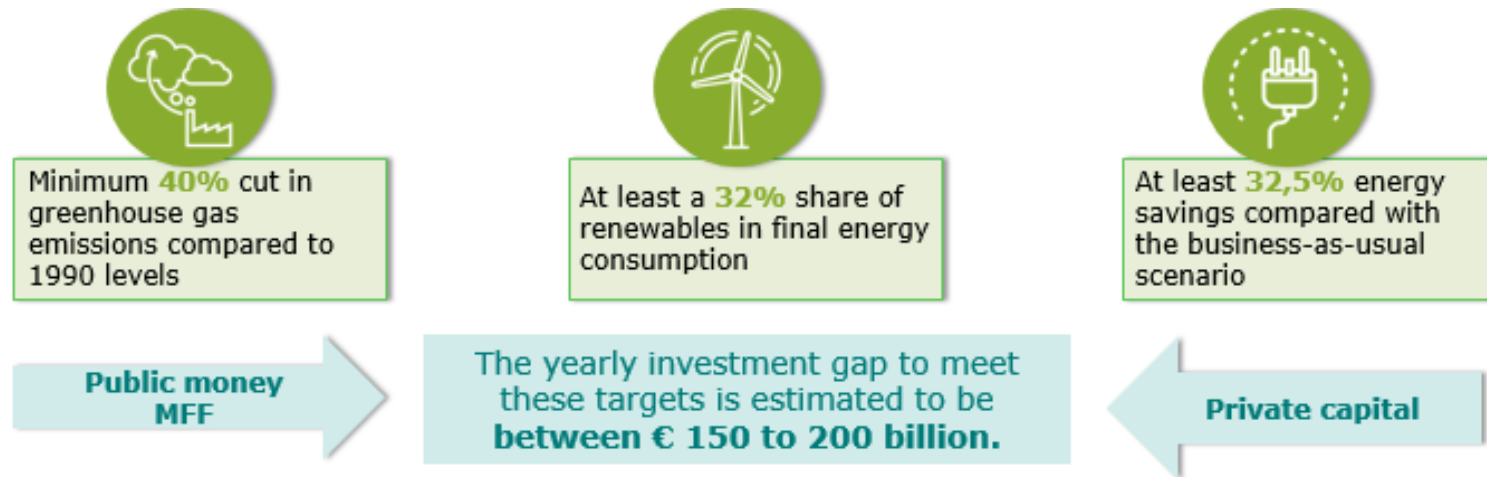
1. Climate neutral Europe by 2050
2. Circular economy
3. **Building Renovation**
4. Zero-pollution
5. Ecosystems & biodiversity
6. Farm to fork strategy
7. Transport
8. Money
9. R&D and innovation
10. External relations

Renovation wave initiative for the building sector:

- **Strategic Commission Communication**
 - Factual stocktaking and gap analysis per Member State
 - Analysis of main barriers to building renovation and of market-pull factors (financing, incentives, regulatory approaches, split-incentives, lack of information, skills)
 - Focus on social housing, schools, hospitals
- **Open platform on building renovation**
- **Media Campaign**

Clean Energy for All Europeans

The right framework for 2030 and 2050

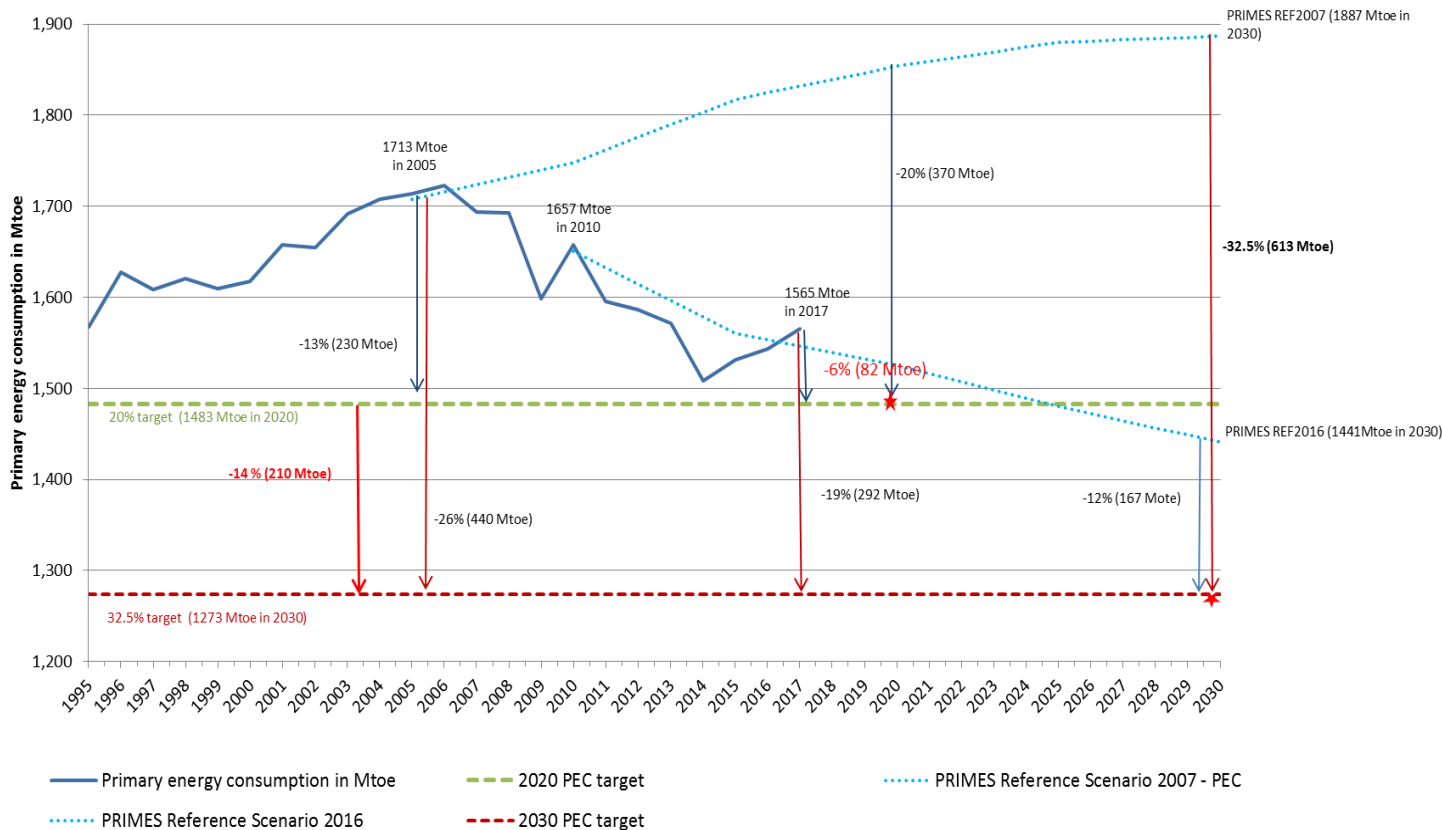


Public support alone will not be sufficient to meet those investment needs. The private sector will have to play a huge role and a smart policy framework is needed to incentivize private investment.



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The energy efficiency challenge for 2020 and beyond



Energy consumption is **rising since 2014**, following an extended period of declining or flat consumption.

The distance to the **EU 2020 energy efficiency target** has been increasing.

Some facts for the EU building sector

- Buildings responsible for 40% of energy consumption and 36% of GHG emissions in EU
- Buildings to contribute significantly to GHG emission reductions of around 90% compared to 1990 by 2050
- 75% of the housing stock is energy inefficient

in terms of floor area public buildings are estimated to represent around 12% of the EU building stock

Construction rates / worse economic conditions

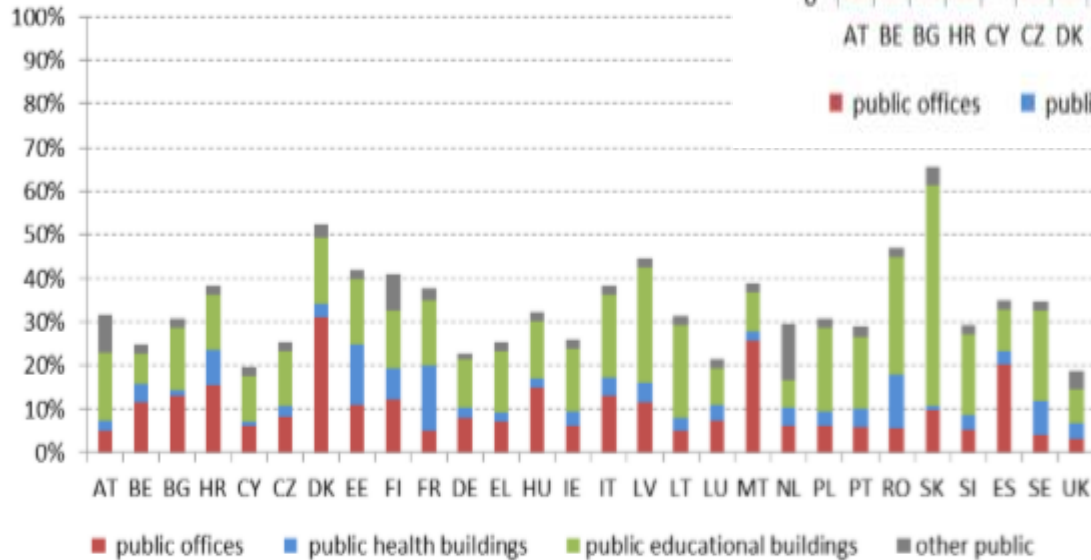
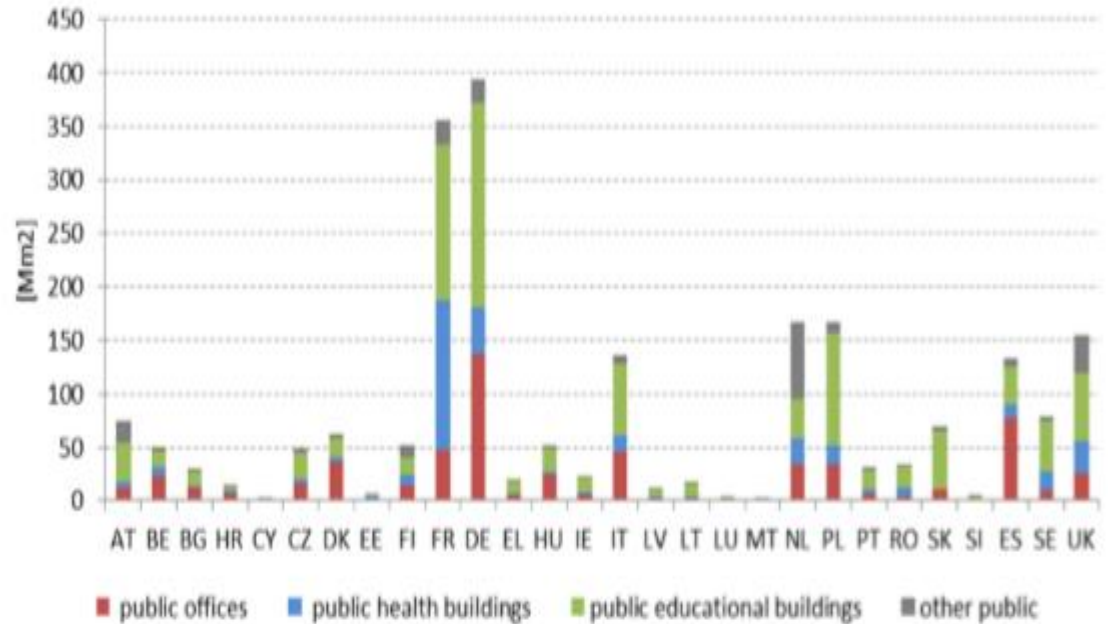
- ✓ low demolition rates (0.1-0.2% per year)
- ✓ limited new construction activities (0.4-1.1% per year)
- ✓ very low refurbishment rates (0.4-1.2% per year)

Problems and drivers

- ✓ structural
- ✓ market failures
- ✓ regulatory failures

Floor area of public buildings (per type) in the EU Member States

Source: JRC



Share of public floor area (per building type) on the total floor area of non-residential buildings

Source: JRC

Energy Performance of Buildings

Rapid implementation of the revised Directive to boost energy performance

- Reinforced obligations on building renovation, linked to NECPs: speeding up current low rates, mobilising investments at higher scale, facilitate access to financial mechanisms, targeting worst-performing buildings
- Modernisation: smart technologies, e-charging infrastructure, reinforcement of building automation, Smart Readiness Indicator

Consolidating the basic EU framework

- Assess the 2nd cost-optimal reports for setting up minimum requirements
- Monitor and further promote NZEB uptake
- Reinforcing the quality of Energy Performance Certificates
- Better data for buildings
- Wider benefits of energy efficiency
- Share good practices of successful financial schemes

SYNERGIES

Engaging citizens

Finance focus

Sustainability of the built environment

Alleviation energy poverty

Circular economy

Cities action

Industrialisation and Digitalisation

Competitiveness

Skills

EPBD – main outcomes of the revised Directive

- ✔ **Supportive of building renovation by linking policy and financing**
- ✔ ***Smart* by ensuring the use of ICT and modern technologies**

Transposition deadline: 10 March 2020

- **Stronger long term renovation strategies** for Member States, aiming at decarbonisation by 2050 and with a solid financial component.
- Requirements for the deployment of **e-mobility infrastructure** in certain buildings' car parks.
- A **smart readiness indicator (SRI)** for buildings
- **Reinforcement of building automation:** additional requirements on room temperature level controls, building automation and controls and enhanced consideration of typical operating conditions.
- **Enhanced transparency** of national building energy performance calculation methodologies.

Commission Recommendation:
➤ Buildings Renovation
➤ Buildings Modernisation

Long-term renovation strategies (Article 2a)

Requirement for Member States to establish comprehensive strategies aiming at a highly efficient and **decarbonised building stock by 2050** and at a cost-effective transformation of existing buildings into **nearly zero-energy buildings**

- More elements to be considered: **energy poverty**, market failures and barriers, split incentives, necessary skills, health and safety issues, wider benefits
- **Policies and actions to target all public buildings**
- Set up a **roadmap** with measures, **measurable** progress indicators and indicative milestones for **2030, 2040** and **2050**

Carry out a **public consultation**

Part of the **Nationals Energy and Climate Plans**

Enabling condition for structural funds

Facilitate mechanisms for the mobilisation of investments (Article 2a)

- the **aggregation of projects**, including by investment platforms or groups, and by consortia of small and medium-sized enterprises, to enable investor access as well as packaged solutions for potential clients;
- the **reduction of the perceived risk** of energy efficiency operations for investors and the private sector;
- the **use of public funding** to leverage additional private-sector investment or address specific market failures;
- **guiding investments into an energy efficient public building stock, in line with Eurostat guidance;**
- accessible and transparent advisory tools, such as **one-stop-shops** for consumers and energy advisory services, on relevant energy efficiency renovations and financing instruments

The "Smart Finance for Smart building" Initiative

Smart Finance for Smart Building Initiative aims at unlocking investments and private financing through:

✓ **Effective use of public funding**

- Making more use of financial instruments(to achieve higher leverage)
- Facilitate the use of Energy Performance Contracting for the public sector
- Flexible financing platforms at national level, mixing different strands of public financing (i.e. ESIF, EFSI)
- Sustainable Energy Investment Forums

✓ **Technical Assistance and Aggregation of projects**

- Encourage local/regional one-stop-shops
- ELENA - Technical assistance to develop large-scale projects
- Project Development Assistance (bankable projects)

✓ **De-risking**

- The De-risking Energy Efficiency Platform (DEEP) <http://deep.eefig.eu>
- EEFIG Underwriting toolkit <http://valueandrisk.eefig.eu>

Pilot phase in 5 EU Markets: MT, FR, ES, NL and PT (and preliminary discussions in PL and IE)

Long-term renovations strategies must be submitted as part of the National Energy and Climate Plans

Assessment of the draft National Energy and Climate Plans

- The potential of efficiency measures that would achieve cost-efficient emission reductions, while reducing energy bills for households and increasing employment in the construction sector **could be exploited more rapidly in some Member States**
- The **long-term building renovation strategy will provide a comprehensive picture** of the planned actions to renovate the national stock of buildings in view of the cost-effective transformation of existing buildings into nearly zero-energy buildings



The exemplary role of the public sector, EPBD

The public sector in each Member State **should lead** the way in the field of energy performance of buildings, and therefore the national plans should set more **ambitious targets for the buildings occupied by public authorities**

- Public authorities should **lead by example** and should endeavour to implement the recommendations included in the energy performance certificate
- Member States should include within their national plans measures to support public authorities to become **early adopters** of energy efficiency improvements
- Measures should include encouraging energy efficient mortgages for certified energy efficient building renovations, **promoting investments for public authorities in an energy efficient building stock**, for example **by public-private partnerships or optional energy performance contracts**, reducing the perceived risk of the investments, ...

- After 31 December 2018, new buildings occupied and owned by public authorities are **nearly zero-energy buildings**
- Buildings where a total useful floor area over 250 m² is occupied by a public authority and frequently visited by the public must issue an **Energy Performance Certificate and display it** in a prominent place clearly visible to the public
- Member States shall encourage public authorities to take into account the **leading role which they should play in the field of energy performance of buildings**, by implementing the recommendations included in the **energy performance certificate** issued for buildings owned by them within its validity period

The exemplary role of the public sector, EED

Buildings owned by public bodies **account for a considerable share** of the building stock and **have high visibility in public life**. It is therefore appropriate to set an **annual rate of renovation of buildings owned and occupied by central government**

- Available Union **financial instruments and innovative financing mechanisms** should be used to give practical effect to the objective of improving the energy performance of public bodies' buildings
- **support the public sector in taking up energy service offers (for renovations)** by providing model contracts for energy performance contracting and information on best practices

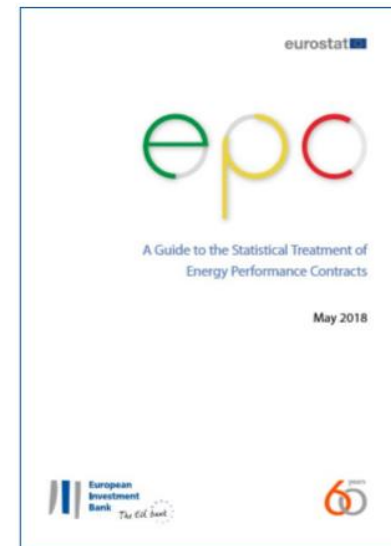
EU countries making energy efficient renovations to at least 3% per year of buildings owned and occupied by central governments

- Member States shall establish and make publicly available an inventory of heated and/or cooled central government buildings with a total useful floor area over 250 m²
- primary energy savings of 6.4 Mtoe between 2014 to 2020
- require an additional energy –related investment of 1.56 bn € per year

Energy Performance Contracting

Eurostat Guidance note from 2017

- Opened the way for 'off-balance sheet' EPC
- Translates general rules into concrete provisions
- Covers typical contract provisions and structures
- Guide is official Eurostat guidance and the reference point for Eurostat advice and decision on EPCs



Making Energy Performance Contracting more accessible for the public sector and the local level

- Increasing trust- among public authorities, and in the market
- Upscaling standardisation and replication of energy performance contracts to boost the ESCO market
- Improving awareness of municipalities, cities, regional authorities, banks, financial institutions
- Enhance project development capacity of project promoters
- Improve the procurement process
- Provide access to finance for EPC providers

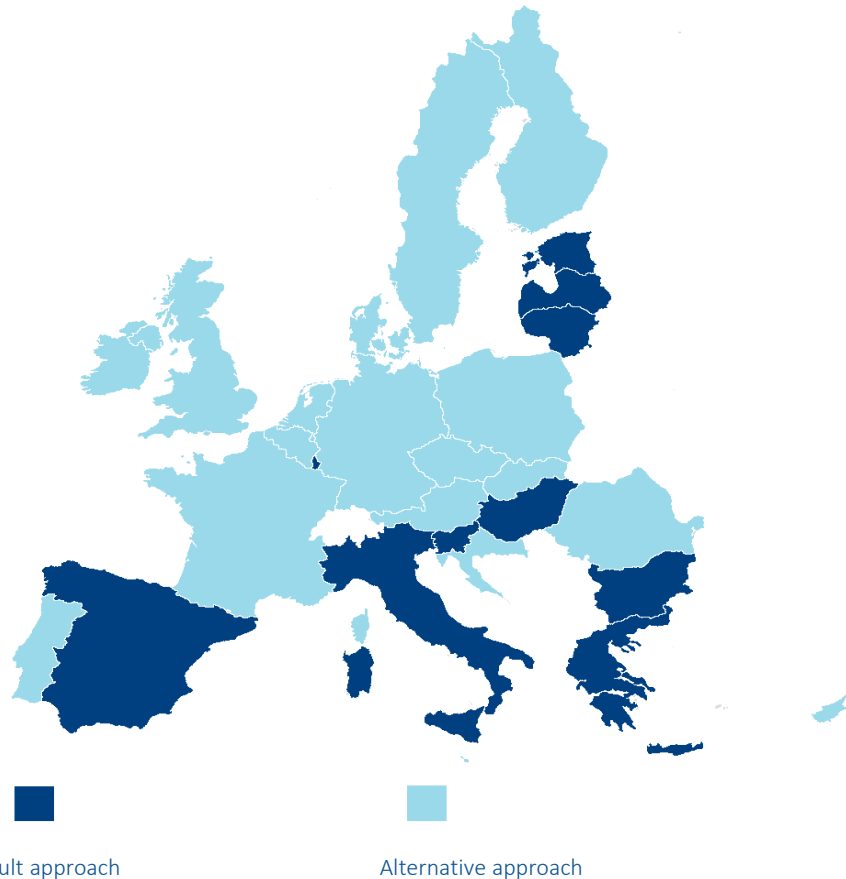


JRC SCIENCE FOR POLICY REPORT

Practices and opportunities for
Energy Performance
Contracting in the public
sector in EU Member States

Boca-Kiss, Berngha
Zanigheri, Paolo
Bertoldi, Paolo
Economidou, Marina
2017





Concerted Action EED

Contribution of the public sector to the EED goals - achievements and perspectives

Some general comments / implementation findings

- more systematic effort is needed
- implementation has remained a challenge and some countries are having difficulties to meet the 3% target
- synergies with long-term renovation strategies should be explored
- in most countries, funding energy efficiency in public sector buildings would benefit from better financial planning and effectiveness evaluation

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 agreement reached on 19 March 2019



ENERGY UNION



Thank you!

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H2020 funding for energy efficient buildings in 2020

Topic identifier	Topic title	Type of action
B4E-1-2020	Towards highly energy efficient and decarbonised buildings	CSA
B4E-5-2020	Integrated design concepts for energy-efficient ICT in buildings	IA
B4E-6-2020	Big data for buildings	IA
B4E-7-2020	European building stock data 4.0	CSA
B4E-8-2020	Renewable and energy efficient solutions for heating and/or cooling, and DHW production in multi-apartment residential buildings	IA
B4E-9-2020	Support to the coordination of European smart buildings innovation community	CSA
B4E-10-2020	Self-assessment and self-optimisation of buildings and appliances for a better energy performance	IA

H2020 funding for energy efficient buildings in 2020

Topic identifier	Topic title	Type of action
B4E-2-2020	Stimulating demand for sustainable energy skills in the building sector	CSA
B4E-3-2020	Upgrading smartness of existing buildings through innovations for legacy equipment	IA
B4E-4-2020	Next-generation of Energy Performance Assessment and Certification	CSA
B4E-14-2020	Enabling next-generation of smart energy services valorising energy efficiency and flexibility at demand-side	CSA

2nd Deadline: **10 September 2020**
(EeB PPP topics are in Bold)

H2020 funding for energy efficient buildings in 2020

Topic identifier	Topic title	Type of action
SCC-1	Smart Cities and Communities	IA
LC-SC3-SA-1	Smart Airports	IA
LC-EEB-04-2020	Industrialisation of building envelope kits for the renovation market	IA
LC-EEB-07-2020	Smart Operation of Proactive Residential Buildings	IA
LC-EEB-08-2020	Digital Building Twins	RIA

Deadlines vary – check in Work Programme
(EeB PPP topics are in Bold)

Future EU budget proposals 2021-27

Direct support

- European Structural and Investments Funds (ERDF/CF)
- Connecting Europe Facility (CEF)

Capacity building and policy support

- LIFE- Clean Energy Transition (LIFE)

R&I and technology development

- Horizon Europe (HE)

Mobilising private investments by reducing the risk:

- InvestEU – Sustainable Infrastructure (InvestEU)



Clean Energy for EU Islands Initiative



New 2020 funding for islands (in blue)

		Instrument	TRL	EU funding per project (in M €)	Budget in 2020
EC-3	Consumer Engagement & Demand Response	IA	5-8	4-6	€ 16 M
ES-5	Innovative Grid services (DSO-TSO)	IA	5-8	20-22	€ 22 M
ES-10	DC – AC/DC hybrid grid	IA	5-8	7	€ 14 M
ES-3	Integrated local energy systems	IA	5-8	5-6	€ 15 M
ES-12	Integrated local energy systems: International Cooperation with India	IA	5-8	5-6	€ 9 M
ES-4	Decarbonising energy system of islands	IA	5-8	5-7	€ 40 M
ES-11	Rapid Relief	IA	6-8	2-3	€ 4 M
ES+EC3 total budget 2020					€ 120 M