Putting Building Renovation Strategies Into Action

EBRD (REEP Plus) – Energy Community Secretariat Workshop

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Energy Community

European Bank
for Reconstruction and Development

ECA

Agenda

1. **Why** develop guidelines on implementing Building Renovation Strategies (BRSs)?
2. **What** are some of the key considerations and options for moving from strategy development to (effective) implementation?
3. Roundtable **discussion** to share thoughts, experiences, learnings and best practices
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   - Claudia Monteiro (ADENE, Portugal)
   - Kevin O'Rourke (Sustainable Energy Expert, ECA associate / REEP Plus)

1 Why develop guidelines on implementing BRSs?

The obligation: the Contracting Parties were required to submit their BRSs under the revised EPBD prescription by 10 March 2023

Article 2a (EPBD 2010/31/EU, as amended by decision 2021/14/MC of the Ministerial Council of the EnC)

- The BRS must support the **renovation of all building types** so that they are highly energy efficient and decarbonised by 2050
- **Strengthened provisions** for the scope of the plans, for example, regarding consideration of trigger points, the targeting of all public and worst performing buildings, the alleviation of poverty and, optionally, the use of building renovation passports
- Must contain a roadmap with measures and progress indicators, with a view to the long-term 2050 goal of **reducing greenhouse gas emissions in the EnC by 80-95%** compared to 1990
  - With indicative milestones for 2030 / 2040 / 2050

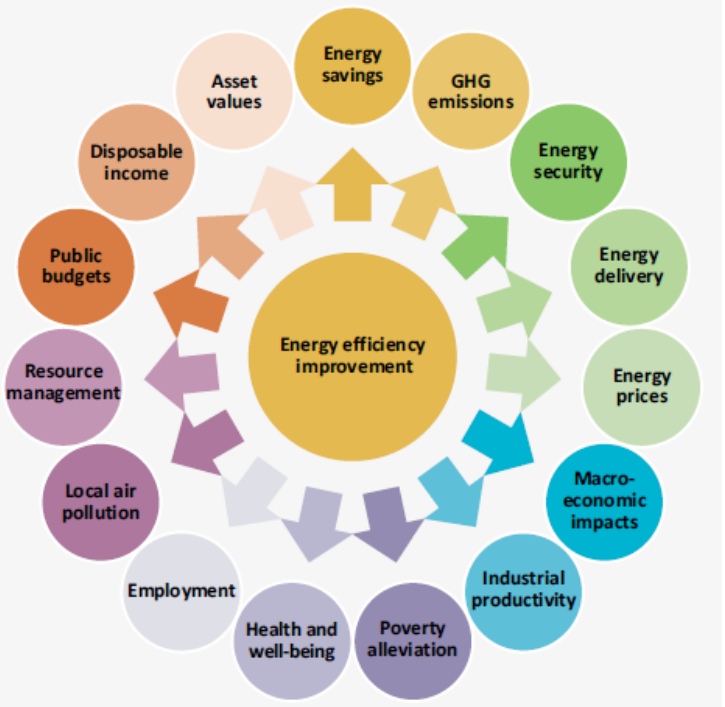
- There is **no known precedent** for a strategy in the built environment of the **scope and ambition** required by EPBD Article 2a
- With BRSs being finalised, **attention must shift to implementation**
- A strategy alone is not sufficient – meeting the strategy's goals depends on **effective execution**

Without strategy, execution is aimless.
Without execution, strategy is useless.
Morris Chang, Founder & Chairman
Taiwan Semiconductor
Manufacturing Company

The rationale: if energy and emissions in the built environment are not radically reduced, decarbonisation goals will not be met…

- In the EU context
  - **85-95%** of buildings that exist today will still be **standing in 2050**
  - Buildings are responsible for about **40% of total energy consumption**, and for 36% of its greenhouse gas emissions from energy
  - To achieve the 55% emission reduction target, by 2030 the EU should **reduce buildings' greenhouse gas emissions by 60%**, their final energy consumption by 14% and energy consumption for heating and cooling by 18% (compared to 2015 levels)
- But, at the same time, the current energy renovation rate is estimated at only about 1% per year
- Hence, the need for a **Renovation** ~~Wave~~ **Revolution** that requires both the pace (~3% per year) and depth (>60% energy savings) of renovation to increase at an unprecedented rate and level

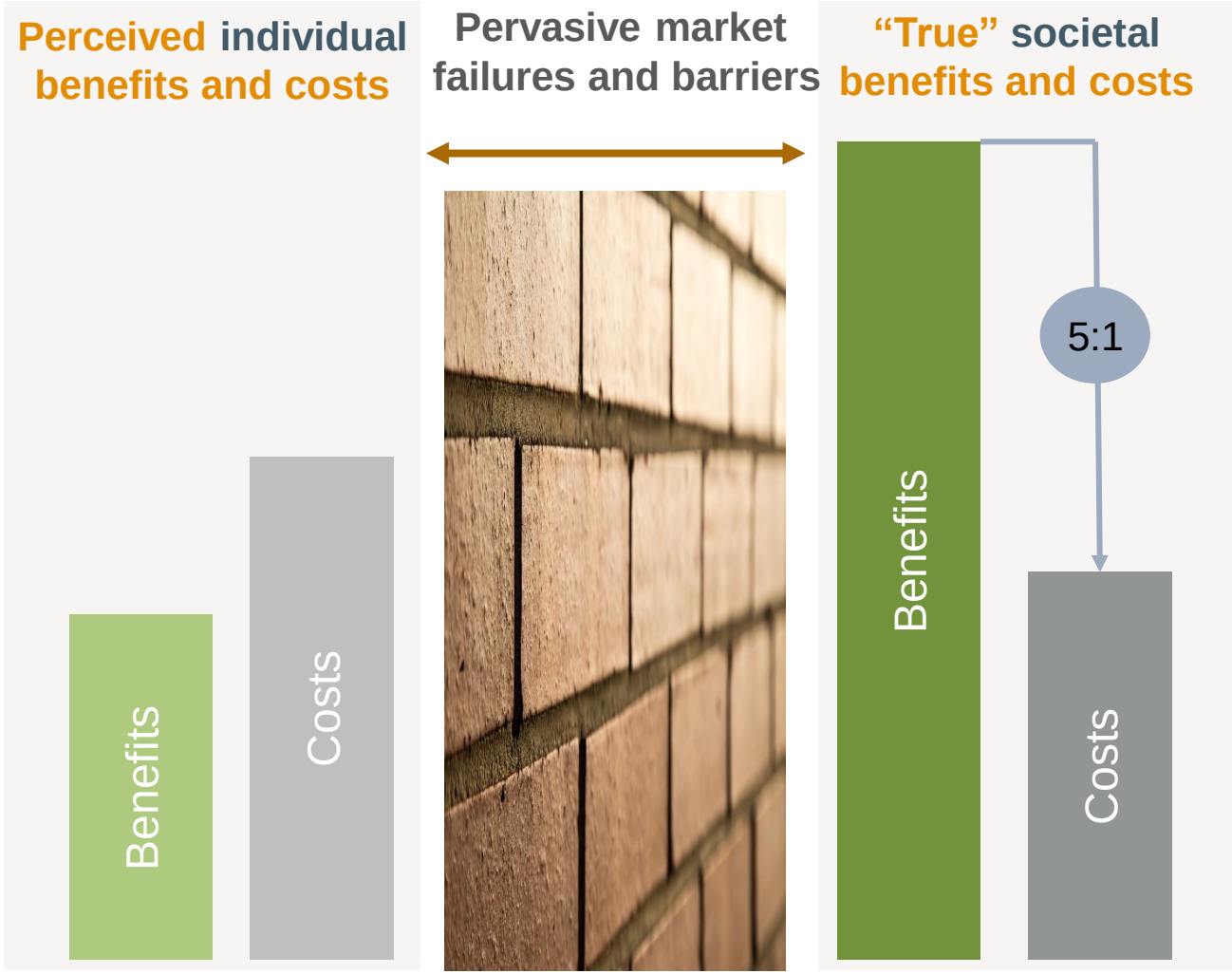
…and widespread economic, environmental and societal benefits will be foregone



Source: International Energy Agency (2014), Capturing the Multiple Benefits of Energy Efficiency

The need: there is a large gap between perceived individual and holistic societal benefits that must be plugged by policy/regulation

- The decision to renovate is always an individual one, but various **market failures and barriers distort the cost-benefit calculus**, for example
  - Split incentives (landlords *vs* tenants)
  - Insufficient information
  - High transaction costs
- Many of these barriers apply throughout the renovation value chain and therefore require **a coordinated set of remedies** to address and overcome them
- The CPs probably confront additional challenges compared to EU Member States, eg
  - Higher incidence of **unauthorised / illegally built dwellings**
  - Relatively **lower GDP per capita** and greater prevalence of low-income households

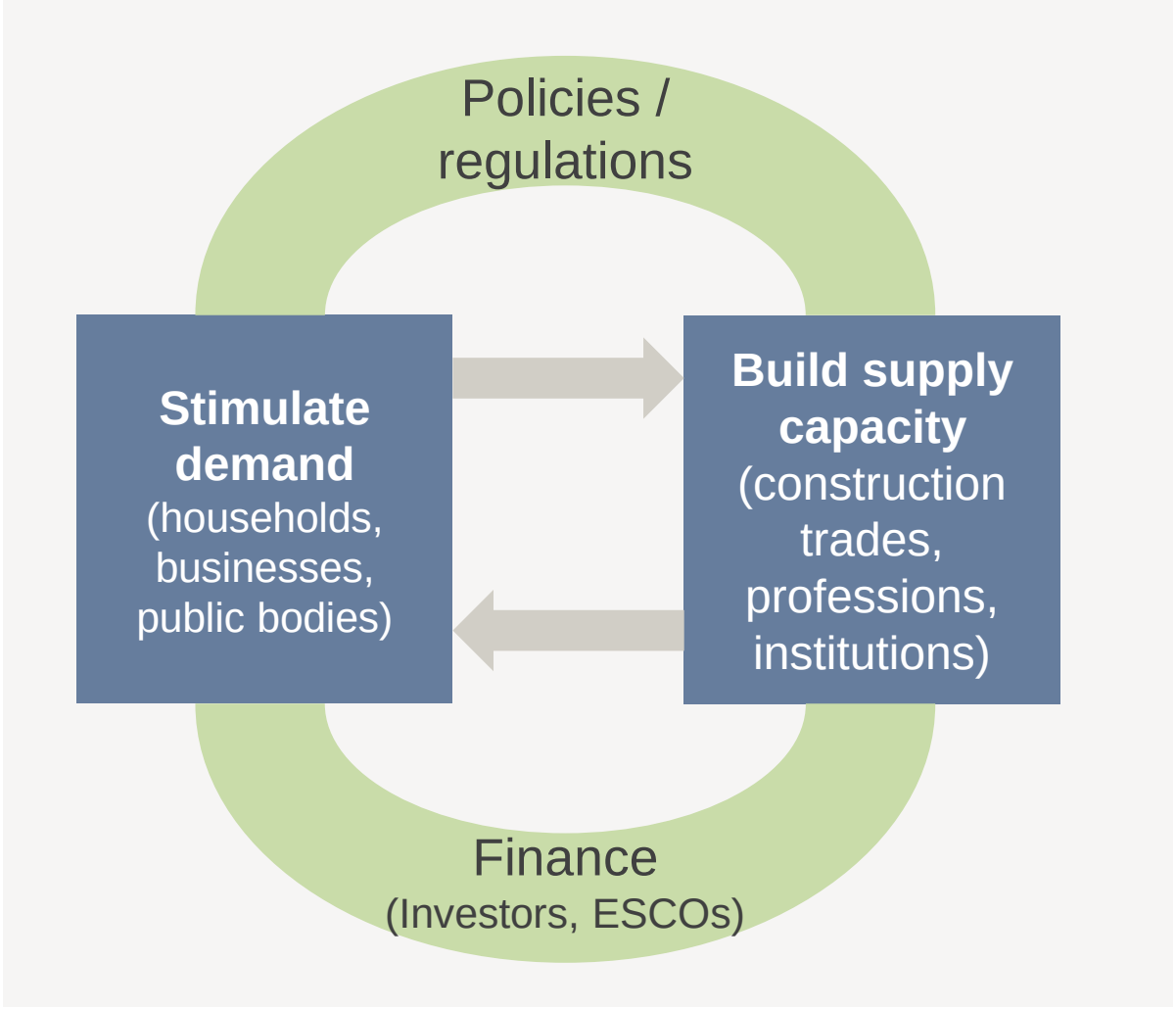


The purpose of the Guidelines: provide practical assistance to the CPs to support them in effectively implementing their BRSs

1. Description of the **scale of the opportunity** and the role of building energy use
2. A summary of the **legislative and policy backdrop** to building renovation in the EU and the EnC
3. Description of the **key elements** of renovation strategies
4. A presentation and discussion of the **main barriers** to effective implementation
5. **Policy levers and measures** and other enabling mechanisms for addressing and overcoming the barriers and therefore delivering faster and deeper renovation, drawing on practical and best practice experience from EU Member States
6. How best to **prioritise** building renovations and how to target the **worst performing buildings**
7. The **most suitable financial and investment mechanisms** for delivering building renovations, emphasising those mechanisms that are most suited to key building sub-sectors
8. Fostering and scaling up the role of **key stakeholders** at various stages of the renovation value chain, including central, regional, and local authorities, and the private sector
9. Measures for addressing **focus areas**, such as tackling energy **poverty** and renovating **public buildings**
10. Identification and description of the **key implementation decisions**
11. **Case studies** of success stories
12. Identification of **additional sources** of information, resources and assistance programmes

2 Key considerations and options for moving from BRS development to (effective) implementation

The fundamental challenge is to stimulate a step change in demand and match it with delivery capacity by effectively executing the BRS



BRS Implementation
(Orchestra of instruments and players to activate the market)

Establish a standing commission or taskforce to oversee BRS delivery

BRS implementation should focus on six key tasks, which seek to ensure speedy, inclusive & proactive delivery and refinement (1/2)

1 Devise action plans

- Segment the BRS into a series of **individual action plans** with **targets** and **timelines**
- Allocate **budgets** and **responsibilities**
- Focus on different **market segments** and their particular needs (ideally using harmonised template)
- Involve **regional and local authorities** to tailor measures to local challenges and circumstances
- Detail how **financing needs** will be met (at least until 2030)

2 Engage stakeholders

- Stakeholder **engagement throughout** the implementation phase is critical for cooperation and effective delivery
- Seek **inclusiveness**, explore whether associations or representative groups have been identified, and consider establishing **sub-working groups**
- Ensure **roles and responsibilities** are understood (enablers, deliverers, influencers, etc)
- Promote **collaboration** and **consensus** building
- Coordinate with **other policy dimensions** (eg Covenant of Mayors)

1. Public sector and regulatory authorities
2. Building industry and professional service bodies and providers
3. Financial institutions
4. Energy service utilities (including ESCOs)
5. Consumers / citizens

Case study: Denmark

- **Six working groups** created to formulate initiatives - single family houses, flats, public buildings, businesses, financing and economic security, and innovation and green business
- An **inter-ministerial task force** was established to coordinate efforts and discuss cross-cutting initiatives and issues
- Stakeholders agreed to participate **without any financial compensation**

BRS implementation should focus on six key tasks, which seek to ensure speedy, inclusive & proactive delivery and refinement (2/2)

3 Sell the case

- **Publish** the BRS
- Promote the benefits of renovating buildings to stakeholders, including the wider public, **to raise awareness and garner support** for the strategy
- Showcase the **wider environmental and societal benefits** of renovation (improved quality of life)
- **Develop targeted messaging and campaigns for the different stakeholder groups** and their respective interests and needs

4 Close data gaps

- There are likely to be **significant data gaps** still in the CPs and their associated BRSs
- Use the implementation phase to **resolve data gaps**
- These data gaps are likely to relate to **the building typologies** and their energy and technical characteristics, but also the cost of EE interventions, and the **wider** environmental and social **benefits**
- Should also collect data (including through **research**) needed for planning and prioritising **future renovation opportunities** and activities

5 Create momentum

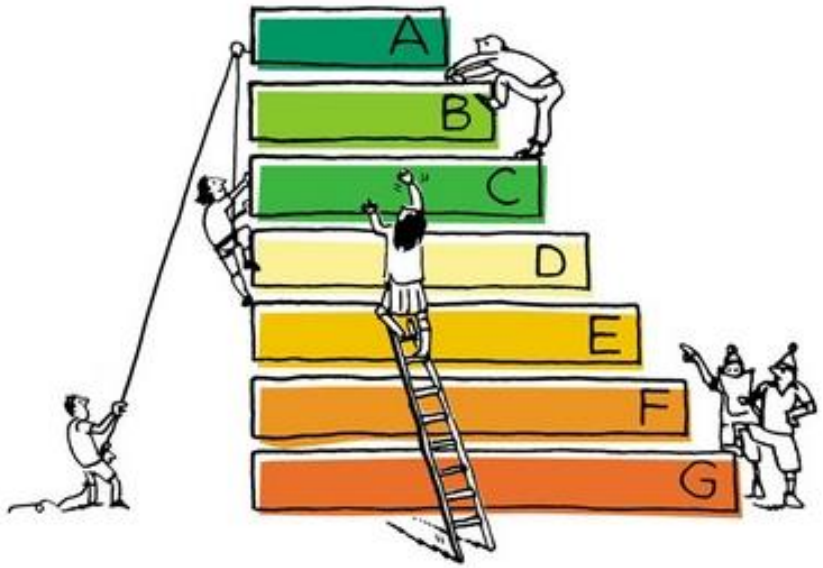
- Seek **early wins** to create confidence and offer examples that can be replicated (eg cost-effective solutions, where there are fewer political constraints)
- Undertake specific actions for **publicly managed buildings**, thereby demonstrating **leadership** in renovating the public building stock, in **procurement** and in other visible initiatives (note EED Art 5 obligation for 3% annual renovation rate)
- Start immediately with **priority actions** centred on key barriers (see below)

6 Monitor and review

- There must be **periodic monitoring** and review of the effectiveness of the BRS as it is applied **in each market segment**, and adjusted as necessary
- The intention is a sustained **long-term evolution** and delivery of the strategy
- Consider establishing an **independent committee** to monitor and report progress
- Examine the development of standardised and **streamlined indicators** (potentially with all CPs and EU MSs eg EU Buildings Climate Tracker developed by BPIE)

A key immediate focus for CPs should be tackling the barriers to achieving early phase renovation delivery on a pathway to scale

1. **Legislative and regulatory barriers**
   - Lack of enabling legislative framework, complex laws and administrative procedures, overlapping and conflicting provisions
2. **Institutional barriers**
   - Eg lack of capacity among policy, administrative, and enforcement authorities
3. **Technical barriers**
   - Lack of knowledge regarding the state of the existing building stock, lack of skills to identify and implement solutions and measures
4. **Fiscal and financial barriers**
   - Lack of funds and funding instruments, high transaction costs, subsidised energy prices
5. **Informational barriers**
   - Lack of awareness of the benefits of renovation, insufficient information about suppliers



Note: These can apply in some or all market segments (ie building types), on either or both the demand and / or supply side, and in isolation or together with other barriers

Priority 1: Close regulatory gaps and develop a favourable legal and regulatory framework

- Finalise **cost optimal methodology** for renovation works to inform next upgrading of building regulations
- Finalise definitions and guidance on NZEB for different building types and any other **outstanding EPBD provisions** (eg EPC procedures, National Calculation Methodologies)
- Take account of positive energy efficiency (EE) aspects in **public procurement** procedures
- 'Fast-track' **legalisation of buildings** without permits if owners implement EE measures
- Establish an effective legal framework to support the formation of **Housing Associations** and their ability to raise finance
- Develop the legal and financial infrastructure to facilitate establishment and entry of **ESCOs**
- Amend or **abolish restrictive legislative acts or operational rules** that discourage the improvement of EE in buildings
- Identify **trigger points** and develop regulations promoting energy performance improvement

The challenge of multi-apartment buildings

- Without a clear regulatory framework, EE upgrades to common spaces would be jeopardised
- This further compounds split incentive problems where apartments are rented

Key measures to address barriers

- Legal requirement to establish HoA and grant legal personality
- Governance reforms eg simple majority decision-making for EE upgrades
- Obligation to periodically contribute to common fund for maintenance, renovation and EE
- Financial support (targeted incentives, extension of credit lines, implementation of energy performance contracting)

Priority 2: Strengthen institutional capacity to ensure the efficient management and operation of the energy efficiency sector

- **Strengthen capacity of managing authorities** / ministries responsible for delivering the BRS
- Create and reinforce (as appropriate) the relevant energy agencies by **committing sufficient staff numbers** at levels of expertise appropriate to their planning, regulatory, monitoring, support and programme delivery functions, including technical assistance for training of professionals (such as EPC assessors)
- Establish and **maintain capacity of the EPC system** (ensure compliant labelling, on-line publicly accessible central register of licensed professionals/EPC assessors, QA system, etc)
- Ensure **adequate capacity (assigned staff) of municipalities** to control and enforce compliance with construction regulations, particularly minimum energy standards / NZEB and EPC legislation, and to implement penalising sanctions in cases of non-compliance
- Compile and publish a **public sector buildings inventory** of energy performance, covering central and municipal government buildings, thus complying with the inventory requirement of EED Article 5
- Establish **knowledge and experience sharing networks** across CPs (and with EU MSs)

Priority 3: Ensure sufficient capacity building and development for construction industry professionals, workforce and suppliers

- Deliver exemplar **pilot / demonstration projects** with accessible learnings for transmission to the construction industry in general
- Deliver **training programmes**, including ‘Train the Trainers’, ongoing training of professionals and practical training of the construction workforce
- **Register adequate numbers of qualified professionals** to provide a basis for market confidence in engaging energy service providers
- Provide a **coherent suite of tools** (eg manuals, software) and online systems (eg databases of registered products and installers)
- Support **research, development and demonstration** (RD&D) measures to accelerate the deployment of new or improved construction technologies, techniques, materials, and components for renovation of buildings

Priority 4: Review the options for upscaled and innovative financial mechanisms for funding energy efficiency schemes

- Engage in a coordinated way with **donor bodies** to target the most promising ‘early wins’ in the public sector, social housing and energy poor households
- Adopt **M&V protocols** to help establish investor confidence
- Establish official **model Energy Performance Contracts** to assist ESCO uptake
- Review **international case studies on financing mechanisms** regarding their relevance and applicability to CPs
- Assess the scope for **innovative finance delivery mechanisms**, eg the possibility of channelling donor funds to consumers through means other than the banks (eg Housing Associations)
- Allow **central budget finance**, eg grant schemes, to be made available on a multiannual programme basis
- Develop **funding vehicles, tailored to specific market segments**, with streamlined procedures (“one-stop shop”)
- Remove **fossil fuel subsidies** to remove disincentive to invest in EE

World Bank: *Western Balkans: Residential Energy Efficiency Market Assessment, 2021* (Eco, ECA, Timel, Links4, ESG)

Criteria	Option 1: Public grant programmes	Option 2: Private sector mandates (including Energy Efficiency Obligation schemes)	Option 3: EE Fund to provide direct loans	Option 4: Commercial financing (loans and credit enhancement tools)	Option 5: Public-private partnership through ESCOs and Super ESCOs / aggregators	Option 6: Enhancing green mortgages	Option 7: On-bill financing	Option 8: Property Assessed Clean Energy (PACE) loans
Scalability	🔴	🟢	🟡	🟢	🟢	🟡	🟡	🟡
Leverage	🟡	🟢	🟡	🟢	🟢	🟢	🟢	🟡
Readiness	🟢	🟡	🟡	🟡	🔴	🟡	🟡	🔴
Sustainability	🟡	🟢	🟢	🟡	🟡	🟢	🟢	🟢

Priority 5: Maintain an ongoing campaign directed at building awareness and confidence among all market sectors and players

- Deliver **regular promotional campaigns** to the different market segments, coordinated with the applicable financial instruments on offer
- Seek to develop and **pilot the concept of a 'one stop shop' service** to building owners, championed by a municipal authority under the aegis of the relevant managing authority / Ministry
- Establish good **communication channels for the exchange of knowledge and experience between different levels of administration** (national, regional, county, local)
- Establish a **web portal as a comprehensive focal point** for energy efficiency in buildings, hosting or linking to all key registers and databases
- Establish **publicly accessible (online) databases with case examples of good practice** and all necessary data for launching and implementing energy renovation projects

3

Roundtable discussion

We have set out some suggested questions to help structure the discussion with our roundtable experts & workshop participants

1. Does the framework set out above form a **reasonable basis for focusing BRS implementation actions** in the CPs? Why or why not?
2. Are there **important elements** of early BRS implementation **that have not been covered**? If so, what are they?
3. Based on EU (and, if relevant, EnC) experience to date, what would you say are the **three to five most important success factors** for effective delivery of a BRS?
4. Correspondingly, what do you believe are **the most significant barriers that need to be overcome** to ensure both a greater pace and depth of building renovation?
5. Successfully delivering on BRSs will require enormous **political will and persistence** (among other factors). **How can this be secured** given political short-termism?
6. Do you think there is value in establishing (or leveraging existing) **multinational associations** or committees (at EnC and/or EnC + EU level) to aid BRS implementation? If so, what should these focus on (eg financing mechanisms, harmonised reporting templates, etc)?

Thank you for your attention and participation!

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