



# Roadmap for future actions regarding the energy performance of existing buildings



Result of the EIE SAVE ENPER-EXIST project

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# Roadmap for future actions regarding the energy performance of existing buildings

## ❖ Objectives :

- An overview of **possible legal measures** for a better energy efficiency in existing buildings
- **Indications of alternative strategies** to improve on a wide scale the energy efficiency of existing buildings
- **Possibilities to widen the scope of the EPBD** in case of a future revision of the requirements of the EPBD





# Content of the roadmap

- ❖ The roadmap report includes
  - List of supporting measures to improve the energy efficiency of buildings
  - Description of the current national situation regarding existing supporting measures
  - Long term national vision / action plans regarding energy efficiency of existing buildings in European countries
    - Available for B, D, FR, G, GR, NL, UK
  - Specific analysis of difficult market segment
- ❖ Toolbox



# Realising substantial energy savings in buildings

- ❖ It is necessary to elaborate supporting measures in the existing building stock
- ❖ The supporting measures aims to
  - overcome barriers
  - create incentives
- ❖ Identify the measures require to consider:
  1. The building type
  2. The type of works / transaction realised
  3. The concerned actors and their motivations
  4. → Identify the efficient supporting measures



# Building type according to the EPBD

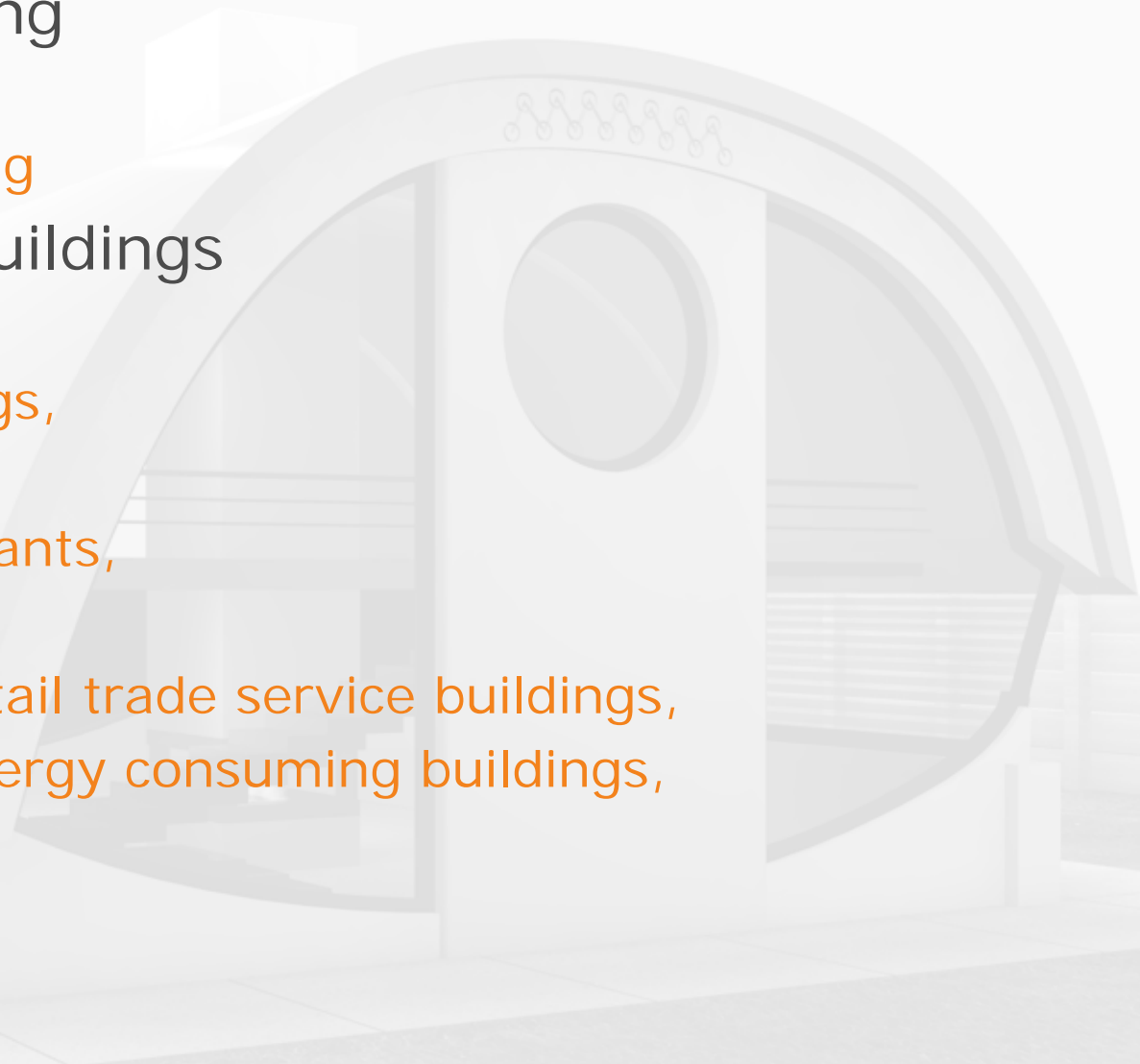
## ❖ Residential building

- Single family
- Apartment building

## ❖ Non residential buildings

- Office buildings,
- Education buildings,
- Hospitals,
- Hotel and restaurants,
- Sport facilities,
- Wholesale and retail trade service buildings,
- Other types of energy consuming buildings,

## ❖ Public buildings





# Realising substantial energy savings in buildings

- ❖ It is necessary to elaborate supporting measures in the existing building stock
- ❖ The supporting measures aims to
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  - create incentives
- ❖ Identify the most efficient measures require to consider:
  1. The building type
  2. The type of works / transaction realised
  3. The concerned actors and their motivations
  4. → Identify the efficient supporting measures



# The type of work – transaction realised

- ❖ New construction
- ❖ Existing building
  - In case of sales
  - In case of rent
  - In case of renovation
    - Major renovation
    - Light renovation
  - No specific action (all the other cases)
    - Occupied by building owner
    - Occupied by tenants

Specific moment



# Realising substantial energy savings in buildings

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# The actors

- ❖ Inventory of directly or indirectly concerned actors about energy savings in buildings
  - Owner(s) of the building (or from the considered part of the building)
  - Association of owners and his representative,
  - Tenant(s) of the building (or from the considered part of the building)
  - Association of tenants and his representative,
  - Property/facility manager,
  - Maintenance services / operation manager,
  - Local craftsmen
  - Energy labelling secretary,
  - National authorities,
  - Local authorities,
  - Financial institutions,
  - Insurance companies,
  - Information source (consumer organization, press, ...)



# Motivations of the actors

## ❖ Identified barriers

- Lack of interest, lack of awareness of the advantages,
  - Lack of transparency in the energy quality of the buildings,
- Lack of knowledge / technical competence of the decision-maker,
- Lack of technical solution
- Lack of action
  - Too much work / too complicate,
- Financial issues
  - No (or too limited) direct financial advantage for the considered actor (e.g. energy bill not paid by the considered decision-maker, not possible to increase the asked rent of the considered building),
  - No (or too limited) indirect financial advantage for the considered actor (e.g. increase of the building value)
  - No budget to realize the works,
  - Limited or no added value for the building
- Limitation related to the decision mechanism:
  - Impossibility to obtain a common agreement on an investment in case of different decision-makers – decision mechanism



# Motivations of the actors

## ❖ Identified positive motivations

- **Financial issues**
  - Reduction of the heating costs
  - Increase of the building value
  - Possibility to ask for a higher rent for the building
  - Benefit of subsidies or primes
- **Getting a better certificate for the building**
- **Obtaining a better comfort in the building**
- ...



# Realising substantial energy savings in buildings

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# Overview of possible measures

1. Legal requirements (technical)
2. Legal support measures
3. Governmental financial incentives or sanctions
4. Non-governmental activities
5. Energy market mechanisms
6. Research / demonstration projects
7. Promotional measures



# Overview of possible measures

## 2. Legal support measures

- Energy certification scheme
- Adaptation of the renting level
  - Right for the owner to charge energy investments in renting level (agreed procedure)
  - Right for the tenant to deduct energy efficiency investments in rent paid to owner (agreed procedure)
- Adaptation of the legislation concerning co-ownership
  - Reduced majority level to decide to implement measure proven to be energy efficient
  - Reduced majority level to decide to implement measure proven to be energy efficient and cost efficient
  - Requirement regarding the constitution of financial reserve in co-owned buildings
  - Rules to transfer cost savings on all co-owners or financial reserve when building retrofitting is applied (to be developed for all kind of heating system and cost ventilation)
- Creation of a legal status of the co-ownership
- Energy friendly urban regulations
- Minimum conditions for renting
- Environmental permit
- Retrofitting of public buildings



# Overview of possible measures

## 3. Governmental financial intervention (incentives or sanctions)

- **The fiscal tool**
  - Deduction for energy investments
  - Taxation stimuli of energy efficient buildings and penalties for others
- **The taxation tool**
  - Lower VAT on energy savings products
  - Energy tax
  - Transfer tax on sales
- **Subsidies for energy efficient technologies**
- **Specific guarantees for loans for energy efficient buildings**
- **Energy savings bank - lower interest rate with credit**
- **European structural funds**
- **Higher energy price paid for e- from PV or CHP**
- **Retrofitting of public building**



# In-depth analysed situations

- **Residential buildings**
  1. Social housing managed by public bodies
  2. Residential sector - Occupant staying in the building in the absence of works
  3. Residential sector – Owners with no financial possibilities
  4. Apartment buildings – the problematic of the co-ownership and decision making within apartments
  5. Rented apartment buildings – importance of the way heating expenses are shared
- **Non Residential buildings**
  6. Rented office buildings
  7. Educational buildings
  8. Public buildings





# The toolbox

## ❖ Entrance portal to the Roadmap report

### Welcome in the ENPER EXIST Roadmap toolbox !

This tool contains information relative to the measures that can stimulate energy efficiency in buildings. The existing measures in different countries as well as long-term vision are treated.

This tool contains information about the following european countries partners in the ENPER EXIST Project : Belgium, Denmark, France, Germany, Greece, The Netherlands and United Kingdom

Click the item you are interested in

- Possibilities for widening the scope of the EPBD
- [Overview of measures currently applied in a specific european country](#)
- [The long-term vision regarding energy efficiency in buildings in a specific country](#)
- [The possible measures to improve the energy efficiency of buildings](#)
- Information relative to a specific country (click the corresponding flag)


Belgium 


Denmark 

France 

Germany 

Greece 

The Netherlands 

United Kingdom 

- Information relative to specific building market (click the corresponding case)

Residential sector

[Social housing managed by public bodies](#)

[Residential sector - Occupant staying in the building in the absence of works \(mainly focusing on elderly\)](#)

[Residential sector - owners with no financial possibilities](#)

[Apartment buildings - the problematic of the co-ownership and decision making within apartments](#)

[Apartment buildings - importance of the way heating costs are charged in apartment buildings](#)

Non residential sector

[Rented office buildings](#)

[Educational buildings](#)

[About this tool](#)



# Results of the projects

- ❖ The report / the annexes and the toolbox will be available begin next year via the project website

[www.enper-exist.com](http://www.enper-exist.com)



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