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ENERGY EFFICIENCY  
DIRECTIVE

## INFO 2.6

# Expert Study group on EE and HEALTH

March 22 2023

Madrid

# Workshop agenda



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- Introduction on the goals of the ESG
- Group assignment: answering the research questions
- Presentation of first findings of the ESG
- Query of MS's desired output formats
- Call to action for participants to share their own input

# CA EED ESG on Energy Efficiency and Health



## Very first ESG in CA EED

Bottom-up approach from a few MS – 6 to 9 months

### **GOAL:**

*collecting existing research on primary and secondary health related consequences of energy poverty, and think about ways in which EE-schemes could help alleviate these issues and which actors could be involved in such approaches*

## Participants

Belgium (Flanders, coordination) – Netherlands – Ireland – Greece – Italy

**Shared interest as a basis**

# CA EED ESG on Energy Efficiency and Health



- Start ESG: February 2023 : collecting sources + defining working method
- First workshop PM EED Madrid: first findings and collection of additional info, sources, expectations on the output
- Periodic online ESG meetings
- Possibly second workshop during PM EED Brussels (Oct '23)
- End date around December 2023 – presentation of results next PM

# ESG Members



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- Energy poverty is usually defined as the inability of households to ensure their energy needs and can be caused by a combination of factors:
  - lower incomes
  - poor energy efficiency/performance of buildings
  - high energy prices.
  
- The impact of energy poverty is wider than just a lack of funding to provide in your energy needs. It also has an impact on health.

- Health problems (physical and mental) can also be both cause and consequence of poor energy efficiency and energy poverty.
  - On the one hand living with an illness or disability can limit people's income, increasing the energy poverty risk.
  - On the other hand living in energy poverty, in a poorly performing home, can cause or worsen health problems.

# Research questions ESG



- What are **health related consequences** of energy poverty and poor energy efficiency and to what extent can they be quantified?
- **How can EE-schemes help** to alleviate health issues linked to poor energy efficiency and energy poverty and which actors could be involved in such approaches?
- If energy efficiency is beneficial for people's health, how is it possible to get **the health sector** to help fund the energy efficiency in some cases?
- What are the direct **links to the** EED and other EU-directives and the possible strategies and actions in MS?
- Next to the direct benefits of increased health, what **other secondary benefits** can be reached and how MS's can use them as arguments for new approaches in the fight against energy poverty and in improving energy efficiency in housing?



# First findings



- Cold homes are linked to a wide range of health conditions, such as:
  - respiratory and cardiovascular diseases
  - mental health conditions
  - unintentional injury, caused by falls (arthritis,...)
  - dementia
  - hypothermia
  - accidents caused by unsafe alternative heating sources
- Cold, dust, viruses, mold,...

# First findings



- the ill effects from cold homes are seen when outdoor temperatures drop **to around 6° C.**
- Indoor temp < 16 degrees: respiratory problems
- Indoor temp < 12 degrees: strain on the cardiovascular system
  - Raise of blood pressure, risk of thrombosis
- Indoor temp < 6 degrees: risk of hypothermia
- Excess winter deaths are reported **up to two weeks** after a cold spell.

- Groups of people that are vulnerable to the cold:
  1. People in hard-to-heat homes
  2. People who need more warmth
    - Infants: negative effects in terms of weight gain, hospital admission rates, developmental status, learning conditions, and the severity and frequency of asthmatic symptoms.
    - Older: need a higher average temperature than adults.
    - People with disabilities that limit their possibility to move around.
  3. People with difficulties to heat their homes
    - People on low income are more likely to use less heating than required to stay warm, resulting in health problems



## BENEFITS

- Investments in upgrading houses : huge savings in energy and health system expenses, quality of life, learning conditions, ...
  - Report Public Health Wales: for every pound spend on improving warmth, there are 4 pounds in health benefits
  - Potential savings offer budget for large scale renovation programs with additional return to the public budget



## BENEFITS

- Reduction overall fuel costs (often imported) giving opportunities for new financial streams within a MS
- Additional savings in climate change mitigation, economy, employment (also vulnerable groups), up-skilling of workforce
- All directly linked to EE goals and LTRS

# First findings



- Meta-analysis (36 studies, 33.000 participants) found that EE measures lead to a small but significant improvement in health.
- Low incomes, elders and children saw greater positive outcomes.
- Improvements in well-being and lower social isolation, feeling of autonomy and social status

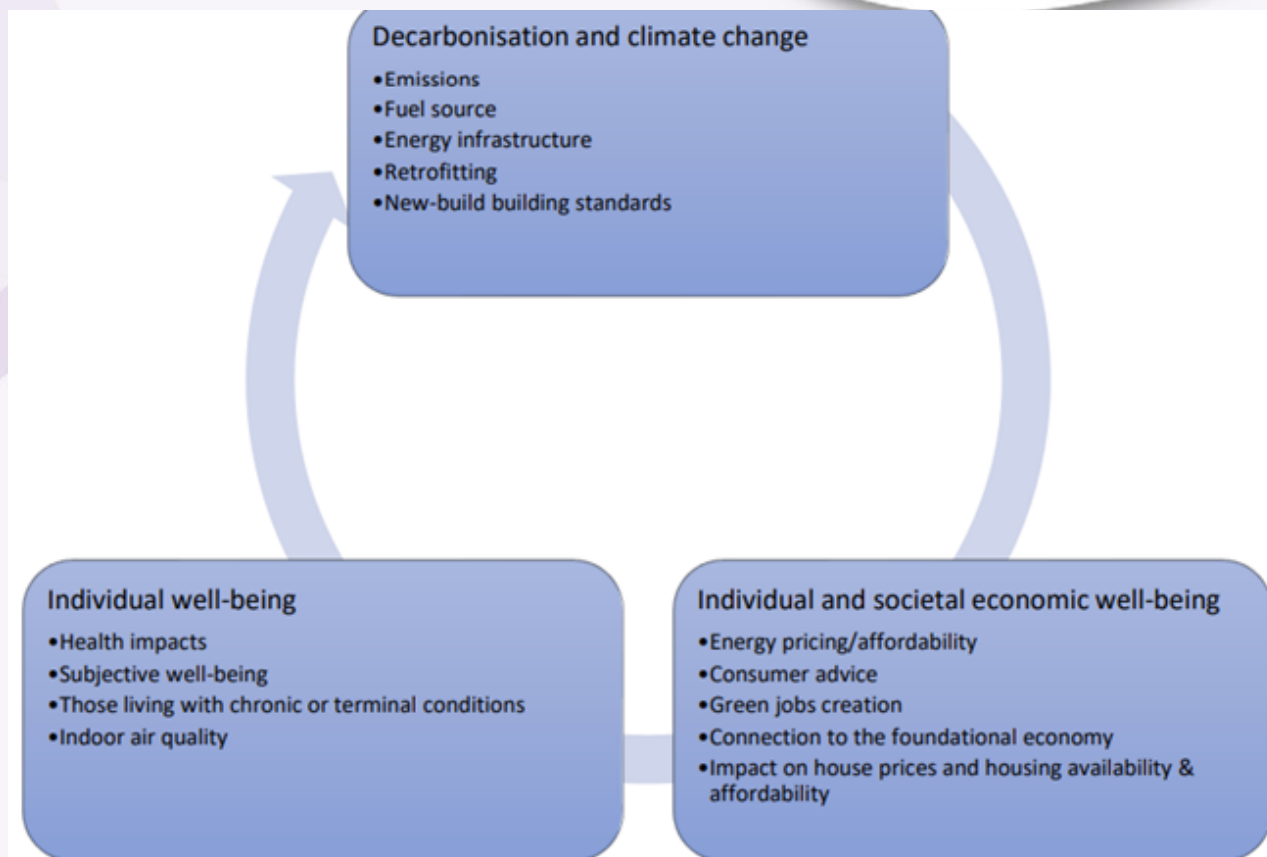


Figure 5 - Household Energy Efficiency: focus points



## Good practices

- “Under one roof” (Liverpool) Health, housing and fuel poverty services work together, toolkit, co-delivery, funding, referral (based on data sharing)
- NEST project (Wales) Advice + EE measures eg free replacement of heating for those with health conditions (respiratory, circulatory, mental) + low income



## Good practices

- Maintenance of heating systems + advice guidance on control systems to empower households
- Indoor climate meter: temperature and humidity (Flanders)





# Workshop agenda



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- Introduction on the goals of the ESG
- Group assignment: Answering the research questions
- Presentation of most important findings of the ESG so far
- Query of MS's expectations on output format
- Call to action for participants to share own input and contacts

# Possible outputs



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- Report including policy advice (< 30p)
  - Good practices
- Factsheets
- Infographic
- Explainer video
- List of sources
- Presentation (report)
- Webinar

# Call to action



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**We will contact you for further input,  
(academic) contacts, reports, ideas**

## **ESG EE & HEALTH**

Coordination: BE, Flemish Energy & Climate Agency

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