POLICY INSTRUMENTS FOR THE ENERGY EFFICIENCY SECTOR: ENABLING MECHANISMS FOR A "FIT FOR 55"

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May 12th 2023









Outline

- Goal
- Expected results
 - Persistent gaps in policy
 - Households EE renovation decisions
 - Incentives and barriers
- Past and future activities







Goal

The goal of *PIREES55* is to shed light on the enabling mechanisms needed to reach the proposed targets of the European Commission's "Fit for 55" legislative package in the energy efficiency field.









Expected results

1. Insights into **persisting gaps** in the European legislative framework on energy efficiency and subsequent guidelines for policy implementation at national level

2. Large-scale data on household energy efficiency renovation decisions

3. Insights into **incentives and barriers that support or work against household motivation** to invest in building renovation.

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LIEPP Workshop, May 12th 2023

1. Persisting gaps: the policy landscape

Initial results and next steps

- Need for better harmonisation of clean energy policies at EU level (esp. EED, EPBD, RED)
- No national targets for $EE \rightarrow$ Binding measures and stringent implementation
- Need for accompanying Member States through implementation of complex settings (esp. Energy efficiency obligations of Art. 7 & 8 EED)
- Alignment with national plans & policies → Governance Regulation is outdated and needs adaptation







Environmental Policies Workshop, December 5th 2022

2. Households EE renovation decisions: the challenges of EE in households

Important distinction to make when talking about energy efficiency in households: Types of energy efficiency measures installed







3. Incentives and barriers

Initial results and next steps

Outcome 1: Examining the Effect of National-Level Energy Efficiency Policies on Household Adoption: Barriers and Social Challenges in the UK

- 1. Scheme awareness Lack of information
- 2. Impacts on bills Ex post effectiveness
- 3. Likelihood of adoption Policy preferences



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Report on past and future activities

12/22: Pre-kick-off workshop jointly with the EIB in Brussels to gather field experts' guidance for the project.

- strong need for better European coordination of energy efficiency and clean energy policies.
- strong need to gather further data and insights on household renovation decisions beyond pure economic incentives.

02/23: Hire student vacataire: Emilie Wehler – thanks! Publication workshop summary report: <u>https://www.sciencespo.fr/liepp/sites/sciencespo.fr.liepp/files/CR%205%20d%C3%A9cembre%20-</u> <u>%20Fit%20for%2055_0.pdf</u>

03/23: Analysis of UK survey for paper: Examining the Effect of National-Level Energy Efficiency Policies on Household Adoption: Barriers and Social Challenges in the UK

06/23: Workshop organisation during the EU Sustainability Week 2023 (EUSEW) – interviews field.

06/23: Start paper: After Energy Efficiency: Factors Influencing Energy Consumption in Households, Impact of EE Measures and Behavioural Adaptation

07/23: Redesign and run survey for France, Germany and Spain. Experiment idea: SURVEY to test willingness to pay for energy efficiency measures after information about savings/health/environment. This would determine partially the amount of financial -and other types of- support needed to foster the adoption of EE measures.



Thanks !









Setting the context

Final energy consumption in buildings in EU-27 Source: Council of European Union 2023







Setting the context

Final energy use by sector EU-27 (%) in 2020 Source: Own elaboration with data from Eurostat

• Households are the second largest sector in terms of energy use after transport in Europe.







Setting the context

One of the reasons for the increase in prices Source: Visualcapitalist.com

"In the past, clean energy options were supported for climate-related reasons,"

"But today, the biggest driver of heat pumps, of solar, of wind power, or electric cars in Europe is energy security. So the driver has changed. **And energy security is now the main driver**"

Euractive Interview with Fatih Birol - IEA's executive director (Euractive, 1st Dec 2022).









1. Persisting gaps: the policy landscape

Policies in a challenging political context

REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition

Source: EU, 2022

TWO MAIN GOALS

- 1. End Europe's dependence on Russian fossil fuels as quickly as possible (by 2027) and with a 2/3 cut in Russian gas consumption by the end of 2022.
- 2. Securing long-term sustainability, cost-effectiveness and energy supply to the EU energy system.







1. Persisting gaps: the policy landscape

Policies in a challenging political context

REPowerEU: A plan to rapidly reduce dependence on Russian fossil fuels and fast forward the green transition

Source: EU, 2022

1. Increase from 9% to 13% the binding Energy Efficiency Target under the 'Fit for 55' package established in the Green Deal

2. EU Save Energy Communication detailing short-term behavioural changes to try to gas and oil demand by 5%

3. Foster the implementation of fiscal measures by Member States to encourage energy savings e.g. reduced VAT rates on energy efficient heating systems, building insulation and appliances







2. Households EE renovation decisions: the challenges of EE in households

Important distinction to make when talking about energy efficiency in households



ec.europa.eu/eurostat



- 2. Scheme awareness – Lack of information
- Impacts on bills Ex - post effectiveness
- 4. Likelihood of adoption – Policy preferences







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2. Households EE renovation decisions: the challenges of EE in households

Initial results and next steps

Outcome 1: Examining the Effect of National-Level Energy Efficiency Policies on Household Adoption: Barriers and Social Challenges in the UK

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Measures installed

Source: Own elaboration with survey data (N=2,084 – representative sample UK)





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3. Incentives and barriers

Initial results and next steps

2,000 2,000 1,500 1,500 1.500 1,000 CERT CESP ВСO 1,000 1.000 500 500 500 0 -0 -0 Yes No Yes No Yes No 2,000 1,500 1,500 Green Home Grants 1,500 EEC1 / EEC2 1,000 1,000 Green deal 1,000 500 500 500 0 0 -0 No Yes No Yes Yes No

Scheme Awareness - Lack of information

Outcome 1:

Examining the Effect of National-Level Energy Efficiency Policies on Household Adoption: Barriers and Social Challenges in the UK







3. Incentives and barriers

Initial results and next steps



Impacts on bills – Ex post effectiveness

Outcome 1: Examining the Effect of National-Level Energy Efficiency Policies on Household Adoption: Barriers and Social Challenges in the UK







3. Incentives and barriers

Likelihood of adoption - Policy preferences

Initial results and next stone

Outcome 1: Examining the Effect of National-Level Energy Efficiency Policies on Household Adoption: Barriers and Social Challenges in the UK







