



# SOCIAL IMPACTS OF CLIMATE CHANGE MITIGATION POLICIES AND OUTCOMES IN TERMS OF INEQUALITIES

EEA-ETC CM webinar: Estimating the socio-economic impact of greenhouse gas policies and measures

27<sup>th</sup> October 2022

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# AGENDA

- 01** Context, objective, scope and method of the study
- 02** Key study findings
- 03** Case studies
- 04** Conclusions and recommendations

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# CONTEXT, OBJECTIVE, SCOPE, METHOD OF THE STUDY

# 01

# OBJECTIVES OF THE STUDY

**Overall objective:** Create a knowledge-base of social Just Transition mechanisms for policy makers

**Specific objective:** Assess climate mitigation policies in terms of their social and inequality implications, as well as possible measures to counteract adverse effects



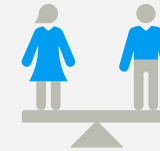
# SCOPE OF THE STUDY



**Policy dimension**  
Energy efficiency and  
renewable energy  
policies



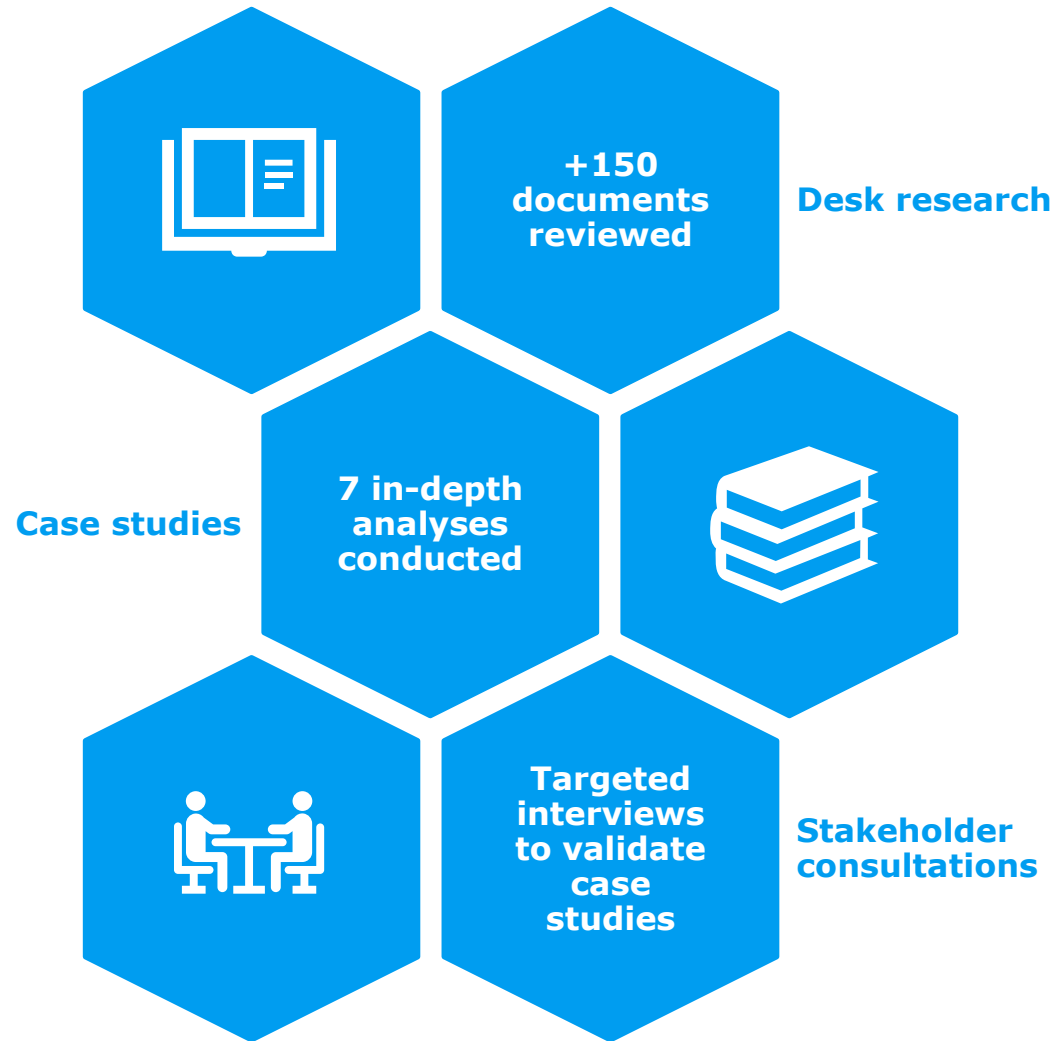
**Social dimension**  
Social impacts of  
different climate  
mitigation measures  
in daily life



**Inequality  
dimension**  
Inequality between  
people

# METHODS AND TOOLS OF THE STUDY

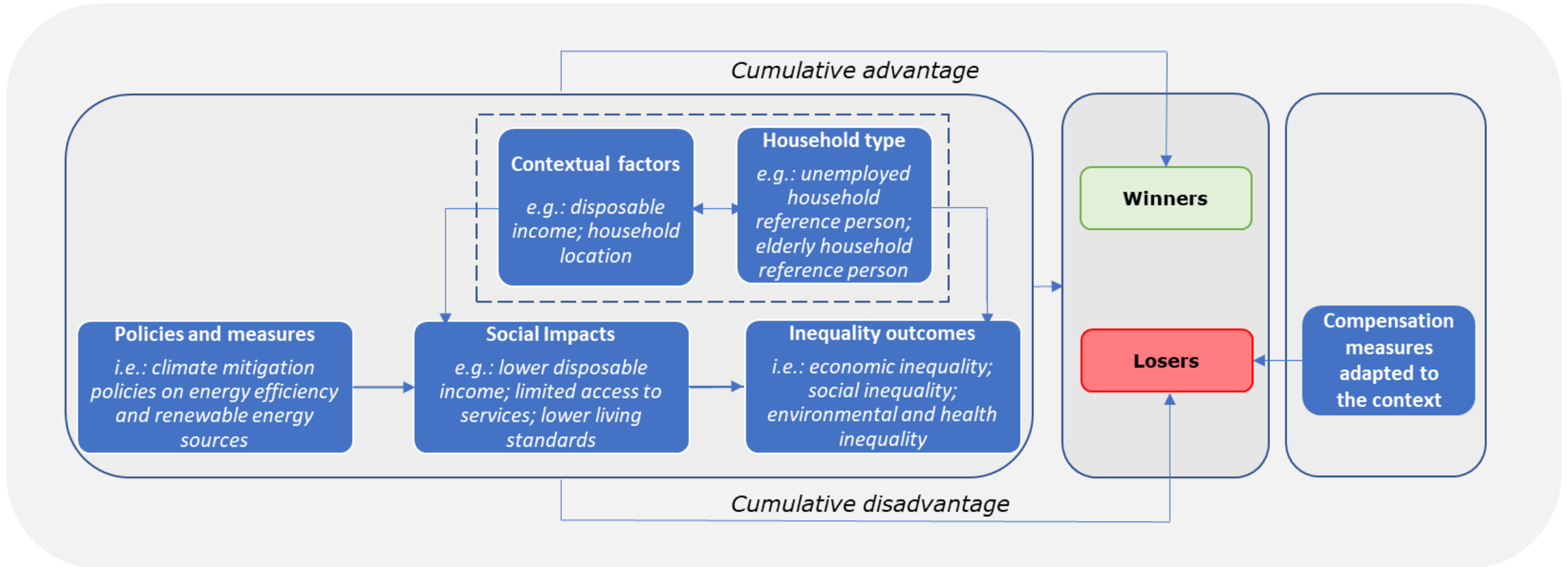
The results are summarised in our **study framework, a visual representation** of the impacts of EU climate mitigation policies on the social and inequality dimensions.



# KEY STUDY FINDINGS

# 02

# THE STUDY FRAMEWORK



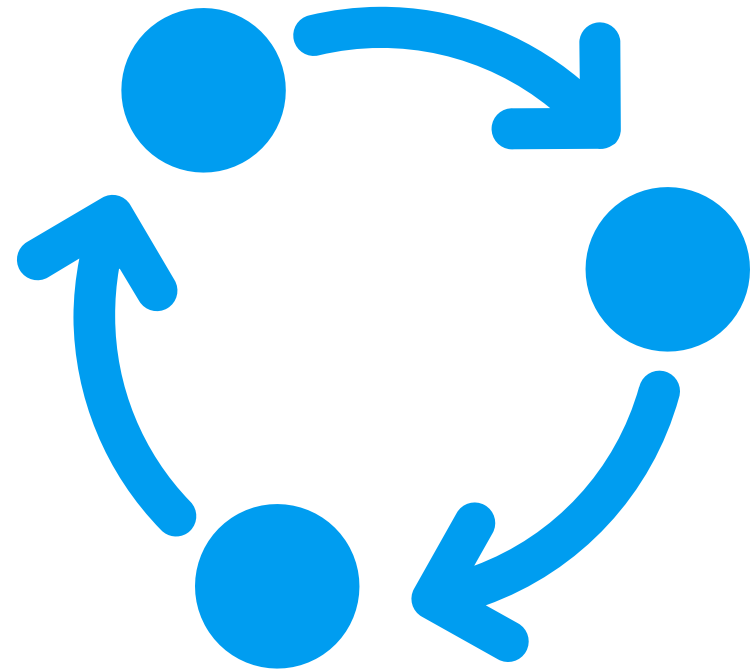


# KEY DETERMINANTS OF THE SOCIAL IMPACTS OF CLIMATE MITIGATION POLICIES

**Socio-economic and demographic factors** play a large role in determining who will benefit and who will not from climate mitigation policies:

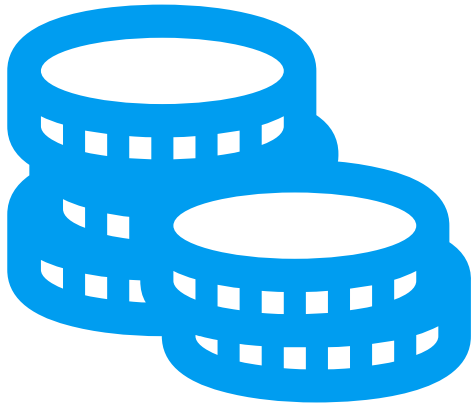
- Disposable income
- Age
- Employment status / sector
- Household location
- Gender and household size (to a lesser extent)

**Context matters!**



# SOCIAL IMPACTS OF ECONOMIC INSTRUMENTS

**Taxes are more often used than other economic and regulatory instruments - they generate revenues that can be re-invested**



**Taxes on heating and electricity** are generally regressive.

**Fuel taxes on private means of transport** are generally not strongly regressive.

**Congestion charges** may be regressive.

**Energy taxes imposed on companies** might (indirectly) affect households employed in energy intensive sectors.

**Investment subsidies** to improve energy efficiency can lead to energy savings, but also to rebound effects.

**Public transport subsidies** are generally beneficial to lower income households.

**Feed-in-tariffs** are generally regressive, as suppliers may shift their costs onto consumers.

# SOCIAL IMPACTS OF REGULATORY & HYBRID INSTRUMENTS

**Climate mitigation objectives have been increasingly addressed through regulatory or hybrid policy instruments**



**Energy efficiency obligations and energy certificates** *potentially* increase disposable income for households in the medium/long term.

**Technical product standards** may impose costs on consumers by making old vehicles/appliances obsolete.

**Energy efficiency labels** have not been studied sufficiently in depth to assess their impacts and distributional outcomes.

**Feebates** are considered less economically efficient than carbon pricing, but they generally only impose a minor burden on the average household.

# COMPENSATION MEASURES – 1

The adequate compensation measure depends on the specific contextual factors at play and the consequent distributional outcomes it aims to correct, rather than on the policy instrument that caused them

## Revenue re-use



**Tax revenues** can be reused for multiple purposes:

- Lump-sum payments to households
- Tax reductions
- Unemployment benefits/insurance

*N.B.:* **Earmarking tax revenues** for specific purposes (e.g.: green investments, tax cuts) can increase the perceived transparency of a policy

## Exemptions



- Vulnerable households can be exempted from **specific payments**, for a set period of time, or pay **lower rates**
- **Exemptions on companies** can have indirect benefits on employees

# COMPENSATION MEASURES – 2

## Structural adjustment assistance



### Assistance to allow households most negatively affected by climate policies to adapt to new market conditions

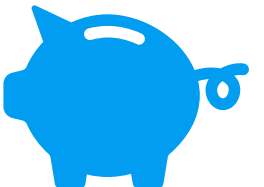
- Financial incentives and support for energy efficiency improvements
- Wage and training subsidies

## Holistic adaptive support



### Broader form of compensation targeting households' losses and covering potential future needs

- Schemes preventing household displacement due to rising energy costs
- Counseling
- Social services for workers and their families





# CASE STUDIES

# 02



# THE AIM OF THE CASE STUDIES

The case studies sought **to provide illustrative examples of specific policies and their impacts** (both positive or negative), of how specific **contextual factors** affect the quality of the socio-economic impact of a particular mitigation policy instrument, and to **illustrate more in detail the causal chain in place** thereof



# CASE STUDY FINDINGS

**Feed-in-tariffs to incentivise the use of Renewable Energy Sources (RES)**



- Germany
- Slovenia

**Energy certificates / Energy efficiency obligations to improve energy efficiency**



- France
- Latvia

**Energy efficiency schemes targeting energy poverty**



- Ireland
- Hungary

**EU ETS**



- EU

# CASE STUDY FINDINGS

## Feed-in-tariffs to incentivise the use of Renewable Energy Sources (RES)



- Costs passed on to consumers, different impact depending on surcharge size;
- In **DE**, lowest income quintiles are more affected
- No evidence of impacts in **SI**

## Energy certificates / Energy efficiency obligations to improve energy efficiency



- Generated energy savings and reduced GHG emissions;
- In **FR**, positive impact on labour market;
- No evidence of economic/social impacts in **LV** nor distributional outcomes (**FR/LV**)

## Energy efficiency schemes targeting energy poverty



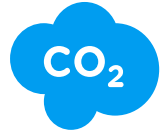
- Generated energy savings and reduced GHG emissions;
- Failed to target (vulnerable) households in need, due to application procedure or eligibility criteria

## EU ETS



- Can produce (indirect) economic, social impacts but these failed to materialise to date;
- Limited evidence on the overall distributional effects, but potentially regressive

# CASE STUDIES – OVERALL CONCLUSIONS



Mitigation measures examined in the case studies **aimed primarily at attaining environmental objectives**: energy efficiency, energy savings, reduction of CO2 emissions



As a consequence, **monitoring** at the national level is mostly performed **on environmental indicators** – little to no monitoring on economic and social impacts was identified



Little to no evidence on economic and social impacts of these policies is available, beyond impact on employment (in some cases). It is **difficult to draw conclusions on the distributional impacts** of these measures



# CONCLUSIONS AND RECOMMENDATIONS

# 03

# CONCLUSIONS & RECOMMENDATIONS – 1



The social impacts and distributional outcomes of climate mitigation policies have not received sufficient attention to date



Invest more in research on the economic and social impacts of climate mitigation policies



Monitoring and evaluating the impacts of climate mitigation policies and the compensating effects of social policies is paramount



Regularly monitor impacts and evaluate the effectiveness of policies in place



A well-balanced policy mix is key to ensure that environmental goals are met, and regressive distributional outcomes are mitigated



Establish new and reinforce existing synergies between the environmental and social policy sphere

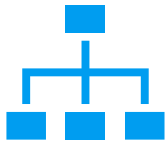
# CONCLUSIONS & RECOMMENDATIONS – 2



The impacts of climate mitigation policies are context- and time- sensitive



Tailor compensation policies to the local socio-economic context and make them sufficiently flexible to adapt to changes in policies' level of ambition



Climate mitigation policies are generally implemented at a national, or even international scale.  
Compensation policies, alternatively, are best implemented at the local level



Establish new and reinforce existing synergies between different governance levels

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