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IBS Policy Paper
From Research to Public Policy

# IS POLAND ON TRACK TO BECOMING ANOTHER FRANCE?

## HOW TO AVOID SOCIAL CONFLICTS SPARKED BY A COUNTRY'S CLIMATE POLICY

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## Abstract

Climate policy is crucial for preventing the devastating effects of natural disasters like droughts, floods, and heat waves. It also plays a vital role in reducing Poland's dependence on imported coal, gas, and oil; addressing energy security concerns in the wake of the crisis caused by Russia's invasion of Ukraine.

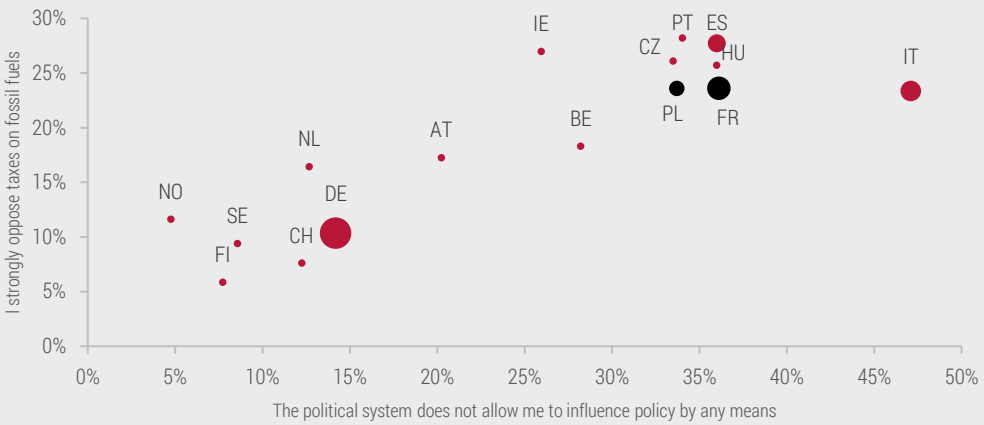
Environmental taxes are a highly effective tool for addressing climate risks. However, they can be controversial instruments, as their implementation may often lead to higher energy prices and social tensions. To mitigate these risks, it is important to implement fair and participatory climate policies that consider social preferences.

A key aspect of ensuring the fairness of environmental taxes lies in the effective redistribution of their revenues. Preference research and citizens' panels can help identify differences between varying social groups, allowing policymakers to better address citizens' concerns and expectations. By adopting a climate policy based on these principles, Poland can significantly reduce social conflicts and minimise the risk of mass protests akin to the Yellow Vest movement sweeping across France.

## Facts and figures

- **90%** of Poles recognise climate change as a fact.
- **65%** believe that climate change effects will be harmful.
- **Half** of all Polish citizens do not support an environmental tax but are willing to contribute a portion of their income to climate protection.
- **15%** – Poles are willing to sacrifice this much of their average monthly income to sustainably combat climate change, ensure good air quality, and guarantee a secure energy supply.

### Both Polish and French citizens believe they have no say in their country's politics and are against environmental taxes




*Source: European Social Survey (ESS8; 2018; plot size reflects a country's population)*

# 1. Introduction

**Implementing an ambitious climate policy is crucial to mitigate the risk of irreversible climate change and the impact of the energy crisis triggered by Russia's invasion of Ukraine.** Environmental taxes and additional charges on fossil fuels are effective mechanisms for addressing climate change and reducing oil and gas imports. However, these policies often result in higher prices for electricity, heating, and fuel, which can lead to social tensions, protests, and conflicts. Climate policy goals may face challenges from social tensions, which can worsen the risk of climate catastrophe and energy crisis. Implementing ambitious climate policies can sometimes lead to increased social tensions and even conflicts, as seen in examples like the Yellow Vests movement in France, which successfully protested a proposed diesel tax.

In this Policy Paper, we suggest how to minimise social tensions related to climate policy. We base our suggestions on the findings of an experimental study published in April 2023 and the "Nationwide Citizens' Panel on Energy Costs." On this basis, we conclude that **it is possible to pursue an ambitious climate policy and reduce social tensions if three conditions are met and the policy is**:

1. Fair – i.e., progressive and combined with effective mechanisms for redistributing revenues from environmental taxes,
2. Participatory – i.e., based on tools such as citizens' panels and discussions,
3. Reflects social preferences – i.e., considers the different preferences between varying social groups.

In previous studies, we have explored public policies that promote equity in the energy transition process, such as:

- taxes and redistribution mechanisms (Antosiewicz et al., 2021),
- labour market (Frankowski et al., 2021),
- social housing (Frankowski et al., 2022),
- poverty and inequality (Sokolowski et al., 2023)

In this paper, we focus on increasing public participation and ensuring that climate policies are based on factual evidence and scientific research. To this end, we present the findings of innovative research conducted with a sample of more than 10,000 respondents, as well as the Shipyard Foundation's "Nationwide Citizens' Panel on Energy Costs," in which we participated as experts.

The rest of this Policy Paper consists of four chapters and is structured as follows. In Chapter 2, we demonstrate why climate policy may cause social tensions. Chapter 3 explores the participatory democracy mechanism behind citizens' panels. In Chapter 4, we discuss the results of an experiment that illustrates Poles' climate and energy policy preferences. Chapter 5 is a summary of our findings.

## 2. Why does climate policy cause social tension?

In this chapter, we will explore the concept of environmental taxes and their potential role in sparking social tensions. Protests against climate policies have been observed globally and we will take a look at several examples, indicating that environmental taxes may not be well-received by all segments of society as they often lead to higher energy prices.

**Environmental taxes can be an effective tool for promoting sustainable practices and combating climate change.** They are an additional cost designed to motivate businesses and consumers to adopt more environmentally friendly solutions; either by limiting their exploitation of natural resources, or by reducing their emissions of pollutants. The revenues generated from such taxes are often dedicated to environmental protection, land rehabilitation, and investments in renewable energy.

### Box 1. An aversion to environmental taxes and a lack of agency – common points between France, Poland, and other CEE countries

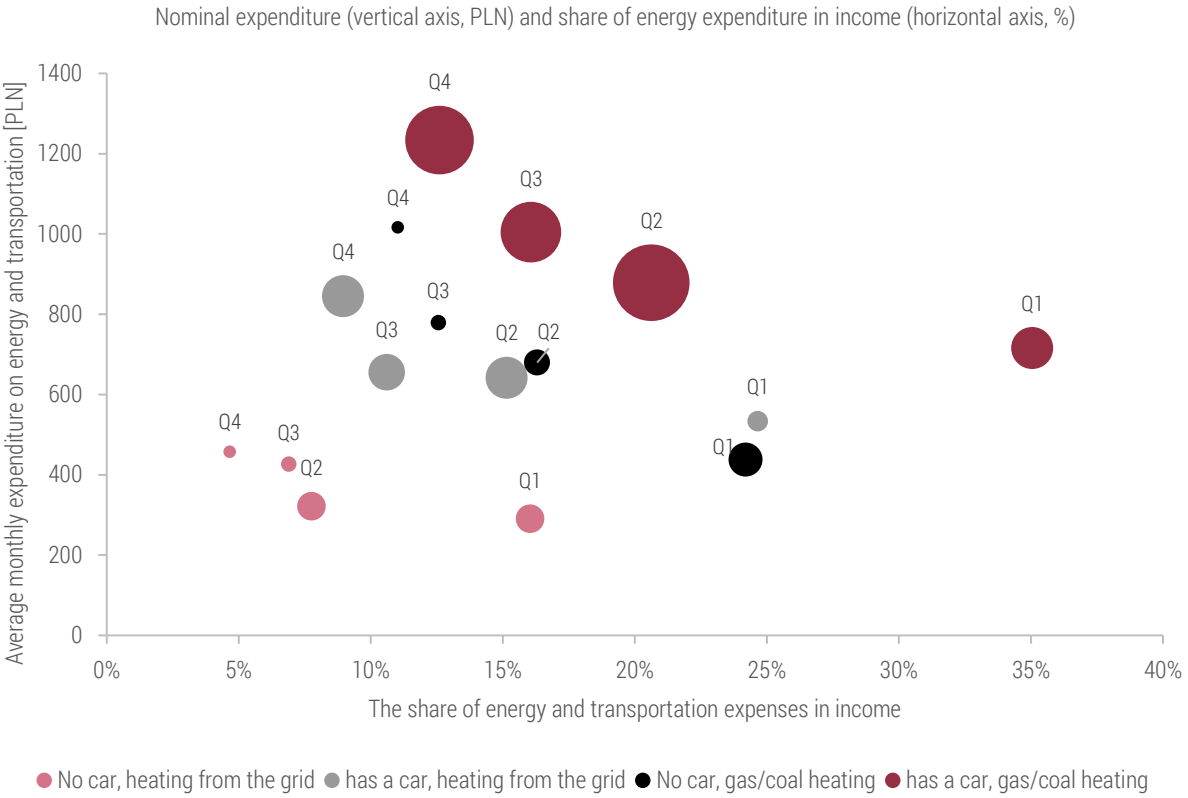
Residents of Central and Eastern European countries, as well as France and the Iberian Peninsula, oppose environmental taxes and demonstrate a lack of political agency. These factors may contribute to social tensions regarding climate policy and environmental taxation.

In contrast, citizens of Nordic countries tend to be more supportive of climate policy and are more influenced by it. For instance, Sweden implemented carbon taxes as early as the 1990s, resulting in a significant shift towards environmentally friendly heating sources like heat pumps, as opposed to heating oil (Rosenow et al., 2023).

Pursuing long-term pro-environmental policies can promote public acceptance of governmental actions and confidence in making further commitments to climate policy.

**Higher fuel prices resulting from environmental taxes may disproportionately impact low-income households**, particularly those that rely on coal for heating and may not be able to afford to implement more efficient heat sources (represented in Figure 1 as the black and maroon dots labelled 'Q1'). An example of an environmental tax designed to prevent climate change and reduce EU countries' dependence on fossil fuel imports is the Emissions Trading System (ETS II), which will be introduced in the European Union in 2027. ETS II will levy a direct charge on fossil fuel consumers, resulting in increased heating costs for buildings (through higher coal and gas prices), as well as higher gasoline and diesel prices.

Figure 1. People with low incomes (Q1) who own a car and rely on coal/gas for heat (maroon dot) spend more than a third of their total income on energy and transportation




*Note: Q1 – Q4 are income quartiles. The size of the plot represents the relative size of this group in the total population.*
*Source: Sokolowski J., Lewandowski P., Frankowski J. (2023). How to Prevent Yellow Vests? Evaluating Preferences for a Carbon Tax with a Discrete Choice Experiment. IBS Working Paper 03/2023.*

**The implementation of climate policy has led to social tensions and polarisation in Poland.** For example, rising fuel prices in 2022 triggered a truckers' strike, and the high cost of electric heating caused protests among tenants of public housing in Warsaw. Moreover, state-owned energy companies blamed EU climate policy for rising energy prices in a national billboard campaign in 2021, leading to further public discontent. Similarly, recommendations by the C40 Organization to reduce meat consumption triggered an uproar from the country's conservative politicians, who argued that the postulates undermine the "Polish way of life." In 2023, tensions over energy prices intensified, with residents of cooperatives and social housing associations protesting rising rent and heating charges.

**Unfortunately, antagonistic narratives that serve to polarise the public often replace meaningful discussions about the goals and merits of climate policy.** Opponents of climate policy often focus solely on its costs, while marginalising the risks of climate change such as heatwaves, droughts, and other natural disasters. In terms of public discussion, it is crucial to highlight the positive effects of climate policies, such as a better and healthier environment and greater energy security. Transparency is key when discussing climate policy. It is essential to consider the costs of achieving climate goals while also highlighting the social benefits of moving away from fossil fuels.

### Box 2. The Yellow Vests Movement

The Yellow Vests movement is a nationwide social protest that originated in France in November 2018. The protesters, representing various professions dissatisfied with government policies, wear yellow vests as their trademark. Although the movement initially began as a protest against a planned increase in fuel prices, it quickly expanded to include other demands such as a reduction in taxes. The protests were often accompanied by riots and clashes with police. In 2023, the Yellow Vests once again organised mass demonstrations in France, this time to protest a controversial pension reform and proposed increase of the retirement age.

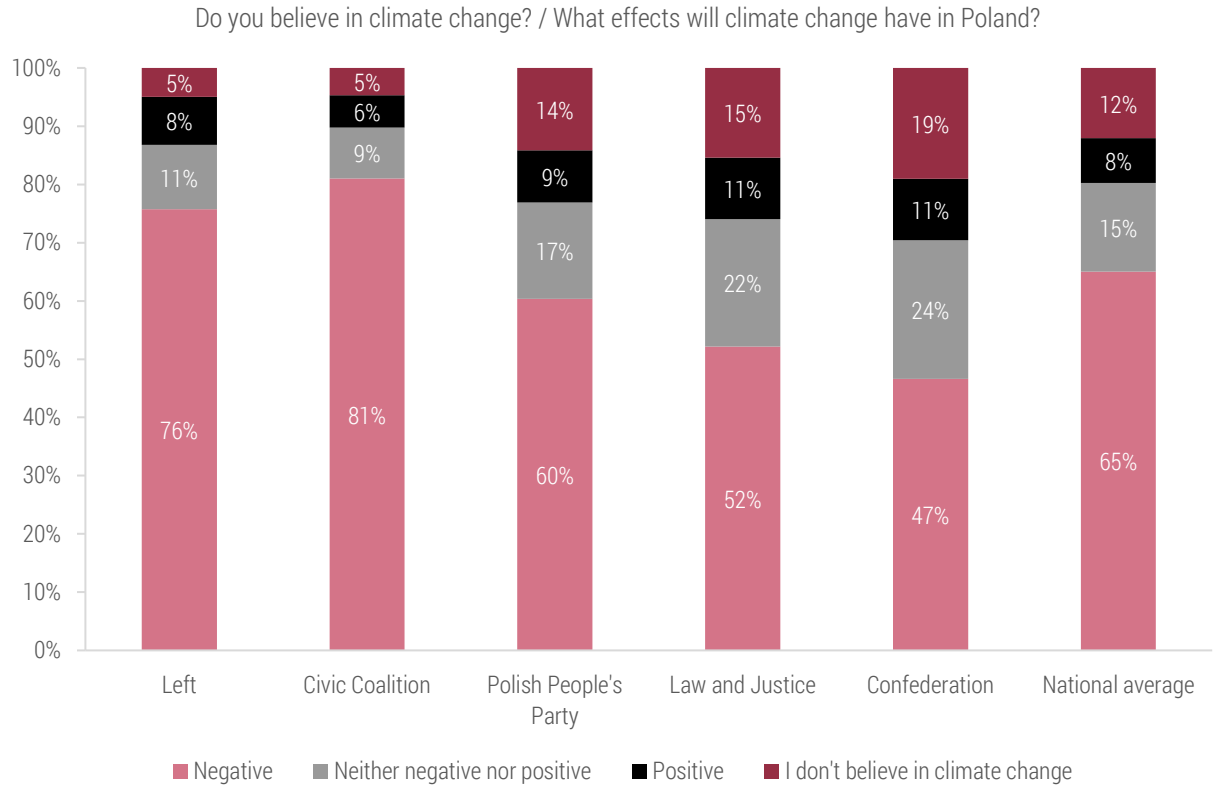
Before 2023, there were no significant protests in Poland similar to the Yellow Vests. However, some initiatives drew inspiration from the French movement and certain groups organised demonstrations against high energy prices:

- In 2022, farmers protested against **high fertiliser and electricity prices** as well as **destabilising grain purchase prices,**
- Likewise, motorists participated in the "Let's Block Orlen" campaign to protest against **high fuel prices**. During a day of protests in November 2022, organizers lined up in 'fake' queues at fuel pumps with the aim of blocking more than 100 petrol stations, which equates to about 5% of all Orlen-owned stations in Poland.
- In 2023, miners affiliated with the "WZZ Sierpień 80" trade union protested against the European Union's methane directive which mandated **costly investments** in coal mines.

**While climate policy remains a polarising issue, the overwhelming majority of Polish citizens acknowledge that the climate is changing – and that these changes will negatively impact the country.** This recognition transcends political affiliations, as Poles are aware of climate change (Figure 2). The views of a small number of politicians and journalists who attempt to polarise the populace and deny climate change are not representative of the majority. Therefore, climate policy must be implemented with the involvement of a society that cares about achieving its overarching goal: reducing catastrophic and long-term climate changes.

Effective climate policy in Poland must include the active participation of a society that is committed to mitigating the impact of climate change. It is imperative to involve individuals who are invested in achieving the common goal of reducing the devastating effects of climate change.

Figure 2. Most people in Poland believe in climate change and predict it will have a negative impact on the country




*Source: own study based on a sample of 10,281 respondents from the Ariadne (2022) panel.*

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**Why is climate policy a potential spark for social tensions, even though most of us recognise climate change as a legitimate concern?** This is often because the implementation of environmental taxes can lead to an increase in energy prices; a topic politicians may use to exploit societal divisions and intensify social conflicts.

## 3. Can climate policy be more democratic?

It is crucial to ensure an environment for democratic decision-making processes to promote social harmony around climate policy. In this chapter, we explore one method of fostering public participation: citizens' panels. Using the "Nationwide Citizens' Panel on Energy Costs" (Shipyard Foundation, 2022) as an example, we demonstrate how to leverage this approach when making decisions regarding climate policy.

**Citizens' panels serve as a means of promoting citizen engagement in decision-making.** These panels are composed of a representative group of individuals who are randomly selected or appointed to deliberate on specific societal issues and submit proposals for solutions. These panels can be conducted at a local or national level, and can address a variety of topics including politics, the economy, healthcare, and education (Box 3).

### Box 3. Climate panels: a promising approach to address social tensions

Climate panels have emerged as a promising approach to tackle climate change and defuse social tensions. These panels comprise of randomly selected citizens who come together to discuss the challenges and risks of climate change and propose solutions to reduce human impact on the environment. Two notable examples of citizens' climate panels include the UK's Citizens' Assembly on Climate Change and Germany's Bürgerrat Klima. The UK panel produced several recommendations, including increasing the use of renewable energy and making changes in transportation. Similarly, the German panel recommended an environmental tax, stricter standards for greenhouse gas emissions, and greater investments in public transportation infrastructure. These proposals reflect the panels' focus on pragmatic and evidence-based policy solutions.

In France, the government turned to a citizens' panel to defuse social tensions after mass protests by the Yellow Vests. The panel aimed to develop proposals for change and reform which were to be incorporated into the government's program and public policy. Panellists discussed various issues such as taxation, climate, security, healthcare, and education. This initiative was a novel approach in France that engaged citizens in creating public policy solutions in a more representative and active way than the traditional electoral process. Although the panel faced some criticism and allegations of being unrepresentative and ineffective, it inspired other countries, including Poland, to adopt similar initiatives. The use of climate panels in various countries demonstrates the potential of citizen-led deliberation and decision-making to address complex issues and defuse social tensions. Such panels can create a more inclusive and democratic policy-making process that is better attuned to the needs and aspirations of the public.

**In 2022, Poland organised its first nationwide citizens' panel on energy costs**, attended by almost 100 participants of diverse backgrounds (different ages, genders, educational backgrounds, and places of residence). The panellists were provided with information from experts (including the authors of this Policy Paper) and then engaged in discussions to generate recommendations to combat energy poverty. These recommendations were presented to all political parties in November 2022, and subsequently discussed during parliamentary and senate committees and various side events.

**The citizens' panel was a valuable addition to the climate policy debate in Poland**, held at a critical time of energy crisis that mobilised public interest in energy costs. It gave voice to a broad spectrum of the country's society, including groups typically underrepresented in public discourse, which resonated in their local communities.

However, the format of the panel had its limitations. This included participants making a large number of demands which reduced message clarity, and the potential for certain voices to be more prominent than others. Additionally, the panel was dominated by a desire for change and criticism of the authorities in Poland, which is not necessarily reflected in the voting preferences of the broader population. Despite these limitations, the panel had the potential to activate citizens and inform collective public opinion, and may help shape democratic climate policy. Nevertheless, it is important to verify a panel's recommendations and conclusions with scientific research.

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**Is it possible to make climate policy more democratic by incorporating citizens' panels?** Citizens' panels can promote constructive discussion among individuals who are often overlooked by decision-makers. However, in our view, relying solely on citizens' panels is not sufficient, and the outcomes of their deliberations should be reinforced by research on public preference.

# 4. How can climate policy be aligned with public preference?

In this chapter, we explore the effectiveness of using economic experiments to align climate policy with social preferences. A democratic approach to climate policy is essential, where decisions are based on factual knowledge and the preferences of specific social groups.

### Box 4. An economic experiment on climate change and energy security in Poland

In our experiment, each participant was asked to select five preferences for environmental policies and their effects (Figure 3). The decisions made by the participants were linked to a random gain or loss of income resulting from taxation and redistribution.

Based on the choices made by the participants, we employed an econometric model to estimate their willingness to pay for the different effects of climate policies presented in the experiment. This analysis allowed us to determine which effects are preferred by specific groups of participants (e.g., those aged 18 – 34) and the extent of their aversion towards environmental taxes.

Figure 3: Example of a simplified vignette used in the experiment.

| | 1 | 2 |
|---|---|---|
| Impacts of climate change | Significant<br>A decline in agricultural crop yields, lives threatened by heatwaves, floods and droughts | Minimum<br>No change in agricultural crop yields, low risk from heatwaves, floods and droughts |
| Air quality | No change<br>50,000 deaths per year | Reduced by half<br>25,000 deaths per year |
| Purchasing fuel from Russia | Limited to zero | Limited to zero |
| Access to electricity and fuel | No change | Energy rationing<br>Power outages every day for 1 hour and car-free Sundays all year round |
| Climate and energy policy | No change | Environmental fee and new cash benefit<br>A tax on coal, gas and oil consumption at home and monthly cash benefits |
| Monthly income | 6375 | 5692 |
| Benefit/loss per month (net) | 0 | -683 |
| Your choice | ☐ | ☐ |

*Source: Sokolowski J., Lewandowski P., Frankowski J. (2023). How to Prevent Another Yellow Vest Movement? Evaluating Preferences for a Carbon Tax with a Discrete Choice Experiment. IBS Working Paper 03/2023.*

**Economic experiments provide a powerful tool to consider social preferences when formulating public policy.** This research method involves simulating different behavioural scenarios and analysing their effects on decision-making. Specifically, a study in which participants make a series of mutually exclusive decisions (Box 4) can be

used to identify public preferences for goods that do not have a price, such as air quality and environmental protection.

**Economic experiments can help identify obstacles to implementing environmental taxes** and assess the public's willingness to accept policies such as $CO_2$ fees or emissions trading schemes. By doing so, researchers can better understand consumer behaviour and develop the most effective solutions to reduce greenhouse gas emissions and prevent further environmental degradation. For instance, in August 2022, we conducted an economic experiment with a representative sample of over 10,000 individuals in Poland to determine their preferences on climate and air quality, fuel imports from Russia, and energy security.

**Poles have a strong aversion to environmental taxes**, as is the case in many other countries (Levi, 2022). Aversion to such policies is even greater when there is low trust in politicians (Umit and Schaffer, 2020). To address this issue in the long term, investment in social capital and efforts to increase trust should be made to help promote acceptance of climate policies. Another effective way to reduce opposition to environmental taxes is through redistribution mechanisms, which involve using tax revenues to fund compensation for those affected by the taxes. These mechanisms typically take the form of direct cash transfers or subsidies for investments in green technologies and can help increase tax acceptance while protecting low-income households from energy price increases.

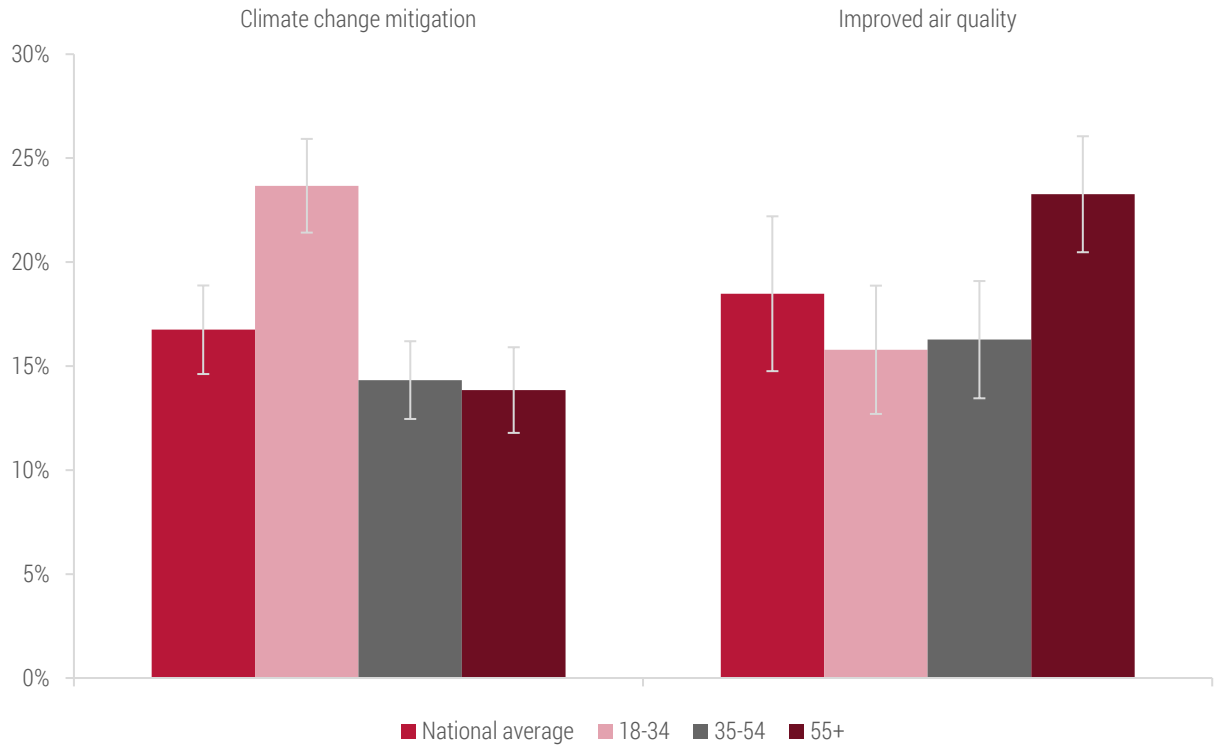
**In Poland, redistribution mechanisms can be used to reduce the aversion to environmental taxes,** with a focus on targeting those with lower incomes to offset any regressive effects of the tax. To ensure the compensation is socially acceptable, it should be funded entirely by wealthy individuals who use fossil fuels. This approach is supported by over 60% of people in Poland (the highest share in the EU), who believe that climate policy should involve taxing the richest 20% of the population (Eurobarometer, 2022).

**In addition to redistribution mechanisms, policymakers should consider social preferences when developing climate policies.** For example, Poles are willing to sacrifice around 15% of their monthly income to combat climate change, improve air quality, and ensure energy security. This provides a useful benchmark for determining the level of environmental taxes that Poles are willing to accept in exchange for achieving these goals.

**It is important to note that preferences for climate change and energy security vary widely among different demographic groups in Poland.** The most important variables that differentiate them are:

- **Age:** Younger people tend to prioritise global warming and environmental protection as key issues, while older people are more concerned about air quality and reducing smog. These preferences may be related to differences in forward thinking and their focus on the present (Figure 4).

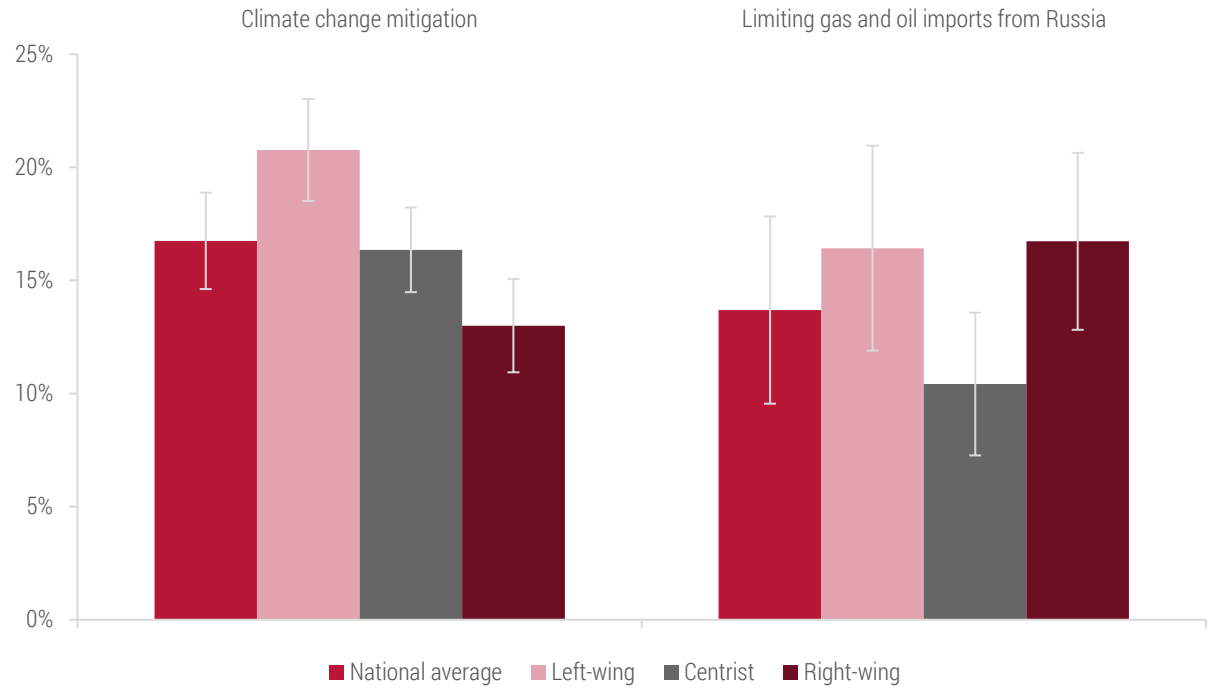
Figure 4. Younger respondents prefer climate mitigation measures while older respondents prefer better air quality




*Note: The Y-axis indicates the percentage of average income a respondent is willing to sacrifice to achieve a particular climate goal.*
*Source: Sokolowski J., Lewandowski P., Frankowski J. (2023). How to Prevent Yellow Vests? Evaluating Preferences for a Carbon Tax with a Discrete Choice Experiment. IBS Working Paper 03/2023.*

- **Political and economic views:** these also play a role in shaping preferences for environmental taxes in Poland. Those with left-wing or liberal views tend to be more willing to pay above the national average for sustainable climate change mitigation efforts, while those with right-wing views may be less inclined to forego part of their income for this purpose. However, there is a common ground among both left-wing and right-wing individuals – reducing gas and oil imports from Russia is an issue that unites both sides (Figure 5). This highlights the complexity of political and economic factors in shaping attitudes towards environmental taxes and the need for nuanced policy approaches that consider diverse perspectives.

Figure 5. Left-wing voters are willing to pay more to combat climate change than right-wingers and centrists. Both the left and right are united by the goal to reduce fuel imports from Russia

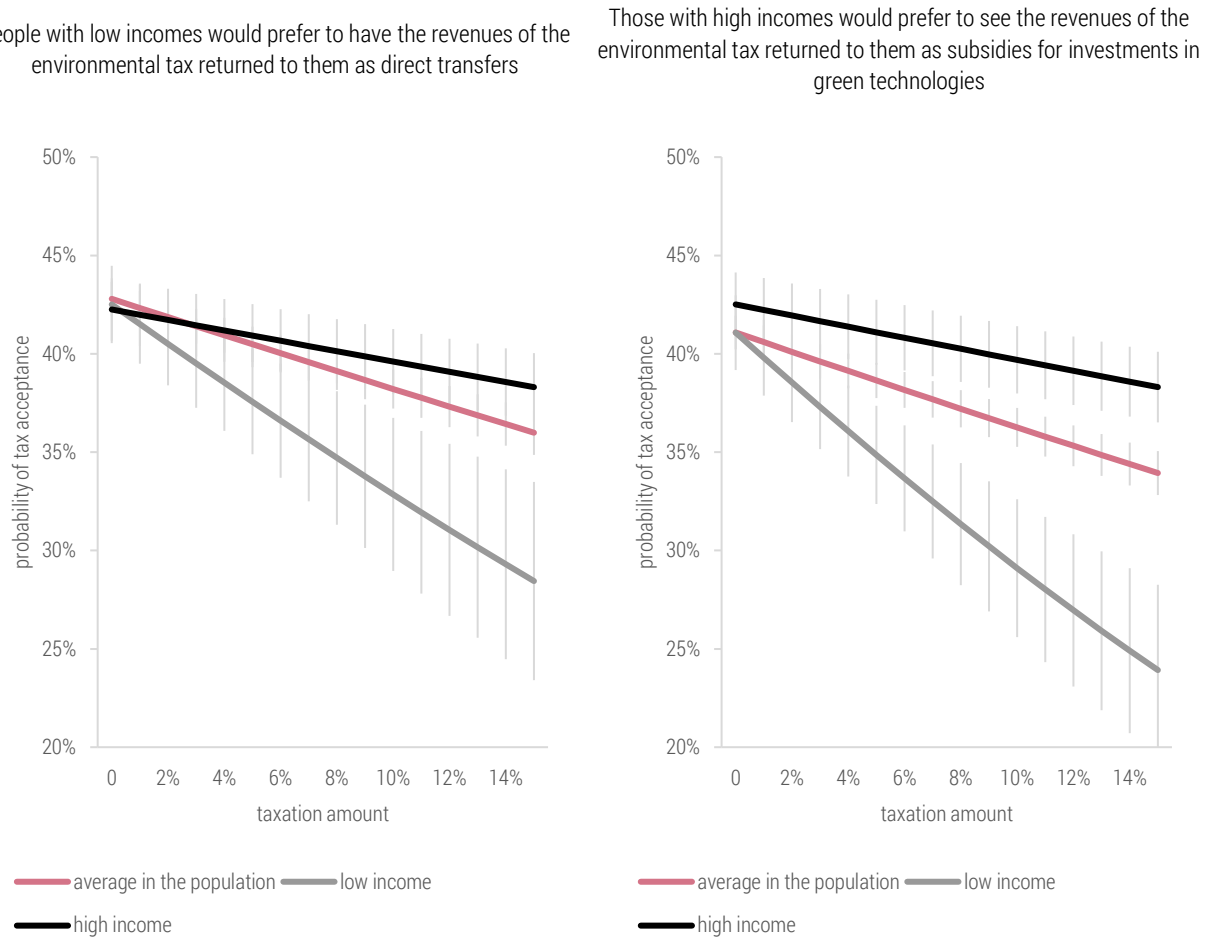



*Note: The Y-axis indicates the percentage of average income a respondent is willing to spend to achieve a particular climate goal.*
*Source: Sokolowski J., Lewandowski P., Frankowski J. (2023). How to Prevent Yellow Vests? Evaluating Preferences for a Carbon Tax with a Discrete Choice Experiment. IBS Working Paper 03/2023.*

**To effectively address the issue of aversion to environmental taxes in Poland, it is important to take into account the varying preferences of different social groups regarding climate policy goals and mechanisms for redistributing tax revenues.** One approach that has been found to be effective is direct transfer for those with low incomes, while subsidising investments in green technologies works better for those with high incomes (Figure 6). By taking into account these preferences, energy policy can be designed in a way that effectively reduces tax aversion and promotes greater acceptance of climate policies. This can help to reduce inequality and tensions. Additionally, it is important to clearly communicate the goals of the tax to the public, highlighting the critical importance of preventing catastrophic effects of climate change, improving air quality, and increasing Poland's energy security.

## Figure 6. Direct transfers are more effective at reducing the reluctance of low-income earners to pay environmental taxes compared to subsidies for investments in green technologies

Probability (%) of choosing an environmental tax (vertical axis) depending on its rate (horizontal axis) and method of redistribution (left – direct transfer; right – investment subsidies).




*Note: The Y-axis represents the probability that a respondent will choose the environmental tax instead of the "no change" option. The X axis is the taxation rate.*

*Source: Sokolowski J., Lewandowski P., Frankowski J. (2023). How to Prevent Yellow Vests? Evaluating Preferences for a Carbon Tax with a Discrete Choice Experiment. IBS Working Paper 03/2023.*

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**How can climate policy be aligned with social preferences?** In summary, a key aspect of aligning climate policy with social preferences is setting a socially optimal level of environmental taxes that is supported by the public, and providing effective redistribution mechanisms that safeguard the interests of the poorest social groups. Additionally, it is important to clearly communicate the goals of the tax to the public – preventing climate change, improving air quality, or increasing energy security.

# 5. Lessons for public policy

**Poland must adopt an ambitious climate policy to mitigate the catastrophic effects of climate change and reduce its dependence on gas and oil imports.** However, such policies and the environmental taxes they entail can result in higher energy prices and potentially trigger social tensions and conflicts, as seen in the Yellow Vests protests in France. While Poland has yet to experience similar protests, a failure to consider public preferences and participation when implementing climate policy may lead to social unrest and discontent, ultimately undermining progress towards achieving climate goals. In 2023, an election year, politicians are attempting to leverage social discontent over energy price hikes and hamper climate policies, despite the fact that the majority of Poles believe in the reality of climate change and its harmful impacts.

**To mitigate social tensions arising from environmental taxes, policies should be guided by three key principles:**

1. **Fairness** – this principle includes the use of progressive taxes, coupled with effective redistribution mechanisms such as direct transfers to low-income earners and support for investments in renewable energy and energy efficiency.
2. **Participation** – adopting the tools of deliberative democracy, such as citizens' panels and deliberations, can increase citizen participation in the decision-making process, promote communication and consideration of diverse perspectives, and strengthen public involvement.
3. **Social preferences** – economic experiments and other studies can be used to capture the differences in social preferences between various groups of citizens, thereby providing crucial information on social priorities that need to be addressed by effective public policy.

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