Available online at www.HEFJournal.org

ISSN: 2785-2997

Journal of
Human, Earth, and Future

Vol. 6, No. 2, June, 2025

Influence of Climate Change Tax Strategies on Willingness to Pay in Asia and Europe

Neeranat K. Rakangthong [1], Somjintana Koompai [2*], Shubham Pathak [3], Qin Zhu [4]

[1] *School of Accountancy and Finance, Walailak University, Nakhon Si Thammarat, 80160, Thailand.*

[2] *School of Political Science and Public Administration, Walailak University, Nakhon Si Thammarat, 80160, Thailand.*

[3] *School of Accountancy and Finance, Center of Excellence in Sustainable Disaster Management (CESDM), Walailak University, Nakhon Si Thammarat, 80160, Thailand.*

[4] *Pinghu Normal College, Jiaxing University, Jiaxing, 314000, China.*

Received 23 January 2025; Revised 09 May 2025; Accepted 15 May 2025; Published 01 June 2025

Abstract

Previous research has demonstrated that people's reluctance to pay taxes to mitigate climate change stems from their belief in the tax system, its transparency and fairness, and its ability to distribute income equally and inclusively. This issue stems from the fact that people in different countries lack financial support to address climate change. This study aims to compare this willingness to pay taxes and to find strategies for organizing taxes to make people more willing to pay them by emphasizing the significant role of cultural values between Asian and European countries, following the model of Inglehart and Welzel. This research adopts a quantitative methodology using secondary data from the European Investment Bank (EIB), which conducted a global public opinion survey in 2023–2024. The data was analyzed using ANOVA and stepwise multiple regression analysis. The results show that Asian countries with traditional and survival values are more willing to pay taxes than those with secular and self-expressive values in Europe. The new findings are that tax policies that hold polluters accountable for their carbon emissions, or fossil tax reforms, are most acceptable in countries with different values in Asia and Europe. This research paves the way for sustainable tax reforms.

Keywords: Climate Change Taxation Strategies; Willingness to Pay; Cultural Values; Asia and Europe; Sustainability.

1. Introduction

Climate change, a significant and sustained rise in Earth's temperature, is primarily driven by human activities such as the combustion of fossil fuels, deforestation, and industrial operations. These activities significantly increase the atmospheric concentration of greenhouse gases, with far-reaching consequences for the economy, politics, society, human health, and the environment. This interconnectedness underscores the need for international cooperation in addressing this issue [1, 2].

Addressing the immediate effects of climate change and ensuring long-term sustainability requires comprehensive mitigation strategies. This complexity needs an integrated approach that incorporates multiple strategies. The global nature of the problem, which transcends national boundaries and affects every aspect of humanity, highlights the necessity of international cooperation [3, 4].

* Corresponding author: ksomjint@wu.ac.th; jsomjint@gmail.com

http://dx.doi.org/10.28991/HEF-2025-06-02-07

Taxation for climate change is an important strategy and a practical and effective approach to addressing one of today's most pressing challenges [5]. These taxes, commonly referred to as carbon taxes or environmental taxes, are levies imposed on the carbon content of fuels. They require organizations and individuals who produce or consume fossil fuels to compensate for the environmental damage they cause, aiming to mitigate and adapt to climate change's impacts [6, 7].

Carbon taxes reduce greenhouse gas emissions and facilitate the transition to a low-carbon economy, offering a viable pathway toward a sustainable future [8-10]. Additionally, they create economic incentives for cleaner energy consumption, encouraging a shift toward sustainable practices while potentially fostering economic growth [11]. Beyond reducing emissions, carbon taxes promote innovation and sustainable societies [12]. The revenue generated can be allocated to environmental initiatives, such as renewable energy projects, conservation efforts, and research into sustainable technologies, thereby driving technological advancements and innovation in the fight against climate change [8].

While public support for reducing climate change is strong, it is important to realize that individual actions can make a significant difference. Politicians greatly affect this level of support, and policies and taxes that aggravate income inequality, regional inequality, and conceptions of justice and efficacy can influence the acceptance of carbon taxes. However, the fairness of policy execution is the strategy for keeping and gaining public support. This fairness not only influences public acceptance but also helps individuals feel confident in the system and understand the impact of their contributions [13-15]. Bergquist et al. [16], based on their studies in 33 countries, discovered that equity and efficiency significantly influence policy implementation.

Public support of climate change taxes and policies rises as governments behave ethically and successfully. Likewise, Andre et al. [17] asked 130,000 individuals from 125 countries regarding their support of climate action. With individuals from higher-risk nations making bigger donations, their results revealed that 69% of respondents were ready to devote 1% of their income to climate change. Furthermore, the design of tax policies influences individuals' willingness to pay. Moreover, Chaikumbung [18] found that while policies supporting greenhouse gas reduction, fuel-efficient vehicles, and agricultural adaptation receive comparatively lower public support, green energy policies garner greater acceptance.

Many factors influence people's willingness to pay climate change taxes. It is shaped by efficacy, government trust, equitable tax distribution, gender, age, education, income, and residence. According to Baranzini et al. [19], many individuals doubt tax collections and think carbon prices are worthless for climate change. The inefficient distribution of this money to environmental projects worries many, eroding public support. However, directing carbon tax income to environmental preservation could be beneficial, instilling hope and optimism. This cynicism stems from government mistrust and concerns about transparency and accountability. Similarly, Mus et al. [20] found that people prefer carbon tax income for environmental preservation over lower taxes or unrelated projects. Douenne & Fabre [21] found that French citizens oppose carbon taxes despite a prominent climate change awareness. This finding underscores the major influence of public knowledge on policy decisions, highlighting the need for alternative legislative measures. Furthermore, Beiser-McGrath & Busemeyer [22] demonstrated how the design of carbon taxation programs can impact public support. For instance, carbon fees based on actual emissions or perceived justice will likely be more popular.

Political ideology significantly influences people's willingness to pay taxes to combat climate change. For instance, rising energy prices push conservatives in the U.S. against carbon levies. At the same time, liberals are more likely to embrace such policies, particularly for social welfare [23], environmental [24, 25], and tax allocation. This influence is also evident in European support for climate mitigation levies. Duijndam & van Beukering's [26] research found a lower level of climate policy support among far-right populists, underscoring the impact of political ideology on climate policy support. Economic factors such as GDP per capita and unemployment rates can also shape attitudes, often overshadowing environmental obligations and complicating the implementation of carbon taxes. Tranter's research [27] further supports the influence of political philosophy on climate change taxation, showing that left-wingers and those who prioritize environmental protection over economic growth are more likely to support climate change activities [28].

Harring et al. [29] discovered that political and economic contexts have a significant impact on public support for policies and tax contributions to mitigate climate change. Taxation is intricately linked to government actions and national economic conditions. For example, countries that are heavily reliant on fossil fuel industries tend to show lower support for carbon taxation. This finding is in line with research by Kulin et al. [30], which revealed that political ideology is intricately linked to individuals' views on climate change in Western Europe and significantly influences their willingness to pay taxes for climate mitigation. A key research finding is that the transparent allocation of tax revenues plays a crucial role in enhancing public acceptance of carbon taxation, especially when funds are directed toward aiding low-income populations. In Germany, for instance, approximately 67% of households with the lowest incomes benefit from carbon tax policies [31]. This emphasis on transparency in tax revenue allocation provides reassurance about the effectiveness of such policies.

It is essential to recognize that political and economic values [27] significantly shape government climate policies. Equally significant are cultural values [32], which guide people in analyzing challenges, determining what is positive and useful, and making decisions that affect their behavior and activities. Understanding climate change mitigation practices requires understanding how the diversity of these cultural values among societies is influenced by history, politics, culture, and a country's social and economic context [33]. Policymakers must integrate cultural values into the formulation and implementation of climate policies. Chaikumbung [18] conducted a meta-regression study on 47 countries to determine how cultural and other factors influence people's willingness to pay taxes for climate change. Low-corruption countries are more likely to support climate change solutions, offering hope for notable change. According to Braithwaite et al. [34], societies that are more indulgent and less likely to accept uncertainty would be less likely to support measures to reduce and adapt to climate change. Indulgence is a cultural factor that shows how well people control their wants and urges. These findings support Al-Shaer et al. [35], who found that cultures prioritizing long-term strategy and transparency are more likely to fund climate change mitigation. This study sheds light on how cultural values shape people's willingness to pay climate-related taxes, providing insight into how societal norms influence reactions to climate change.

Previous research has consistently shown that taxes addressing climate change often encounter public resistance. Key findings from studies by Fremstad & Paul [13], Maestre-Andrés et al. [14], Chen [15], Bergquist and Sverker [16], Andre et al. [17], and Chaikumbung [18] indicate that a lack of public trust in government performance is a significant factor contributing to this opposition, as highlighted by Baranzini et al. [19], Mus et al. [20], Douenne & Fabre [21], and Beiser-McGrath & Busemeyer [22]. This underscores the profound impact of public trust in government on acceptance. Political ideology, as demonstrated by research in the United States by Magistro & Alvarez [23], Anderson et al. [24], Binelli & Schaffner [25], and in 28 European countries by Duijndam & van Beukering [26], also plays a significant role. Furthermore, economic factors, such as income levels and distribution, as indicated by studies conducted by Duijndam & van Beukering [26] and Harring et al. [27], are crucial in understanding public resistance to climate change taxes, highlighting the multifaceted nature of this issue.

However, the expression and perception of this support or resistance are deeply rooted in cultural values that shape people's attitudes and actions toward taxes in their respective countries. Research by Inglehart & Welzel [33] and Luo & Tang [36] suggest that cultural values across different countries heavily influence climate change mitigation. Studies by Chaikumbung [18], Braithwaite et al. [34], and Al-Shaer et al. [35] show how important cultural views are in figuring out how ready people are to support financial and climate-related projects. Therefore, this study emphasizes the urgent need to bridge the gap in public acceptance of climate change taxes by developing funding strategies for tax collection that fit distinct cultural values. This approach ensures perceptions of fairness and equality, increases willingness to pay, and accelerates efforts to mitigate climate change.

This research, therefore, asks the following questions: (1) Do countries with diverse cultural values express differential readiness to pay climate change mitigation taxes? (2) How might tax strategies and social equity support systems help improve people’s propensity to pay these taxes in distinct cultural settings? The researchers aim to address a key gap: the public’s perception that government taxes are unfair, unequal, and do not provide real benefits, which affects people’s willingness to pay. Therefore, this study investigates which tax methods policymakers can use to ensure fairness, reduce inequality, and increase people’s readiness to help reduce climate change. The two main objectives of this comprehensive project are to compare countries’ readiness to pay climate change mitigation taxes across distinct cultural values. This comprehensive aspect of the study ensures that various cultural values and countries’ readiness levels are considered, increasing the credibility of the research.

Based on the conceptual framework proposed by Inglehart & Welzel [33], the study examined countries grouped into a variety of cultural clusters: (1) Confucian, (2) African-Islamic, (3) Catholic Europe, and (4) Protestant Europe. This category includes European and Asian countries. Inglehart and Welzel’s cultural values framework shed light on political change, emphasizing the link between social values and democratic development. Linking economic progress to cultural change, this concept is mainly used in cross-cultural studies, providing in-depth studies of similarities and differences at the national level. Second objective: this study considers effective tax strategies or methods for the public, which may increase public acceptance and tax compliance in distinct cultural countries.

After identifying the significance of the problem and the research objectives in the introduction, the study proceeds as follows:

- *Literature Review:* A content of theories of willingness to pay (WTP), taxation, and cultural values, providing a well-informed understanding of the existing research landscape.
- *Methodology:* A detailed study's population and sample, research instruments, data collection procedures, and data analysis methods.
- *Results:* A presentation of the research findings supported by tables, charts, or graphs.

- *Discussion:* An interpretation of the findings of existing research, highlighting similarities, differences, and implications.
- *Summary:* A summary of the key research findings, their significance, practical recommendations for policy implementation, and suggestions for future research.
- *Limitations:* Acknowledging the study's limitations and potential impact on the findings.

2. Literature Review

2.1. Willingness to Pay (WTP)

Willingness to pay (WTP) is an economic concept that quantifies the maximum amount an individual is willing to pay for a good or service or the minimum amount an individual is willing to pay or sacrifice. They can be explained from several perspectives [36]. There are: (1) The Value Theory of Harper [37], believed that consumers would decide to pay based on the value they receive from goods or services. In other words, a product's perceived value or benefits affect their willingness to pay, such as improving quality of life, reducing energy costs, and creating a better environment; they will be willing to pay more [38]. (2) Pricing Theory by Milton Friedman [39] stated that policymakers should set an appropriate price to create public willingness to pay because high demand and limited supply may increase willingness to pay. (3) Risk Perception Theory: Douglas et al. [40] proposed that if people perceive a high risk of spending, their willingness to pay will be lower. However, they will pay a higher rate if they believe the benefits are worth it. (4) Psychological theory states that consumers may be willing to pay more if they feel satisfied or happy from buying goods or services. In addition, guilt or responsibility also affects willingness to pay. For example, consumers who feel guilty or responsible for supporting environmentally friendly things may be willing to pay more [41, 42]. Furthermore, according to Behavioral Economics Theory, also known as Loss Aversion, consumers prioritize avoiding losses over seeking profits. Therefore, their willingness to pay may increase to avoid losing [43]. Contextual decision-making, including social and marketing factors, also influences people's willingness to pay [44].

2.2. Taxation

The taxes for climate change mitigation used in this study were based on the European Investment Bank or EIB model from 2023–2024 [45], which includes the following approaches:

1) A progressive tax on carbon emissions addresses the injustices of regressive carbon taxes that unfairly affect low-income households by charging a surcharge on carbon emissions, making carbon-intensive goods and services more expensive [46, 47]. Progressive carbon taxes increase with emissions levels, making them fairer and more equitable. Since the revenue from this carbon tax is transferred as a lump sum or dividend to low-income households, it benefits most low-income households. This means that the total revenue collected from the tax is distributed equally among all low-income earners or as a fixed amount per person in the household [48]. Progressive carbon tax models tend to be more supported by low-income groups, as they are seen as fairer than traditional regressive models [49, 51]. They also encourage a shift to cleaner energy sources. Carbon tax rates in Europe have been increasing steadily, and governments plan to increase them to encourage gradual reductions in carbon emissions. Thus, progressive carbon taxes are increasingly popular, particularly among low-income groups, such as in Denmark [47], Switzerland [50], and the United States [51].

2) The carbon wealth tax applies to the net wealth of an individual or entity, with the proceeds going towards climate action and new projects to reduce carbon emissions. It encourages wealthy individuals, such as industrial owners, to take action to address their environmental impacts [52]. They do so by paying a tax based on the carbon footprint of the wealth held by the individual or entity, as well as the carbon emissions from their investments, businesses, and other assets. The tax rate varies depending on the carbon footprint of the asset; for example, investments in high-carbon industries are taxed at higher rates. The proceeds are used to support climate initiatives, such as investing in renewable energy, wind, solar, and other renewable energy sources, supporting building renovations and energy efficiency improvements, investing in infrastructure to combat climate impacts, developing new green technologies and sustainable practices, and supporting communities and individuals affected by such facilities or businesses [53].

According to Köppl & Schratzenstaller [12] and Baranzini [53], carbon taxes can significantly reduce emissions or slow growth without badly impacting economic development, employment, or competitiveness. Still, political and social opposition from business owners and big industrial players who make implementing carbon pricing challenging. Higher costs related to these energy-intensive industries could generate resistance. According to Engström [54] and O'Mahony [55], carbon taxes can significantly reduce emissions compared to other environmental initiatives. For example, Switzerland taxes carbon on heat-related fossil fuels and distributes the money, attesting to public acceptability and positive economic impacts [56]. Lowering income taxes and funding research and development using Australian revenue helps to produce environmental and financial benefits [57]. Thus, overcoming probable resistance from wealthy individuals primarily depends on the management of politicians. Broad political support [58, 59] is necessary for properly applying taxes. This highlights the importance of political support in implementing effective climate policies, raising this issue's relevance for the viewers.

3) Fossil fuel tax reform is proposed as a strategic move to eliminate incentives for using such fuels and address environmental issues. The funds saved from this reform will be redirected to support renewable energy and clean technology. This policy aims to enable the government to use funds effectively and equitably to combat climate change, reduce dependence on fossil fuels, and generate significant economic benefits. A key benefit is the potential for job creation in the renewable energy sectors, stimulating economic growth and offering new opportunities for the workforce. This prudent use of state funds benefits society and addresses the climate crisis [45]. As shown by Liu & Xu [60], subsidies lead to excessive consumption of fossil fuels, resulting in resource waste and increased carbon emissions. They also increase the government's fiscal burden and may lead to smuggling and unequal distribution of benefits between rich and poor residents.

Reducing or eliminating subsidies can lead to a hopeful increase in Gross Domestic Product (GDP) growth per capita and increased employment, especially in regions with high subsidies [61]. It can significantly reduce carbon emissions and promote renewable energy development [60, 62]. Governments can look forward to substantial cost savings by investing in health, education, and infrastructure [61]. According to Mundaca [61], countries in the Middle East and North Africa have experienced positive economic impacts from subsidy reform, with increased GDP growth and employment. Similarly, environmental tax reform in the European Union has shown positive macroeconomic and environmental outcomes when energy prices are low [63]. Fossil fuel tax reform is a complex but necessary step for sustainable development, requiring careful planning and implementation. This should make policymakers feel the weight of their decisions. It is crucial to balance economic, environmental, and social goals. Governments can achieve significant long-term benefits by gradually reducing subsidies, implementing offsetting measures, and investing in renewable energy, with the potential for substantial benefits [64, 65].

2.3. Cultural Values

A country's cultural values influence the willingness to pay taxes to reduce climate change. Inglehart & Welzel [66] asserted that religious and cultural history are significant factors in shaping people's lives in a society. They conducted a survey on global and European values, which they then presented on a cultural map. The Inglehart-Welzel map is a tool used to visualize and compare the cultural values of different countries based on two main dimensions: traditional versus secular values and survival values versus self-expression values. This tool is important as it helps divide countries into cultural clusters reflecting their social values and developmental trajectories [67]. Traditional values versus secular ones are on the y-axis or vertical, and survival values versus self-expression ones are on the x-axis or horizontal. Countries can change their values, with a shift up on the vertical axis reflecting a shift from traditional values to secular ones and a shift to the right from survival values to self-expression ones [66].

1) Traditional values vs. secular values: The contrast between these two value systems is stark. Traditional values emphasize religion, superstition, parent-child relationships, conventional familial principles, and differences in authority and bureaucracy. They have a pronounced sense of national pride and a nationalist disposition. Their economies are predominantly industrial sectors. On the other hand, secular values, which respect rationality and individualism and mistrust conventional authority, empower individuals to think and act independently, fostering a sense of freedom and independence [33, 66].

2) Survival vs. self-expression values: Survival values prioritize a societal structure's cornerstone, underscoring the crucial importance of economic and physical security. They are often associated with ethnocentrism and low trust and tolerance, which are often found in economically developing societies. Self-expression values, on the other hand, focus on individual autonomy and quality of life. They strongly highlight environmental protection, accept and celebrate social differences, want to participate in economic and political decision-making, and desire independence and freedom from a central authority. This emphasis on individual autonomy and quality of life offers a hopeful outlook for societal progress in climate change.

Inglehart and Welzel's perspective underscores the transformative power of economic development in fostering democratic values. Particularly in a country's manufacturing sector, economic growth is crucial in fostering a more secular, tolerant, and trusting society that values self-expression, participation, and quality of life. This shift from survival to self-expression, marked by a transition from an industrialized to a post-industrial or service-sector society, often heralds the adoption of democratic values [33, 66]. This relationship between economic development and cultural values is a key aspect of the analysis, offering a hopeful outlook for societal progress in climate change.

The Inglehart-Welzel World Cultural Map 2023 [33] divided countries into eight clusters: (1) English-speaking countries; (2) Latin American countries, a combination of traditional values and self-expression; (3) Catholic countries, with secular-rational values and high political activism and progressive social values; (4) Protestant countries, with high expression values and high GDP per capita; (5) African-Islamic countries, with strong traditional values and an emphasis

on survival ones; (6) South Asian countries, with traditional values and an emphasis on survival ones; (7) Orthodox countries, with secular-rational values and varying levels of economic development; and (9) Confucian countries, with an emphasis on balance and mutual well-being, while integrating traditional and contemporary values, are included [68].

This map is a clarified resource to understand the profound influence of cultural values on the economic, social, and political development of a cluster of countries. It provides insights into key factors, such as corruption, democracy, and economic competitiveness. Notably, countries with secular values and a focus on self-expression tend to exhibit higher rates of political activism, indicating a significant shift toward more progressive social norms [69, 70]. These cultural values also have significant implications for climate change; for instance, van de Vliert [71] found that societies in climates that necessitate special care, such as cold or hot climates, prioritize survival values over self-expression values. Conversely, societies with more self-enhancement values, such as egocentrism or hedonism, are less likely to endorse environmental conservation efforts [72]. The information presented here should concern and encourage the research team to act and find the difference.

3. Research Methodology

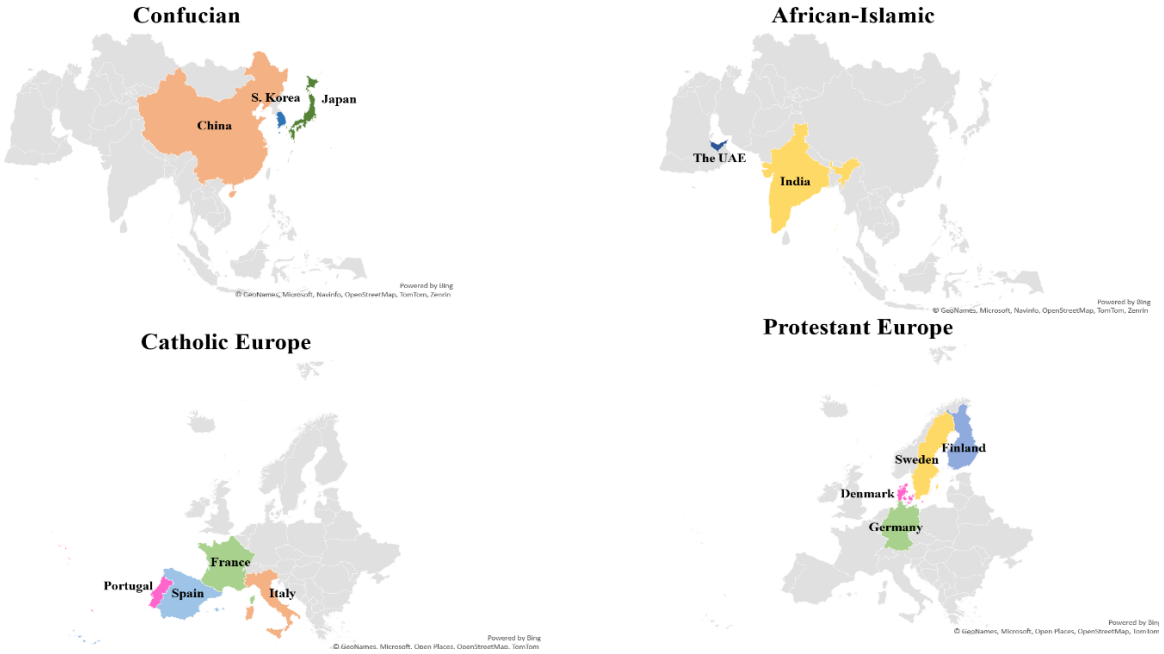
The researchers identify the problems or gaps, research questions, and objectives. Since the researchers reviewed the literature and found that most people in the world are aware of the problems caused by climate change, but many people pay a small amount of taxes for it, such as 1 percent of their income [17], research has discovered that political and economic factors, namely, government actions that must be fair, equal, and inclusive, are important factors that affect tax payment. The perspective and survey of cultural values of Inglehart & Welzel [66] found that cultural values affect people's political ideas and economic development in that country. By classifying countries according to cultural values in 8 clusters of countries in 2023: (1) English-speaking countries, (2) Latin American countries, (3) Roman Catholic countries, (4) Protestant countries, (5) African-Islamic countries, (6) South Asian countries, (7) Orthodox countries, and (8) Confucian countries.

Therefore, the research team has formulated the research question: (1) Do countries with diverse cultural values have a different willingness to pay taxes to reduce climate change and assist low-income individuals? Furthermore, (2) What tax collection methods to reduce climate change result in a higher willingness to pay taxes among people in each culture? Comparing the differences in willingness to pay taxes to reduce climate change among countries with diverse cultures and the strategies of taxes to reduce climate change results in a higher willingness to pay them among people in each culture. This guides policymakers as to what taxes should be. Be collected to ensure fairness, reduce inequality, and increase the public's willingness to pay taxes to reduce climate change. The goals of the study are (1) to find out how willing people are to pay taxes on climate change in different countries with different cultural values and (2) to find tax strategies or methods that work well for low-income groups and get more people to pay their taxes and accept them in different cultural settings.

The researchers relied on secondary data for their data collection, using the European Investment Bank (EIB) survey of public opinion on climate change conducted during 2023–2024 [45]. The survey was administered online via computers, tablets, or mobile phones across all 27 EU member states: the United Kingdom, China, the United States, Canada, India, Japan, South Korea, and the United Arab Emirates. Respondents were randomly selected from nationally representative samples and participated in a self-administered web-based survey. The total sample size was 30,245, aged 15 and over, or 16 and over for Luxembourg. It ensured representativeness using a quota approach, weighing the data by gender, age, occupation, and region and maintaining a 95% confidence interval.

This study specifically focused on Question 20, which asked, “How much extra tax on your yearly income would you be willing to pay to finance climate policies that benefit people with lower incomes than yourself?” Question 21, which asked, "To promote social equality while addressing climate emergencies, some suggest implementing the following new taxation methods," also caught my attention. Would you agree with a progressive tax on carbon emissions, a carbon wealth tax, and fossil fuel tax reform?” [45]. The responses to these questions were crucial in shaping the research focus and findings.

The study population comprises the countries that responded to the questionnaire, with over 30,000 respondents from the European Union, the United States, China, India, Japan, the United Kingdom, the United Arab Emirates, Canada, and South Korea. The sample group was meticulously selected and stratified into clusters representing Europe and Asia to ensure the representativeness of the findings. The Asian cluster includes the Confucian cluster, which comprises three countries (China, Japan, and South Korea), while India and the UAE were selected to represent the African-Islamic cluster. The European cluster is divided into the Catholic Europe cluster, consisting of four randomly selected countries (France, Italy, Portugal, and Spain), and the Protestant Europe cluster, also comprising four randomly selected countries (Germany, Finland, Denmark, and Sweden), as shown in Figure 1.



Clusters	Countries (Samples)				Total
Confucian	China (1,000)	Japan (1,000)	South Korea (1,000)		3 (3,000)
African -Islamic	India (1,007)	UAE (509)			2 (1,516)
Catholic Europe	France (1,000)	Italy (1,000)	Portugal (1,000)	Spain (1,005)	4 (4,005)
Protestant Europe	Finland (1,000)	Denmark (1,000)	Germany (1,000)	Sweden (1,000)	4 (4,000)

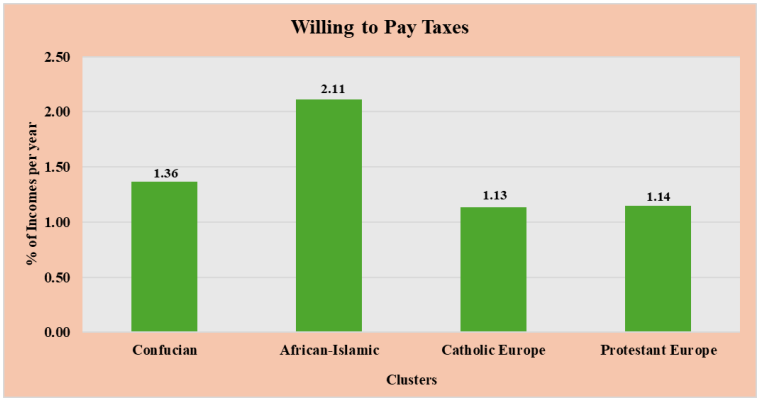
Figure 1. Clusters of countries and the number of samples used for the study

The researchers utilized the Analysis of Variance (ANOVA) method for data analysis, a scientifically rigorous approach that confidence in the robustness of our findings. This method was instrumental in comparing the differences in tax willingness to combat climate change across countries with different cultural values, such as the Confucian, African-Islamic, Catholic Europe, and Protestant European clusters. The ANOVA method was chosen to determine if there is a statistically significant difference in tax willingness among these cultural clusters, thereby supporting the concept that cultural values influence tax willingness. The findings of this study are significant in understanding the complex relationship between cultural values and tax willingness, underscoring the importance of our research in climate change economics and cultural studies.

After that, this study used stepwise multiple regression analysis to examine the relationship between independent variables. These are tax collection methods that aim to fight climate change and help low-income earners. These are (1) a progressive tax on carbon emissions, (2) a carbon wealth tax, and (3) fossil fuel tax reform. The dependent variables are the percentage of the amount individuals are willing to pay in taxes. The stepwise regression analysis determines which tax collection methods influence the willingness to pay taxes to mitigate climate change across various clusters of countries. It selects variables into the model one by one or eliminates unimportant variables from the model step by step. This helps the researchers create a model that is not too complicated and efficient in predicting. Because it selects only the variables that have the most significant impact on predicting the results after analyzing the data, following the data analysis, the researchers will present the data in the form of figures, graphs, and tables.

4. Research Results

The researchers presented the findings in the subsequent order. The primary objective is to compare the willingness to pay climate change taxes across countries with distinct cultural values. This study meticulously and comprehensively examines the relationship between cultural values and the willingness to pay taxes for mitigating climate change, utilizing the conceptual framework proposed by Inglehart and Welzel (2023). The analysis compares tax willingness across various cultural clusters, including countries characterized by Confucian, African-Islamic, Catholic European, and Protestant European values. ANOVA is a strong and accurate way to compare the means of more than two groups. Figure 2 shows the results of a statistical analysis that shows how well it can be used to determine if country clusters with distinct cultural values have different tendencies to pay taxes that help fight climate change and help people with low incomes.



Opinion	Clusters	Mean	S.D.	df	F	P
Willing to pay taxes for climate change	Confucian	1.38	1.13	3	307.14	0.000*
	African -Islamic	2.11	1.18			
	Catholic Europe	1.13	1.14			
	Protestant Europe	1.14	1.16			

** P < 0.05*

Figure 2. Compare the willingness to pay taxes to mitigate climate change in four clusters

Figure 2 shows that the African-Islamic cluster (India and the UAE) is most willing to pay taxes to mitigate climate change, with an average of 2.11% of annual income (S.D. = 1.18). The Confucian cluster (China, Japan, and South Korea) follows with an average of 1.36% (S.D. = 1.13), while the Catholic Europe cluster (France, Italy, Portugal, and Spain) demonstrates the lowest willingness at 1.13% (S.D. = 1.14). The Protestant European cluster (Denmark, Finland, Germany, and Sweden) is willing to pay taxes of 1.14% (S.D. = 1.16).

Accordingly, the researchers investigated whether groups of countries with distinct cultural values exhibit various levels of willingness to pay climate change taxes. They compared the means of the four independent clusters using ANOVA at a 95% confidence level. The analysis revealed that the differences in willingness to pay taxes among the four clusters were statistically significant (p = 0.000). Consequently, the researchers conducted pairwise comparisons using the Least Significant Difference (LSD) method. The results of these comparisons are presented in Table 1.

Table 1. Compare the differences in willingness to pay taxes to mitigate climate change across four clusters

Clusters	Mean	Confucian	African Islamic	Catholic Europe
Confucian	1.36			
African -Islamic	2.11	-0.747*		
Catholic Europe	1.13	0.229*	0.977*	
Protestant Europe	1.14	0.219*	0.966*	-0.010*

** P < 0.05*

Table 1 reveals a significant trend: the African-Islamic cluster demonstrates a notably higher willingness to pay taxes than the Confucian, Catholic Europe, and Protestant Europe clusters, with a statistically significant difference of 0.000. In contrast, the Confucian cluster exhibits a lower willingness to pay taxes than the African-Islamic cluster but a higher willingness than the Catholic Europe and Protestant Europe clusters, with a statistically significant difference of 0.000. While less willing to pay taxes than the African-Islamic and Confucian clusters, the two European clusters also show a statistically significant difference at 0.000. Notably, the Catholic European cluster is less willing to pay taxes than the Protestant Europe cluster. In summary, the African-Islamic cluster's higher tax willingness stands out, while the Catholic Europe cluster's lower willingness is also statistically significant at 0.05. These key findings underscore the variations in tax willingness across distinct cultural clusters.

Following a meticulous and comprehensive process, the research team thoroughly investigated the impact of different tax collection methods on distinct clusters of countries as part of the second objective. They employed stepwise multiple regression analysis to examine the willingness of these countries to pay taxes for climate change mitigation. The researchers implemented several safeguards to ensure the credibility of their findings, including preventing multicollinearity by ensuring that the independent variables were not too closely correlated. The results of this rigorous analysis, presented in Table 2, provide a credible and comprehensive understanding of tax willingness across distinct cultural clusters.

Table 2. Relationship between independent and dependent variables

Variable	A progressive tax	A carbon wealth tax	Mean	S.D.
A progressive tax			2.90	0.844
A carbon wealth tax	0.433**		3.03	0.799
Fossil fuel tax reform	0.406**	0.456**	2.98	0.767

** Correlation is significant at the 0.01 level (2-tailed).

The relationships between the three variables used in the analysis including a progressive tax, a carbon wealth tax, and a fossil fuel tax reform which are shown in Table 2. The self-correlations of these variables were taken out, which had a value of 1. It is important to note that the variables do not have any correlations stronger than 0.5, indicating the absence of any pairs of independent variables with strong correlations that would violate the rules of multiple regression analysis or cause multicollinearity. The researchers then meticulously examined the relationship between independent and dependent variables across different country clusters, with the results presented in Table 3.

Table 3. The taxation methods that affect the willingness to pay taxes to mitigate climate change in four cluster

Variables	b	SEest	β	t	sig
Confucian					
Constant	-0.507	0.110	-	-4.604	0.000
1. A carbon wealth tax	0.216	0.036	0.127	6.039	0.000*
2. A progressive tax	0.200	0.033	0.126	5.996	0.000*
3. Fossil fuel tax reform	0.206	0.036	0.120	5.741	0.000*
R = 0.302 R ² = 0.091	**SE = ± 1.082**	**F = 99.859**	**Sig = 0.000***		
Africa - Islamic					
Constant	0.128	0.177	-	0.725	0.469
1. Fossil fuel tax reform	0.309	0.046	0.185	6.648	0.000*
2. A carbon wealth tax	0.179	0.046	0.108	3.896	0.000*
3. A progressive tax	0.120	0.046	0.072	2.578	0.010*
R = 0.288 R ² = 0.083	**SE = ± 1.127**	**F = 45.440**	**Sig = 0.000***		
Catholic Europe					
Constant	-0.149	0.082	-	-1.830	0.067
1. A progressive tax	0.228	0.024	0.170	9.411	0.000*
2. A carbon wealth tax	0.105	0.027	0.074	3.909	0.000*
3. Fossil fuel tax reform	0.103	0.028	0.068	3.671	0.000*
R = 0.259 R ² = 0.067	**SE = ± 1.099**	**F = 96.393**	**Sig = 0.000***		
Protestant Europe					
Constant	-0.526	0.070	-	-7.555	0.000
1. Fossil fuel tax reform	0.250	0.025	0.181	10.173	0.000*
2. A progressive tax	0.183	0.022	0.147	8.275	0.000*
3. A carbon wealth tax	0.160	0.025	0.121	6.495	0.000*
R = 0.365 R ² = 0.134	**SE = ±1.079**	**F= 205.353**	**Sig = 0.000***		

** p < 0. 05*

Table 3 presents a stepwise multiple regression analysis exploring the relationship between Confucian cultural values (China, Japan, and South Korea) and the willingness to support various climate-related tax policies. The dependent variable represents the willingness to support climate-related taxation, while the independent variables include a carbon wealth tax, a progressive tax, and a fossil fuel tax reform. The multiple regression analysis examines the relationship between tax policies and an unspecified dependent variable in Confucian societies. The model is statistically significant ($F = 99.859$, $p = 0.000$), confirming that the independent variables, including carbon wealth tax, progressive tax, and fossil fuel tax reform, collectively influence the dependent variable. The coefficient of determination ($R^2 = 0.091$) suggests that the model explains 9.1% of the variance in the dependent variable, indicating a modest effect size. At the same time, the standard error (SE = ±1.082) reflects the average deviation of observed values from the predicted regression line.

The constant (-0.507, p = 0.000) is negative and significant, implying that without tax interventions, the dependent variable would take a negative value, potentially signaling unfavorable economic, social, or environmental conditions. Among the independent variables, a carbon wealth tax (b = 0.216, β = 0.127, p = 0.000) has the strongest standardized effect, suggesting that taxing carbon wealth significantly impacts the dependent variable. A progressive tax (b = 0.200, β = 0.126, p = 0.000) also demonstrates a comparable but slightly weaker influence, indicating the importance of equitable tax distribution. Fossil fuel tax reform (b = 0.206, β = 0.120, p = 0.000) is similarly significant. However, it has the smallest effect among the three, suggesting that while taxation on fossil fuels plays a role, it is relatively less influential than carbon wealth and progressive taxation.

These findings indicate that the carbon wealth tax appears to have the strongest effect, followed by fossil fuel tax reform and progressive tax. The analysis reveals a positive and statistically significant relationship between all three tax policies (carbon wealth tax, fossil fuel tax reform, and progressive tax) and the willingness to pay taxes for climate change mitigation in the Confucian countries.

In African-Islamic countries (India and the UAE), a multiple regression analysis examines the relationship between tax policies and an unspecified dependent variable. The model is statistically significant (F = 45.440, p = 0.000), indicating that the independent variables of fossil fuel tax reform, carbon wealth tax, and progressive tax collectively influence the dependent variable. The coefficient of determination (R^2 = 0.083) suggests that the model explains 8.3% of the variance in the dependent variable, implying a modest explanatory power. At the same time, the standard error (SE = ±1.127) reflects the variability in predictions.

The constant (0.128, p = 0.469) is not statistically significant, meaning that when all independent variables are set to zero, the predicted value of the dependent variable does not significantly differ from zero, suggesting that tax policies, rather than other factors, drive changes in the dependent variable. Among the independent variables, fossil fuel tax reform (b = 0.309, β = 0.185, p = 0.000) has the strongest effect, highlighting its importance in influencing the dependent variable, likely due to the economic and energy dependency in the region. A carbon wealth tax (b = 0.179, β = 0.108, p = 0.000) also plays a significant role. However, its impact is weaker than that of fossil fuel tax reform, suggesting that redistributive taxation of carbon-intensive industries is relevant but not as dominant. A progressive tax (b = 0.120, β = 0.072, p = 0.010) has the weakest influence among the three yet remains statistically significant, indicating that progressive taxation shapes the dependent variable but to a lesser extent than fossil fuel and carbon wealth taxes.

The analysis reveals that all three tax policies (fossil fuel tax reform, carbon wealth tax, and progressive tax) have a positive and statistically significant relationship with the willingness to pay taxes for climate change mitigation in the African-Islamic cluster. Fossil fuel tax reform has the strongest effect, followed by the carbon wealth tax and the progressive tax.

Table 3 also presents the results of the regression analysis examining the relationship between various tax methods and Catholic Europe's will to pay (France, Italy, Portugal, and Spain). The multiple regression analysis investigates the relationship between tax policies and an unspecified dependent variable in Catholic Europe. The model is statistically significant (F = 96.393, p = 0.000), indicating that the independent variables, including progressive tax, carbon wealth tax, and fossil fuel tax reform, collectively influence the dependent variable. However, the coefficient of determination (R^2 = 0.067) suggests that only 6.7% of the variance in the dependent variable is explained by the model, indicating a relatively weak explanatory power. At the same time, the standard error (SE = ±1.099) reflects the level of deviation in the model's predictions.

The constant (-0.149, p = 0.067) is negative and marginally insignificant, implying that if all independent variables were equal to zero, the dependent variable would be slightly negative but not significantly different from zero. Among the independent variables, a progressive tax (b = 0.228, β = 0.170, p = 0.000) has the strongest impact, suggesting that redistributive taxation significantly shapes economic or social outcomes in Catholic Europe. A carbon wealth tax (b = 0.105, β = 0.074, p = 0.000) also has a significant effect, though smaller in magnitude, indicating that taxation on carbon-related wealth contributes to the dependent variable but is less influential than progressive taxation. Similarly, fossil fuel tax reform (b = 0.103, β = 0.068, p = 0.000) is statistically significant but has the weakest impact among the three, implying that while reforming fossil fuel taxation has an effect, it is relatively minor compared to the other tax policies.

The findings suggest that progressive taxation has the most substantial influence in Catholic Europe. The analysis reveals that all three tax policies (progressive tax, carbon wealth tax, and fossil fuel tax reform) correlate positively and statistically significantly with the willingness to pay taxes for climate change mitigation in the Catholic cluster.

The Protestant Europe cluster, including Denmark, Finland, Germany, and Sweden, shows the multiple regression analysis examining the relationship between tax policies and an unspecified dependent variable in Protestant Europe. The model is statistically significant (F = 205.353, p = 0.000), indicating that the independent variables, including fossil fuel tax reform, progressive tax, and carbon wealth tax, jointly influence the dependent variable. The coefficient of determination (R^2 = 0.134) suggests that the model explains 13.4% of the variance in the dependent variable, which, while still modest, is the highest among the analyzed regions. The standard error (SE = ±1.079) reflects the extent of deviation in the model's predictions, indicating a relatively stable fit.

The constant (-0.526, p = 0.000) is negative and statistically significant. This means the dependent variable would have a significantly negative value if tax policy had not been changed. This could mean things are going badly in the economy, society, or the environment. Among the independent variables, fossil fuel tax reform (b = 0.250, β = 0.181, p = 0.000) has the strongest impact, suggesting that changes targeting fossil fuel taxation significantly shape economic or environmental outcomes in Protestant Europe. This could reflect the region's historical focus on market-based environmental policies and sustainability initiatives. A progressive tax (b = 0.183, β = 0.147, p = 0.000) also demonstrates a significant influence, reinforcing that redistributive taxation policies contribute to the dependent variable, albeit slightly less than fossil fuel tax reforms. Similarly, a carbon wealth tax (b = 0.160, β = 0.121, p = 0.000) is statistically significant. However, it has the smallest effect among the three predictors, indicating that while taxation on carbon-intensive wealth is relevant, it has a relatively weaker influence in comparison.

In conclusion, in Protestant Europe, all three tax policies, including fossil fuel tax reform, progressive tax, and carbon wealth tax, have a positive and statistically significant relationship with the willingness to pay taxes for climate change mitigation. Fossil fuel tax reform has the largest relative effect, followed by progressive tax and carbon wealth tax.

The results show that all four culturally different clusters favor the three tax-collection methods. However, statistically significant differences exist in how much each group is willing to pay in taxes to help fight climate change. The degree of endorsement for each tax strategy varies across the clusters.

5. Discussion

This study addresses the first research objective analyze comparing the willingness to pay climate change taxes across countries with distinct cultural values and presents a significant and impactful finding. The results indicate that cultural values and differences are crucial in shaping individuals' willingness to pay taxes for climate change mitigation. Notably, the African - Islamic cluster is more willing to pay such taxes than other cultural clusters. The robustness of these findings aligns with the GLOBAL Scan [73], which reported that African and Middle Eastern countries demonstrated the highest level of agreement (28%), followed by Asian countries (20%), Latin American countries (18%), and European countries (14%). These results further reinforce the credibility and relevance of this research. Moreover, the findings are consistent with the study by Dunlap & York [74], which tested Inglehart's theory in the context of developing countries and demonstrated that environmental concern exists even in less developed countries. Additionally, a study by Doğanoğlu et al. [75], found that Indian citizens exhibit a higher likelihood of accepting climate taxes compared to individuals from other countries, particularly those in developed nations.

The African -Islamic cluster is traditional; the respondent has an intense sense of national pride, favors more respect for national authority, or has a bureaucracy as the basis of behavior and power relationships in society, as Inglehart and Welzel mention. It can be seen from India that it is a country with a spirit with millions of gods and various religious philosophies. It is also an ancient country with one of the longest-lasting cultures, including values emphasizing economic and physical security [33, 66]. Consistent with the study of cultural dimensions, Hofstede [76] found that India places high importance on power, has a hierarchy and top-down structure in society and organizations, tends to rely on leaders or those in authority to guide, accepts unequal rights between those in authority who have privileges and those who are lower in the hierarchy. The supervisor is centralized and makes team members obey and follow. This is also consistent with Schwartz's Theory of Basic Values [68, 77], which found that Muslim countries and India have traditional values, namely respect and acceptance of their traditions, cultures, or religions. Practicing religious principles shows group unity and contributes to the survival of the group by behaving under the expectations set by society, such as parents, teachers, and leaders or people in authority, traditions, religion, and culture.

The findings of this study, however, contrast with those of Husted [78], who reported that Hofstede's power distance dimension was negatively associated with environmental sustainability. Nevertheless, these results align with the research of Alemán & Woods [79], who found that African Islamic countries strongly emphasize respecting authority. As a result, citizens in these nations perceive national political institutions as playing a crucial role in addressing global warming. Consequently, governments levy taxes on citizens to finance public expenditures, particularly programs to support disadvantaged groups. These dynamic fosters a sense of civic responsibility, encouraging individuals to cooperate and contribute through taxation. Similarly, Indian citizens also exhibit a willingness to pay climate taxes, a tendency that appears to be strongly influenced by these cultural values. In other words, the government's ability to enforce laws directly impacts tax compliance, as highlighted in the study by Malik & Younus [80].

The UAE and other Muslim-majority countries in the Middle East rely on oil- and gas-based economies and are significantly affected by climate change, experiencing droughts, floods, and rising temperatures. These nations must balance economic development with environmental protection, guided by religious principles that emphasize humanity's role as custodians of the Earth. These religious principles, deeply rooted in Islamic teachings, advocate for environmental stewardship, promoting sustainability, discouraging excessive consumption, and encouraging a balanced relationship with nature [81]. This emphasis on sustainability provides reassurance about the potential for positive change. They also stress the importance of justice and equity, crucial in addressing climate change and its impacts on vulnerable communities.

The potential of Islamic principles, particularly Islamic law, to significantly strengthen and decentralize international climate action is a key aspect. The societal acceptance of climate taxes to mitigate climate change is relatively high in the UAE, as described by Inglehart and Welzel [33, 66]. The African-Islamic societal structure is generally less receptive to behaviors and ideas that deviate from tradition. However, Islam also plays a significant role in shaping attitudes toward climate change, fostering environmental consciousness among its followers through religious teachings and climate-related initiatives. This influence is further reinforced by the Islamic Declaration on Climate Change, issued by the Organization of Islamic Cooperation (OIC) [82]. With its call for reductions in greenhouse gas emissions and promotion of net-zero strategies [83], this declaration establishes a religious framework that supports climate action. Its existence gives hope for future climate change responses, extending to financial contributions such as climate-related taxation.

The study of Hussein et al. [84] revealed that integrating Islamic ethics can promote more inclusive and justice-focused climate policies. This integrative approach highlights the potential of Islamic law to strengthen and decentralize international climate action, resulting in more just and effective solutions by drawing on Islamic legal concepts. Also, the study of Al-Jayyousi et al. [85] showed that Islamic values could positively interact with environmental responsibility and environmentally friendly behavior, inspiring and motivating individuals to act in an environmentally responsible manner. These studies support that Islamic principles and finance can contribute to climate change mitigation and adaptation through unique cultural, religious, and ethical perspectives, promoting environmental justice. In addition, in Muslim countries with low economic security, survival values tend to be more important than environmental issues. However, developed Muslim countries, such as some countries in the Middle East with good economic status, are beginning to give more importance to environmental issues, following the concept of value change of Inglehart & Welzel [66].

After African-Islamic countries, Confucian countries ranked second in willingness to pay taxes for climate change mitigation and in support of tax measures. This trend can be explained by the profound influence of Confucian cultural values on economic decision-making. These values, which emphasize ethical behavior, social responsibility, and a strong sense of duty, play a key role in shaping social norms, including financial support for collective welfare. Understanding these cultural values' role and social norms' power in driving support for climate action can enlighten it. Chen et al. [15] found that willingness to pay taxes for social benefits, including climate change mitigation and reducing corporate tax avoidance, in China is influenced by cultural values and environmental awareness. Thus, more Chinese people will likely support financial measures such as personal carbon taxes and green energy policies.

Inglehart & Welzel [66] state that Confucian countries share survival values like African Islamic countries but express more secular and rational views. Japan ranked highest among all the countries surveyed. Inglehart and Welzel also found that Confucian countries have relatively low self-expression values. This indicates that societies prefer survival-oriented behavior over self-expression. This cultural influence is important because it influences the attitudes of Confucian societies, who view individual actions as constrained by social norms and view self-will as inappropriate. Moreover, Confucian countries are characterized by the value of a long-term focus [76]. Webb [86] and Qureshi & Ahsan [87] found that a long-term and collective focus was important in increasing the climate change risk perception. This cultural influence significantly increases the willingness to invest in mitigation efforts. For example, allocating carbon tax revenues to subsidize clean energy technologies has been widely supported. In Japan, the average willingness to pay (WTP) for climate action was ¥4,008 per year (€24.78 per year), the highest of all countries surveyed. Similarly, in China, Mehboob et al. [88] explored the adoption of green taxes in response to the severe environmental challenges of rapid economic growth. These measures constitute a broader national effort to combat environmental degradation and address climate change.

These findings underscore the resilience of traditional cultural values in the face of modernization, a perspective supported by Inglehart & Welzel [66]. Despite significant economic and social transformations in China, Japan, and South Korea, traditional cultural values such as those influenced by Confucianism remain influential. The shift from manufacturing to service-sector dominance, the decline of blue-collar jobs alongside the rise of white-collar professions, and the increasing importance of finance, healthcare, education, and technology have not eroded these values. Instead, modernization has brought a greater emphasis on individual choice, self-expression, quality of life, environmental sustainability, and the gradual secularization of society, accompanied by a decline in traditional religious authority. However, Confucianism, as a philosophical and ethical system, has profoundly shaped the cultural foundations of China and East Asia for more than 2,500 years. Its core values deeply permeate societal values and behavior, including benevolence and humanitarianism, justice, fairness, and ethical decision-making. Confucian principles also stress loyalty to one's ruler and country, dedication to collective well-being, social unity and harmony, and a preference for consensus over conflict. Despite globalization and the influence of Western values, Confucianism remains a fundamental cultural pillar in East Asia, continuously adapting to contemporary contexts. This enduring cultural heritage is a testament to Confucianism's profound and pervasive impact on East Asian societies [89].

Although economic modernization has brought prosperity, Confucian cultural principles persist in shaping economic and social structures. For instance, Poznanski [89] refers to this phenomenon as Confucian economics, a system fundamentally different from the liberal economics of the West. In this model, individuals work not solely for personal

gain but for their families and communities, reflecting collectivist and long-term-oriented values rooted in benevolence and social responsibility. According to Hofstede's [76] framework and the research of Hou et al. [90], Confucian culture significantly influences the financial behavior of the Chinese.

In addition, Manurung et al. [91] found that Confucian teachings developed into national moral values, contributing to Japan's political stability. A particularly striking Confucian influence in Japan is the role of shame in shaping political culture. Confucian principles emphasize governance through morality and propriety, which foster a strong sense of moral responsibility. As a result, officials implicated in corruption are more likely to resign out of shame, which strengthens public trust in a government that is seen as honest and responsible, an important element in maintaining transparency in governance. Consistent with Chaikumbung [18], citizens in less corrupt countries are more willing to support solutions to climate change. Similarly, as South Korea has undergone deep industrialization and modernization, research by Kim & Hamilton-Hart [92] shows that Confucianism has a profound influence on cultural norms, family values, workplace practices, and political institutions.

Distinct in their tax compliance behavior, Catholic and Protestant Europe stand out from African-Islamic and Confucian countries due to their unique cultural values. Both European groups share common values related to self-expression, environmental protection, acceptance of differences, and the necessity of participating in economic and political decision-making. This active participation in economic and political decision-making is a key aspect of their culture, reflecting their democratic values and strong economic standing. Their emphasis on self-expression and quality of life over economic and physical security fosters trust. Notably, as identified by Inglehart & Welzel [33, 66], Protestant Europe exhibits a higher degree of self-expression, a cluster of values encompassing social tolerance, life satisfaction, public expression, and a desire for liberty. This cultural characteristic makes individuals in Protestant European countries more inclined to make financial sacrifices for the public good.

In contrast, individuals in the Nordic countries and the Netherlands exhibit the highest levels of support for environmental protection. According to Hofstede [76], these countries are characterized by individualistic societies that value flexibility and have fewer regulations. In these societies, individuals expect to be self-sufficient, possess high self-esteem, and believe strongly in their potential. Inglehart and Welzel's cultural concept suggests that societies with post-materialistic values, which develop in wealthier societies, tend to have higher environmental intentions and are more likely to support climate taxes. A significant body of research has found that individualism and autonomy are positively associated with a greater willingness to contribute to the public good, which includes combating climate change. This positive association underscores the potential for individuals with these values to make a significant impact by paying taxes to provide for public goods, such as addressing climate change [81, 93].

This study challenges the prevailing view proposed by Inglehart & Welzel [66], which suggests that wealthier, post-industrial countries are more inclined to support environmental initiatives and climate taxes due to their emphasis on ethical behavior and social responsibility, leading to higher tax compliance [80]. In contrast, the findings of this study align with Mostafa's research [94], which indicates that the willingness to make sacrifices for environmental protection is a global phenomenon, not limited to affluent nations. Additionally, Franzen & Vogl's study [95] revealed that respondents from economically disadvantaged countries in Asia and Eastern Europe exhibited higher levels of consent for climate action than those from wealthier Western countries, highlighting the importance of considering economic disparities when understanding environmental attitudes.

At the same time, the influence of societal values on environmental behavior is significant. Societies with high individualism may be less collaborative in addressing climate change, while those with high uncertainty avoidance tend to be more concerned and willing to act [96-98]. Future-oriented cultures, such as those in Confucian countries like China and South Korea, are more likely to support carbon reduction efforts [18, 99]. This aligns with Bohm et al.'s research [100], which found that different cultures exhibit varying behavior toward climate change mitigation. Norwegians in Protestant Europe tend to adopt a more flexible approach to climate change and are less hopeful about its management than countries with high concerns and collectivistic values. Additionally, societies that prioritize self-expression exhibit less environmentally friendly behavior than societies with lower self-expression values and lower economic development [101].

However, even though respondents in European countries are less willing to pay taxes to mitigate climate change than those in Asian countries, this does not mean that Europeans are not concerned about climate change. For example, research by Davidovic & Jagers [102] found that although higher levels of education in Europe are associated with higher environmental concern, this does not necessarily translate into a higher willingness to pay taxes. The implication is that cultural values have significantly influenced willingness to pay taxes, with some European countries showing lower tax payments due to historical and cultural factors [103]. Environmentally conscious individuals are less likely to support climate tax in regions with low political trust and high corruption, such as Davidovic [104].

Furthermore, many Europeans already face high tax rates. This has increased opposition to environmental taxes [102]. However, they support alternative environmental policies that do not involve paying taxes alone, such as voluntary donations [105]. This implication aligns with Inglehart and Welzel's theory [66], which shows that societies with postmaterialist or self-expression values, a concept that refers to a shift in societal values from materialist to postmaterialist, still value the environment. It is also consistent with Schwartz's value theory [68, 77], which sees Europeans as having sustainability values, i.e., emphasizing environmental care and responsible resource use, environmental conservation, environmental awareness, and sustainable development. However, they are individualistic, emphasizing personal freedom, human rights, and self-expression, and they want independence, self-reliance, and high personal responsibility, thus reducing climate change in a way with which they are satisfied.

Even within the European continent, the Catholic Europe cluster, which refers to the group of European countries with a predominantly Catholic population, is less willing to pay taxes than the three clusters studied in this research, with an average of only 1.13% of annual income [45]. This finding is consistent with Rotaris & Danieli's [106] research, which reported that Italians' average willingness to pay taxes ranged from €0.17 to €0.30 per year. In France, a pioneer in environmental taxes for nearly six decades, public opposition to such policies persists. A survey of 3,000 French citizens conducted by Douenne & Fabre [21, 107] revealed that the primary reason for rejecting a carbon tax is a pessimistic view of the tax's efficacy.

Although tax revenues are redistributed to households to make the policy progressive, most people believe that both they and low-income households will experience greater financial losses and that the tax will be ineffective in reducing greenhouse gas emissions [108, 109]. Many French citizens believe that income distribution is unfair, primarily benefiting those in power and perpetuating inequality, a perception that evokes an intense sense of injustice. They perceive the burden of income loss as disproportionately high and argue that the policy is regressive and environmentally ineffective. Opponents of the carbon tax, driven by a lack of trust, call for the government to introduce fairness schemes for poor households to address fuel poverty effectively [110]. Their prominent levels of anxiety and profound distrust of the government] underscore a pervasive sense of injustice [111].

The sentiments of European Catholics observed in this study are consistent with the findings of Inglehart & Welzel [66]. These scholars noted that Catholic countries highly value personal freedom and human rights, support democracy and freedom of expression, value political participation, and encourage citizens to participate in political decision-making. Furthermore, these countries tend to have critical attitudes toward government, such as questioning government policies or protesting government actions, a view consistent with Hofstede's [76] research. This inequality emphasizes the urgent need for ordinary citizens to demand their rights from those in power to achieve equality. As a result, they tend to support lower taxes than other groups in the study. It is also consistent with Schwartz's value theory [68, 77], which found that Europeans are individualistic, value personal freedom, human rights, self-expression, independence, and self-reliance, and consider personal responsibility important. They desire their direction, freedom of thought and action, creativity, and the ability to choose their own goals.

To address the second research objective regarding methods of climate change mitigation taxes that assist low-income earners and lead to a higher willingness to pay among people of different cultures, this study found that the three tax collection methods; namely a progressive carbon emission tax, a carbon wealth tax, and fossil fuel tax reform; each impacted the willingness to pay taxes across all four country clusters. Importantly, these methods were found to provide significant benefits to low-income earners, a promising finding that aligns with Harper's value theory [37] and the research of Ullah Khan et al. [38].

The respondents' willingness to pay is particularly significant, as they perceive the three tax collection methods as valuable. These methods are seen as providing benefits to low-income earners, reducing climate change, and assisting disadvantaged groups. This perception directly influences their willingness to pay. For instance, these methods are expected to improve quality of life, lower energy costs, and contribute to a better environment. Consequently, respondents expressed a greater willingness to pay taxes, which is consistent with the behavioral economics theory, particularly the concept of loss aversion. This theory, which plays a crucial role in promoting behaviors that reduce environmental impacts, is a powerful tool in creating effective incentives for individuals to make more environmentally friendly decisions, thereby enlightening the audience about the potential of this approach.

The application of this concept within environmental policy can significantly aid in addressing environmental challenges. Respondents are motivated by the desire to avoid the losses associated with climate change, leading them to be more willing to pay taxes to prevent such losses [42, 43]. However, the four country clusters, which represent different socio-economic and cultural contexts, show varying levels of support for the tax methods, as illustrated in Figure 3. These variations can be attributed to factors such as income levels, cultural attitudes toward taxation, and the perceived severity of climate change impacts.

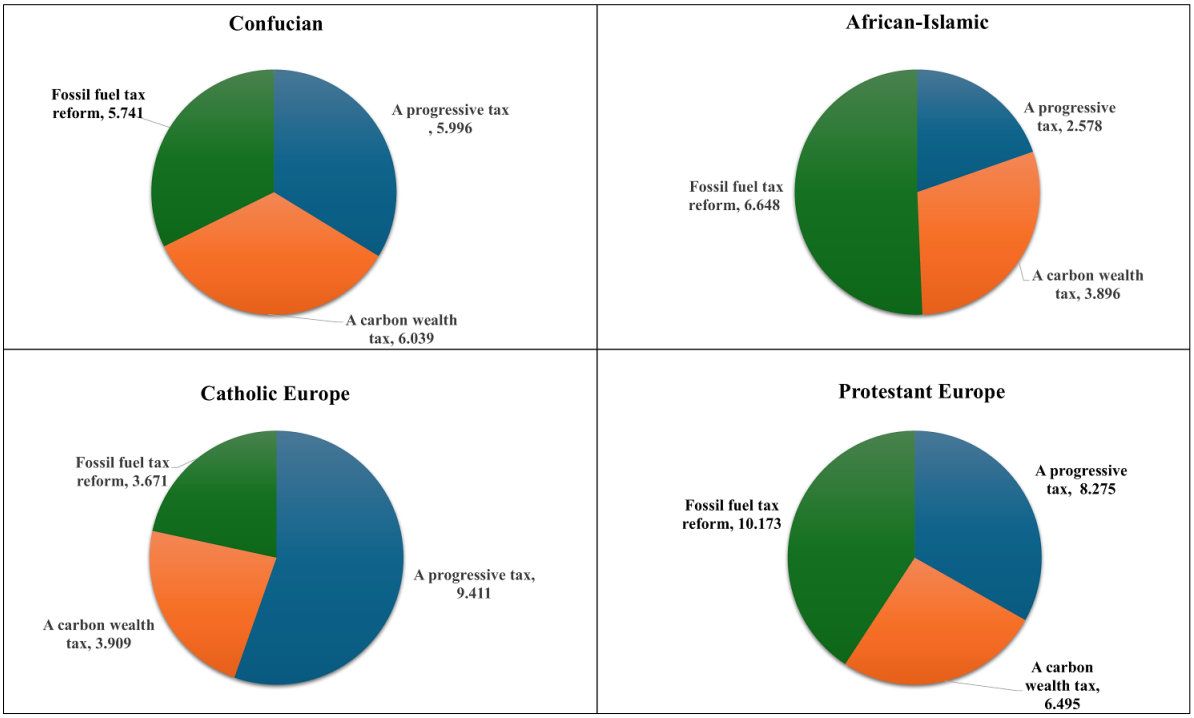


Figure 3. The three taxation methods affect the willingness to pay taxes in four clusters

Figure 3 illustrates that the tax collection method in Confucian countries similarly affects the willingness to pay taxes across all three countries. The carbon wealth tax, a tax on income generated from environmentally harmful activities, greatly impacts this group. In contrast, fossil fuel reform has the least effect. Respondents perceived that the higher the income an individual or company generates from environmentally harmful activities, such as fossil fuel extraction, the greater the tax on that income. The goal is to create incentives to reduce harmful activities and fund significant efforts to address the climate emergency [45]. Although China is the world's largest producer of coal-fired fossil fuels and Japan relies heavily on fossil fuel imports, Kvaløy et al.'s research [112] found that countries with high carbon emissions and individuals from countries with elevated levels of climate disasters were not significantly associated with awareness of climate change. Instead, values such as the perceived seriousness of the problem, post-materialistic values, political stance, and religious beliefs played a crucial role in shaping awareness of it.

This finding is consistent with the research of Kawakatsu et al. [113], who discovered that East Asian countries, including Japan, China, South Korea, and Taiwan, have implemented carbon wealth taxes. These taxes significantly enhance the effectiveness and efficiency of environmental policies and reduce the economic burden across these nations. Guo et al. [114] further found that this type of tax can foster the transition to a cleaner energy system, offering hope for a more sustainable future. In Japan, high-income earners and business owners are more willing to pay taxes if the carbon tax revenue is used to subsidize clean energy technologies, particularly in Tokyo. On the other hand, in South Korea, implementing a carbon tax led to a 17-18% reduction in coal consumption, resulting in a significant 10% decrease in carbon emissions [115, 116].

This highlights the profound influence of Confucian values on carbon consumption and tax perceptions. Respondents suggest that a fair tax system should be implemented, especially in China, which has a large manufacturing base and relies heavily on energy-intensive industries. According to Confucian philosophy, carbon consumers such as business owners and high-income earners should pay higher taxes. This philosophy, which teaches that those in power should exhibit humility, kindness, respect, thrift, and tolerance, considering the well-being of others before their own, as outlined by Chen & Jebran [99] in their study, plays a crucial role in shaping tax perceptions.

Additionally, Confucian countries emphasize long-term orientations and collectivist values, which significantly influence their willingness to cooperate to mitigate climate change's effects. The belief that paying taxes to support those less fortunate is a moral responsibility is deeply ingrained in Confucian individuals. This perspective aligns with national values that emphasize uncertainty avoidance and reflect ancient teachings, as discussed in the works of Alemán & Woods [79], Webb [86], and Qureshi & Ahsan [87]. The emphasis on long-term goals and collective action in Confucian societies inspires hope for the potential of collective change in the face of climate change, motivating us to work together for a better future.

All three taxation methods in African-Islamic countries influence the willingness to pay taxes, with fossil fuel tax reform being the most supported. This is particularly relevant in India, which heavily depends on coal, and Saudi Arabia, the world's largest oil producer and consumer. However, it is important to note that public values play a crucial role in

mitigating climate change and fostering social equity [66]. These values, which include eliminating subsidies and tax breaks for companies that use fossil fuels and air transport and redirecting public funds to subsidize renewable energy and clean technologies, are not just ideals but powerful tools for change.

India's considerable progress in fossil fuel subsidy reform over the past decade, with an 85% reduction in financial subsidies for the oil and gas sector, from $25 billion in 2013 to $3.5 billion by 2023 [117], is a beacon of hope. These reforms have significantly reduced India's renewable energy subsidies since 2017 [118], freeing government funds for renewable energy, electric vehicles, and electricity infrastructure. They have also improved access to and expanded liquefied petroleum gas (LPG) use among the rural poor. Consistent with Ojha et al.'s research [119], taxes levied are being invested in building capacity across sectors, particularly in the clean energy sector. Furthermore, to enhance income distribution, India has implemented transfers to households. According to a 2024 Europe Investment Bank survey, 84% of respondents from both India and the UAE expressed a desire for financial support to transition to a low-carbon economy, signaling a promising future where such support could be a reality [45].

The UAE is also likely to reform fossil fuel subsidies, historically resulting in budget cuts and reduced fossil fuel export revenues. However, the need for such reforms has become increasingly apparent due to economic and environmental pressures, including budget balancing and addressing climate change [120]. This aligns with research by Rentschler & Bazilian [121], who found that fossil fuel tax reforms in African Muslim countries have been used to reallocate savings from subsidies toward social welfare programs for low-income earners or those investing in sectors that stimulate economic growth, reduce losses from toxic air pollution, and mitigate climate change simultaneously.

Their fossil fuel reforms, deeply grounded in Islamic principles, have resulted in significant economic and environmental benefits. This alignment with Islamic teachings and values underscores such policies' cultural and religious compatibility and reassures us of their validity. Islamic teachings and proclamations support climate action. According to research by Maina [122], a financial mechanism integrating Islamic finance into the climate finance framework has been developed. This is further supported by the work of Olawuyi [82], Zuhroh & Malik [83], and the theoretical frameworks of Inglehart & Welzel [66] and Schwartz's values [68], which emphasize the importance of tradition, conformity, security, and inherited beliefs within societies. These frameworks align with Islamic values that encourage sustainable practices and climate action.

The Catholic Europe cluster plays a pivotal role in advocating for a progressive tax on carbon emissions. The cluster strongly supports this approach, where individuals with higher incomes would pay a higher tax rate when purchasing goods like petrol to combat climate change. The goal is to ensure everyone contributes their fair share to address the climate crisis [45]. This approach aims to reduce carbon emissions while considering the economic and social impacts on different income groups. A key factor in successful implementation is a gradual tax increase, with revenues distributed to low-income households. The Catholic Europe cluster views its current carbon taxes as regressive, but progressive reforms can be made through strategic revenue recycling and targeted transfers.

Addressing regional differences and focusing on reducing fuel poverty, where households cannot afford adequate heating, is a crucial aspect of a fair and effective carbon tax policy. This approach ensures that all regions and income groups are considered, making the audience feel included and considered. For example, carbon pricing should be transparent and cost-effective, with higher-income households more affected by taxes on motor fuels and transport services. In contrast, lower-income households are primarily impacted by taxes on basic housing services, such as electricity and heating. Therefore, political trust and good governance practices are essential for supporting climate change mitigation policies. If citizens perceive widespread corruption, trust in public institutions decreases, leading to lower support for a climate tax, as found by Davidović [122]. Furthermore, an EIB survey revealed that only 37% of Catholic European countries are confident in their government’s ability to reduce climate change and social inequalities [45].

This taxation policy emphasizes fairness and will reassure the public about its social impact [123, 124]. For example, Italy introduced a carbon tax in 1999, which mitigated its regressive effects, a term used to describe a tax that takes a larger percentage of income from low-income earners than from high-income earners, by redistributing income to low-income households, thereby reducing income inequality by approximately 2 Gini points [124]. Similarly, a progressive carbon tax in Portugal and significant emissions reductions can help mitigate the economic impact and ensure more equitable product distribution. This balanced approach can enable Portugal to achieve its climate goals without negatively impacting economic growth or social equity [125]. It is important to note that a regressive carbon tax, as observed in Spain, can disproportionately affect low-income households. However, this regressiveness can be mitigated by a key strategy: recycling tax revenues through regular cash transfers or transforming the policy into a more progressive one [126].

Catholic European countries, with their strong focus on equality, are at the forefront of considering the implementation of a progressive carbon tax. This tax, designed to ensure fairness and reduce inequality, is a crucial decision for these countries. Their leadership in promoting social equity through this policy is inspiring and motivates

others to follow suit. Sharing carbon tax revenues primarily with low-income households could address environmental concerns while contributing to a more equitable society. According to the democratic principles in Western European countries, there is a vibrant democratic process along with strong protections of civil liberties and political rights, as noted by Inglehart & Welzel [66] and Hofstede [76]. The potential impact of a more progressive carbon tax on the willingness of European Catholics to pay taxes is a key consideration in this context. This is consistent with Inglehart and Welzel's concept of secular-rational and self-expression values, as well as Schwartz's theory [68, 77], which suggests that these values align with principles of egalitarianism, the transcendence of selfish interests, helpfulness, social justice, a peaceful world, and equality.

The Protestant European cluster believes fuel tax reform influences their willingness to pay taxes more than others. This is consistent with the ongoing efforts of these countries to reduce their dependence on fossil fuels and achieve carbon neutrality between 2030 and 2050. The progress of these transitions varies across countries, with some, such as Norway, making more significant strides in transitioning to renewable energy. However, industry and transport remain the most fossil fuel-dependent sectors. These countries continue to lead in reducing fossil fuel use and transitioning to clean energy. By developing policies and technologies that can serve as models for other nations, they support fossil fuel tax reform, which includes eliminating subsidies and tax breaks for companies that rely on fossil fuels and air transport. The additional public revenue would subsidize renewable energy and clean technologies to combat climate change. The goal is to ensure that public funds are used fairly to address the climate crisis, a principle strongly upheld by the Protestant European cluster. Most respondents in this cluster indicated that they would also support other climate-related taxes. About 71% supported a fossil fuel tax reform to eliminate subsidies and tax breaks for the aviation sector and other industries that heavily depend on fossil fuels. However, they preferred that the revenue not be used for their benefit but rather for promoting environmental sustainability, with 53.5% agreeing with this stance lower than the support seen in other country clusters [45].

This belief is strongly supported by the research of Sivonen & Koivula [126], which indicates that various fossil fuel taxes have been implemented as part of environmental policies to reduce greenhouse gas (GHG) emissions and promote sustainable development. These taxes seek to decrease the use of fossil fuels while encouraging the adoption of renewable energy sources. The alignment of this research with the beliefs of Protestant European countries is a testament to the validity of the findings, offering hope for both economic growth and sustainability.

Fossil fuel taxes in Nordic countries have proven beneficial for economic development, particularly through revenue generated from energy and transportation taxes, which significantly contribute to GDP per capita [127]. Germany reformed its fossil fuel taxes to align tax rates with carbon dioxide emissions, promoting environmental sustainability while considering the economic and social impacts. This reform gradually redistributed income, providing tax relief to most households, especially those using environmentally friendly transportation systems [128]. In Finland, the revenue generated from tax reforms is used to reduce other taxes, such as labor taxes, to mitigate negative economic impacts [129, 130]. Similarly, in Denmark, the revenue generated from fossil fuel tax reforms is used to reduce other taxes, alleviating the economic burden on society [130-132]. Sweden has implemented various fossil fuel tax reforms, significantly reducing fossil fuel consumption and greenhouse gas emissions. Reports indicate that greenhouse gas emissions have decreased by 35% since the introduction of these reforms, providing significant relief to low-income households.

As Inglehart & Welzel [66] proposed, reforming fossil fuel taxes aligns not only with economic development, increased self-expression, democracy, and capitalism but also with our values of self-expression and quality of life in post-industrial or predominantly service-oriented societies. This reform, driven by these values, is not important, but urgent. As Inglehart and Welzel argue, it necessitates independence from state control. The government should reduce subsidies for those responsible for severe climate change and reallocate the funds from these subsidy removals to activities that benefit the environment and society. This alignment with our societal values is crucial for reform success.

Individualism and freedom are crucial in shaping public support for initiatives, including combating climate change. Without imposing undue burdens on individuals, organizations that use fossil fuels and air transportation should bear the costs themselves without government support. In particular, the service and tourism industries that arise in post-industrial or predominantly service-oriented societies contribute significantly to climate change. For example, the airline industry exacerbates global warming through the combustion of fossil fuels. As such, these industries should bear the costs associated with their environmental impact by charging passengers higher fees. According to the "Polluter Pays Principle," widely accepted in Nordic societies, companies that cause pollution should be held responsible for the costs of solving environmental problems rather than relying on taxpayer money to subsidize these businesses. This principle, rooted in reason and logic, ensures that those contributing to environmental degradation also contribute to its solution. When people perceive society as fair, they are more motivated to pay taxes. This aligns with Hofstede's [76] view that these countries exhibit high individualism, emphasizing the principle that the polluter must pay. The proposed system is reasonable and fair, ensuring that those who contribute to the problem contribute to the solution in a just and equitable manner.

These findings confirm the ideas of Inglehart and Welzel and support Schwartz's theory of cultural dimensions. A study by Dobewall & Strack [133] found that Protestant values include openness to change, self-direction, independent thought and action, choice, creativity, exploration, novelty, and challenge. For example, Norway is a prominent example of promoting the use of electric vehicles, with the government setting policies and incentives to encourage citizens to switch to more environmentally friendly vehicles. Citizens, understanding the importance of reducing greenhouse gas emissions and dependence on fossil fuels, support these policies [134]. These policies indicate a desire to improve society. They are also leaders in sustainability and climate change mitigation through environmentally friendly behaviors and policies, such as the use of clean energy, sustainable transportation, waste reduction, and support for economic measures such as carbon taxes and recycling policies, all of which reflect a culture that cares about the planet and the future of future generations [135].

6. Conclusion

The study found that countries with distinct cultural values, as suggested by Inglehart and Welzel, were more willing to pay climate change taxes that benefit low-income individuals. Traditional and religious minded countries were more supportive of such taxes than developed or post-industrial countries that prioritized environmental protection and sought higher levels of participation in economic and political decision-making. When examining what taxation strategies influenced willingness to pay climate change taxes, both traditional and survival countries and secular and self-expressive countries were most supportive of fossil tax reforms, which are reforms that aim to divert money from energy-intensive or polluting makers without government support to help low-income individuals and create social equity.

The carbon wealth tax is particularly significant in countries transitioning from an industrial to a post-industrial society, where the belief that high-income earners should assist those less fortunate is deeply rooted in religious beliefs. Moreover, countries that advocate for equality and place a high value on transparency and accountability in government see the significance of a progressive carbon tax to assist low-income earners fairly, providing reassurance and confidence in the system. This emphasis on aiding the less fortunate can foster a sense of empathy and compassion among policymakers. Tax policymakers must align all three forms of tax with the cultural values, including the political and economic ideas, of the people in that country. This alignment is not just a strategy but a necessity that can lead to greater public acceptance and support for tax policies. By doing so, the government can demonstrate the positive outcomes or successes resulting from the tax, such as reducing climate change and using the revenue fairly to assist low-income individuals in concrete terms.

6.1. Limitations and Way Ahead

This study utilized secondary data from the European Investment Bank (EIB), which conducted a public opinion survey on climate change among citizens in the European Union, the United States, China, India, Japan, the United Kingdom, the UAE, Canada, and South Korea during the years 2023-2024. It is important to note that the African-Islamic countries group, while potentially having fewer countries and respondents than other regions, may result in a smaller sample size. This could impact on the generalizability of the findings and should be considered when interpreting the results.

In addition, the EIB's survey covered a significant range of countries, including China, Japan, North Korea, India, and the United Arab Emirates, forming our study's basis. While the data was limited, these diverse countries provide a comprehensive view. Furthermore, several Eastern European countries in the Catholic Europe group, such as Slovenia, Slovakia, Latvia, Hungary, and Croatia, will be used for future comparisons with Western European countries and Western European Catholic European countries. Secondary data needs to be collected at the individual country’s level to enrich the database and allow further analysis of the tax reforms. Thus, this research paves the way for the adoption of models among various developing and underdeveloped countries.

7. Declarations

7.1. Author Contributions

Conceptualization, N.R.K., S.K., and S.P.; methodology, S.K. and S.P.; software, S.K. and S.P.; formal analysis, N.R.K., S.K., S.P., and Q.Z.; investigation, S.K., S.P., and Q.Z.; data curation, S.K., S.P., and Q.Z.; writing—original draft preparation, S.K. and Q.Z.; writing—review and editing, N.R.K., S.K., and S.P.; visualization, S.P.; supervision, N.R.K. All authors have read and agreed to the published version of the manuscript.

7.2. Data Availability Statement

The data presented in this study are available in the article.

7.3. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7.4. Acknowledgments

The researchers express gratitude to the European Investment Bank (EIB) for the Climate Survey data utilized in the analysis and preparation of this work.

7.5. Institutional Review Board Statement

Not applicable.

7.6. Informed Consent Statement

Not applicable.

7.7. Declaration of Competing Interest

The authors declare that there are no conflicts of interest concerning the publication of this manuscript. Furthermore, all ethical considerations, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

8. References

[1] N.R.C. (2012). Climate change evidence, impacts, and choices answers to common questions about the science of climate change. National Research Council (N.R.C.), Washington, D.C., United States. Available online: https://nap.nationalacademies.org/resource/12781/Climate-Change-Lines-of-Evidence.pdf (accessed on May 2025).

[2] IPCC. (2021). Climate change 2021: The physical science basis. Intergovernmental Panel on Climate Change (IPCC). Available online: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf (accessed in May 2025).

[3] Ali, M. A., & Kamraju, M. (2023). Climate Change and Natural Resources. In Natural Resources and Society: Understanding the Complex Relationship between Humans and the Environment, 143-158. doi:10.1007/978-3-031-46720-2_10.

[4] United Nation. (2022). Causes and effects of climate change. United Nation, New York, United States. Available online: https://www.un.org/en/climatechange/science/causes-effects-climate-change (accessed in May 2025).

[5] Pan, J., Cross, J. L., Zou, X., & Zhang, B. (2024). To tax or to trade? A global review of carbon emissions reduction strategies. Energy Strategy Reviews, 55. doi:10.1016/j.esr.2024.101508.

[6] Tiller, T. R., & Schott, C. (2013). The Critical Relationship between Climate Change Awareness and Action: An Origin-Based Perspective. Asia Pacific Journal of Tourism Research, 18(1–2), 21–34. doi:10.1080/10941665.2012.697648.

[7] IBRD. (2017). Carbon tax guide: A handbook for policy makers. International Bank for Reconstruction and Development. Available online: https://documents1.worldbank.org/curated/en/728421535605566659/pdf/129668-V1-WP-PUBLIC-Carbon-Tax-Guide-Main-Report.pdf (accessed on May 2025).

[8] OECD. (2023). Effective carbon rates 2023: Pricing greenhouse gas emissions through taxes and emissions trading, OECD series on carbon pricing and energy taxation. OECD, Paris, France. doi:10.1787/b84d5b36-en.

[9] Ahmad, M., Li, X. F., & Wu, Q. (2024). Carbon taxes and emission trading systems: Which one is more effective in reducing carbon emissions?—A meta-analysis. Journal of Cleaner Production, 476, 143761. doi:10.1016/j.jclepro.2024.143761.

[10] Nsabiyeze, A., Ma, R., Li, J., Luo, H., Zhao, Q., Tomka, J., & Zhang, M. (2024). Tackling climate change in agriculture: A global evaluation of the effectiveness of carbon emission reduction policies. Journal of Cleaner Production, 468, 142973. doi:10.1016/j.jclepro.2024.142973.

[11] Gugler, K., Haxhimusa, A., & Liebensteiner, M. (2021). Effectiveness of climate policies: Carbon pricing vs. subsidizing renewables. Journal of Environmental Economics and Management, 106, 102405. doi:10.1016/j.jeem.2020.102405.

[12] Köppl, A., & Schratzenstaller, M. (2023). Carbon taxation: A review of the empirical literature. Journal of Economic Surveys, 37(4), 1353–1388. doi:10.1111/joes.12531.

[13] Fremstad, A., & Paul, M. (2019). The Impact of a Carbon Tax on Inequality. Ecological Economics, 163, 88–97. doi:10.1016/j.ecolecon.2019.04.016.

[14] Maestre-Andrés, S., Drews, S., Savin, I., & van den Bergh, J. (2021). Carbon tax acceptability with information provision and mixed revenue uses. Nature Communications, 12(1), 7017. doi:10.1038/s41467-021-27380-8.

[15] Chen, S. (2022). The inequality impacts of the carbon tax in China. Humanities and Social Sciences Communications, 9(1), 277. doi:10.1057/s41599-022-01285-3.

[16] Bergquist, M., & Sverker, C. J. (2022). The importance of perceived fairness to public opinion about climate change policies. Nature Climate Change, 12(3), 226–227. doi:10.1038/s41558-022-01299-4.

[17] Andre, P., Boneva, T., Chopra, F., & Falk, A. (2024). Globally representative evidence on the actual and perceived support for climate action. Nature Climate Change, 14(3), 253–259. doi:10.1038/s41558-024-01925-3.

[18] Chaikumbung, M. (2023). The effects of institutions and cultures on people's willingness to pay for climate change policies: A meta-regression analysis. Energy Policy, 177. doi:10.1016/j.enpol.2023.113513.

[19] Baranzini, A., Caliskan, M., & Carattini, S. (2014). Economic Prescriptions and Public Responses to Climate Policy. SSRN Electronic Journal, 1-20. doi:10.2139/ssrn.2531615.

[20] Mus, M., Mercier, H., & Chevallier, C. (2023). Designing an acceptable and fair carbon tax: The role of mental accounting. PLOS Climate, 2(10), 227. doi:10.1371/journal.pclm.0000227.

[21] Douenne, T., & Fabre, A. (2020). French attitudes on climate change, carbon taxation and other climate policies. Ecological Economics, 169, 106496. doi:10.1016/j.ecolecon.2019.106496.

[22] Beiser-McGrath, L. F. & Busemeyer, M. R. (2024). Carbon inequality and support for carbon taxation. European Journal of Political Research, 63(4), 1286–1307. doi:10.1111/1475-6765.12647.

[23] Magistro, B., & Alvarez, R. M. (2024). Appealing to Independents: information on negative externalities increases support for environmental corrective taxes. Environmental Politics, 2439686. doi:10.1080/09644016.2024.2439686.

[24] Anderson, S., Marinescu, I., & Shor, B. (2023). Can Pigou at the Polls Stop Us Melting the Poles? Journal of the Association of Environmental and Resource Economists, 10(4), 903–945. doi:10.1086/722970.

[25] Binelli, C., Loveless, M., & Schaffner, B. F. (2023). Explaining Perceptions of Climate Change in the US. Political Research Quarterly, 76(1), 365–380. doi:10.1177/10659129211070856.

[26] Duijndam, S., & van Beukering, P. (2021). Understanding public concern about climate change in Europe, 2008–2017: the influence of economic factors and right-wing populism. Climate Policy, 21(3), 353–367. doi:10.1080/14693062.2020.1831431.

[27] Tranter, B. (2011). Political divisions over climate change and environmental issues in Australia. Environmental Politics, 20(1), 78–96. doi:10.1080/09644016.2011.538167.

[28] Royali, A. S., Sholiha, F. U., & Suliswanto, M. W. (2024). Investigating the impact of economic growth on pollution index in emerging market countries. Journal of Human, Earth, and Future, 5(3), 408-420. doi:10.28991/HEF-2024-05-03-07.

[29] Harring, N., Jagers, S. C., & Matti, S. (2019). The significance of political culture, economic context and instrument type for climate policy support: a cross-national study. Climate Policy, 19(5), 636–650. doi:10.1080/14693062.2018.1547181.

[30] Kulin, J., Johansson Sevä, I., & Dunlap, R. E. (2021). Nationalist ideology, rightwing populism, and public views about climate change in Europe. Environmental Politics, 30(7), 1111–1134. doi:10.1080/09644016.2021.1898879.

[31] Schmidt, T. S., Steffen, B., Egli, F., Pahle, M., Tietjen, O., & Edenhofer, O. (2019). Adverse effects of rising interest rates on sustainable energy transitions. Nature Sustainability, 2(9), 879–885. doi:10.1038/s41893-019-0375-2.

[32] Smith, E. K., & Hempel, L. M. (2022). Alignment of values and political orientations amplifies climate change attitudes and behaviors. Climatic Change, 172(1–2), 4. doi:10.1007/s10584-022-03348-5.

[33] Welzel World Values Survey. (2024). WVS Cultural Map: 2023 Version Released. World Values Survey Association, Stockholm, Sweden. Available online: https://www.worldvaluessurvey.org/WVSNewsShow.jsp?ID=467 (accessed on May 2025).

[34] Braithwaite, J., Tran, Y., Ellis, L. A., & Westbrook, J. (2020). Inside the black box of comparative national healthcare performance in 35 OECD countries: Issues of culture, systems performance and sustainability. PLoS ONE, 15(9 September), 0239776. doi:10.1371/journal.pone.0239776.

[35] Al-Shaer, H., Albitar, K., & Hussainey, K. (2024). Corporate Accountability for Human Rights: Evidence from Conflict Mineral Ratings. Business and Society, 63(8), 1887–1936. doi:10.1177/00076503241254829.

[36] Cowen, T. & Tabarrok, A. (2024). Modern principles of economics, the sixth edition. Worth Publishers Incorporated, London, United Kingdom.

[37] Harper, F. A. (1979). An introduction to value theory. Institute for Humane Studies, Inc. California, United States.

[38] Khan, S. U., Liu, G., Zhao, M., Chien, H., Lu, Q., Khan, A. A., Ali, M. A. S., & Misbahullah. (2020). Spatial prioritization of willingness to pay for ecosystem services. A novel notion of distance from origin's impression. Environmental Science and Pollution Research, 27(3), 3100–3112. doi:10.1007/s11356-019-06538-4.

[39] Friedman, M. (2017). Price Theory. Price theory. United States: Aldine Publishing Company, Venice, Italy. doi:10.4324/9781315127378.

[40] Adams, J. (2016). Risk and culture. Routledge Handbook of Risk Studies. University of California Press, California, United States. doi:10.4324/9781315776835.

[41] Chang, Y., & Yoshino, K. (2017). Theory of willingness to sell to valuate ecosystem services in the contingent valuation method. Journal of Environmental Informatics, 29(1), 53–60. doi:10.3808/jei.201700362.

[42] Michalos, A. C. (2023). Global Forum on Transparency and Exchange of Information for Tax Purposes. Encyclopedia of Business and Professional Ethics, 1001–1003. doi:10.1007/978-3-030-22767-8_1162.

[43] Lehr, B. (2021). Behavioral Economics Evidence, Theory, and Welfare. Behavioral Economics: Evidence, Theory, and Welfare. Routledge, New York, United States. doi:10.4324/9780367854072.

[44] Thomadsen, R., Rooderkerk, R. P., Amir, O., Arora, N., Bollinger, B., Hansen, K., John, L., Liu, W., Sela, A., Singh, V., Sudhir, K., & Wood, W. (2018). How Context Affects Choice. Customer Needs and Solutions, 5(1–2), 3–14. doi:10.1007/s40547-017-0084-9.

[45] E.I.B. (2023). Climate Survey Resources. European Investment Bank (E.I.B.), Luxembourg City, Luxembourg. Available online: https://www.eib.org/en/surveys/climate-survey/all-resources.htm (accessed on May 2025).

[46] Baranzini, A., & Weber, S. (2023). Carbon taxes. Elgar Encyclopedia of Ecological Economics, 42–47. doi:10.4337/9781802200416.ch08.

[47] Hedegaard, T. F., & Kongshøj, K. (2024). How redistribution can make carbon taxes more acceptable to the public. Social Science Journal, 2416774. doi:10.1080/03623319.2024.2416774.

[48] Dietsch, P. (2024). A fairer and more effective carbon tax. Nature Sustainability, 7(12), 1584–1591. doi:10.1038/s41893-024-01429-0.

[49] Chen, S. (2022). The inequality impacts of the carbon tax in China. Humanities and Social Sciences Communications, 9(1), 1-10. doi:10.1057/s41599-022-01285-3.

[50] Landis, F. (2019). Cost distribution and equity of climate policy in Switzerland. Swiss Journal of Economics and Statistics, 155(1). doi:10.1186/s41937-019-0038-2.

[51] Coffman, M., Bernstein, P., Schjervheim, M., Croix, S. La, & Hayashida, S. (2022). Economic and GHG impacts of a US state-level carbon tax: the case of Hawai'i. Climate Policy, 22(7), 935–949. doi:10.1080/14693062.2022.2061405.

[52] Bastos Neves, J. P., & Semmler, W. (2022). A Proposal for a Carbon Wealth Tax: Modelling, Empirics, and Policy. SSRN Electronic Journal, 4114243. doi:10.2139/ssrn.4114243.

[53] Baranzini, A., van den Bergh, J. C. J. M., Carattini, S., Howarth, R. B., Padilla, E., & Roca, J. (2017). Carbon pricing in climate policy: seven reasons, complementary instruments, and political economy considerations. Wiley Interdisciplinary Reviews: Climate Change, 8(4), 239. doi:10.1002/wcc.462.

[54] Engström, K., Lindeskog, M., Olin, S., Hassler, J., & Smith, B. (2017). Impacts of climate mitigation strategies in the energy sector on global land use and carbon balance. Earth System Dynamics, 8(3), 773–799. doi:10.5194/esd-8-773-2017.

[55] O'Mahony, T. (2020). State of the art in carbon taxes: a review of the global conclusions. Green Finance, 2(4), 409–423. doi:10.3934/GF.2020022.

[56] Bruderer Enzler, H., & Diekmann, A. (2019). All talk and no action? An analysis of environmental concern, income and greenhouse gas emissions in Switzerland. Energy Research and Social Science, 51, 12–19. doi:10.1016/j.erss.2019.01.001.

[57] Mashhadi Rajabi, M. (2023). Carbon tax accompanied by a revenue recycling increases Australia's GDP: A dynamic recursive CGE approach. Journal of Cleaner Production, 418, 138187. doi:10.1016/j.jclepro.2023.138187.

[58] Knight, K. W., Schor, J. B., & Jorgenson, A. K. (2017). Wealth Inequality and Carbon Emissions in High-income Countries. Social Currents, 4(5), 403–412. doi:10.1177/2329496517704872.

[59] Schroeder, S. (2021). A Kaleckian wealth tax to support a Green New Deal. Economic and Labour Relations Review, 32(2), 190–208. doi:10.1177/10353046211017350.

[60] Liu, C., & Xu, Y. (2023). Fossil fuel subsidy reform policy. The Handbook of Energy Policy, 291–315. doi:10.1007/978-981-19-6778-8_12.

[61] Mundaca, G. (2017). Energy subsidies, public investment and endogenous growth. Energy Policy, 110, 693–709. doi:10.1016/j.enpol.2017.08.049.

[62] Jakob, M., & Hilaire, J. (2015). Using importers' windfall savings from oil subsidy reform to enhance international cooperation on climate policies. Climatic Change, 131(4), 465–472. doi:10.1007/s10584-015-1406-2.

[63] Ekins, P., Pollitt, H., Summerton, P., & Chewpreecha, U. (2012). Increasing carbon and material productivity through environmental tax reform. Energy Policy, 42, 365–376. doi:10.1016/j.enpol.2011.11.094.

[64] Belfiori, M. E. (2020). Fossil fuel subsidies, the green paradox and the Fiscal paradox. Economics of Energy and Environmental Policy, 10(1). doi:10.5547/2160-5890.10.1.MBEL.

[65] Lanterna, F. (2024). Trying to find a balance: Energy excise duties in the context of climate targets, energy shocks, and redistributive goals. Energy Policy, 195, 114406. doi:10.1016/j.enpol.2024.114406.

[66] Inglehart, R., & Welzel, C. (2005). Modernization, cultural change, and democracy: The human development sequence. Modernization, Cultural Change, and Democracy: The Human Development Sequence. Cambridge University Press, Cambridge, United Kingdom. doi:10.1017/CBO9780511790881.

[67] Berry, J. W., & Grigoryev, D. (2022). Universal principles of intercultural relations are a basis for culturally-appropriate research, policies, and practices: Response to commentaries on "How shall we all live together?" Applied Psychology, 71(3), 1053–1057. doi:10.1111/apps.12406.

[68] Schwartz, S. H. (2014). National Culture as Value Orientations: Consequences of Value Differences and Cultural Distance. Handbook of the Economics of Art and Culture, 2, 547–586. doi:10.1016/B978-0-444-53776-8.00020-9.

[69] Yeganeh, H. (2014). Culture and corruption: A concurrent application of Hofstede's, Schwartz's and Inglehart's frameworks. International Journal of Development Issues, 13(1), 2–24. doi:10.1108/IJDI-04-2013-0038.

[70] Mironenko, I. A., & Sorokin, P. S. (2022). Activity Theory for the De-Structuralized Modernity. Integrative Psychological and Behavioral Science, 56(4), 1055–1071. doi:10.1007/s12124-020-09587-4.

[71] Van De Vliert, E. (2007). Climatoeconomic roots of survival versus self-expression cultures. Journal of Cross-Cultural Psychology, 38(2), 156–172. doi:10.1177/0022022106297298.

[72] Birkenbach, M., & Egloff, B. (2024). Effects of matching climate change appeals to personal values. Scientific Reports, 14(1), 6128. doi:10.1038/s41598-024-56631-z.

[73] Global Scan (2024). Sustainability leaders. Global Scan, Georgia, United States. Available online: https://globescan.com/wp-content/uploads/2024/06/2024_Sustainability_Leaders_Survey_Report.pdf (accessed on May 2025).

[74] Dunlap, R. E., & York, R. (2008). The globalization of environmental concern and the limits of the postmaterialist values explanation: Evidence from four multinational surveys. Sociological Quarterly, 49(3), 529–563. doi:10.1111/j.1533-8525.2008.00127.x.

[75] Doganoglu, T., Grzybowski, L., & Rachubik, J. (2024). Explaining the Willingness to Pay Higher Prices and Taxes to Combat Climate Change. Working Papers, 24/2024 (460). doi:10.33138/2957-0506.2024.24.460.

[76] The Culture Factor. (2024). Country comparison tool - Hofstede insights. The Culture Factor, Helsinki, Finland. Available online: https://www.theculturefactor.com/country-comparison-tool (accessed on May 2025).

[77] Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. Online Readings in Psychology and Culture, 2(1), 1116. doi:10.9707/2307-0919.1116.

[78] Husted, B. W. (2005). Culture and ecology: A cross-national study of the determinants of environmental sustainability. Management International Review, 45(3), 349–371.

[79] Alemán, J., & Woods, D. (2018). Value orientations from the World Values Survey: How comparable are they cross-nationally? Comparative Political Studies, 51(2), 213-244. doi:10.1177/0010414015600458.

[80] Malik, M. S., & Younus, S. (2020). Voluntary Tax-compliance Behavior in SMEs; Evidence from Pakistan and Turkey. Review of Economics and Development Studies, 6(4), 905–918. doi:10.47067/reads.v6i4.289.

[81] Houtman, D., Aupers, S., & De Koster, W. (2016). Paradoxes of Individualization Social Control and Social Conflict in Contemporary Modernity. Routledge, New York, United States. doi:10.4324/9781315247373.

[82] Olawuyi, D. S. (2021). Climate change law and policy in the Middle East and North Africa region. Climate Change Law and Policy in the Middle East and North Africa Region. Routledge, New York, United States. doi:10.4324/9781003044109.

[83] Zuhroh, I., & Malik, N. (2023). Revisiting the Role of Islamic Bank on SDGs: Sharia Financing, Inequality, and Poverty. Journal of Human, Earth, and Future, 4(4), 443–452. doi:10.28991/HEF-2023-04-04-05.

[84] Hussein, J. M., Abdullah, S. K., Zuhair, M., Dahash, Z. M., & Maksutalievna, A. M. (2024). Islamic Legal Perspectives on Climate Change and Global Policy Frameworks. Al-Istinbath: Jurnal Hukum Islam, 9(2), 723–742. doi:10.29240/jhi.v9i2.11185.

[85] Al-Jayyousi, O., Hasan, W. N. W., Mohamed Saniff, S., Sever, S. D., & Tok, E. (2023). A Critical Discourse Analysis on Climate Change in a Globalized World: The Nexus of Islam and Sustainable Development. Sustainability (Switzerland), 15(19), 14515. doi:10.3390/su151914515.

[86] Webb, J. (2013). Society and a low-carbon future: Individual behaviour change or new social values and priorities? Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 103(2), 157–163. doi:10.1017/S1755691013000054.

[87] Qureshi, M. A., & Ahsan, T. (2022). Do investors penalize the firms disclosing higher environmental performance? a cross cultural evidence. Environmental Science and Pollution Research, 29(36), 55147–55160. doi:10.1007/s11356-022-19716-8.

[88] Mehboob, M. Y., Ma, B., Mehboob, M. B., & Zhang, Y. (2024). Does green finance reduce environmental degradation? The role of green innovation, environmental tax, and geopolitical risk in China. Journal of Cleaner Production, 435, 117123. doi:10.1016/j.jclepro.2023.140353.

[89] Poznanski, K. (2017). Confucian economics: how is Chinese thinking different? China Economic Journal, 10(3), 362–384. doi:10.1080/17538963.2017.1370170.

[90] Hou, E., Luo, Y., Kuang, Y., Chen, C., Lu, X., Jiang, L., Luo, X., & Wen, D. (2020). Global meta-analysis shows pervasive phosphorus limitation of aboveground plant production in natural terrestrial ecosystems. Nature Communications, 11(1), 637. doi:10.1038/s41467-020-14492-w.

[91] Manurung, V., Nasution, I. K., Arifin, A., & Ardian, M. (2024). Production of Culture in the Vernacular Communities: Confucian Beliefs and the Culture of Shame in Japan. International Society for the Study of Vernacular Settlements, 11(8), 126–138. doi:10.61275/isvsej-2024-11-08-09.

[92] Kim, H. S., & Hamilton-Hart, N. (2022). Negotiating and Contesting Confucian Workplace Culture in South Korea. Asian Studies Review, 46(1), 110–129. doi:10.1080/10357823.2021.1992346.

[93] Boehm, C. (2000). Conflict and the evolution of social control. Journal of Consciousness Studies, 7(1-2), 79-101.

[94] Mostafa, M. M. (2019). World-wide concern for global warming: A stochastic cusp catastrophe analysis. International Journal of Green Economics, 13(1), 19–39. doi:10.1504/IJGE.2019.101449.

[95] Franzen, A., & Vogl, D. (2013). Two decades of measuring environmental attitudes: A comparative analysis of 33 countries. Global Environmental Change, 23(5), 1001–1008. doi:10.1016/j.gloenvcha.2013.03.009.

[96] Noll, B., Filatova, T., & Need, A. (2020). How does private adaptation motivation to climate change vary across cultures? Evidence from a meta-analysis. International Journal of Disaster Risk Reduction, 46, 101615. doi:10.1016/j.ijdrr.2020.101615.

[97] Jakučionytė-Skodienė, M., & Liobikienė, G. (2021). Climate change concern, personal responsibility and actions related to climate change mitigation in EU countries: Cross-cultural analysis. Journal of Cleaner Production, 281(8), 125189. doi:10.1016/j.jclepro.2020.125189.

[98] Fontana, S., D'Amico, E., Coluccia, D., & Solimene, S. (2015). Does environmental performance affect companies' environmental disclosure?. Measuring Business Excellence, 19(3), 42-57. doi:10.1108/MBE-04-2015-0019.

[99] Chen, S., Xu, L., & Jebran, K. (2021). The effect of Confucian culture on corporate tax avoidance: evidence from China. Economic Research-Ekonomska Istrazivanja, 34(1), 1342–1365. doi:10.1080/1331677X.2020.1825105.

[100] Böhm, G., Pfister, H. R., Doran, R., Ogunbode, C. A., Poortinga, W., Tvinnereim, E., Steentjes, K., Mays, C., Bertoldo, R., Sonnberger, M., & Pidgeon, N. (2023). Emotional reactions to climate change: a comparison across France, Germany, Norway, and the United Kingdom. Frontiers in Psychology, 14. doi:10.3389/fpsyg.2023.1139133.

[101] Chan, H. W., Udall, A. M., & Tam, K. P. (2022). Effects of perceived social norms on support for renewable energy transition: Moderation by national culture and environmental risks. Journal of Environmental Psychology, 79. doi:10.1016/j.jenvp.2021.101750.

[102] Davidovic, D., Harring, N., & Jagers, S. C. (2020). The contingent effects of environmental concern and ideology: institutional context and people's willingness to pay environmental taxes. Environmental Politics, 29(4), 674–696. doi:10.1080/09644016.2019.1606882.

[103] Torgler, B., & Schneider, F. (2006). What shapes attitudes toward paying taxes? Evidence from multicultural European countries. Institute for the Study of Labor, IZA Discussion Paper No. 2117. Available online: https://www.iza.org/en/publications/dp/2117/what-shapes-attitudes-toward-paying-taxes-evidence-from-multicultural-european-countries (accessed on May 2025).

[104] Davidovic, D. (2020). Does corruption shape attitudes towards carbon taxes? Experimental evidence from Mexico and Sweden. Energy Research & Social Science, 67, 101536. Doi:10.1016/j.erss.2020.101536.

[105] Reichl, J., Cohen, J. J., Klöckner, C. A., Kollmann, A., & Azarova, V. (2021). The drivers of individual climate actions in Europe. Global Environmental Change, 71(3), 102390. doi:10.1016/j.gloenvcha.2021.102390.

[106] Rotaris, L., & Danielis, R. (2019). The willingness to pay for a carbon tax in Italy. Transportation Research Part D: Transport and Environment, 67, 659–673. doi:10.1016/j.trd.2019.01.001.

[107] Douenne, T., & Fabre, A. (2022). Yellow Vests, Pessimistic Beliefs, and Carbon Tax Aversion†. American Economic Journal: Economic Policy, 14(1), 81–110. doi:10.1257/pol.20200092.

[108] Carattini, S., Carvalho, M., & Fankhauser, S. (2018). Overcoming public resistance to carbon taxes. Wiley Interdisciplinary Reviews: Climate Change, 9(5), 531. doi:10.1002/wcc.531.

[109] Klenert, D., Mattauch, L., Combet, E., Edenhofer, O., Hepburn, C., Rafaty, R., & Stern, N. (2018). Making carbon pricing work for citizens. Nature Climate Change, 8(8), 669–677. doi:10.1038/s41558-018-0201-2.

[110] Ravigné, E., Ghersi, F., & Nadaud, F. (2022). Is a fair energy transition possible? Evidence from the French low-carbon strategy. Ecological Economics, 196(S1). doi:10.1016/j.ecolecon.2022.107397.

[111] Berry, A. (2019). The distributional effects of a carbon tax and its impact on fuel poverty: A microsimulation study in the French context. Energy Policy, 124(C), 81–94. doi:10.1016/j.enpol.2018.09.021.

[112] Kvaløy, B., Finseraas, H., & Listhaug, O. (2012). The publics' concern for global warming: A cross-national study of 47 countries. Journal of Peace Research, 49(1), 11–22. doi:10.1177/0022343311425841.

[113] Kawakatsu, T., Lee, S., & Rudolph, S. (2017). The Japanese Carbon Tax and the Challenges to Low-Carbon Policy Cooperation in East Asia. Discussion Paper No. E-17-009, 1–21.

[114] Guo, Z., Zhang, X., Feng, S., & Zhang, H. (2020). The Impacts of Reducing Renewable Energy Subsidies on China's Energy Transition by Using a Hybrid Dynamic Computable General Equilibrium Model. Frontiers in Energy Research, 8, 25. doi:10.3389/fenrg.2020.00025.

[115] Cao, L., Toyohara, A., Li, Y., & Zhou, W. (2024). Willingness to pay for carbon tax in Japan. Sustainable Production and Consumption, 52, 427–444. doi:10.1016/j.spc.2024.11.004.

[116] Kim, S. E., Kim, S. Y., & Suh, J. (2024). Public support for carbon tax in South Korea: The role of tax design and revenue recycling. Asia and the Pacific Policy Studies, 11(2), 385. doi:10.1002/app5.385.

[117] Raizada, S., Sharma, D., Laan, T., & Jain, S. (2024). Mapping India's energy policy. Available online: https://www.iisd.org/publications/report/mapping-india-energy-policy-2023 (accessed on May 2025).

[118] Jain, A. K. (2018). A fine balance: Lessons from India's experience with petroleum subsidy reforms. Energy Policy, 119, 242–249. doi:10.1016/j.enpol.2018.04.050.

[119] Ojha, V. P., Pohit, S., & Ghosh, J. (2020). Recycling carbon tax for inclusive green growth: A CGE analysis of India. Energy Policy, 144, 111708. doi:10.1016/j.enpol.2020.111708.

[120] Strand, J. (2024). Fuel and electricity pricing and subsidies in the GCC states: recent developments. Middle East Development Journal, 16(2), 164–195. doi:10.1080/17938120.2024.2415237.

[121] Rentschler, J., & Bazilian, M. (2017). Reforming fossil fuel subsidies: drivers, barriers and the state of progress. Climate Policy, 17(7), 891–914. doi:10.1080/14693062.2016.1169393.

[122] Maina, N. K. (2024). Crop Diseases, Pests and Food Insecurity in Africa: An Islamic Perspective. Sustainable Development Goals Series: Vol. Part F2819, 167–179. doi:10.1007/978-3-031-50392-4_10.

[123] Distefano, T., & D'Alessandro, S. (2023). Introduction of the carbon tax in Italy: Is there room for a quadruple-dividend effect? Energy Economics, 120, 106578. doi:10.1016/j.eneco.2023.106578.

[124] Pereira, A. M., & Pereira, R. M. (2017). Reducing carbon emissions in Portugal: the relative roles of fossil fuel prices, energy efficiency, and carbon taxation. Journal of Environmental Planning and Management, 60(10), 1825–1852. doi:10.1080/09640568.2016.1262832.

[125] Klenert, D., & Mattauch, L. (2016). How to make a carbon tax reform progressive: The role of subsistence consumption. Economics Letters, 138, 100–103. doi:10.1016/j.econlet.2015.11.019.

[126] Sivonen, J., & Koivula, A. (2024). How do social class position and party preference influence support for fossil fuel taxation in Nordic countries? Social Science Journal, 61(2), 453–473. doi:10.1080/03623319.2020.1815469.

[127] Alola, A. A., & Nwulu, N. (2022). Do energy-pollution-resource-transport taxes yield double dividend for Nordic economies? Energy, 254. doi:10.1016/j.energy.2022.124275.

[128] Jacobs, L., Quack, L., & Mechtel, M. (2022). Distributional effects of carbon pricing by transport fuel taxation. Energy Economics, 114, 106290. doi:10.1016/j.eneco.2022.106290.

[129] Andersen, M. S., & Ekins, P. (2010). Carbon-Energy Taxation: Lessons from Europe. Carbon-Energy Taxation: Lessons from Europe, Oxford University Press, 9780199570683. doi:10.1093/acprof:oso/9780199570683.001.0001.

[130] Barker, T., Junankar, S., Pollitt, H., & Summerton, P. (2010). The Effects of Environmental Tax Reform on International Competitiveness in the European Union: Modelling with E3ME. Carbon-Energy Taxation: Lessons from Europe, 147-214. doi:10.1093/acprof:oso/9780199570683.003.0007.

[131] Miceikiene, A., Makutenas, V., Makutenas, V., Zukovskis, J., & Kożuch, A. J. (2016). Comparative evaluation of experience in environmental tax reforms in chosen EU states. Problemy Ekorozwoju, 11(1), 87–99. doi:10.35784/pe.2016.1.10.

[132] Prati, G., Pietrantoni, L., & Albanesi, C. (2018). Human values and beliefs and concern about climate change: a Bayesian longitudinal analysis. Quality and Quantity, 52(4), 1613–1625. doi:10.1007/s11135-017-0538-z.

[133] Dobewall, H., & Strack, M. (2014). Relationship of Inglehart's and Schwartz's value dimensions revisited. International Journal of Psychology, 49(4), 240–248. doi:10.1002/ijop.12004.

[134] Ulibarri, N., Ajibade, I., Galappaththi, E. K., Joe, E. T., Lesnikowski, A., Mach, K. J., Musah-Surugu, J. I., Nagle Alverio, G., Segnon, A. C., Siders, A. R., Sotnik, G., Campbell, D., Chalastani, V. I., Jagannathan, K., Khavhagali, V., Reckien, D., Shang, Y., Singh, C., & Zommers, Z. (2022). A global assessment of policy tools to support climate adaptation. Climate Policy, 22(1), 77–96. doi:10.1080/14693062.2021.2002251.

[135] Fairbrother, M. (2016). Trust and public support for environmental protection in diverse national contexts. Sociological Science, 3, 359–382. doi:10.15195/v3.a17.