

## Attitudes Towards Environmental Protection in International Comparative Research

### Postawy wobec ochrony środowiska naturalnego w międzynarodowych badaniach porównawczych

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#### Abstract

Protection of the natural environment is one of the key areas of sustainable development strategy. However, even the best strategy needs support from society. Drawing upon the data from the International Social Survey Program – Environment 2019-2023, we analysed environmental attitudes among residents of 44 countries. 45.7% of respondents declare their concern about issues related to the natural environment. Over half (55.6%) believe in making personal sacrifices, such as incurring additional costs or spending more time, to benefit the environment. 39.7% declare that they avoid purchasing certain products for environmental reasons (always and often). Approx. 19% of respondents have signed an environmental petition and approx. 15% have given money for the environmental purpose in the last 5 years. Most respondents (over 40%) believe that educating people about the benefits of environmental protection is the most effective way to encourage individuals and families to adopt environmentally responsible behaviours. Fewer respondents (35%) believe that this can be done through the tax system or by imposing fines on those who damage the environment (approx. 23%). The ISSP does not explicitly address global challenges of the last years, i.e. the COVID-19 pandemic and the war in Ukraine. However, by comparing people's recent attitudes with those in the past, we can see the impact of the pandemic and war on environmental attitudes and on people's willingness to pay for environmental protection in different countries.

**Key words:** sustainable development, environment, International Social Survey Program, public opinion

#### Streszczenie

Ochrona środowiska jest jednym z kluczowych obszarów strategii zrównoważonego rozwoju. Jednak nawet najlepsza strategia musi mieć oparcie w społeczeństwie. W oparciu o dane International Social Survey Program, Environment 2019-2023 przeprowadzona została analiza postaw mieszkańców 44 krajów na temat kwestii związanych z ochroną środowiska naturalnego. Zainteresowanie sprawami związanymi ze środowiskiem naturalnym deklaruje 45,7%. Opinie, że robi się coś dobrego na rzecz środowiska naturalnego, nawet gdy związane jest to z kosztami lub poświęceniem czasu sięgają 55,6%. Unikanie zakupu pewnych produktów ze względów środowiskowych (zawsze oraz często) deklaruje 39,7%. Petycję środowiskową podpisało ok. 19% badanych, zaś pieniądze na rzecz ochrony środowiska przeznaczyło ok. 15% (jedno i drugie w ciągu ostatnich 5 lat). Rozwiązanie problemu najczęściej widziano w edukacji (ponad 40%), rzadziej, przez system podatkowy (ok. 35%) lub nakładanie grzywien (ok. 23%). Chociaż ISSP nie odnosi się bezpośrednio do globalnych wyzwań ostatnich lat, takich jak pandemia COVID-19 i wojna w Ukrainie, to poprzez porównanie aktualnych postaw ludzi z postawami w latach wcześniejszych pokazuje wpływ pandemii i wojny na postawy środowiskowe oraz na chęć do ponoszenia kosztów ochrony środowiska w różnych krajach.

**Słowa kluczowe:** rozwój zrównoważony, środowisko naturalne, International Social Survey Program, opinia społeczna

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## Introduction

Environmental protection is one of the key issues in introducing sustainable development, perhaps the most complex strategy of our times (de Vries, 2013). The concept of sustainable development was introduced in 1987 in the UN's report entitled *Our Common Future*, and it was defined as *development that meets the needs of the present without compromising the ability of future generations to meet their own needs* (WCED, 1987). At that time, three pillars of sustainable development were distinguished: environmental, social and economic (Pawłowski, 2011). While all three of them are supposed to be treated as equally important, one must be aware that the environmental pillar stands as the foundation, since destruction of the environment means that the Earth may become uninhabitable and the realization of the two remaining pillars will not be possible (Purvis et al., 2019).

In 2015, 17 more detailed Sustainable Development Goals were introduced during the United Nations' summit. Three of them refer directly to the environment: Goal 13 calling for protection of the climate, Goal 14 – need for protection of life below water, and Goal 15 – protection of life on land (Huck, 2022; UN, 2015). These goals are not easy to achieve: global climate is heavily disrupted, more and more land suffers from pollution and the depletion of natural resources is progressing. The unprecedented human impact on the nature calls for establishing a new geological epoch – *Anthropocene* (Crutzen, 2006).

There are many programs and strategies aimed at protecting the environment. However, there is one important factor that goes beyond any strategy, namely public attitudes towards environmental protection and people's willingness to take action and to pay money to protect the environment.

Significantly, in the fight against climate change, one of the ways to counteract negative trends is connected with the commitment made by most of the countries in the world to become carbon neutral by 2050 (Gutierrez, 2020). This is crucial as carbon dioxide is the primary greenhouse gas driving climate change and recent years have seen record-breaking emissions of carbon dioxide (World Economic Forum, 2022). Becoming carbon neutral is not only the duty of central governments or industry. It means that not only basic infrastructure, but also every household must become carbon neutral, so everyone must pay (EC, 2019).

The aim of this article is to answer the following research questions: (1) what is the level of concern about environmental issues? (2) do people take actions to benefit the environment, even if it means spending more money or time? (3) what is considered to be the best way to convince people and their families to protect the environment? (4) how often do people avoid purchasing certain products for environmental reasons? (5) do people sign environmental petitions? (6) do people donate money to environmental groups?

## Methodology

The article is based on the most recent data from the International Social Survey Program (ISSP) – Environment. The data comes from the surveys conducted between 2019 and 2023, and made available in the fall of 2023. The initial, partial dataset became accessible in the fall of 2022, but only now can researchers access the complete version, which covers 44 countries.

The ISSP is an international comparative research project carried out annually in many countries worldwide. The main idea of the project is to measure variables that cover a broad scope of social life, on a regular basis. The ISSP thematic modules are repeated every few years, which enables researchers to examine changes in the selected phenomena. One of the ISSP modules is the ISSP Environment, which was implemented in 1993, 2000, 2010, and between 2019 and 2023.

The current edition of the ISSP Environment covers 44 countries. In total, the research sample consisted of 44,100 respondents. Table 1 shows sample sizes for each country. The following research methods and techniques were used to collect the data: face-to-face interview: computer-assisted (CAPI / CAMI), telephone interview, self-administered questionnaire: paper, self-administered questionnaire: web-based (CAWI), web-based interview, face-to-face interview: paper-and-pencil (PAPI). The obtained sample is a multi-stage random sample. Most respondents were over 18 years old, except for those in Denmark (who were 18 and over 18), Finland (over 15) and South Africa (over 16 years old) (ISSP, 2023).

It is noteworthy that the latest ISSP survey spans the period between 2019 and 2023, which means that it encompasses two global challenges: the COVID-19 pandemic and the war in Ukraine. The ISSP does not explicitly address these challenges. However, by comparing people's recent attitudes with those in the past, we can see the impact of the pandemic and war on environmental attitudes and on people's willingness to pay for environmental protection in different countries.

Table 1. Sample of ISSP Environment 2019-2023 by country (own analysis based on ISSP Environment data)

Country	Frequency	Percent
Australia	1147	2.6
Austria	1261	2.9
China	2741	6.2
Taiwan	1822	4.1
Croatia	1000	2.3
Denmark	1198	2.7
Finland	1137	2.6
France	1520	3.4
Germany	1702	3.9
Hungary	1001	2.3
Iceland	1150	2.6
India	1421	3.2
Italy	1138	2.6
Japan	1491	3.4
Korea (South)	1205	2.7
Lithuania	1200	2.7
New Zealand	993	2.3
Norway	1131	2.6
Philippines	1500	3.4
Russia	1583	3.6
Slovakia	1013	2.3
Slovenia	1102	2.5
South Africa	2844	6.4
Spain	2254	5.1
Sweden	1921	4.4
Switzerland	4280	9.7
Thailand	1498	3.4
United States	1847	4.2
Total	44100	100.0

## Results

One of the areas of focus in the ISSP Environment 2023 was concern about environmental protection issues. In total, 45.7% of respondents expressed concern about environmental protection issues, while 24.6% showed a lack of interest. The remaining 26.6% held neutral opinions. Inhabitants of Slovenia and Spain (approx. 80% of respondents in each of these countries), as well as those living in New Zealand, the Philippines and Japan (approx. 75-77%), and in Australia, France, Italy and Switzerland (approx. 70-74%) were the most concerned about environmental protection. People in Slovakia and South Africa were the least concerned about environmental issues (approx. 42-48%). Lack of concern about environmental issues was most likely expressed by those living in Slovakia and Thailand (approx. 24-25%), and China, India and Sweden (approx. 14-15%) (Table 2).

As the term *concern* may be understood in different ways, the survey included the definition of what it refers to: *By concerned about we mean being worried about environmental issues. 'Concern' should not imply involvement with environmental pressure groups.* In other words, a broad understanding of this term was adopted (concern may be manifested in many different ways, such as reading research reports, listening to or watching news in the media, etc.), but the definition excludes a purposeful social and group activity. The answer to the question about concern about ecological issues can therefore be classified as a typical inclusive indicator, which is very broad in meaning and which cannot be clearly defined, as it is based mainly on the subjective feelings of respondents. Our view is that research results that rely on this indicator should be interpreted with great caution. A more detailed exploration of the concept of concern and its relationship to pro-environmental attitudes can be found in the literature (Felon-neau, Becker, 2008).

In the survey, respondents were asked to what extent they agreed or disagreed with the statement *I do what is right for the environment, even when it costs more money or takes more time.* In all surveyed countries, over half (55.6%) of respondents expressed positive attitudes towards environmental protection (*strongly agree* and *agree* combined), while 42.8% expressed negative attitudes (*strongly disagree* and *disagree* combined). Respondents in Taiwan were most likely to give positive answers (approx. 88%), followed by those in Slovenia, Australia, Austria, France, Germany, Switzerland (approx. 65%) and Italy (approx. 60%). Negative responses were most likely given in Thailand (approx. 30%), in the Philippines, Croatia, South Africa, Russia (approx. 20-22%) and in Lithuania (approx. 18%) (Table 3).

Table 2. Concerned about environmental issues by country (own analysis based on ISSP Environment data)

Country		Concerned about environmental issues				Total
		Not concerned	Neutral	Concerned	Can't answer	
Australia	Count	106	196	802	5	1109
	%	9.6%	17.7%	72.3%	0.5%	100.0%
Austria	Count	114	336	810	1	1261
	%	9.0%	26.6%	64.2%	0.1%	100.0%
China	Count	381	649	1692	19	2741
	%	13.9%	23.7%	61.7%	0.7%	100.0%
Taiwan	Count	94	533	1187	4	1818
	%	5.2%	29.3%	65.3%	0.2%	100.0%
Croatia	Count	95	331	569	5	1000
	%	9.5%	33.1%	56.9%	0.5%	100.0%
Denmark	Count	127	351	695	21	1194
	%	10.6%	29.4%	58.2%	1.8%	100.0%
Finland	Count	139	264	711	6	1120
	%	12.4%	23.6%	63.5%	0.5%	100.0%
France	Count	94	323	1086	7	1510
	%	6.2%	21.4%	71.9%	0.5%	100.0%
Germany	Count	129	381	1182	8	1700
	%	7.6%	22.4%	69.5%	0.5%	100.0%
Hungary	Count	81	353	558	8	1000
	%	8.1%	35.3%	55.8%	0.8%	100.0%
Iceland	Count	132	274	735	6	1147
	%	11.5%	23.9%	64.1%	0.5%	100.0%
India	Count	207	210	955	49	1421
	%	14.6%	14.8%	67.2%	3.4%	100.0%
Italy	Count	96	232	804	5	1137
	%	8.4%	20.4%	70.7%	0.4%	100.0%
Japan	Count	76	263	1133	16	1488
	%	5.1%	17.7%	76.1%	1.1%	100.0%
Korea (South)	Count	81	339	782	3	1205
	%	6.7%	28.1%	64.9%	0.2%	100.0%
Lithuania	Count	124	312	752	12	1200
	%	10.3%	26.0%	62.7%	1.0%	100.0%
New Zealand	Count	60	154	732	5	951
	%	6.3%	16.2%	77.0%	0.5%	100.0%
Norway	Count	116	330	666	9	1121
	%	10.3%	29.4%	59.4%	0.8%	100.0%
Philippines	Count	136	233	1117	14	1500
	%	9.1%	15.5%	74.5%	0.9%	100.0%
Russia	Count	162	309	1100	12	1583
	%	10.2%	19.5%	69.5%	0.8%	100.0%
Slovakia	Count	246	315	424	28	1013
	%	24.3%	31.1%	41.9%	2.8%	100.0%
Slovenia	Count	48	165	883	2	1098
	%	4.4%	15.0%	80.4%	0.2%	100.0%
South Africa	Count	451	984	1361	48	2844
	%	15.9%	34.6%	47.9%	1.7%	100.0%
Spain	Count	127	297	1786	31	2241
	%	5.7%	13.3%	79.7%	1.4%	100.0%
Sweden	Count	254	503	1096	21	1874
	%	13.6%	26.8%	58.5%	1.1%	100.0%
Switzerland	Count	314	882	3057	19	4272
	%	7.4%	20.6%	71.6%	0.4%	100.0%
Thailand	Count	368	397	683	45	1493
	%	24.6%	26.6%	45.7%	3.0%	100.0%
United States	Count	222	416	1163	41	1842
	%	12.1%	22.6%	63.1%	2.2%	100.0%
Total	Count	4580	10332	28521	450	43883
	%	10.4%	23.5%	65.0%	1.0%	100.0%

Table 3. I do what is right for the environment, even when it costs more money or takes more time by country (own analysis based on ISSP Environment data)

Country		I do what is right for the environment, even when it costs more money or takes more time					Total
		Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly	
Australia	Count	61	653	280	96	11	1101
	%	5.5%	59.3%	25.4%	8.7%	1.0%	100.0%
Austria	Count	179	637	280	139	18	1253
	%	14.3%	50.8%	22.3%	11.1%	1.4%	100.0%
China	Count	329	1216	559	455	78	2637
	%	12.5%	46.1%	21.2%	17.3%	3.0%	100.0%
Taiwan	Count	168	1381	113	133	4	1799
	%	9.3%	76.8%	6.3%	7.4%	0.2%	100.0%
Croatia	Count	44	341	295	210	97	987
	%	4.5%	34.5%	29.9%	21.3%	9.8%	100.0%
Denmark	Count	106	548	299	172	34	1159
	%	9.1%	47.3%	25.8%	14.8%	2.9%	100.0%
Finland	Count	55	494	356	167	39	1111
	%	5.0%	44.5%	32.0%	15.0%	3.5%	100.0%
France	Count	121	778	398	157	33	1487
	%	8.1%	52.3%	26.8%	10.6%	2.2%	100.0%
Germany	Count	99	880	411	208	44	1642
	%	6.0%	53.6%	25.0%	12.7%	2.7%	100.0%
Hungary	Count	122	398	352	98	16	986
	%	12.4%	40.4%	35.7%	9.9%	1.6%	100.0%
Iceland	Count	79	536	388	99	17	1119
	%	7.1%	47.9%	34.7%	8.8%	1.5%	100.0%
India	Count	296	564	287	166	50	1363
	%	21.7%	41.4%	21.1%	12.2%	3.7%	100.0%
Italy	Count	86	615	283	122	21	1127
	%	7.6%	54.6%	25.1%	10.8%	1.9%	100.0%
Japan	Count	104	566	604	99	45	1418
	%	7.3%	39.9%	42.6%	7.0%	3.2%	100.0%
Korea (South)	Count	41	539	476	140	9	1205
	%	3.4%	44.7%	39.5%	11.6%	0.7%	100.0%
Lithuania	Count	47	453	426	182	38	1146
	%	4.1%	39.5%	37.2%	15.9%	3.3%	100.0%
New Zealand	Count	66	519	272	107	8	972
	%	6.8%	53.4%	28.0%	11.0%	0.8%	100.0%
Norway	Count	38	476	438	133	12	1097
	%	3.5%	43.4%	39.9%	12.1%	1.1%	100.0%
Philippines	Count	93	655	401	298	33	1480
	%	6.3%	44.3%	27.1%	20.1%	2.2%	100.0%
Russia	Count	363	465	379	228	123	1558
	%	23.3%	29.8%	24.3%	14.6%	7.9%	100.0%
Slovakia	Count	134	400	330	106	34	1004
	%	13.3%	39.8%	32.9%	10.6%	3.4%	100.0%
Slovenia	Count	95	629	280	62	15	1081
	%	8.8%	58.2%	25.9%	5.7%	1.4%	100.0%
South Africa	Count	215	1053	834	521	151	2774
	%	7.8%	38.0%	30.1%	18.8%	5.4%	100.0%
Spain	Count	144	1023	603	256	80	2106
	%	6.8%	48.6%	28.6%	12.2%	3.8%	100.0%
Sweden	Count	98	835	727	162	29	1851
	%	5.3%	45.1%	39.3%	8.8%	1.6%	100.0%
Switzerland	Count	392	2307	1114	340	46	4199
	%	9.3%	54.9%	26.5%	8.1%	1.1%	100.0%
Thailand	Count	72	390	475	343	71	1351
	%	5.3%	28.9%	35.2%	25.4%	5.3%	100.0%
United States	Count	123	868	602	161	27	1781
	%	6.9%	48.7%	33.8%	9.0%	1.5%	100.0%
Total	Count	3770	20219	12262	5360	1183	42794
	%	8.8%	47.2%	28.7%	12.5%	2.8%	100.0%

Table 4. Best way of getting people and their families to protect environment by country (own analysis based on ISSP Environment data)

Country		Best way of getting people and their families to protect environment			Total
		Heavy fines for people who damage the environment	Use the tax system to reward people who protect the environment	More information and education for people about the advantages of protecting the environment	
Australia	Count	200	354	498	1052
	%	19.0%	33.7%	47.3%	100.0%
Austria	Count	247	493	490	1230
	%	20.1%	40.1%	39.8%	100.0%
China	Count	630	577	1252	2459
	%	25.6%	23.5%	50.9%	100.0%
Taiwan	Count	633	329	795	1757
	%	36.0%	18.7%	45.2%	100.0%
Croatia	Count	391	322	267	980
	%	39.9%	32.9%	27.2%	100.0%
Denmark	Count	131	382	629	1142
	%	11.5%	33.5%	55.1%	100.0%
Finland	Count	109	452	518	1079
	%	10.1%	41.9%	48.0%	100.0%
France	Count	295	417	715	1427
	%	20.7%	29.2%	50.1%	100.0%
Germany	Count	311	822	497	1630
	%	19.1%	50.4%	30.5%	100.0%
Hungary	Count	338	311	285	934
	%	36.2%	33.3%	30.5%	100.0%
Iceland	Count	99	407	577	1083
	%	9.1%	37.6%	53.3%	100.0%
India	Count	470	446	398	1314
	%	35.8%	33.9%	30.3%	100.0%
Italy	Count	306	363	433	1102
	%	27.8%	32.9%	39.3%	100.0%
Japan	Count	204	445	749	1398
	%	14.6%	31.8%	53.6%	100.0%
Korea (South)	Count	564	361	262	1187
	%	47.5%	30.4%	22.1%	100.0%
Lithuania	Count	233	364	532	1129
	%	20.6%	32.2%	47.1%	100.0%
New Zealand	Count	162	278	517	957
	%	16.9%	29.0%	54.0%	100.0%
Norway	Count	133	432	523	1088
	%	12.2%	39.7%	48.1%	100.0%
Philippines	Count	306	371	766	1443
	%	21.2%	25.7%	53.1%	100.0%
Russia	Count	611	549	364	1524
	%	40.1%	36.0%	23.9%	100.0%
Slovakia	Count	372	353	239	964
	%	38.6%	36.6%	24.8%	100.0%
Slovenia	Count	245	451	387	1083
	%	22.6%	41.6%	35.7%	100.0%
South Africa	Count	935	822	949	2706
	%	34.6%	30.4%	35.1%	100.0%
Spain	Count	265	721	1132	2118
	%	12.5%	34.0%	53.4%	100.0%
Sweden	Count	307	610	891	1808
	%	17.0%	33.7%	49.3%	100.0%
Switzerland	Count	531	2108	1476	4115
	%	12.9%	51.2%	35.9%	100.0%
Thailand	Count	262	248	770	1280
	%	20.5%	19.4%	60.2%	100.0%
United States	Count	228	727	734	1689
	%	13.5%	43.0%	43.5%	100.0%
Total	Count	9518	14515	17645	41678
	%	22.8%	34.8%	42.3%	100.0%

Table 5. Avoid buying certain products for environmental reasons by country (own analysis based on ISSP Environment data)

Country		How often do you avoid buying certain products for environmental reasons				Total
		Always	Often	Sometimes	Never	
Australia	Count	136	439	412	133	1120
	%	12.1%	39.2%	36.8%	11.9%	100.0%
Austria	Count	136	463	560	75	1234
	%	11.0%	37.5%	45.4%	6.1%	100.0%
China	Count	301	391	1088	961	2741
	%	11.0%	14.3%	39.7%	35.1%	100.0%
Taiwan	Count	225	462	721	410	1818
	%	12.4%	25.4%	39.7%	22.6%	100.0%
Croatia	Count	61	239	493	207	1000
	%	6.1%	23.9%	49.3%	20.7%	100.0%
Denmark	Count	67	427	515	171	1180
	%	5.7%	36.2%	43.6%	14.5%	100.0%
Finland	Count	49	401	541	136	1127
	%	4.3%	35.6%	48.0%	12.1%	100.0%
France	Count	230	685	449	88	1452
	%	15.8%	47.2%	30.9%	6.1%	100.0%
Germany	Count	109	867	616	101	1693
	%	6.4%	51.2%	36.4%	6.0%	100.0%
Hungary	Count	55	262	459	207	983
	%	5.6%	26.7%	46.7%	21.1%	100.0%
Iceland	Count	48	368	525	170	1111
	%	4.3%	33.1%	47.3%	15.3%	100.0%
India	Count	156	494	445	297	1392
	%	11.2%	35.5%	32.0%	21.3%	100.0%
Italy	Count	101	265	510	240	1116
	%	9.1%	23.7%	45.7%	21.5%	100.0%
Japan	Count	130	582	640	130	1482
	%	8.8%	39.3%	43.2%	8.8%	100.0%
Korea (South)	Count	143	247	579	216	1185
	%	12.1%	20.8%	48.9%	18.2%	100.0%
Lithuania	Count	49	190	580	376	1195
	%	4.1%	15.9%	48.5%	31.5%	100.0%
New Zealand	Count	112	356	409	114	991
	%	11.3%	35.9%	41.3%	11.5%	100.0%
Norway	Count	34	371	559	165	1129
	%	3.0%	32.9%	49.5%	14.6%	100.0%
Philippines	Count	115	320	895	170	1500
	%	7.7%	21.3%	59.7%	11.3%	100.0%
Russia	Count	143	216	562	552	1473
	%	9.7%	14.7%	38.2%	37.5%	100.0%
Slovakia	Count	127	267	493	126	1013
	%	12.5%	26.4%	48.7%	12.4%	100.0%
Slovenia	Count	48	382	534	137	1101
	%	4.4%	34.7%	48.5%	12.4%	100.0%
South Africa	Count	156	457	859	1372	2844
	%	5.5%	16.1%	30.2%	48.2%	100.0%
Spain	Count	199	759	848	427	2233
	%	8.9%	34.0%	38.0%	19.1%	100.0%
Sweden	Count	98	718	880	191	1887
	%	5.2%	38.0%	46.6%	10.1%	100.0%
Switzerland	Count	324	2208	1468	247	4247
	%	7.6%	52.0%	34.6%	5.8%	100.0%
Thailand	Count	83	361	743	310	1497
	%	5.5%	24.1%	49.6%	20.7%	100.0%
United States	Count	146	525	768	381	1820
	%	8.0%	28.8%	42.2%	20.9%	100.0%
Total	Count	3581	13722	18151	8110	43564
	%	8.2%	31.5%	41.7%	18.6%	100.0%

This indicator, however, is as subjective as the previous one. Although its meaning has been specified by adding *even when it costs more money or takes more time*, the expression *I do what is right for the environment* is probably even more inclusive than *concern about environmental issues*. It may include using renewable energy sources and possibly incurring additional costs connected with this, as well as, for example, giving some old batteries to be recycled, which only requires taking them to recycling bins (time spent to do so).

Another issue concerned opinions on the following question *Which of these approaches do you think would be the best way of getting people and their families in your country to protect the environment?* Respondents were asked to choose from the following: *heavy fines for people who damage the environment*, *use the tax system to reward people who protect the environment*, and *more information and education for people about the advantages of protecting the environment*. If we take into account all the countries in the survey, respondents were most likely to indicate *more information and education for people about the advantages of protecting the environment* (42.3%), followed by *use the tax system to reward people who protect the environment* (34.8%). Much fewer respondents (22.8%) indicated the opinion *heavy fines for people who damage the environment*. The suggested approaches vary in their severity, ranging from education-focused measures that do not involve sanctions to those that include financial measures (tax system and severe fines) (Table 4).

The opinion that the best way of getting people to protect the environment is to provide *more information and education about the advantages of protecting the environment* is most often expressed in China, Denmark, France, Iceland, Japan, New Zealand, the Philippines, Spain, Sweden and Thailand (50% or over 50% respondents in these countries indicated this answer). The opinion *use the tax system to reward people who protect the environment* is most often chosen by residents of Switzerland and Hungary (approx. 50%), and it is often chosen also by those living in Austria, Finland, Slovenia and the United States (approx. 40-43%). On the other hand, imposing *heavy fines on people who damage the environment* is favoured by inhabitants of Korea (approx. 48%), Croatia and Russia (approx. 40%).

Another indicator of attitudes towards environmental protection is the frequency with which residents of the surveyed countries *avoid buying certain products for environmental reasons*. The most common response was *sometimes* (41.7%), followed by *often* (31.5%), *never* (18.6%), and least frequently, *always* (8.2%). A combined category of *always* and *often* responses was most prevalent among residents of France (63%), Switzerland (59.6%), Germany (57.6%) and Australia (51.3%). On the other hand, residents of South Africa (48.2%), Russia (37.5%), China (35.1%) and Lithuania (31.5%) were most likely to choose the answer *never*. It is important to note that this indicator may be ambiguous: respondents may not have enough knowledge or may not be fully aware of whether their consumer decisions are pro-environmental or not. Moreover, the frequency scale is also ambiguous and subjective (Table 5).

Respondents were also asked whether they had *signed an environmental petition in the last 5 years*. In total, 18.8% of respondents gave a positive answer. Residents of Austria (39.1%), New Zealand (37.3%), Australia (35.2%), Switzerland (35.1%) and France (32.7%) were most likely to have signed an environmental petition. On the other hand, those living in China (2.8%), Philippines (3.7%), Thailand (6.1%), Hungary (6.2%) and South Africa (6.9%) were the least likely to have signed an environmental petition. Like many other indicators, this one also has a limitation: the decision to sign or not to sign a petition may be more influenced by beliefs about the effectiveness or ineffectiveness of such actions (why sign if it won't make a difference?) than by genuine pro-environmental attitudes (Table 6).

A similar indicator concerned *given money to an environmental group in the last 5 years*. A total of 15.3% of all respondents gave money for this purpose. Most often these were residents of Austria (34%), Switzerland (32.8%), Norway (26.1%), New Zealand (26%), Sweden (25.7%) and Australia (25.6%). The least often – those living in Lithuania (3.2%), Korea (4.6%) and the Philippines (4.7%). It is worth emphasising that this indicator is influenced by several factors, including the affluence of the society, the number and credibility of environmental groups, and the perceived effectiveness of their actions (Table 7).

## Conclusions

The article aimed to explore the level of public concern regarding environmental issues in 44 different countries and willingness to contribute financially to protect the environment, which is one of the main pillars of sustainable development. Public concern about environmental issues hovers below 50%, which seems relatively low, given the importance of the issue and its widespread media coverage for many years. Notably, nearly a quarter (25%) of respondents expressed a lack of concern about environmental issues. This finding aligns with the relatively low percentage (slightly exceeding 50%) of those who believe they take actions that benefit the natural environment, even when it involves additional costs or time.



Table 6. Signed an environmental petition in the last 5 years by country (own analysis based on ISSP Environment data)

Country		Signed an environmental petition in the last 5 years		Total
		Yes, I have	No, I have not	
Australia	Count	391	719	1110
	%	35.2%	64.8%	100.0%
Austria	Count	487	757	1244
	%	39.1%	60.9%	100.0%
China	Count	77	2664	2741
	%	2.8%	97.2%	100.0%
Taiwan	Count	164	1658	1822
	%	9.0%	91.0%	100.0%
Croatia	Count	150	850	1000
	%	15.0%	85.0%	100.0%
Denmark	Count	190	1000	1190
	%	16.0%	84.0%	100.0%
Finland	Count	227	904	1131
	%	20.1%	79.9%	100.0%
France	Count	491	1011	1502
	%	32.7%	67.3%	100.0%
Germany	Count	473	1199	1672
	%	28.3%	71.7%	100.0%
Hungary	Count	62	937	999
	%	6.2%	93.8%	100.0%
Iceland	Count	340	747	1087
	%	31.3%	68.7%	100.0%
India	Count	174	1211	1385
	%	12.6%	87.4%	100.0%
Italy	Count	157	964	1121
	%	14.0%	86.0%	100.0%
Japan	Count	107	1359	1466
	%	7.3%	92.7%	100.0%
Korea (South)	Count	115	1090	1205
	%	9.5%	90.5%	100.0%
Lithuania	Count	145	1055	1200
	%	12.1%	87.9%	100.0%
New Zealand	Count	366	615	981
	%	37.3%	62.7%	100.0%
Norway	Count	226	891	1117
	%	20.2%	79.8%	100.0%
Philippines	Count	55	1442	1497
	%	3.7%	96.3%	100.0%
Russia	Count	150	1433	1583
	%	9.5%	90.5%	100.0%
Slovakia	Count	213	784	997
	%	21.4%	78.6%	100.0%
Slovenia	Count	242	857	1099
	%	22.0%	78.0%	100.0%
South Africa	Count	197	2647	2844
	%	6.9%	93.1%	100.0%
Spain	Count	573	1626	2199
	%	26.1%	73.9%	100.0%
Sweden	Count	390	1477	1867
	%	20.9%	79.1%	100.0%
Switzerland	Count	1488	2748	4236
	%	35.1%	64.9%	100.0%
Thailand	Count	91	1404	1495
	%	6.1%	93.9%	100.0%
United States	Count	447	1354	1801
	%	24.8%	75.2%	100.0%
Total	Count	8188	35403	43591
	%	18.8%	81.2%	100.0%

Table 7. Given money to an environmental group in the last 5 years by country (own analysis based on ISSP Environment data)

Country		Given money to an environmental group in the last 5 years by country		Total
		Yes, I have	No, I have not	
Australia	Count	280	813	1093
	%	25.6%	74.4%	100.0%
Austria	Count	428	829	1257
	%	34.0%	66.0%	100.0%
China	Count	235	2506	2741
	%	8.6%	91.4%	100.0%
Taiwan	Count	168	1654	1822
	%	9.2%	90.8%	100.0%
Croatia	Count	57	943	1000
	%	5.7%	94.3%	100.0%
Denmark	Count	206	977	1183
	%	17.4%	82.6%	100.0%
Finland	Count	213	918	1131
	%	18.8%	81.2%	100.0%
France	Count	202	1297	1499
	%	13.5%	86.5%	100.0%
Germany	Count	333	1309	1642
	%	20.3%	79.7%	100.0%
Hungary	Count	49	947	996
	%	4.9%	95.1%	100.0%
Iceland	Count	257	828	1085
	%	23.7%	76.3%	100.0%
India	Count	213	1143	1356
	%	15.7%	84.3%	100.0%
Italy	Count	92	1028	1120
	%	8.2%	91.8%	100.0%
Japan	Count	83	1383	1466
	%	5.7%	94.3%	100.0%
Korea (South)	Count	56	1149	1205
	%	4.6%	95.4%	100.0%
Lithuania	Count	38	1162	1200
	%	3.2%	96.8%	100.0%
New Zealand	Count	252	716	968
	%	26.0%	74.0%	100.0%
Norway	Count	291	823	1114
	%	26.1%	73.9%	100.0%
Philippines	Count	70	1424	1494
	%	4.7%	95.3%	100.0%
Russia	Count	111	1471	1582
	%	7.0%	93.0%	100.0%
Slovakia	Count	81	918	999
	%	8.1%	91.9%	100.0%
Slovenia	Count	131	965	1096
	%	12.0%	88.0%	100.0%
South Africa	Count	174	2670	2844
	%	6.1%	93.9%	100.0%
Spain	Count	214	1990	2204
	%	9.7%	90.3%	100.0%
Sweden	Count	481	1392	1873
	%	25.7%	74.3%	100.0%
Switzerland	Count	1388	2843	4231
	%	32.8%	67.2%	100.0%
Thailand	Count	110	1387	1497
	%	7.3%	92.7%	100.0%
United States	Count	428	1385	1813
	%	23.6%	76.4%	100.0%
Total	Count	6641	36870	43511
	%	15.3%	84.7%	100.0%

Another indicator of attitudes towards environmental protection is the frequency with which residents of the countries in the survey avoid buying certain products for environmental reasons. In this instance, the most frequently chosen response was *sometimes*, accounting for slightly over 40% of all responses. In terms of their behaviour, respondents were also asked whether they had signed an environmental petition in the last 5 years. Less than 19% of those surveyed had done so. A similar indicator concerned *given money to an environmental group in the last 5 years*. This question was answered affirmatively by approx. 15% of respondents.

Most respondents (over 40%) believe that the best way of getting people and their families to protect the environment is through education. Much fewer are convinced about the effectiveness of more restrictive methods, such as using the tax system to reward people who protect the environment (approx. 35%) or imposing fines on those who damage the environment (approx. 23%).

As mentioned in the part on methodology, while the ISSP Environment project does not explicitly address the COVID-19 pandemic and the war in Ukraine, its insights into current attitudes across different countries provide a valuable basis for comparative analysis. This allows us to effectively assess how the pandemic and the war have impacted attitudes towards environmental protection and willingness to pay for it.

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