ECOLOGICAL TRANSFORMATION:

"are we (still) ready?"

BAROMETER OF THE ECOLOGICAL TRANSFORMATION - 2024 EDITION







WHY THE BAROMETER OF THE ECOLOGICAL TRANSFORMATION?

The debate around ecology has entered a new phase which is struggling to be structured on common basis. If there is a consensus on the risks for the planet and for all humankind, the solutions to reduce our impact are still little debated and dividing.

IPCC reports, climate strategies, the Green New Deal, the COP: there are many proposals to fight climate change, biodiversity loss and pollution. But as half the people on the planet are about to vote in 2024, voices are raising around the world calling for a sharp slowdown of the ecological transition and gathering under a new banner: the ecological pause. The large-scale adoption and deployment of ecological solutions raise a decisive question: are the needed changes to win the "battle of the century" socially, economically and culturally acceptable to human communities?

This question is at the heart of the Barometer of the ecological transformation carried out with a sample covering **more than half of the world's population** on the 5 continents.

This barometer aims to **make the public debate concrete** by working on **solutions**, and to understand **the obstacles and levers** of their **acceptability** to accelerate the transition.

3 thematic axes

Decarbonisation

Decontamination

Resources regeneration

A novel angle : acceptability of ecological solutions and desirability of the transition

What are the **psychological, economic and cultural obstacles** to adopt ecological solutions?

How do we arbitrate between the cost of action and the cost of inaction?

Why are we prepared to bear or accept the cost of ecological transformation? What are the objectives and benefits that make people want to make the ecological transition?





Methodology



Target countries

A survey carried out in 26 countries on 5 continents, involving over 29,500 individuals (between 1,000 and 2,000 per country). 1 000 individuals were surveyed in Hungary.

The countries were chosen for their demographic weight, their weight in GHG emissions and to ensure a diversity of ecological political and cultural histories.

Overall, these countries represent nearly 60% of the world's population, 67% of global GHG emissions and 77% of global GDP.

See details on the next page.



Collection method and field dates

An online survey conducted from 17 October to 6 December 2023. In Hungary, the survey took place from November 9 to 27, 2023.



Sample representativeness

For **each of the 26 countries**, a **representative** sample of **residents aged 18 and over** was selected. Representativeness was ensured using **the quota method** applied to the following variables: **gender, age, socio-professional category or income** (depending on the country), **urban area** and **region of residence**.

(i)

Results "World Opinion" and "European Union Opinion"

To constitute the **results of the "world opinion", an equivalence between countries was privileged** (each country counts for 1, no weighting according to the number of inhabitants). This choice was made to ensure that the diversity of countries is represented and thus avoid "world opinion" being only the average of the results of the most populous countries (China and India in particular). The same principle applies to the **results of the European Union opinion**.

« World opinion » is indicated with the world symbol 🕤 and the opinion of the member countries of the European Union with the flag 🚳 .



Frequency of the barometer

Every 18 months. This is the 2nd edition. The questions common to the 2 editions and showing significant changes (+ / - 3 % points) are indicated +3 -3



A global scope

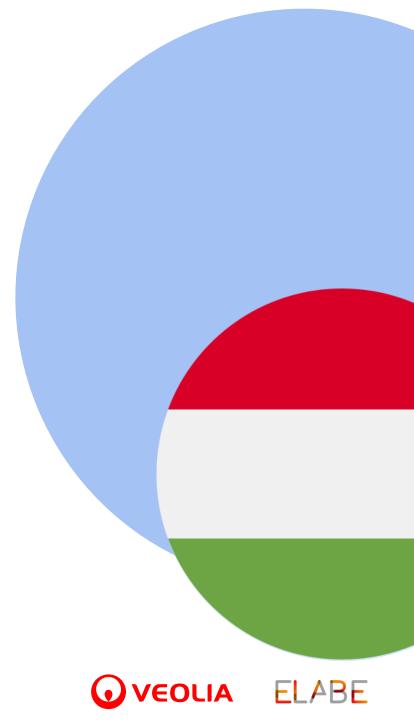


				Number of people Interviewed	Pop. of the country on global pop.	Share of the country in global GHG emissions	Share of world GDP
			TOTAL	29 500	59,2%	67,0%	77,0%
AFR	ICA						
1		CIV	Ivory Coast	1 000	0,4%	0,1%	0,1%
2	*	MAR	Morocco	1 500	0,5%	0,2%	0,1%
3		NGA	Nigeria	1 000	2,8%	0,8%	0,4%
AME	RICA						
4	•	BRA	Brazil	1 000	2,7%	2,4%	2,0%
5	4	CHL	Chile	1 000	0,2%	0,3%	0,3%
6	<u> </u>	COL	Colombia	1 000	0,6%	0,4%	0,3%
7	#	USA	United States	2 000	4,2%	11,2%	25,8%
8	(+)	MEX	Mexico	1 000	1,6%	1,5%	1,7%
	TERN A						
9	**	CHN	China	1 000	17,6%	29,2%	16,9%
10		IND	India	1 000	17,8%	7,3%	3,6%
11		IDN	Indonesia	1 000	3,4%	2,3%	1,4%
12	•	JPN	Japan	1 000	1,5%	2,2%	4,0%
EUR	OPE						
13	-	DEU	Germany ®	1 000	1,0%	1,5%	4,2%
14	Q	BEL	Belgium 🕲	1 000	0,1%	0,2%	0,6%
15	-	ESP	Spain ®	1 000	0,6%	0,6%	1,5%
16	\mathbb{Q}	FRA	France	1 000	0,8%	0,8%	2,9%
17	#	NOR	Norway 🕾	1 000	0,1%	0,1%	0,5%
18		HUN	Hungary ®	1 000	0,1%	0,1%	0,2%
19		ITA	Italy 🔞	1 000	0,7%	0,7%	2,1%
20		NDL	Netherlands 🐵	1 000	0,2%	0,3%	1,0%
21		POL	Poland ®	1 000	0,5%	0,7%	0,8%
22		CZE	Czech Republic	1 000	0,1%	0,2%	0,3%
23	4 k	GBR	United Kingdom	2 000	0,8%	0,8%	3,2%
	DLE EA						
24	1991	SAU	Saudi Arabia	1 500	0,5%	1,5%	1,0%
25	C	UAE	United Arab Emirates	1 500	0,1%	0,5%	0,5%
	ANIA			1.000			
26	5	AUS	Australia	1 000	0,3%	1,1%	1,6%





Ecology,
do we stop
or do we go further?



The planet is burning, humankind is suffering: the collapse has begun

Since November 2023, dozens of municipalities in the regions of Nord and Pas de Calais (France) have been hit by successive floods, leading to power cuts, evacuations and restrictions on the use of water. Soil was waterlogged and overflowing rivers flooded crops. The subsiding of floodwater is making it much harder for farmers to get back to normal, and to rotate their crops. With global warming, the increase in rainfall is set to become stronger, increasing the risk of a recurring situation.

In August 2023, Iran became the first country in the world to shut down due to high temperatures, sometimes exceeding 50 degrees. The authorities instituted two public holidays and closed public

instituted two public holidays and closed public infrastructures, banks and some businesses. **The number of consultations at medical centres has**



According to the European Copernicus programme, **2023 was the hottest year on record.** The average annual temperature reached 14.98°C, with peaks of 53°C in Death Valley and 38°C recorded in the middle of winter in Argentina.

At this rate, **the climate in a city like Paris could be similar to Seville or Canberra by 2050**, with long heatwaves and temperature peaks over 50°C.



Our planet has just endured a season of simmering — the hottest summer on record.

Climate breakdown has begun.

António Guterres. Secretary General of the United Nations

In France, Rumilly (Haute-Savoie) is one of 17,000 European sites contaminated by eternal pollutants. The town's water supply had to be cut off, and large quantities of PFOA were found in the blood of some residents. In December 2023, the International Agency for Research on Cancer classified PFOA as "carcinogenic to humans".

Fine particle pollution, emitted by motor vehicles, industry and fires, represents "the greatest external threat to public health" according to the Energy Policy Institute of the University of Chicago (EPIC).

In New Delhi (India), one of the world's most polluted cities, the average person loses 12 years of life expectancy due to air pollution.



Red arbitro dua web. Barbie v Oppenheimer.

Guardian Weekly

Reed arbitro and global heating creating a perfect climate storm?

Since the bettragedy for a facing violer drought. The (which cause)

In August 2023, **Maui** (Hawaii) burns down. The town of Lahaina was nearly razed to the ground. 100 people died and around thirty disappeared. It **was one of the deadliest fires in the United States**, and the rebuilding costs exceeded 5.5 billion dollars, according to the authorities.

Since the beginning of February, **Chile has been experiencing** "the greatest climatic tragedy for more than ten years", according to President Gabriel Boric. The country is facing violent fires fuelled by extreme temperatures and violent winds during an intense drought. The climate situation has been intensified by the natural phenomenon El Niño (which causes a rise of sea and atmospheric temperatures). More than 43,000 hectares of forest went up in smoke, thousands of homes were destroyed and 122 people died.

According to scientist Raul R. Cordero,

"a change of a few degrees in the tropical Pacific can make the difference between a relatively calm forest fire season and a widespread disaster".



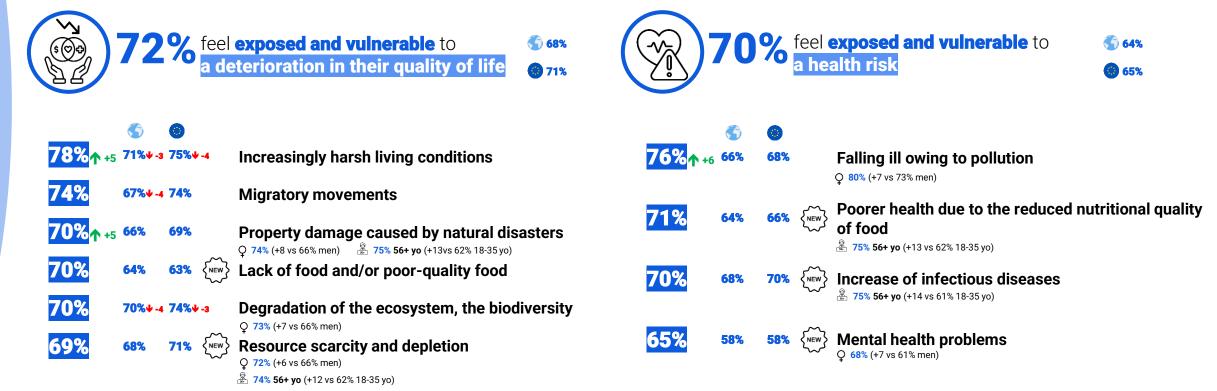


Health and quality of life, the first victims on the Hungarian front of ecological and climatic insecurity

All over the world, the litany of record-breaking temperatures continues to grow, with loss of life, health damage and material damage caused by extreme weather events. Countries that have historically been the most vulnerable (low GDP, difficult access to essential services such as water, etc.) and developed countries that have long felt 'safe', protected by their economic development and infrastructures, are now united by the same ecological fear.

71% of Hungarians feel exposed and vulnerable to a risk linked to climate change or pollution. Women (as in most countries in the world) and the over-56s (as in Poland, Latin America and Japan) feel more exposed and vulnerable to the threat, whether health-related or material.

Hungarian ecological and climatic insecurity is 6 points higher than the world average (65%), in the upper reaches of the EU average and alongside the highest levels recorded in Poland, Southern Europe, South and South-East Asia and South America (>70%).



Question: When you think about the risks related to climate disruption and pollution (water, air, soil), do you... personally feel exposed and vulnerable to them? Feel that your country is exposed and vulnerable to them?



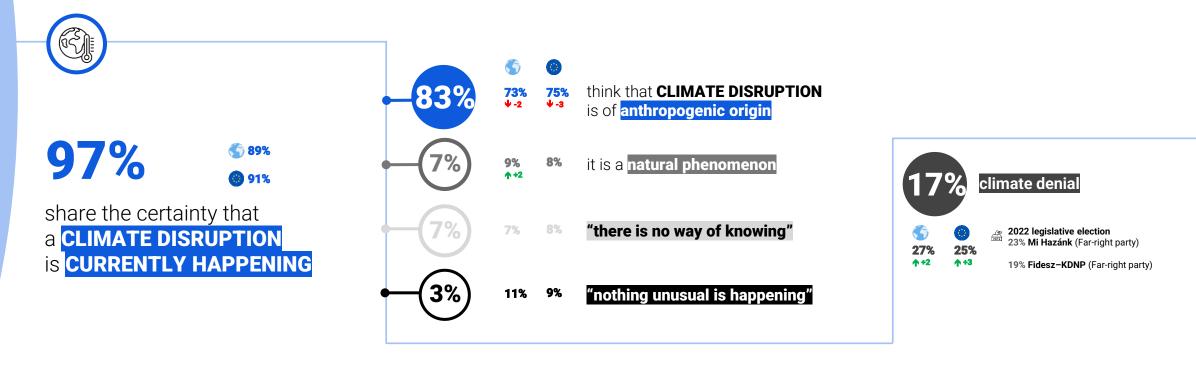


97% of Hungarians are convinced that climate change is currently happening and that human activity is the main cause

Faced with the 'climate and ecological wall', 97% of Hungarians are certain that climate change is underway.

However, its anthropogenic origin is still the subject of debate among 14% of them: 7% support the theory of a strictly natural phenomenon, while 7% argue that it is impossible to identify the cause. While they are over-represented among MHM voters, climate deniers are a minority in all electorates. They have not gained a single vote in Hungary in 18 months (1st Barometer, 2022), bucking the global trend.

Deniers have increased in number in 14 of the 26 countries covered by the Barometer, particularly among the lowest income groups and among conservative and right-wing populist sympathisers and voters, notably in the UK (+5), Eastern Europe (+10 and +5 in Poland and the Czech Republic), Africa (+8 in Ivory Coast) and Australia (+6). 13 of the 26 countries now have between 26% and 43% of people who dispute whether man is responsible for global warming, or whether it even exists.



Question: Would you personally say that climate disruption is currently happening on our planet?





The temptation of ecological fatalism is growing



In 18 months, the fatalism camp has won over Hungarians (+3 points), confirming the majority position of doubt and resignation in the country, as in Central Europe (Germany and the Czech Republic), the Netherlands, Belgium, France and Japan.

1 in 2 Hungarians (+2) now doubt humanity's ability to limit climate change and reduce pollution, while 8% (+1) are convinced that it is too late.

While the majority of people in other countries in Europe, Asia, Africa, America, Australia and the Middle East are still convinced that we are in control of our climate future, **the temptation to fatalism is growing everywhere.**Resignation is particularly rife among the lowest income groups in Asia, Africa, South America and Central Europe (+15 to +20 points of doubt).







1% no answer

Question: And do you think we still have the future in our hands, that we can still limit climate disruption and pollution, or is it too late?





Ecological transition: a divisive action and a failing ecological imaginary

Hungarian fatalism is fuelled by the perception that the ecological transition lacks ambition and that the ecological imaginary has broken down.

Action and investment in favour of ecological transition divide the country into 2 camps of equal size. The debate is raging between Hungarians who feel they are up to the risk, and those who feel they lack ambition.

And 7 out of 10 fail to imagine the world and their daily lives post-carbon, one of the highest levels recorded anywhere in the world (+9 vs. world average). Of the 26 countries included in the Barometer, only Colombia (50%) and India (63%) have a majority of inhabitants capable of imagining the tangible benefits of ecological and climate action





believe that action and investment to promote ecological transformation in Hungary are **commensurate** with the risk that pollution, climate change and the depletion of natural resources pose to their health and quality of life

61% 18-35 yo (+21 vs 41% 56+ yo)

58% Low-income populations (+17 vs 41% affluent populations)



not commensurate with the risk





find it difficult to imagine what daily life could be like after **ecological** transformation

77% 56+ yo (+9 vs 68% 18-35 yo)



⑤ 37%**⊌** -2 **⑥** 31%

find it quite easy

to imagine

Question : In your opinion, is action and investment in supporting ecological transformation in your country commensurate with the risk that pollution, climate disruption and the depletion of natural resources poses to your health and quality of life?



Question: When you hear that we need to change a number of things in society and in our lifestyles to limit climate disruption and reduce pollution, do you find it easy or difficult to imagine what daily life could be like if we achieved the ecological transformation?





The ecological pause, a dead end?

Environmental regulations are dividing and polarising public opinion. All over the world, voices opposing social policy and ecological action are rising to encourage "pragmatism", to put the consequences of the climate crisis into perspective and to call for an "ecological pause".

But global warming is accelerating. Without a major reduction of emissions, the 1.5 degree threshold could be exceeded in 2030, with all the connected human and economic costs. Yet the sums needed "to adapt to global warming are ten to eighteen times greater than current international public financial flows", i.e. 203 to 365 billion euros each year (UNEP).

Ecology is a new political crest line, as half the world's voting age population is called to the polls (4.1 billion people) in nearly 70 countries: Russia, Belarus, South Africa, South Korea, Taiwan (presidential and legislative elections), Iran, Pakistan, India, the world's most populous country (legislative elections), the American superpower (presidential elections), the largest trading bloc (European elections), Indonesia (legislative elections), Mexico, the largest Spanish-speaking country (presidential elections).

> In January 2024, the Norwegian parliament authorised mining prospecting on 280,000 km2 of its seabed with the aim of finding reserves of increasingly coveted minerals (cobalt, zinc, copper).

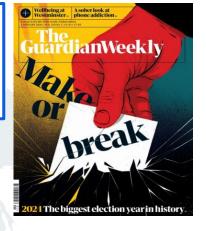




In September 2023, Rishi Sunak, the British Prime Minister. announced that he was "adopting a more pragmatic, proportionate and realistic approach to achieving carbon neutrality, which eases the burden on working people" by backing down on a number of green measures.



In March 2023, the Farmer-Citizen Movement (BBB) became the leading political force in the Dutch Senate. notably by representing the rural and agricultural world's opposition to the "nitrogen plan" (50% reduction in emissions by 2030).



In November 2023, Justin Trudeau's government in Canada announced a carbon tax exemption for Canadians who heat with heating oil, for the next 3 years (carbon pricing had been introduced in 2018).









In May 2023, French President Emmanuel Macron called for "a European regulatory pause" in terms of environmental constraints, so that the weight of standards does not slow down European economies.



During COP 28. India, which said it was in favour of tripling renewable energies by 2030, refused to join the 116 nations in ratifying an agreement because of restrictions on coal, calling for a "phasing out of coal-fired power generation".



While Anthony Albanese's Australian Labor government was talking about ambitious climate targets, the country continues to give major support to the coal and fossil fuel industries. According to the Australian Conservation Foundation, no fewer than "16 fossil fuel projects have been approved or received some form of support" since the government took office in 2022.





Inaction is still considered more costly than ecological action



Nearly 3 out of 4 Hungarians are convinced that inaction will cost them more than ecological action, an increase of 5 points in 18 months. Across all population categories and all electorates, the opinion is clear and in the majority: the future is written in action.

Although the small minority of climate sceptics are more cautious than the majority of climate believers, 47% are nevertheless certain that the investments needed for the ecological transition will be less costly than the health and material consequences of the climate crisis (with 29% refusing to make up their minds).

Southern Europe and a large part of Central and Eastern Europe, Asia, Africa and South America are the most categorical regions of the world (>60%). The decision is less clear-cut in the USA and Australia (52% and 57%) but remains overwhelmingly in favour of action everywhere.

73% 66% 66% e 64% 1 are **certain** that

the costs of the consequences
of climate disruption
are going to be greater than the
investments needed for ecological
transformation

77% Believers in climate change (+30 vs 47% climate sceptics)

Question: Experts say that the costs caused by the damage linked to climate disruption and pollution are going to be greater than the investments needed for the ecological transition of our societies. Do you personally feel that this fact is true or false?





The seriousness of the health threat has become a certainty And mass poverty is a credible threat





76% 575%

are **certain** that

« climate change is the greatest health threat facing humanity »

World Health Organization, 2021

85% 677%

are **certain** that

« climate change is an

acute threat to the poorest people
across the world, with the potential to
push more than 130 million people
into poverty by 2030 »

World Bank, 2023

Question: In a report published in 2021, the World Health Organization (WHO) said that climate change is the single biggest health threat facing humanity. Do you think this information is true or false?

The World Bank says that "climate change is an acute threat to the poorest people across the world, with the power to push more than 130 million people back into poverty by 2030". Do you think this information is true or false?







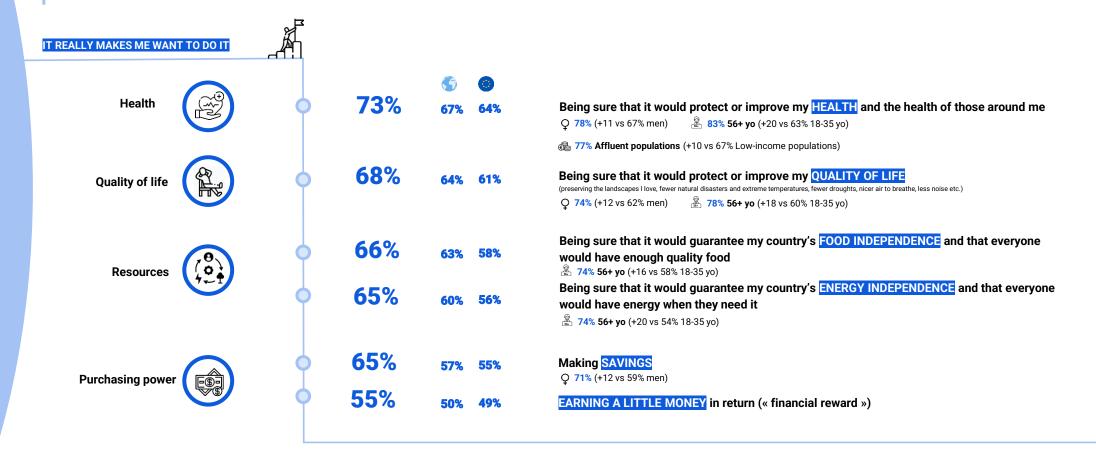
So, what do we do?



Protecting health and quality of life to make ecology desirable

In Hungary, as in every other region of the world, a desirable ecology is an ecology that protects: regardless of gender, generation or income level, protecting health and quality of life, contributing to food security and the energy independence of human communities and regions, all make people want to act and consent to the additional costs and changes in behaviour brought about by most ecological actions, whether they are aimed at protecting resources, decarbonising or depolluting.

The protection of purchasing power is a lever of consent to change for more than 6 out of 10 Hungarians, but in all categories of the population the prospect of a financial reward for encouraging change is less motivating than the health benefits.



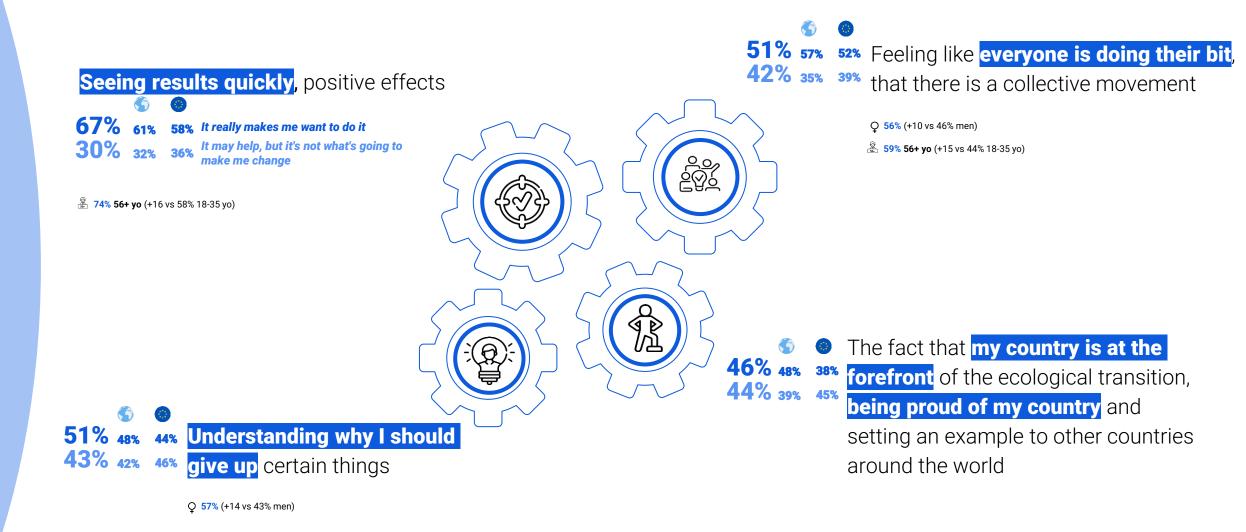
Question: The ecological transformation may lead us to change some of our behaviours, sometimes change the way we live or cost us a little more. What would encourage you to make these changes? What would make them easier for you or would justify the extra costs?







Concrete results, explained and collective action to encourage change



Question : The ecological transformation may lead us to change some of our behaviours, sometimes change the way we live or cost us a little more. What would encourage you to make these changes? What would make them easier for you or would justify the extra costs?





A joint commitment of all stakeholders to find and implement solutions



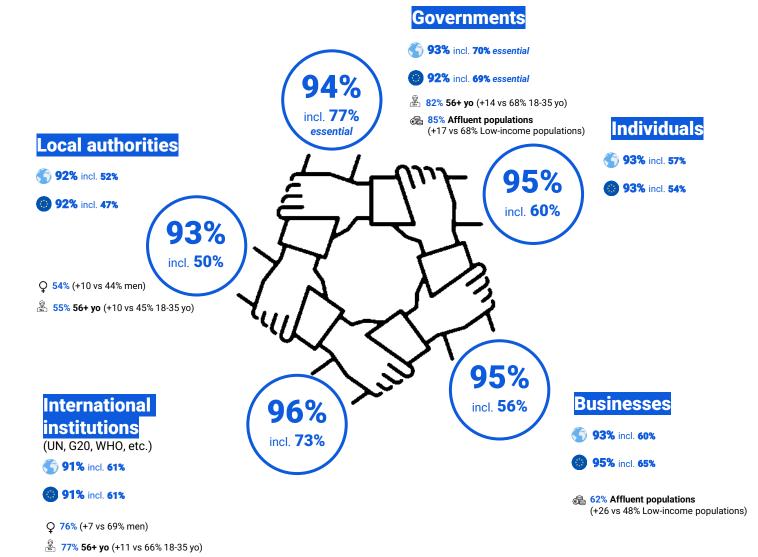
Achieving tangible results in terms of health and quality of life is seen as dependent on the ability of stakeholders to work together, with each having a duty to act in accordance with their means and responsibilities.

Governments and **international institutions** are the key players in the planning process, with a role to play in providing impetus and a framework through standards and regulations, both encouraging and constraining.

Hungarians are neither hesitant nor reluctant to give an essential role to individual responsibility. Despite the temptation to be fatalistic and the difficulty of giving up or adapting their practices, most are aware that the ecological transition will not happen without them.

Businesses are the driving force behind innovation and the implementation of solutions.

Finally, local authorities are the architects of the territory, in the front line when it comes to preventing, adapting and responding to risks.



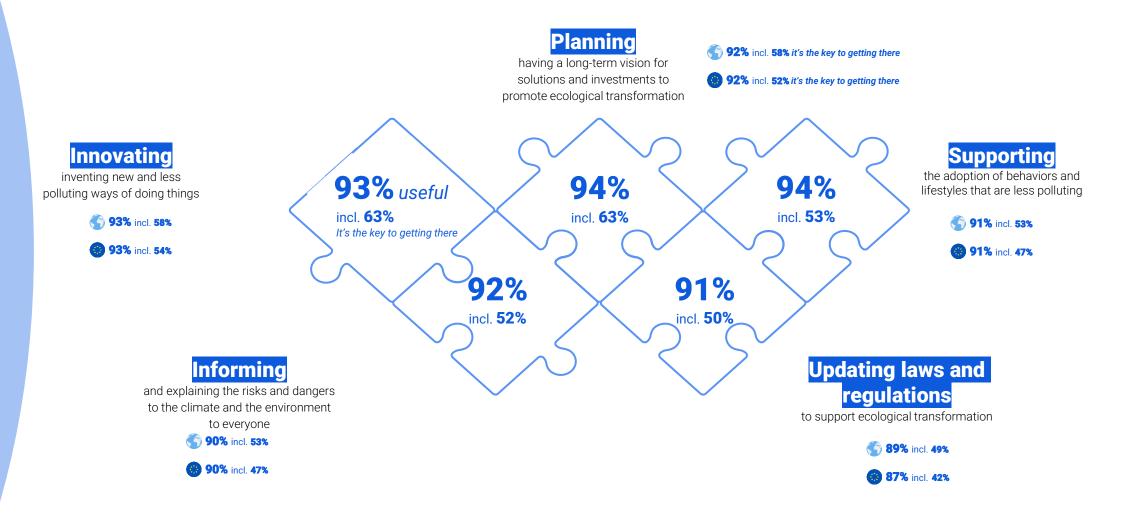
Question : To what extent do we need each of the following stakeholders to find and implement specific and effective solutions for ecological transformation?







Programming, inventing, supporting, informing and updating laws to succeed



Question: In your opinion, what matters for the success of the ecological transformation in your country (reducing greenhouse gas emissions and pollution, and protecting natural resources and biodiversity)?







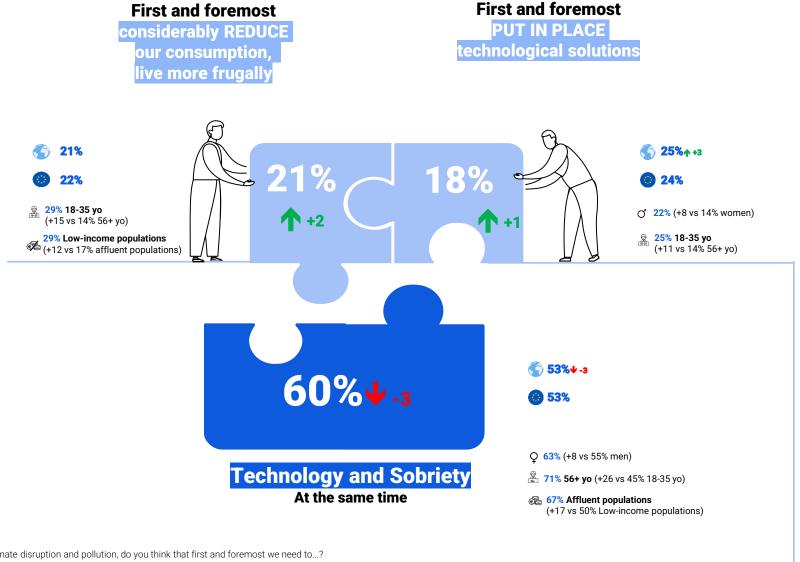
Combining technology and sobriety to limit climate disruption and pollution

While there are more people in favour of technology alone than there were 18 months ago in most countries around the world (+3 in the global trend, +4 in Australia), 1 in 2 of the world's inhabitants still share the conviction that we need to combine sobriety and technology to limit climate change and reduce pollution.

In 23 of the 26 countries included in the

Barometer, a majority (at least relative) of between 43% and 69% agree on the complementary nature of these means.

UAE, Saudi Arabia and Morocco residents are the exceptions. The debate divides the UAE, Saudi Arabia and Morocco into 3 groups of equivalent size.



Question: Generally speaking, when you think about the changes to be implemented to limit climate disruption and pollution, do you think that first and foremost we need to ...?





Such as making health and ecological risks the keys to local decision-making for water, waste and energy

The majority of Hungarians believe that decisions on water, waste and energy management should **take health and ecological risks into account** whenever they require an arbitration (investment, choice of technology), **at least as much as the final price for the consumer.**

With the exception of the Czech Republic, protection of health and resources are everywhere considered essential by a larger proportion of the population than the final price; residents on the lowest incomes make the same choice, both in terms of hierarchy and percentage.



Question : When making decisions about managing water, waste or energy where you live, should your local leaders/elected officials take into account ?





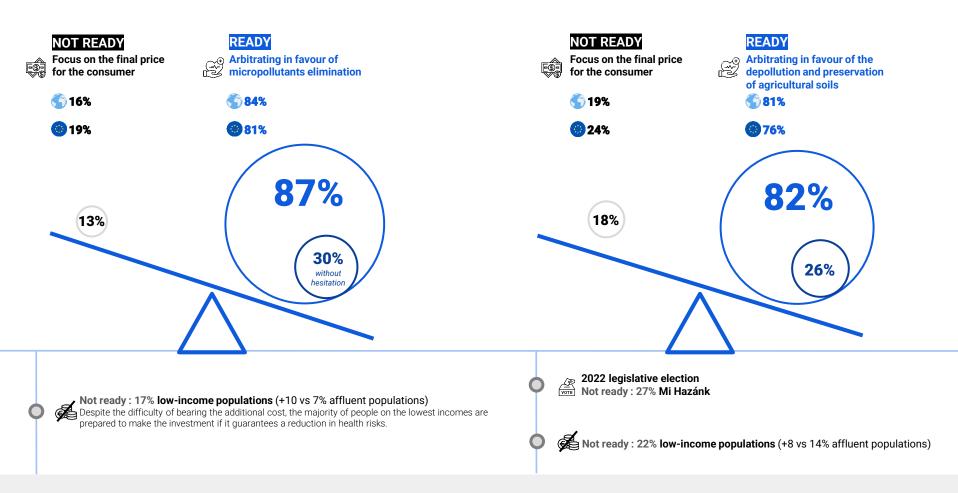
Decarbonising, depolluting and regenerating our resources



Micro-pollutants and soil pollution: health risks are unacceptable and justify additional costs, beyond socio-economic divide

Paying more for water to eliminate micropollutants and reduce health risks

Paying more for fruit, vegetables and meat to clean up, protect agricultural soil and reduce health risks





Reuse and recycled: resource conservation, avoided pollution and economic co-benefits lever the social acceptability of changing behavior

Buy food packaged in recycled materials (recycled Drinking water from recycled wastewater to reduce Eat food from agriculture that uses recycled water to paper or plastic) to reduce plastic pollution and oil the risk of water shortages for consumption, reduce the risk of water shortages for consumption, agriculture and the country's economy extraction agriculture and the country's economy **NOT READY NOT READY READY NOT READY READY** READY Reluctant to eat food grown Reluctant to drink water Prefer packaging without Arbitrating in favour of Arbitrating in favor of Arbitrating in favor of recycled materials from REUSE drinking water from REUSE packaging in recycled with water from REUSE agriculture that uses recycled water (REUSE) materials **79%** +10 S88% A +8 **5**21% **34% 66%** ↑+13 **3** 10% 😘 19% 81% ↑+8 35% **33 65% ↑** +12 **№ 90% ↑** +4 11% 45% 21% Ready: 91% 55+ yo (+7 vs 84% 18-35 yo) Not ready: 29% 18-35 yo (+10 vs 19% 35+ yo) Not ready: 54% 55+ yo (+13 vs 41% 18-55 yo) Not ready: 18% low-income populations (+10 vs 8% affluent populations) Not ready: 26% low-income populations (+9 vs 17% affluent populations)



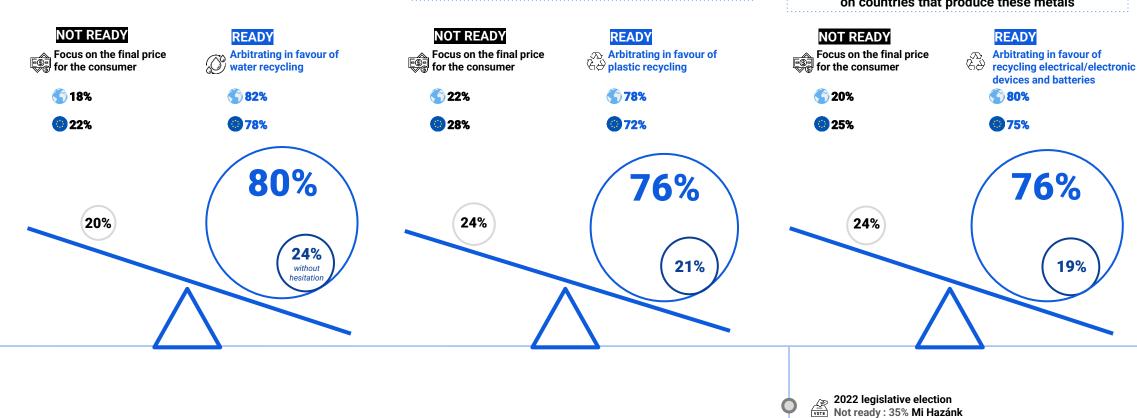


Reuse, electrical/electronic devices and plastics recycling: economic, geopolitical and ecological gains can justify the cost of action

Pay a little more for water now so that it can be recycled and reduce the risks of running out for consumption, agriculture and the country's economy

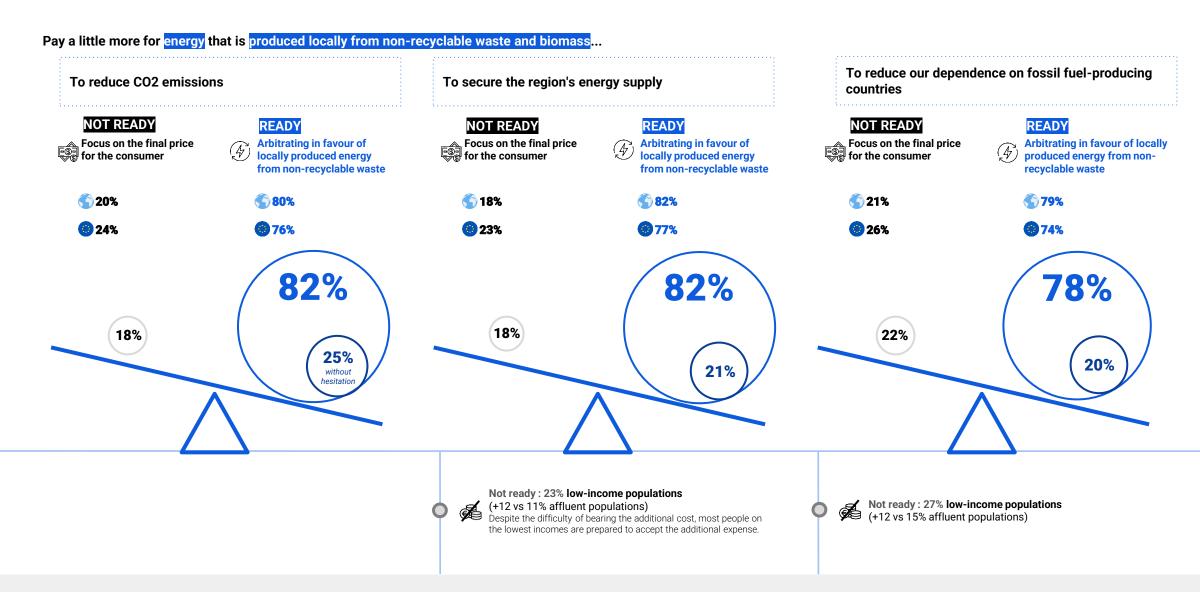
Pay a little more for everyday products that contain or are packaged with plastic to ensure they are recycled, reduce plastic pollution and limit oil extraction

Pay a little more for electrical and electronic devices to ensure that the battery and the device itself are recycled, and to limit the pollution caused by the extraction of rare metals and reduce our dependence on countries that produce these metals





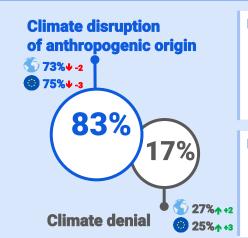
Local low-carbon energy: decrease of GHG emissions, security of local supply and reduction of national energy dependency make the extra cost acceptable







Hungary – Key figures



ECOLOGICAL AND CLIMATIC VULNERABILITY

feel exposed and vulnerable to a risk related to climate change or pollution

BUT A TRANSITION WITH NO HORIZON

THE FUTURE IN ACTION

the costs of the consequences of climate disruption are going to be greater than the investments needed for ecological transformation

are certain that

« climate change is

the greatest health threat

facing humanity »

World Health Organization, 2021

across the world, with the potential to push more than 130 million people into poverty by 2030 »

76 %	5 75%

are certain that « climate change is an acute threat to the poorest people

World Bank, 2023

DECARBONISING, DEPOLLUTING AND REGENERATING OUR RESOURCES READY Buy food packaged in recycled materials (recycled paper or plastic) to reduce plastic pollution and oil extraction Paying more for water to eliminate micropollutants and reduce health risks Paying more for fruit, vegetables and meat to clean up, protect agricultural soil and reduce health risks 82% 81% 76% Pay a little more for energy that is produced locally from non-recyclable waste and biomass to reduce CO2 emissions 82% 80% 76% Pay a little more for energy that is produced locally from non-recyclable waste and biomass to secure the region's 82% 82% 77% energy supply Pay a little more for water now so that it can be recycled and reduce the risks of running out for consumption, 80% 82% 78% agriculture and the country's economy Eat food from agriculture that uses recycled water to reduce the risk of water shortages for consumption, agriculture 78% 79% 81% and the country's economy ↑ +14 ↑ +10 ↑ +8 Pay a little more for **energy** that is **produced locally from non-recyclable waste and biomass** to <u>reduce our dependence on fossil fuel-producing countries</u> **78%** 79% 74% Pay a little more for everyday products that contain or are packaged with plastic to ensure they are recycled, reduce **76%** 78% 72% plastic pollution and limit oil extraction Pay a little more for electrical and electronic devices to ensure that the **battery and the device** itself are **recycled**, and to limit the pollution caused by the extraction of rare metals and reduce our dependence on countries that produce 76% 80% 75% Drinking water from recycled wastewater to reduce the risk of water shortages for consumption, agriculture and the 66% 65% country's economy **↑** +17 **↑** +13 **↑** +12



DECISION CRITERIA FOR ECOLOGICAL ACTION



Protecting your health



Taking ecological risks into account



Final price for the consumer







APPENDIX





PART A: Diagnostic

Existence of climate change

Would you personally say that climate disruption is currently happening on our planet?

- 1. Yes, climate disruption is currently happening
- 2. No, nothing unusual is happening

Human responsibility for climate change

Do you think that human activity is responsible for climate disruption or not?

- 1. Yes, the disruption is mainly due to human activity
- 2. No, the disruption is mainly due to a natural phenomenon
- 3. There is no way of knowing

Fears about the consequences of climate change

When you think about the risks related to climate disruption and pollution (water, air, soil), do you...

- personally feel exposed and vulnerable to them?
- 1. The risk of <u>falling ill</u> owing to <u>pollution</u> (water, air, soil)
- 2. The risk of <u>property damage</u> caused by <u>natural disasters</u> (impact of floods, droughts and severe weather events on buildings and infrastructure such as roads, gas and electricity networks, water supply, etc.)
- 3. The risk of increasingly harsh <u>living conditions</u> (extreme temperatures, limitation of water consumption for certain uses in case of drought, disappearance or decline in the quality of certain foods, etc.)
- 4. The risk of being in poorer health due to the reduced nutritional quality of food
- 5. The risk of having mental health problems (stress, depression, anxiety)

• feel that your country is exposed and vulnerable to them?

- 6. The degradation of the ecosystem, the biodiversity in my country (disappearance of animals, flora, etc.).
- 7. Migratory <u>movements</u> caused by pollution (water, air, soil) and the consequences of climate disruption (drought, famine, rising sea levels, etc.)
- 8. An increased risk of infectious diseases (spread by mosquitoes, insects or animals)
- 9. The risk of lacking food and having poor quality food
- 10. The risk of resource scarcity and depletion (lack of drinking water, healthy soil for agriculture, etc.)

Awareness of the risk of poverty/impact on global living standards

The World Bank says that "climate change is an acute threat to the poorest people across the world, with the power to push more than 130 million people back into poverty by 2030". Do you think this information is true or false?

- 1. I'm certain it is true
- 2. I think it is true
- 3. I think it is false
- 4. I'm certain it is false
- 5. I don't know if it is true or false

Climate change, the greatest threat to health

In a report published in 2021, the World Health Organization (WHO) said that <u>climate change is the single</u> <u>biggest health threat facing humanity</u>. Do you think this information is true or false?

- 1. I'm certain it is true
- 2. I think it is true
- 3. I think it is false
- 4. I'm certain it is false
- 5. I don't know if it is true or false

Our climate and ecological future in our own hands

And do you think we still have the future in our hands, that we can still limit climate disruption and pollution, or is it too late?

- 1. Yes, I'm sure we still have the future in our hands
- 2. I'm not sure
- 3. No, it is too late, we no longer have our future in our hands

The role of technology

Generally speaking, when you think about the changes to be implemented to limit climate disruption and pollution, do you think that first and foremost we need to...?

- 1. Considerably <u>reduce</u> our <u>consumption</u>, live more <u>frugally</u> (energy, food, transport, etc.)
- Put in place and invent <u>technologies</u> to <u>offset</u> and <u>reduce</u> the consequences of pollution and climate disruption
- Both at the same time: fundamentally change our ways of life and live more frugally, and at the same time put in place technologies to offset and reduce the consequences of pollution and climate disruption

Type of action

In your opinion, what matters for the success of the ecological transformation in your country (reducing greenhouse gas emissions and pollution, and protecting natural resources and biodiversity)?

It's key, it's essential for getting there / It won't do everything, but it's useful / It won't do much

- 1. <u>Planning</u>, having a long-term vision for solutions and investments to promote ecological transformation
- 2. <u>Updating laws and regulations</u> to support ecological transformation
- 3. <u>Innovating</u>, inventing new ways of doing things (manufacturing, travelling, housing people, diet, etc.) that produce little pollution, produce few greenhouse gas emissions and use few natural resources
- 4. <u>Supporting</u> the adoption of behaviours and lifestyles that are less polluting and use few natural resources (incentives or financial support, information, expanding the range of suitable products and services, penalties, etc.)
- 5. <u>Informing</u> and explaining the risks and dangers to the climate and the environment to everyone

PART A: Diagnostic

Actors

To what extent do we need each of the following stakeholders to find and implement specific and effective solutions for ecological transformation?

These stakeholders are essential, we can't achieve ecological transformation without them / They aren't essential but they still have a role to play / They are not needed for achieving ecological transformation

- 1. International institutions (the United Nations, G20, World Health Organization, etc.)
- 2. Governments
- 3. Local authorities
- 4. Businesses
- Individuals

Cost of climate and ecological action/inaction

IPCC scientists say that the <u>costs</u> caused by the <u>damage linked to climate disruption and pollution are going to be greater than the investments needed for the ecological transition of society.</u>

Do you think this information is true or false?

- I'm certain it is true
- 2. I think it is true
- 3. I think it is false
- 4. I'm certain it is false
- I don't know if it is true or false

Assessment of the action in relation to health risks/quality of life

In your opinion, is action and investment in supporting ecological transformation in your country commensurate with the risk that pollution, climate disruption and the depletion of natural resources poses to your health and quality of life?

- 1. Completely commensurate
- 2. Somewhat commensurate
- 3. Not very commensurate
- 4. Not at all commensurate

PART B : Solutions and acceptability

The IPCC (Intergovernmental Panel on Climate Change), a body created by the United Nations and which comprises almost all the countries of the world, recently published a report that states that our current lifestyles will lead to a temperature increase of 3.5 to 5°C by 2100. In order to limit the negative effects of global warming, the temperature increase should be limited to 2°C by 2030.

Ability to imagine the world transformed

When you hear that we need to change a number of things in society and in our lifestyles to limit climate disruption and reduce pollution, do you find it easy or difficult to imagine what daily life could be like if we achieved the ecological transformation?

- Yes, <u>I find it quite easy to imagine</u> what the world and our daily lives might look like after the ecological transformation
- 2. <u>I have a vague idea</u>, but it is still very unclear
- No, <u>I can't really see</u> what the world and our daily lives might look like after the ecological transformation

CLEANING UP

Each year, pollution (air, water and soil) causes 9 million deaths worldwide (according to leading medical journal The Lancet), three times more than AIDS, tuberculosis and malaria deaths combined. We already have solutions for reducing this pollution. They include:

- Eliminating micropollutants found in small quantities in drinking water, toxic products such as pesticides, herbicides, household products, solvents and medicine residues
- Cleaning up soil contaminated by pollutants such as hydrocarbons or heavy metals (lead, mercury, copper, zinc, etc.)

New trade-off between the cost of action in the short term and the cost of inaction in the medium term (individual level)

Elimination of micropollutants from water

Some micropollutants cause cancer, neurological or behavioural disorders, and endocrine hormone disruption (source: Inserm). Treating water to eliminate these micropollutants could cost a little more.

If it reduced the risks to your health, would you be willing to <u>pay a little more for your water today to eliminate these micropollutants</u>?

- Yes, without hesitation
- Yes, probably
- 3. No, probably not
- 4. No, definitely not

Soil decontamination

Pollution of soil with hydrocarbons or heavy metals can significantly reduce crop yields, or even leave them completely unusable for agriculture. Cleaning up soil could cost a little more.

If it reduced the risks to your health, would you be willing to <u>pay a little more for your fruit, vegetables and meat</u> to clean up and protect agricultural soil?

- 1. Yes, without hesitation
- 2. Yes, probably
- 3. No, probably not
- No, definitely not

PART B: Solutions and acceptability

REGENERATE

In 2023, by 2 August, humanity had consumed all the resources that the planet is capable of regenerating in one year. This date comes increasingly earlier each year. The depletion of resources is a risk to the health, quality of life and economy of a country. It can also be a source of conflict between countries. We already have solutions for preserving resources. They include:

- Recycling wastewater (domestic, industrial and rainwater) to produce drinking water that meets health standards
- Recycling plastic
- · Recycling batteries and electrical and electronic equipment

New trade-off between the cost of action in the short term and the cost of inaction in the medium term (individual level)

Reuse of wastewater

Following the summer of 2022, the UN said that 40% of the world's population was affected by water shortages. Recycling wastewater to directly produce drinking water that meets health standards could limit the draining of water tables, and reduce water shortages for individuals and the country's agriculture and economy (industry and tourism). This could cost a little more.

If it reduced the risk of water shortages for you and your country's agriculture and economy, would you be willing to pay a little more for your water today so that it was recycled?

- 1. Yes, without hesitation
- Yes, probably
- 3. No, probably not
- 4. No, definitely not

If it reduced the risk of water shortages for you and your country's agriculture and economy, would you be willing to eat food from agriculture that uses water recycled directly from treated wastewater?

- Yes, without hesitation
- 2. Yes, probably
- 3. No, probably not
- 4. No, definitely not

If it reduced the risk of water shortages for you and your country's agriculture and economy, would you be willing to <u>drink drinking water that had been produced by recycling wastewater</u>?

- Yes, without hesitation
- Yes, probably
- 3. No, probably not
- 4. No, definitely not

Plastics recycling

Recycling plastic reduces plastic pollution and limits the extraction of oil (which is used to produce plastic). This could cost a little more.

If it reduced plastic pollution and limited oil extraction, would you be willing to <u>pay a little more for your everyday products containing or packaged in plastic to be sure that they were recycled?</u>

- Yes, without hesitation
- 2. Yes, probably
- No, probably not
- No, definitely not

It is possible to package food in recycled paper or plastic. If it reduced plastic pollution and limited oil extraction, would you be willing to <u>buy food packaged in recycled materials</u> (recycled paper or plastic)?

- Yes, without hesitation
- 2. Yes, probably
- 3. No, probably not
- No, definitely not

Recycling electrical and electronic equipment and batteries

Recycling batteries and electrical and electronic equipment enables the recovery of the rare metals they contain, which are essential for manufacturing many high-tech products. It also reduces pollution caused by the extraction of rare metals, and reduces dependence on countries that produce these metals. This could cost a little more.

If it limited pollution caused by the extraction of rare metals and reduced dependence on countries that produce these metals, would you be willing to pay a little bit more for your electrical and electronic devices to be sure that the battery and the device itself will be recycled?

- Yes, without hesitation
- 2. Yes, probably
- 3. No, probably not
- No, definitely not

PART B: Solutions and acceptability

DECARBONISE

The IPCC states that greenhouse gas emissions (including CO2), which are responsible for global warming, have continued to increase in recent years. To limit global warming to 2°C, these greenhouse gas emissions must be drastically reduced. Climate impacts include an increase in natural disasters (floods, droughts, fires, heat waves, cyclones), melting glaciers and rising sea levels, resulting in increased food and water crises, health crises, the extinction of animal and plant species, etc. We already have solutions for reducing CO2 emissions. They include:

 Locally producing low-carbon energy from the incineration of non-recyclable waste and biomass (agricultural waste, wood, leaves, waste of animal origin, etc.) from the area

New trade-off between the cost of action in the short term and the cost of inaction in the medium term (individual level)

Local low-carbon energy production

When energy is produced and burnt, carbon dioxide (CO2) is emitted. Producing energy locally from the incineration of non-recyclable waste and biomass reduces CO2 emissions, reduces dependence on countries that produce fossil fuels, and provides energy security for your region. Producing low-carbon energy locally could cost a little more.

Would you be willing to pay a little more for energy so that it was produced locally from non-recyclable waste and biomass, if it...?

Yes, without hesitation / Yes, probably / No, probably not / No, definitely not

- 1. Reduced CO2 emissions (responsible for global warming)
- 2. Reduced dependence on countries that produce fossil fuels
- 3. Provided energy security for your region

Elements of the public decision

When making decisions about managing water, waste or energy where you live, should your local leaders/elected officials take into account:

It's essential / It's important, but not essential / It's not important

- 1. Protecting your health
- 2. The environmental risks (pressure on resources, pollution, drought, greenhouse gas emissions, etc.)
- 3. The end price for you (price of drinking water, energy, waste management, etc.)

PART C: Desirability of ecology

Desirability levers

The ecological transformation may lead us to change some of our behaviours, sometimes change the way we live or cost us a little more. What would encourage you to make these changes? What would make them easier for you or would justify the extra costs?

It would make a big difference, it might really make me want to do it / It might help, but it isn't what would get me to change / It wouldn't make a difference for me

- . Being sure that it would protect or improve my health and the health of those around me
- 2. Being sure that it would protect or improve my quality of life (preserving the landscapes I love, fewer natural disasters and extreme temperatures, fewer droughts, nicer air to breathe, less noise etc.)
- 3. Being sure that it would guarantee my country's energy independence and that everyone would have energy when they need it
- 4. Being sure that it would guarantee my country's food independence and that everyone would have enough quality food
- 5. Quickly seeing results, positive effects
- . Feeling like everyone is doing their bit, that there's a collective movement
- Making savings
- 8. Earning a little money in return ("financial reward")
- 9. The fact that my country is at the forefront of the ecological transition, being proud of my country and setting an example to other countries around the world
- 10. Understanding why I should give up certain things

ECOLOGICAL TRANSFORMATION:

"are we (still) ready?"

BAROMETER OF THE ECOLOGICAL TRANSFORMATION - 2024 EDITION





