

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**).

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**



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**.



Results "World Opinion"

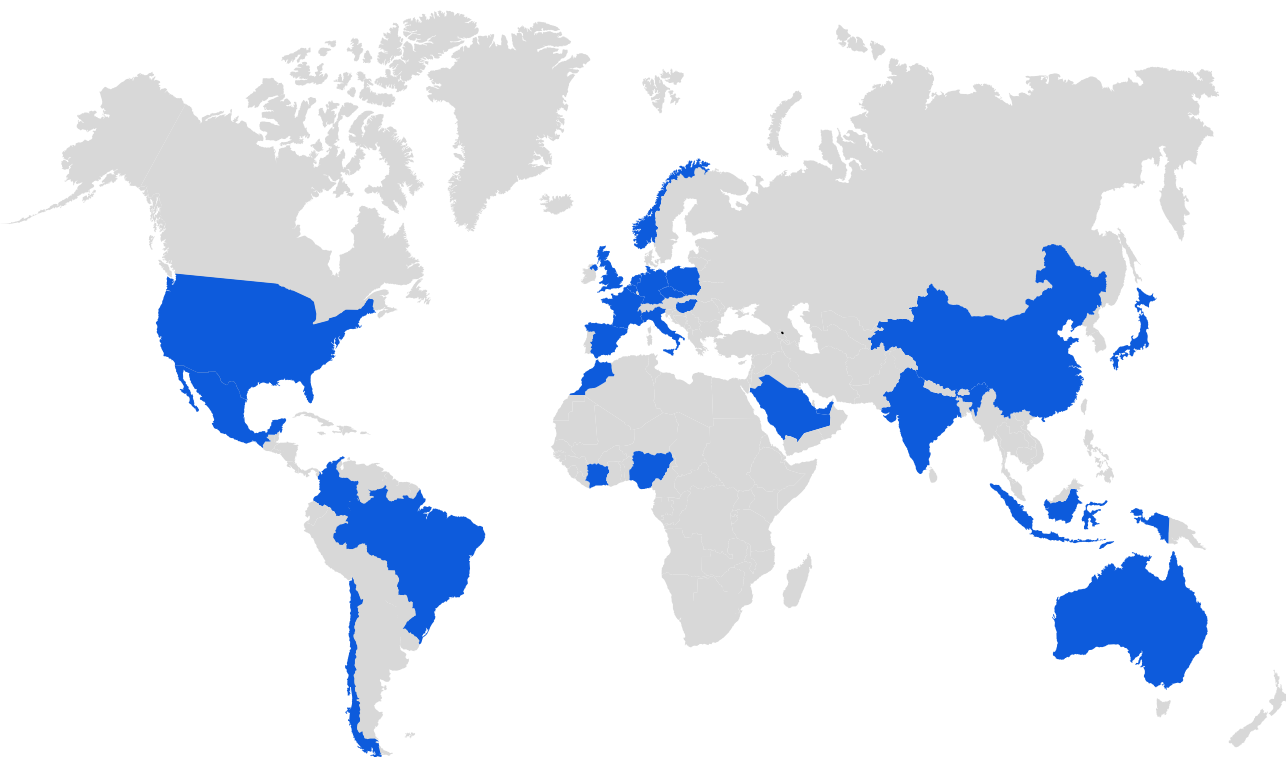
To constitute the **results of the "world opinion"**, an **equivalence between countries was privileged** (each country counts for 1, no weighting according to the number of inhabitants). This choice was made to ensure that the diversity of countries is represented and thus avoid "world opinion" being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



Frequency of the barometer

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

A global scope

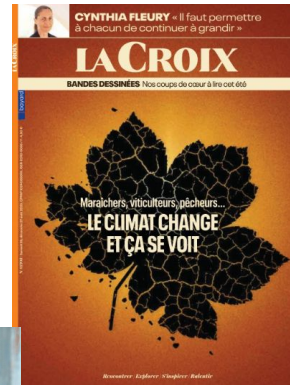


				Number of people interviewed	Pop. of the country on global pop.	Share of the country in global GHG emissions	Share of world GDP
TOTAL				29 500	59,2%	67,0%	77,0%
AFRICA							
1		CIV	Ivory Coast	1 000	0,4%	0,1%	0,1%
2		MAR	Morocco	1 500	0,5%	0,2%	0,1%
3		NGA	Nigeria	1 000	2,8%	0,8%	0,4%
AMERICA							
4		BRA	Brazil	1 000	2,7%	2,4%	2,0%
5		CHL	Chile	1 000	0,2%	0,3%	0,3%
6		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%
EASTERN ASIA							
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%
EUROPE							
13		DEU	Germany	1 000	1,0%	1,5%	4,2%
14		BEL	Belgium	1 000	0,1%	0,2%	0,6%
15		ESP	Spain	1 000	0,6%	0,6%	1,5%
16		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		GBR	United Kingdom	2 000	0,8%	0,8%	3,2%
MIDDLE EAST							
24		SAU	Saudi Arabia	1 500	0,5%	1,5%	1,0%
25		UAE	United Arab Emirates	1 500	0,1%	0,5%	0,5%
OCEANIA							
26		AUS	Australia	1 000	0,3%	1,1%	1,6%

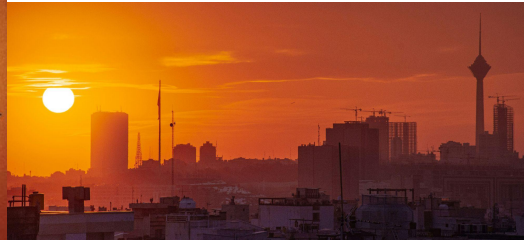
**Ecology,
do we stop or
do we go further ?**

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 infrastructures, banks and some businesses. **The number of consultations at medical centres has tripled** due to the heatwave.



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**.



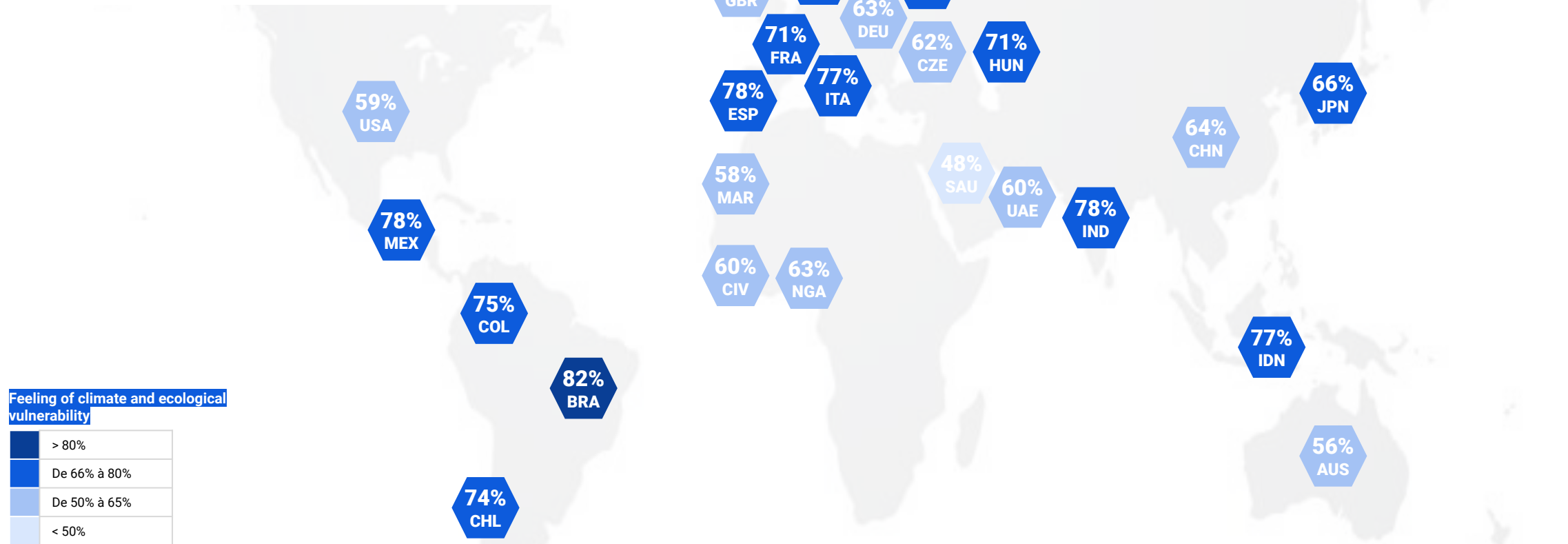
In August 2023, **Maui (Hawaii) burns down**. The town of Lahaina was nearly razed to the ground. 100 people died and around thirty disappeared. It **was one of the deadliest fires in the United States**, and the rebuilding costs exceeded 5.5 billion dollars, according to the authorities.

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"**.

Ecological and climate insecurity is spreading around the world

65%
of the world's inhabitants feel
exposed and vulnerable to a risk
related to climate change or pollution



Feeling of climate and ecological vulnerability

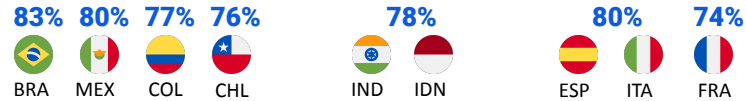
> 80%
De 66% à 80%
De 50% à 65%
< 50%

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?

Human health and quality of life, the first victims on the ecological front



68% of the world's population feel **exposed and vulnerable** to **a deterioration in their quality of life**



71% Increasingly harsh living conditions

↓ -3

70% Degradation of the ecosystem, the biodiversity

↓ -4

68% Resource scarcity and depletion

NEW

67% Migratory movements

↓ -4

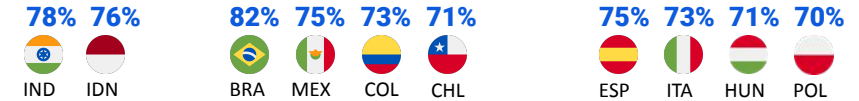
66% Property damage caused by natural disasters

64% Lack of food and/or poor quality food

NEW



64% fell **exposed and vulnerable** to **a health risk**



68% Increase of infectious diseases

NEW

66% Falling ill owing to pollution

64% Poorer health due to the reduced nutritional quality of food

NEW

58% Mental health problems

NEW

Regardless of vulnerability (health and quality of life)



+5 to +10 points (vs. men) in **10 countries/26**



+5 to +10 points (vs. average) in part of **Europe and United States**

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?

The massive and stable certainty of an ongoing climate change

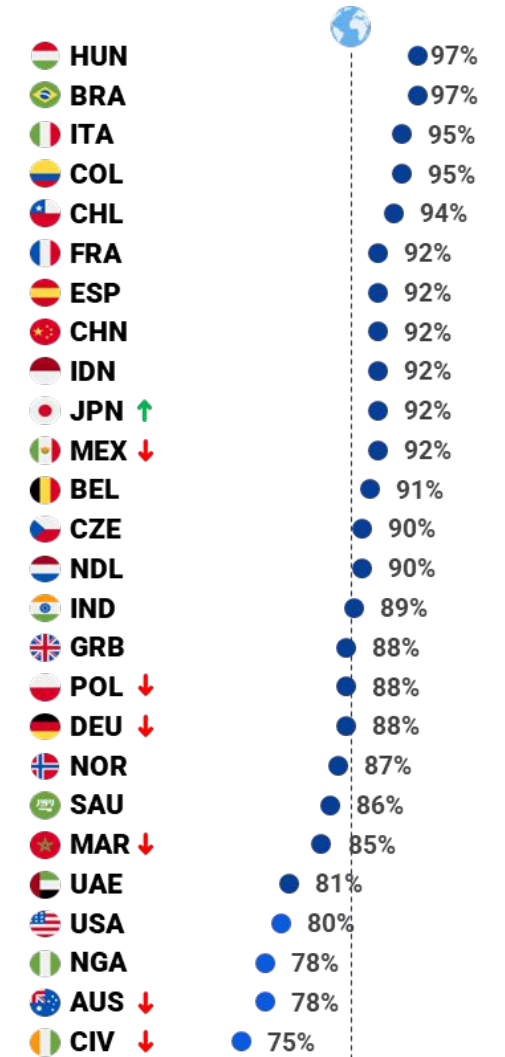


89%

of the world's inhabitants share the certainty that a **CLIMATE DISRUPTION** is **CURRENTLY HAPPENING**

11%

feel that **nothing unusual is happening**



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

But climate denial is on the rise among conservatives and populists of the whole world



73%

think that **CLIMATE DISRUPTION** is of **anthropogenic origin**

↓ -2

9%

it is a **natural phenomenon**

7%

“there is no way of knowing”

11%

“nothing unusual is happening”

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

27%

climate denial

Increase in 14 countries/26

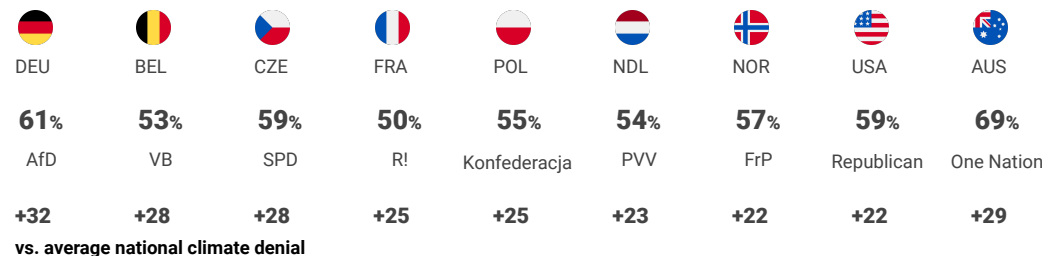
including 8 with electoral deadline in 2024



↑ +2



Conservatism / Far-right populism



Low-income populations

Climate denial **+5 to +15 points** (vs. affluent populations) in **¾ of countries**

And the temptation of ecological fatalism is growing



55%

think that **the future is still in our hands**, we can still limit climate disruption and pollution

↓ -4

35%

have a **doubt**

↑ +3

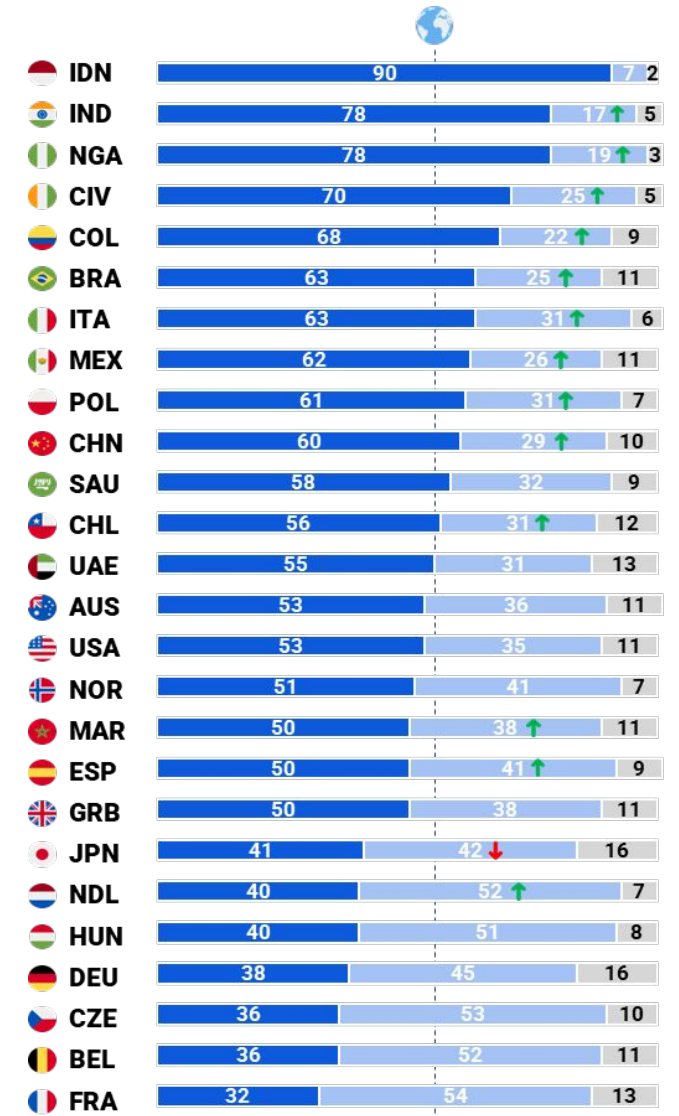
+15 to +20 points (vs. affluent populations) in **10 countries/26** (developing countries in Asia, Africa and Latin America, the Netherlands and Poland)

+5 to +10 points (vs. men) in **half of the countries** (especially in Europe)

9%

think it is **too late**

1% don't know

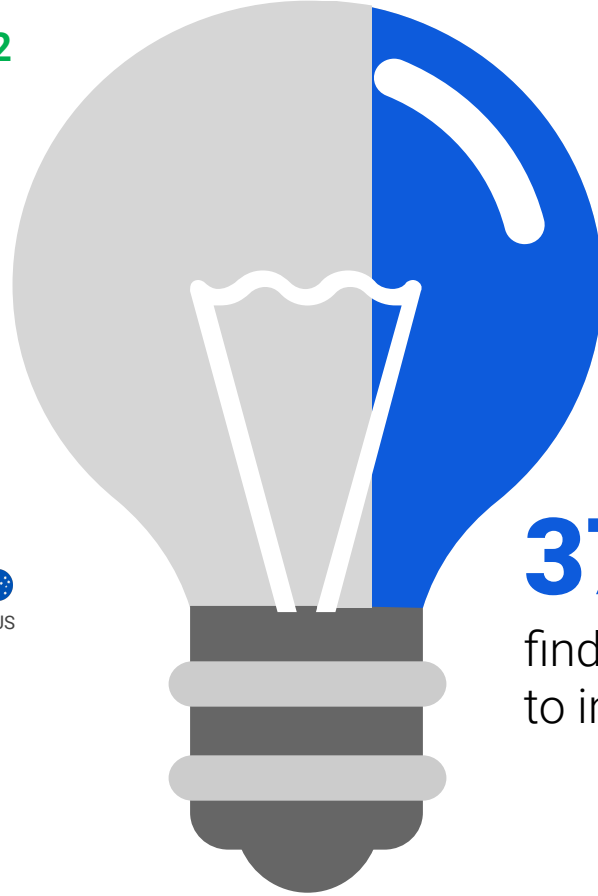


Question: And do you think we still have the future in our hands, that we can still limit climate disruption and pollution, or is it too late?

An ecological transition with no horizon

62% ↑ +2

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



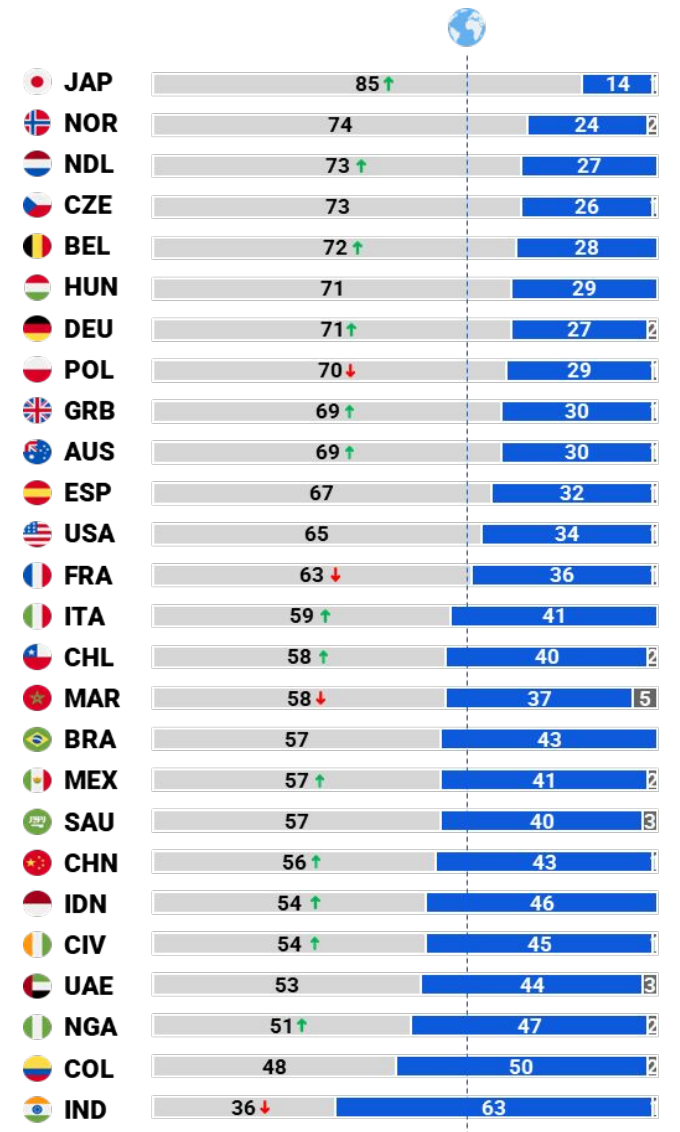
37% ↓ -2

find it **quite easy** to imagine



+5 to +10 points in 10 countries/26

- NDL
- HUN
- NOR
- IND
- IDN
- CHN
- CHL
- MEX
- USA
- AUS



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 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 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).



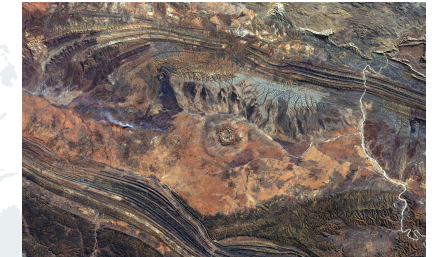
In May 2023, French President Emmanuel Macron called for "a European regulatory pause" in terms of environmental constraints, so that the weight of standards does not slow down European economies.



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".



In November 2023, Javier Milei was elected President of the Republic of Argentina, stating that "global warming is a lie".



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



66%

of the world's inhabitants are **certain** that

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

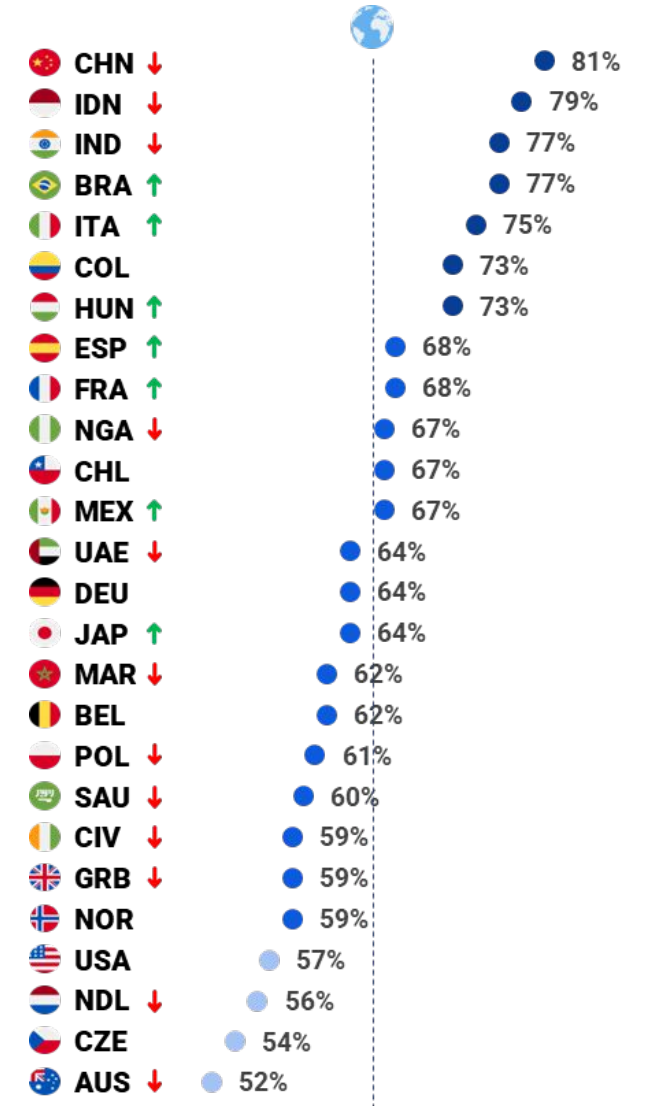


+5 to +11 points (vs. average) in **8 countries/26**



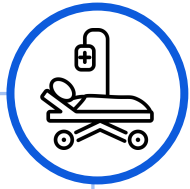
Conservatism / Far-right populism

-7 to -28 points (vs. average) in **Europe, United States and Brazil**



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

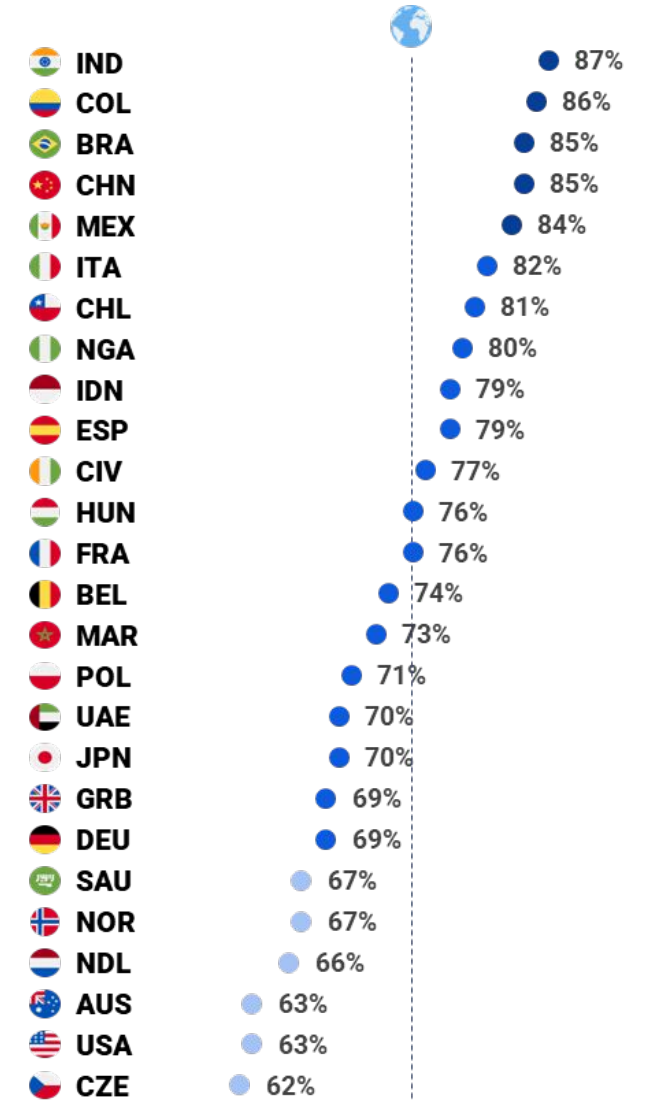


75%

of the world's inhabitants **certain** that

« **climate change** is
the greatest health threat
facing humanity »

World Health Organization, 2021



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?



And mass poverty is a credible threat

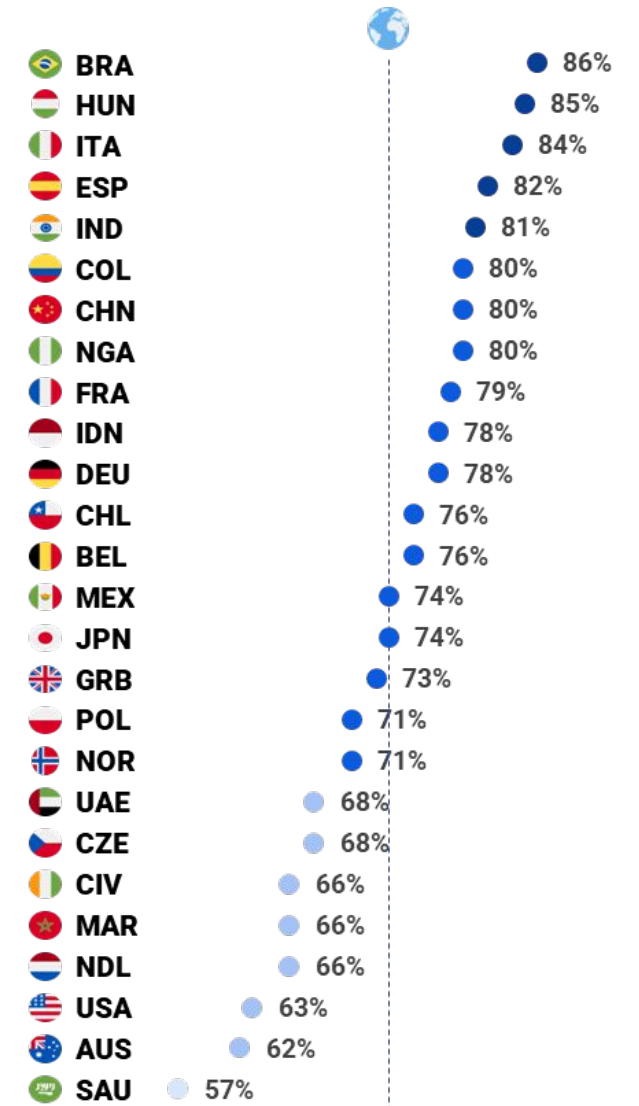


74%

of the world's inhabitants **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 : 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

IT REALLY MAKES ME WANT TO DO IT



Health

67%

Being sure that it would protect or improve my **HEALTH** and the health of those around me

♀ **+5 to +10 points** (vs. men) in 16 countries/26

77%

A healthy life



Quality of life

64%

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.)

70%

Happier



Resources

63%

Being sure that it would guarantee my country's **food independence** and that everyone would have enough quality food

60%

Being sure that it would guarantee my country's **energy independence** and that everyone would have energy when they need it

♂ **+5 to +10 points** (vs. average) in 12 countries/26

70%

More serene



Purchasing power

57%

Making **SAVINGS**

50%

EARNING A LITTLE MONEY in return (« financial reward »)

63%

Comfort of life

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?



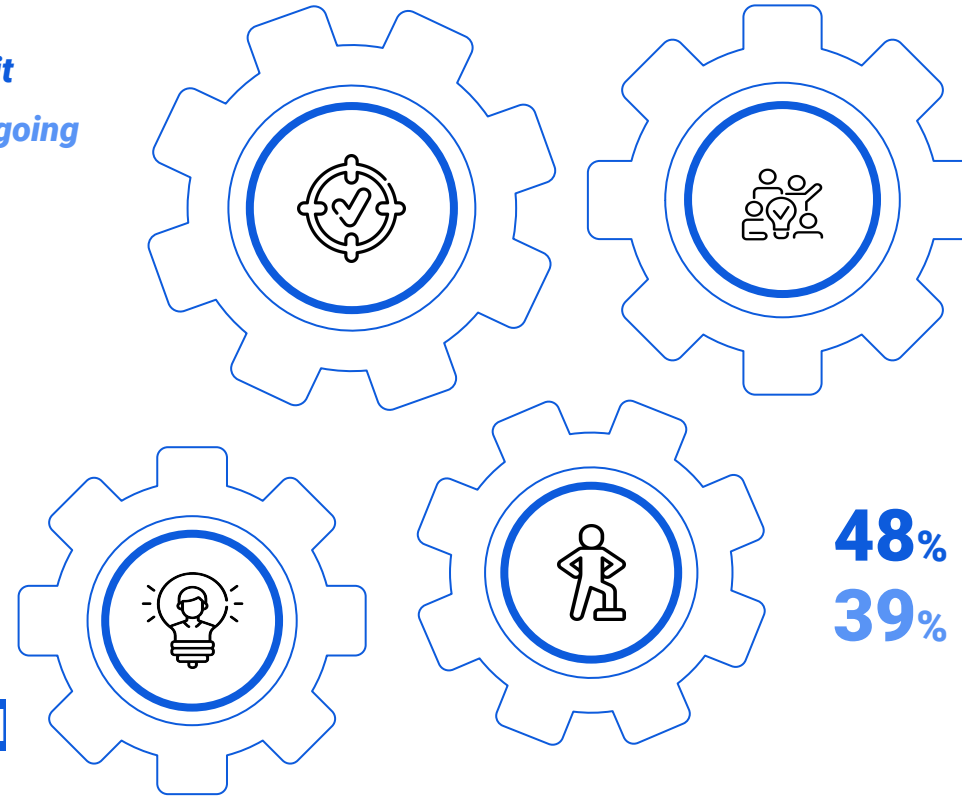
Question: If you imagine the world we would live in if we achieve the ecological transformation, in your opinion...?

Concrete results and an explained and unifying collective action as levers for change

Seeing results quickly, positive effects

61% *It really makes me want to do it*

32% *It may help, but it's not what's going to make me change*



57% Feeling like **everyone is doing their bit**, that there is a collective movement

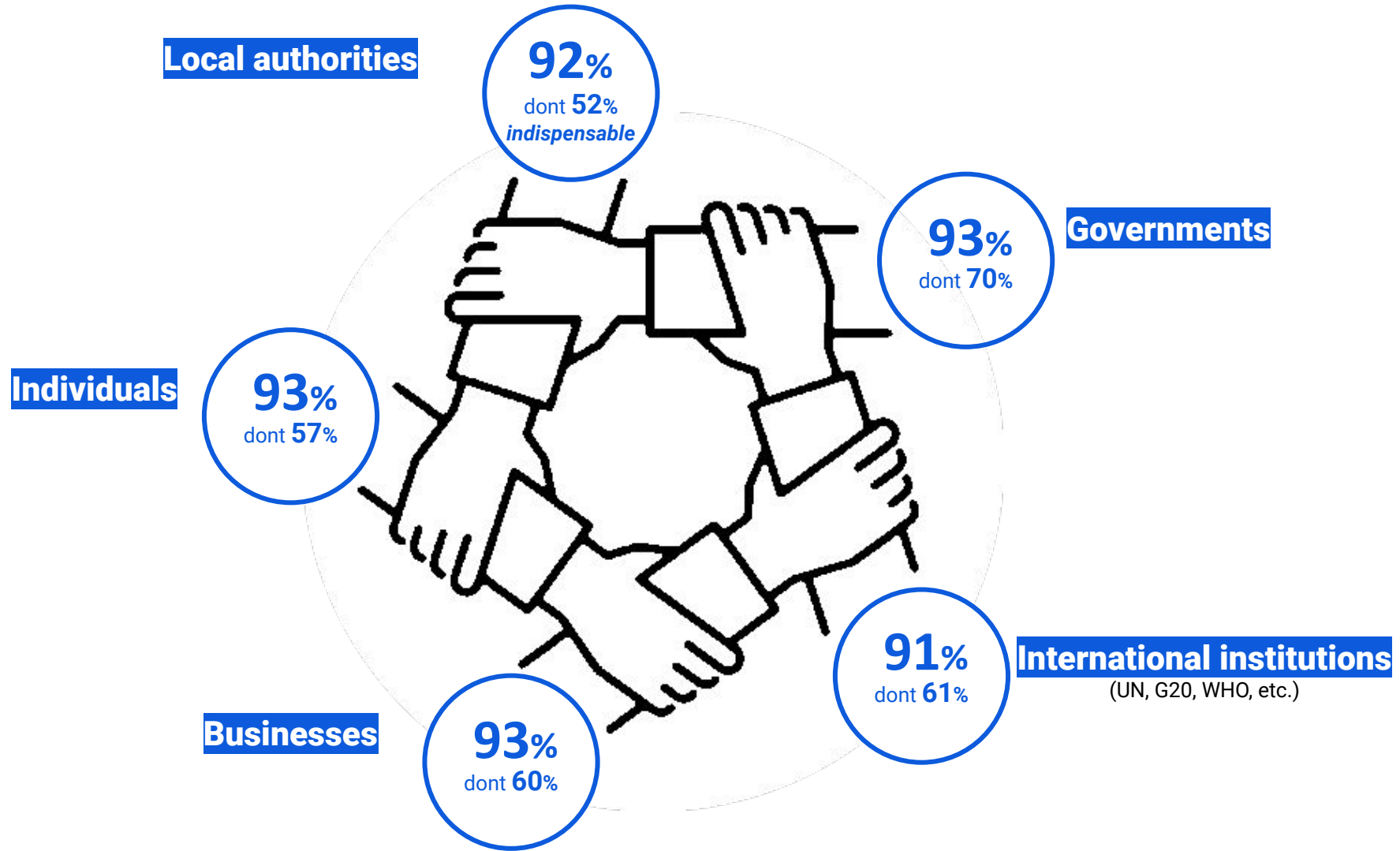
48% **Understanding why I should give up** certain things

48% 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

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 for ecological transformation's solutions



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 are major matters to succeed

Planning

having a long-term vision for solutions and investments to promote ecological transformation

92% *useful*
incl. **58%**
it's the key to getting there

Innovating

inventing new and less polluting ways of doing things

93%
incl. **58%**

Supporting

the adoption of behaviours and lifestyles that are less polluting

91%
incl. **53%**

90%
incl. **53%**

89%
incl. **49%**

Informing

and explaining the risks and dangers to the climate and the environment to everyone

Updating laws and regulations

to support ecological transformation

 **-5 to -10 points** (vs. average)
50+ in **5 countries/26**

GRB BEL JPN USA AUS


On all items



Conservatism / Far-right populism

-10 to -15 points (vs. average) in part of Europe, Brazil, Chile, the United States and Australia

GRB FRA BEL NDL NOR CZE ESP POL BRA CHL USA AUS

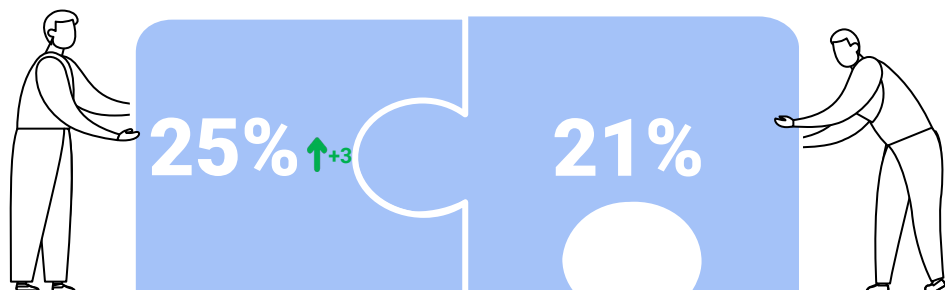

Question: In your opinion, what matters for the success of the ecological transformation in your country (reducing greenhouse gas emissions and pollution, and protecting natural resources and biodiversity)?



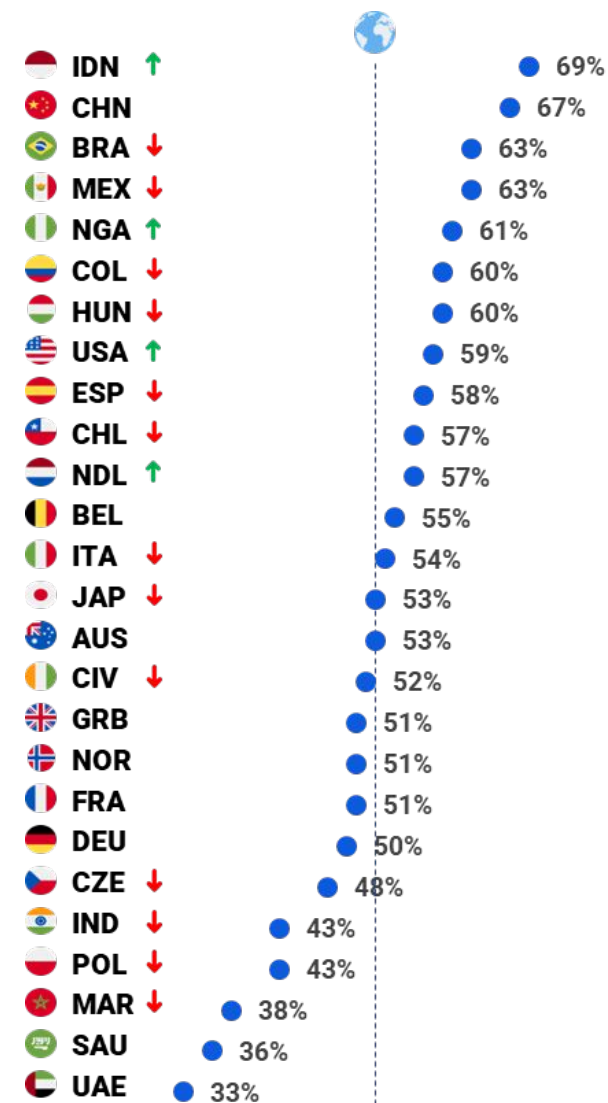
Combining technology and sobriety as a solution to limit climate disruption

First and foremost
PUT IN PLACE
technological solutions

First and foremost
considerably **REDUCE**
our consumption,
live more frugally



Technology and Sobriety
at the same time



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



Protecting your health

97% incl. **79% essential**



+4 to +14 points (vs. average % essential)
in **15 countries/26**



+5 to +15 points (vs. men)
in **10 countries/26**



Taking ecological risks into account

96% incl. **67% essential**



Conservatism / Far-right populism
-5 to -25 points (vs. average % essential)
in **12 countries/26** (part of Europe, Brazil, the United States and Australia)



+4 to +16 points (vs. average)
in **11 countries/26**



+5 to +12 points (vs. men)
in **10 countries/26**



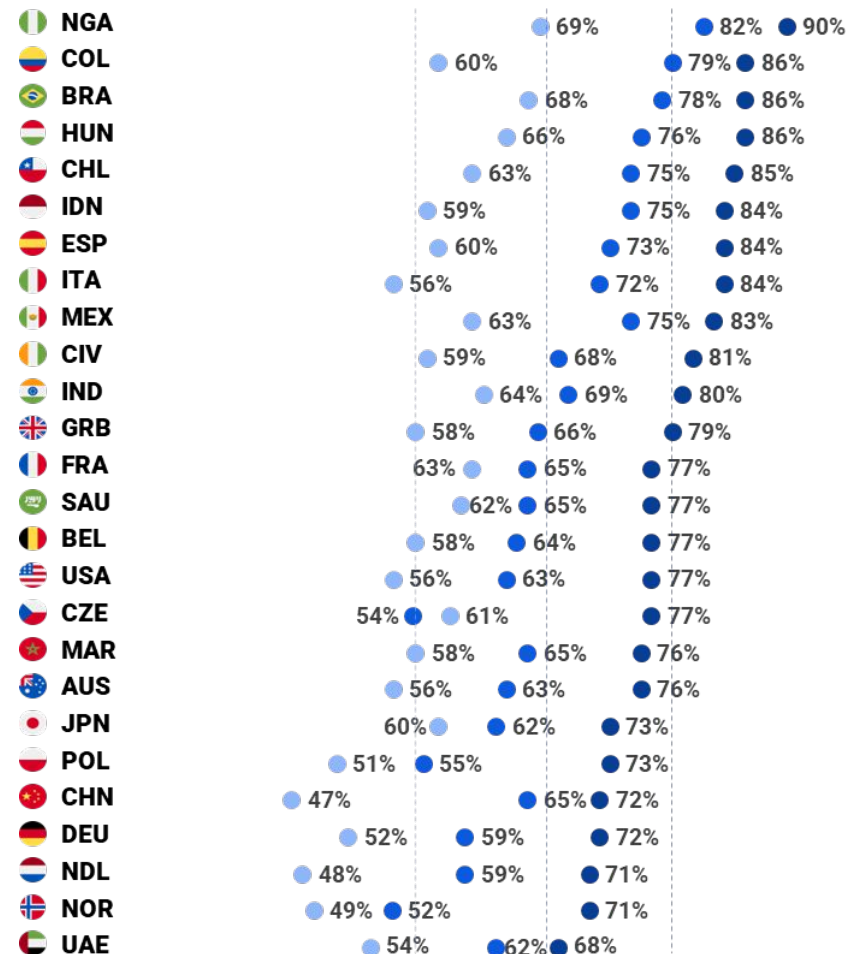
Final price for the consumer

96% incl. **58% essential**



-8 to -15 points (vs. affluent populations)
in **3 countries only**

ITA CIV NGA



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


NOT READY

 Focus on the final price for the consumer

READY

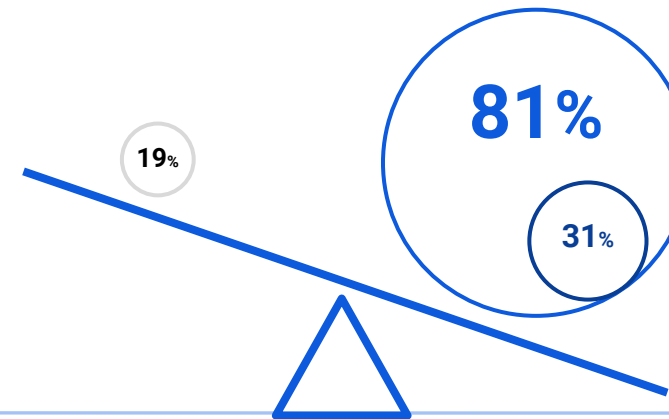
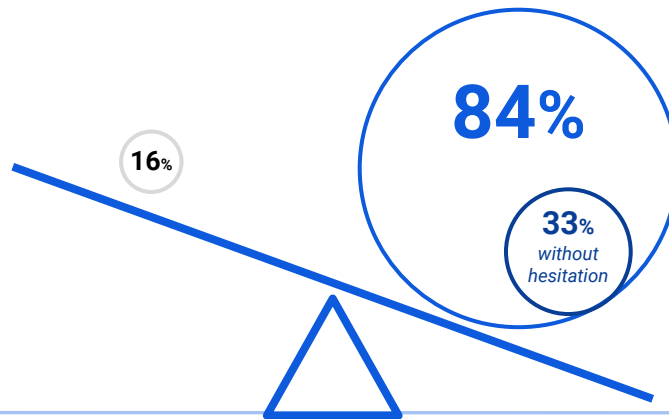
 Arbitrating in favour of micropollutants elimination

NOT READY

 Focus on the final price for the consumer

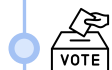
READY

 Arbitrating in favour of the depollution and preservation of agricultural soils



+10 to +20 points (vs. affluent populations) in **10 countries/26**

In every country in the world, despite the difficulty of bearing the additional cost, the majority of people on the lowest incomes are prepared to make the investment if it guarantees a reduction in health risks.



Conservatism / Far-right populism

+10 to +15 points (vs. average) in **Europe and the United States**

AUS DEU BEL HUN ITA NDL NOR USA BRA SAU

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 paper or plastic) to reduce plastic pollution and oil extraction


Eat food from **agriculture that uses recycled water** to reduce the risk of water shortages for consumption, agriculture and the country's economy

Drinking water from **recycled wastewater** to reduce the risk of water shortages for consumption, agriculture and the country's economy

NOT READY
 Prefer packaging without recycled materials

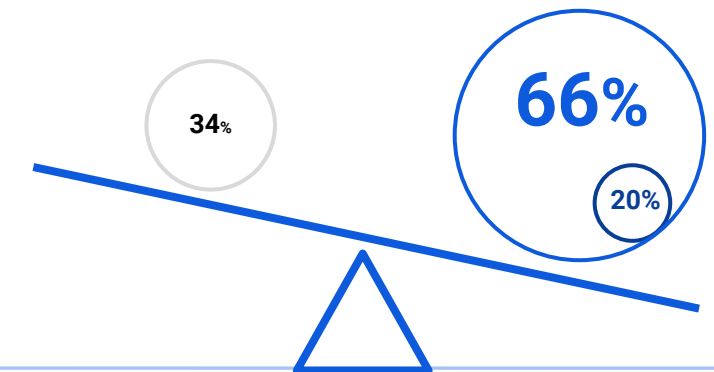
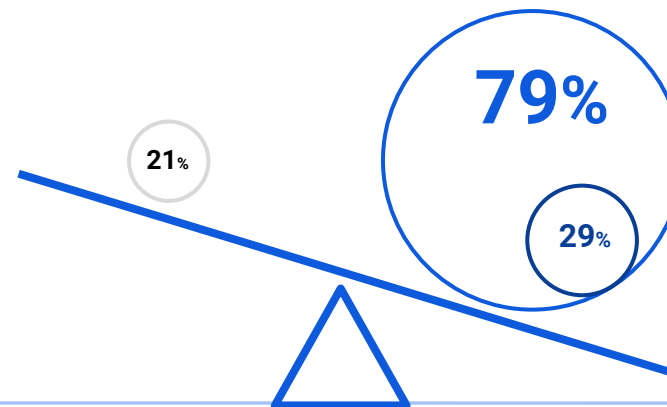
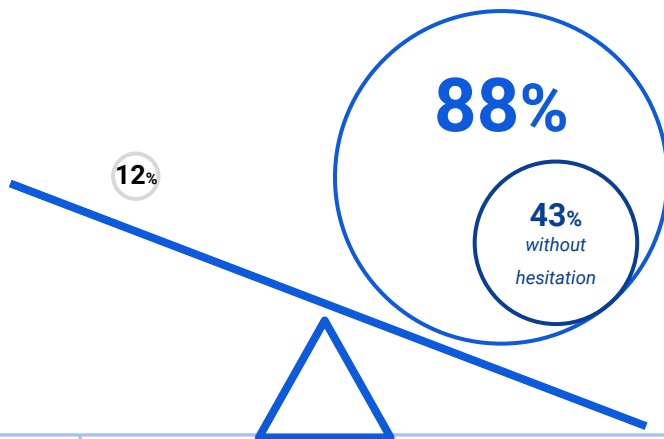
READY
 Arbitrating in favour of packaging in recycled materials


NOT READY
 Reluctant to eat food grown with water from REUSE

READY
 Arbitrating in favour of agriculture that uses recycled water (REUSE)


NOT READY
 Reluctant to drink water from REUSE

READY
 Arbitrating in favour of drinking water from REUSE



 **+5 to +15 points** (vs. men) in **17 countries/26** on the **consumption of food and water from REUSE**
 Women are significantly more sensitive to health risks. Their reluctance to adopt new uses, particularly for drinking water, reflects a need for health guarantees.

GRB FRA DEU BEL NDL NOR CIV MAR SAU UAE IND IDN BRA COL MEX USA AUS

 **Conservatism / Far-right populism**
+10 to +15 points (vs. average) in **Europe and the United States**
 Climate denial hampers the social acceptability of adapting uses. Climate relativism and denial of the anthropogenic cause of the ecological crisis are major obstacles to changing behaviour and perceptions.

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 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

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

NOT READY
 Focus on the final price for the consumer

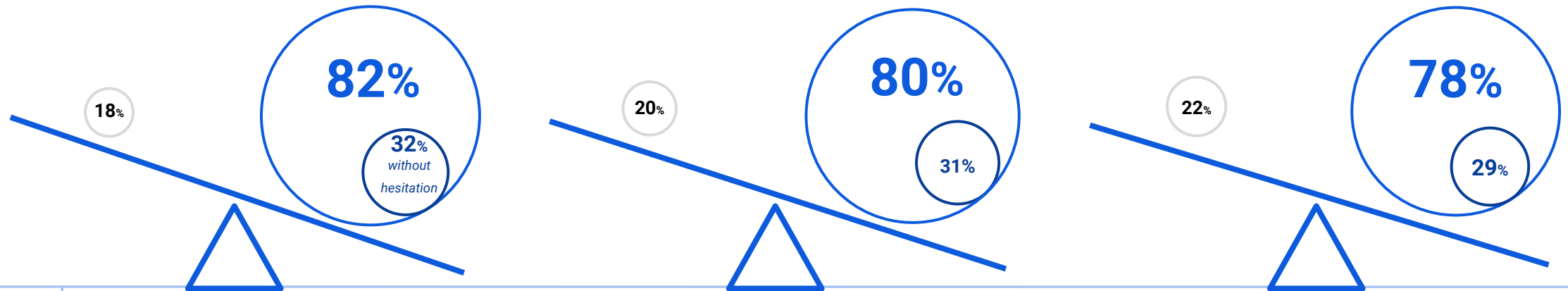
READY
 Arbitrating in favour of water recycling

NOT READY
 Focus on the final price for the consumer

READY
 Arbitrating in favour of recycling electrical/electronic devices and batteries

NOT READY
 Focus on the final price for the consumer

READY
 Arbitrating in favour of plastic recycling



+10 to +20 points (vs. affluent populations) in **10 countries/26**
 In every country in the world, despite the difficulty of bearing the additional cost, the majority of people on the lowest incomes are prepared to accept the additional expense if it guarantees a reduction in pollution, dependence on imports of strategic minerals and the risk of water shortages

Conservatism / Far-right populism
+10 to +15 points (vs. average) in **Europe and the United States**

- AUS
- DEU
- BEL
- HUN
- ITA
- NDL
- NOR
- USA
- BRA
- SAU

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

Pay a little more for energy that is produced locally from non-recyclable waste and biomass...

To secure the region's energy supply

To reduce CO2 emissions

To reduce our dependence on fossil fuel-producing countries

NOT READY

Focus on the final price for the consumer

READY

Arbitrating in favour of locally produced energy from non-recyclable waste

NOT READY

Focus on the final price for the consumer

READY

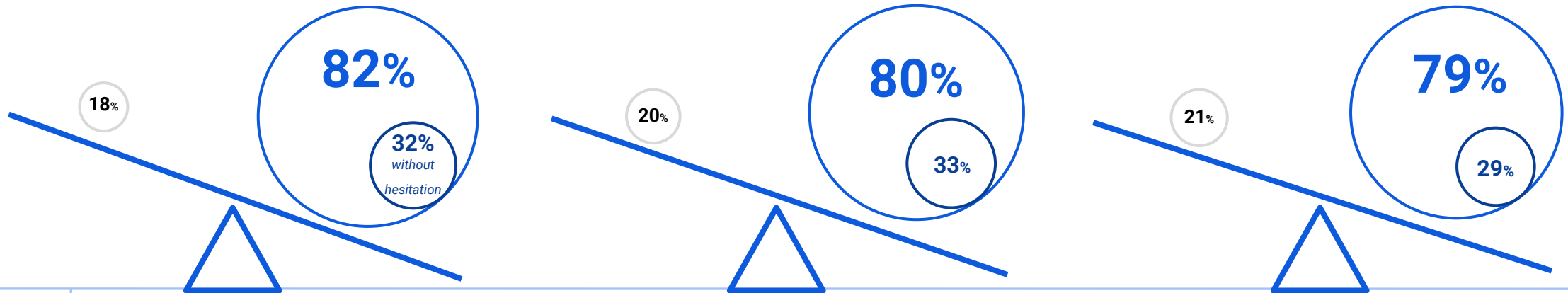
Arbitrating in favour of locally produced energy from non-recyclable waste

NOT READY

Focus on the final price for the consumer

READY

Arbitrating in favour of locally produced energy from non-recyclable waste



+10 to +20 points (vs. affluent populations) in **10 countries/26**

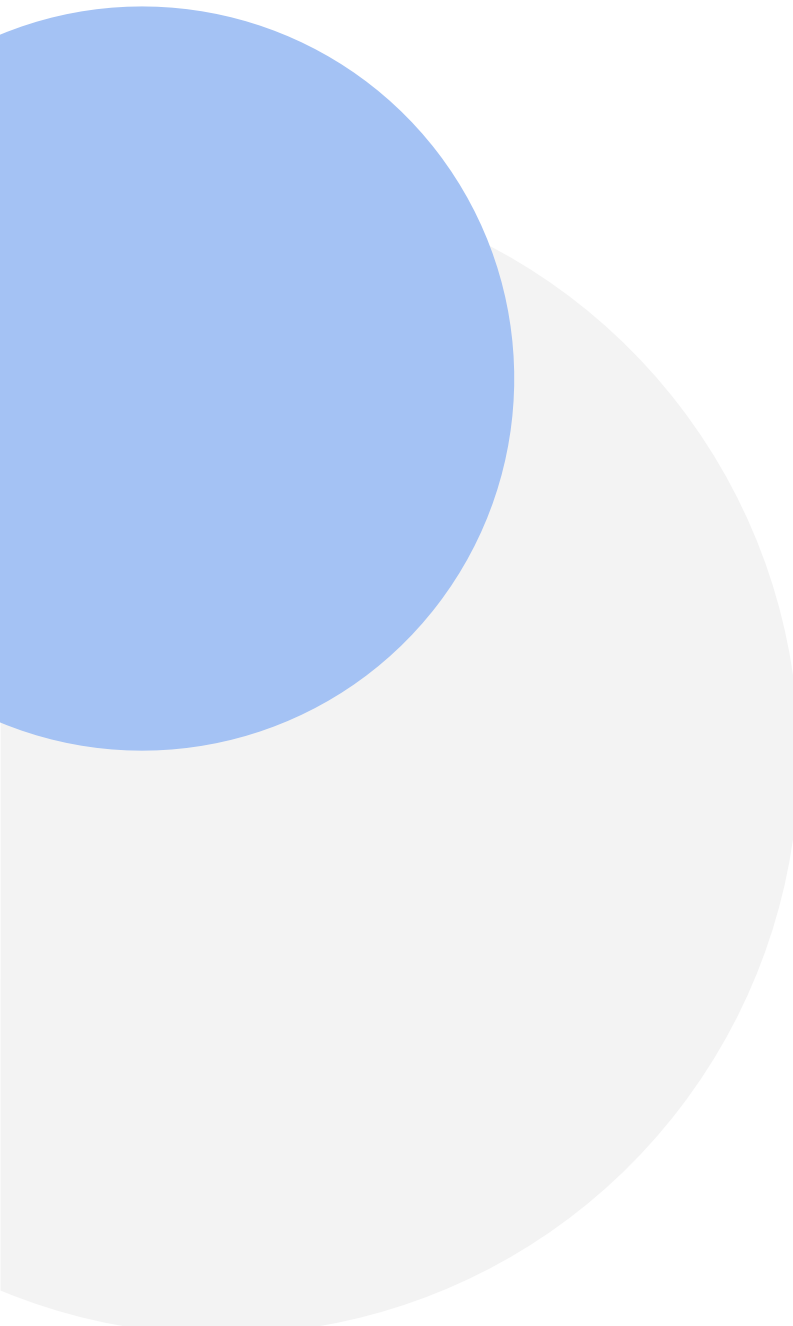
In every country in the world, despite the difficulty of bearing the additional cost, the majority of people on the lowest incomes are prepared to accept the additional expense if it guarantees a reduction in energy dependency and GHG emissions.



Conservatism / Far-right populism

+10 to +15 points (vs. average) in **Europe and the United States**

AUS DEU BEL HUN ITA NDL NOR USA BRA SAU



ECOLOGICAL TRANSFORMATION : “are we (still) ready ?”

BAROMETER OF THE ECOLOGICAL TRANSFORMATION - 2024 EDITION

