



ECOLOGICAL TRANSFORMATION : « Are we ready ? »

BAROMETER OF THE ECOLOGICAL TRANSFORMATION
NIGERIA 

ECOLOGICAL EMERGENCY

Are we ready?

1951

First report on the state of the environment by the International Union for Conservation of Nature.

1972

Stockholm Conference, first international conference of the United Nations on the environment and launch of the Earth Summits.



1985

Discovery of a hole in the ozone layer by scientists. To date, the only climate issue that has not deteriorated.

1978

The Amoco Cadiz, a Liberian supertanker sank and released 227,000 tons of oil off the coast of Brittany. The worst oil spill of the 20th century opened the way and became the first legal case to succeed in terms of oil pollution.

1997

Kyoto Protocol on climate change, 38 countries commit to reducing their greenhouse gas emissions by an average of 5.2% within 15 years, compared to 1990 levels.

1990

First assessment report of the IPCC (Intergovernmental Panel on Climate Change)

1987

Brundtland Report "Our Common Future" by the World Commission on Environment and Development (UN) establishes the definition of sustainable development as "a pattern of development that meets the needs of the present without compromising the ability of future generations to meet their needs."

2007

The former vice-president of the United States, Al Gore, was awarded the Nobel Peace Prize jointly with the IPCC, after having highlighted the dramatic consequences of global warming, notably in the documentary "An Inconvenient Truth".



1997

Discovery of the North Pacific waste vortex, also called 7th continent.

1992

First Earth Summit in Rio and signing of Agenda 21 by more than 170 countries, a program of actions to be transposed locally by governments and institutions, in all areas of human activity.

2021

Glasgow Conference on Climate Change (COP26), which resulted in the "Glasgow Climate Pact", thus completing the Paris agreement with notable advances concerning the exit from oil and gas and the 1.5°C ambition.



2015

The Paris Agreement was adopted at the Paris Climate Conference (COP 21). The signatory states commit to keeping the global temperature increase below 2°C, or even below 1.5°C by 2100.



2019/2020

"Black summer" in Australia: mega-fires ravage nearly 19M hectares of vegetation and thousands of homes..



2021

Warmest summer on record in Europe according to the European climate change monitoring service Copernicus.

2022

Record floods in Pakistan following intense drought, 10% of the country flooded since the beginning of the monsoon

WHY THE BAROMETER OF THE ECOLOGICAL TRANSFORMATION?

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

IPCC reports, climate strategies, Green New Deal, COP: the proposals to fight against climate change, biodiversity loss and pollution are numerous. But their adoption and large-scale deployment raises a major question: **are the changes needed to lead 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

Climate change

Pollution and
resource scarcity

Threats to
biodiversity and
food security

A novel angle: the acceptability of ecological solutions

- Are there **psychological, economic or cultural obstacles** to the transition?
- Are we ready to **bear or accept the cost of the ecological transformation**?
- How far are we ready to go? How **radical** should the **change** be?
- What levers could **improve the acceptability of ecological solutions**?
- How does the world public opinion project itself in a **"transformed world"**?

Methodology



Selection of target countries

A survey conducted in **25 countries** in **5 continents** with more than **25,000 individuals** (about **1,000 per country**). **1 000 individuals** were surveyed in **Nigeria**. Countries were **chosen** for their **demographic weight**, their **weight in terms of GHG emissions** and to ensure a **diversity of political and cultural ecological histories**. Overall, these countries represent nearly 60% of the world's population and **68% of global GHG emissions**.
[See details on the next page.](#)



Collection method and field dates

A survey conducted **online** from **August 24 to September 26, 2022**. In **Nigeria**, the survey took place from **August 25 to September 14, 2022**.



Sample representativeness

For each of the **25 countries**, a **representative** sample of **residents aged 18 and over** was selected. The representativeness was ensured according to the **quota method** applied to the following variables: **gender**, **age**, **socio-professional category or income** (depending on the country) 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 (long period of evolution of representations, opinions and behaviour).

25 target countries



				Number of people interviewed	Pop. of the country on global pop.	Share of the country in global GHG emissions
TOTAL				25 111	59,4%	67,7%
AFRICA						
1		CIV	Ivory Coast	1 005	0,3%	0,1%
2		MAR	Morocco	1 030	0,5%	0,2%
3		NGA	Nigeria	1 000	2,6%	0,7%
AMERICA						
4		BRA	Brazil	1 006	2,7%	2,3%
5		CHL	Chile	1 006	0,2%	0,2%
6		COL	Colombia	1 005	0,6%	0,4%
7		USA	United States	1 002	4,2%	13,0%
8		MEX	Mexico	1 003	1,6%	1,4%
EASTERN ASIA						
9		CHN	China	1 000	18,1%	27,4%
10		IND	India	1 002	17,5%	7,3%
11		IDN	Indonesia	1 000	3,5%	2,2%
12		JPN	Japan	1 004	1,6%	2,5%
EUROPE						
13		DEU	Germany	1 006	1,1%	1,6%
14		BEL	Belgium	1 008	0,1%	0,2%
15		ESP	Spain	1 000	0,6%	0,7%
16		FRA	France	1 001	0,8%	0,9%
17		FIN	Finland	1 003	0,1%	0,1%
18		ITA	Italy	1 002	0,8%	0,8%
19		NDL	Netherlands	1 002	0,2%	0,4%
20		POL	Poland	1 000	0,5%	0,8%
21		CZE	Czech Republic	1 005	0,1%	0,3%
22		GBR	United Kingdom	1 003	0,9%	1,0%
MIDDLE EAST						
23		SAU	Saudi Arabia	1 002	0,4%	1,6%
24		ARE	United Arab Emirates	1 011	0,1%	0,5%
OCEANIA						
25		AUS	Australia	1 005	0,3%	1,3%



KEY FINDINGS

1

A feeling of vulnerability in the face of ecological and climatic risks

A **feeling of extreme fragility now unites the historically most fragile countries** (low GDP, natural disasters already inscribed in the collective memory, long-standing experience of scarcity of essential resources such as water, etc.) **and developed countries**, which for a long time felt "sheltered", protected by their economic development and lesser exposure to the consequences of climate disruption and pollutions (long-standing health policies, infrastructures, etc.): **62% of Nigerian people express a feeling of ecological and climate vulnerability (vs. 71% of world's inhabitants).**

Nigeria is in the low average of the 25 countries, its level of vulnerability is however higher than Saudi Arabia (48%) and comparable to Morocco (61%) and the UAE (65%).

Falling ill owing to pollution
(water, air, soil)

66%



The degradation of the ecosystem, the biodiversity in my country
(disappearance of animals, flora, etc.)

63%



Having increasingly harsh living conditions
(extreme temperatures, limiting water consumption in case of drought, etc.)

63%



Migratory movements
(caused by pollution and the consequences of climate disruption: drought, famine, etc.)

60%



Property damage caused by natural disasters
(floods, droughts and severe weather events)

58%



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?

2

61% of Nigerian people are convinced that climate change is occurring AND that human activity is the main cause

Contesting climate change is no longer on the agenda. The increasingly frequent experience of "abnormal" phenomena has provided the proof that some people claimed, refuting or ignoring for decades the warnings of science : **77%** of Nigerian people now share the **certainty of an ongoing climate disruption**.

It is its **anthropic origin that is still being debated locally**: **10%** defend the theory of a **strictly natural phenomenon** and **6%** plead the **impossibility of identifying the cause**.

After Saudi Arabia, Nigeria is the country with the most climate sceptics.

77%



of American people share the certainty that a **CLIMATE DISRUPTION** is **CURRENTLY HAPPENING**



89%

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

61% think that **CLIMATE DISRUPTION** is of **anthropogenic origin**



75%

10% a **natural phenomenon**



7%

6% « **there is no way of knowing** »



7%

23% « **nothing unusual is happening** »



11%

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

61%

Believers in climate change



75%

39%

Climate sceptics



25%

3

Faced with the "climate and ecological wall", concern and eco-anxiety have become the norm in Nigeria

70% are **concerned about the situation, without stopping them from being at peace** or making long-term plans  59%

24% are **worried and anxious about the future** to the point of not being at peace, or even giving up long-term projects such as having children  30%

The Nigerian level of eco-anxiety is comparable to the Moroccan level (27%), i.e. below the world average and very far from the Indian eco-anxiety (58%).

4% « **there is really nothing to worry about** »  9%

Question: When you think about climate disruption and the environmental situation (pollution, quality of biodiversity), which phrase best describes how you feel?

4

A large majority of Nigerian people believe they are still in control of the climate future and believe that inaction will be more costly than action

More than 8 in 10 Nigerian people are convinced that the climate and ecological future is still in our hands.

Nigeria is the 3rd country in the world, behind Indonesia (90%) and India (86%), where this certainty is the highest. In Africa, this opinion is higher than in Ivory Coast (71%) and Morocco (58%).

Determinate, more than 7 in 10 Nigerian people are convinced that taking action will cost less than doing nothing.

84% think that **the future is still in our hands**
We can still limit climate disruption and pollution



13% have a **doubt**



2% think it is **too late**



71%

are certain that **the costs caused by climate disruption and pollution are going to be more important than the investments needed for the ecological transformation**

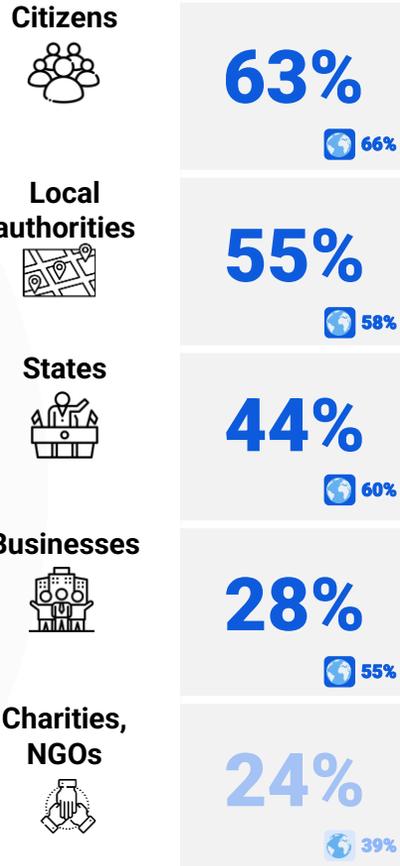


Question: And do you think we still have the future in our hands, that we can still limit climate disruption and pollution, or is it too late?

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?

5

Act collectively to reduce and innovate



Question: In your opinion, who needs to take action for the success of the ecological transformation?

58% think we need to **CHANGE our ways of life, live more frugally**
55%
AND
PUT IN PLACE technological solutions to reduce climate disruption

32% think we need **first to PUT IN PLACE technological solutions**

23%

9% think we need **first to CHANGE our ways of life, live more frugally**

21%

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...?

6

The need to nourish a new imaginary

A small majority (55%) of Nigerian people find it **quite easy to imagine** what **daily life could be like if we achieve the ecological transformation**. However, 44% find it **difficult to imagine**: 22% don't see it at all, 22% have some ideas but find it very vague.

Notably because there is **little or no discussion of the solutions to be put in place** (66%).

55% find it **quite easy** to imagine what the **world** and our **daily** lives might look like after the **ecological transformation**



44% find it difficult to imagine what **daily life could be like if we achieved the global ecological transformation**



incl. **22%** have **a vague idea, but it is still unclear**

incl. **22%** **can't really see**

66% 56%

believe we do **NOT TALK enough** about the **SOLUTIONS TO PUT IN PLACE**

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?

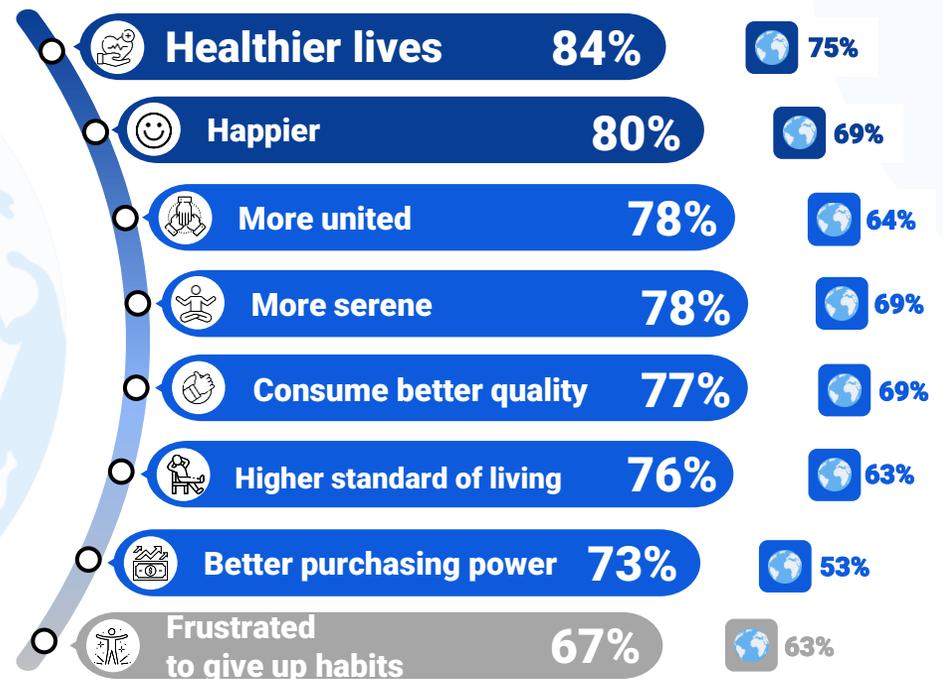
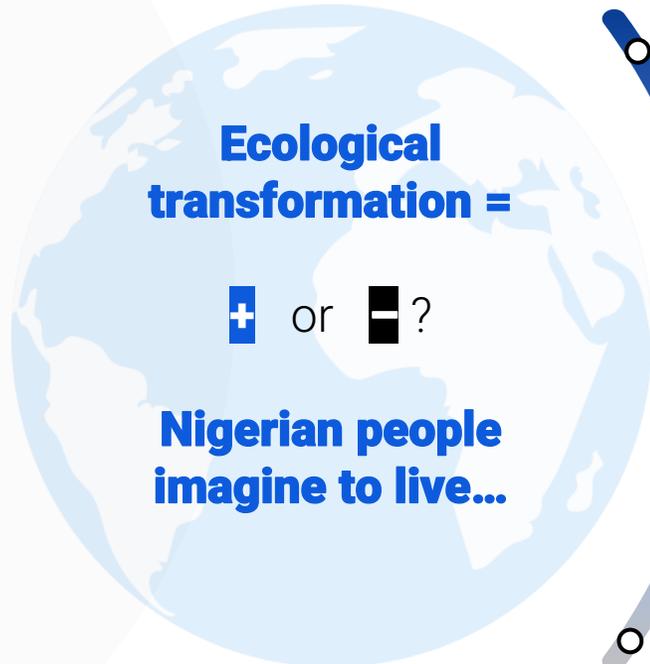
Question: In your country, would you say that there is enough or not enough talk about the solutions to be put in place (lifestyle changes, technological innovations, regulations, etc.) to mitigate pollution and climate disruption and adapt to the consequences thereof?

7

Draw me the transformed world...

No matter how easy or difficult it is to imagine everyday life being "transformed", the majority of Nigerian people want to believe that ecological transformation is synonymous with a "better world", in which **we will live in better health (84%), happier (80%), more united (78%), more serene (78%), in which we will consume less but better (77%), with higher standard of living (76%) and having a better purchasing power (73%).**

The transformed world is **not without its worries: 67% of Nigerian people fear to be frustrated to give up habits.**



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

8

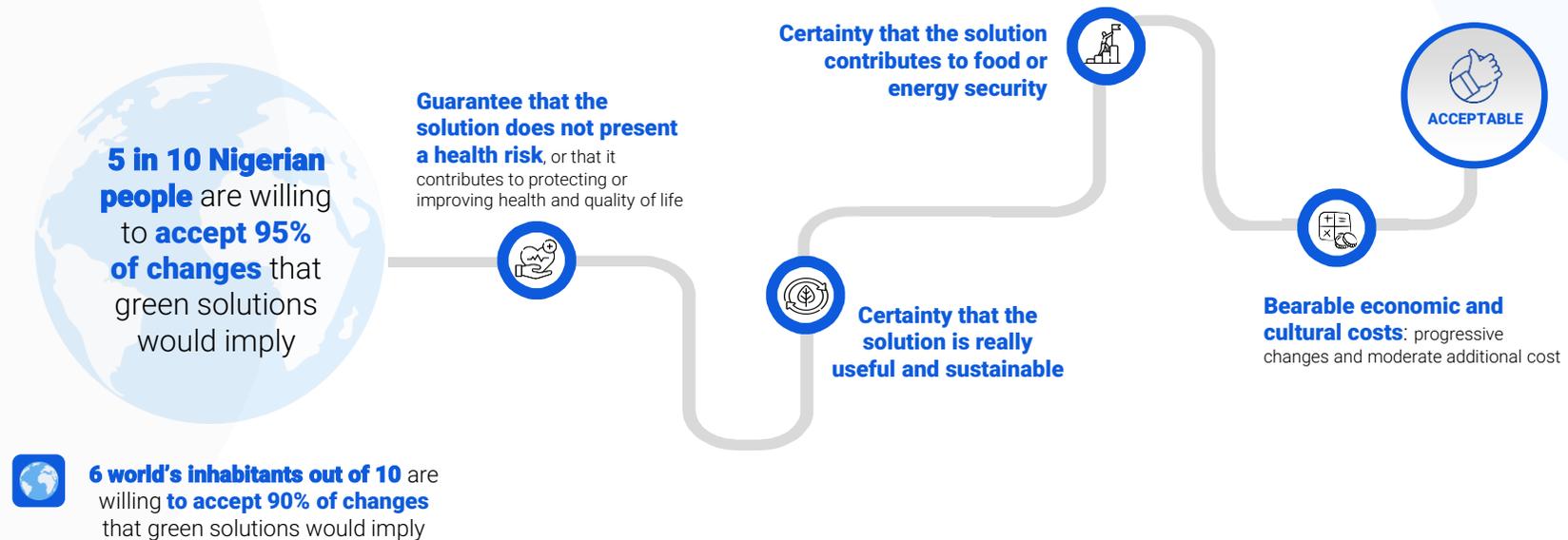
Which way to go?

Fear of the consequences of inaction is now significantly **stronger than fear of the cost of change: the ratio of projected gains and losses is in favor of ecological transformation.**

5 in 10 Nigerian people say they **are willing to accept 95% of the changes** that green solutions would entail.

Provided that :

- They have the **guarantee that the solution does not present any health risk**, or that it contributes to protect or improve health and quality of life
- To be sure that the solution is **really useful and sustainable**
- To be sure that the solution contributes to the Nigerian **food or energy security**
- The **economic and cultural costs are bearable**: progressive evolution and financial burden shared fairly between parties



Question: What might make you more willing to accept changes to our behaviour and our ways of living?

9

Threats to biodiversity and food security: a significant risk, very desirable solutions but conditional on efficiency, gradual changes and health guarantees

RISK

77% consider that the risk of **LACKING** and **POOR QUALITY FOOD** is **serious and immediate**

74%

SOLUTIONS



Using **organic waste** and **sludge from wastewater treatment** plants to produce "**organic**" **fertilisers** replacing "**chemical**" **fertilisers**

KNOW **60%** **49%**
DON'T KNOW **35%** **49%**

Using **processing** technologies to produce **water to irrigate crops** that meets health standards directly from **wastewater**

52% **48%**
45% **50%**

Developing **urban agriculture**

56% **55%**
41% **43%**

Feeding **fish and livestock** with **fly larvae meal**

35% **27%**
61% **70%**

ACCEPTABILITY

Eat food from **agriculture using sewage sludge**

69% **68%**

Eat food from **agriculture using recycled water**

68% **69%**

Wash with **recycled water**

64% **66%**

Wash dishes and clothes with **recycled water**

59% **69%**

Reduce **meat consumption**

59% **67%**

Pay a little more per m3 of water to develop **wastewater reuse**

58% **59%**

Eat fish or meat from **animals fed with fly larvae meal**

52% **60%**

Drink water from **wastewater treatment**

39% **53%**

CONDITIONS



No risk to our health

53% **54%**



Durability of the solution facing the risk

46% **43%**



Change happens gradually

37% **35%**

10 Climate disruption: a significant risk, very desirable solutions but conditional on energy sovereignty, health guarantees and demonstration of efficiency

RISK

76% believe that the risk of **CLIMATE DISRUPTION** is **serious and immediate**
79%

SOLUTIONS

Producing energy from the **incineration of non-recyclable waste and biomass** (agricultural waste, animal carcasses, etc.)

KNOW **51%**
46%

DON'T KNOW **47%**
52%

Equipping buildings with **"smart" tools** to optimise **energy consumption** (computer systems that measure energy consumption and temperature and connect them to heating appliances)

38%
42%

59%
56%

Capturing CO2 directly when it is emitted by industries (before it reaches the open air) to transform it into methane or hydrogen (via a chemical process) – **fuels with low greenhouse gas emissions**

34%
33%

63%
65%

ACCEPTABILITY

Have **incinerators** near where you live, for **local energy** production from the **area's waste**

74% 63%

Have **sewage treatment** plants near where you live, to produce **energy locally** (biomass) from the **area's waste**

70% 68%

Pay a little more for your **energy** so that it emits **less CO2** and is **"local"** (produced close to home)

69% 61%

CONDITIONS



No risk to our health

50% 49%



Durability of the solution for energy independence

46% 43%



Demonstration of reduction GHG emissions

43% 43%

1 1 Resource scarcity and pollution: a significant risk, very desirable solutions but conditional on efficiency, gradual changes and health guarantees

RISK

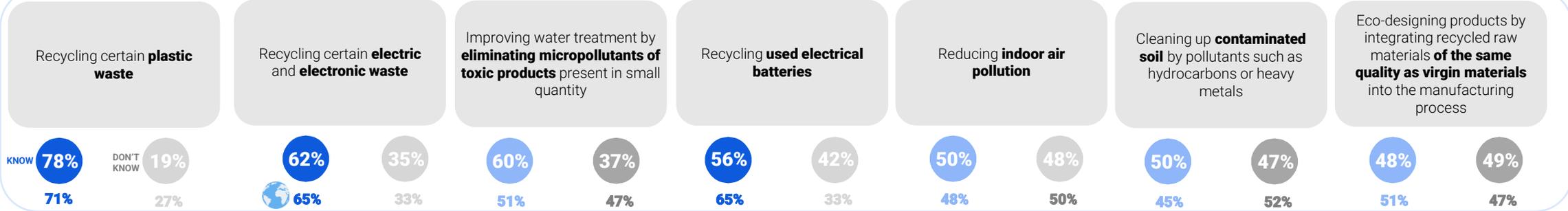
71% believe that the risk **RESOURCE SCARCITY** is **serious and immediate**

77%

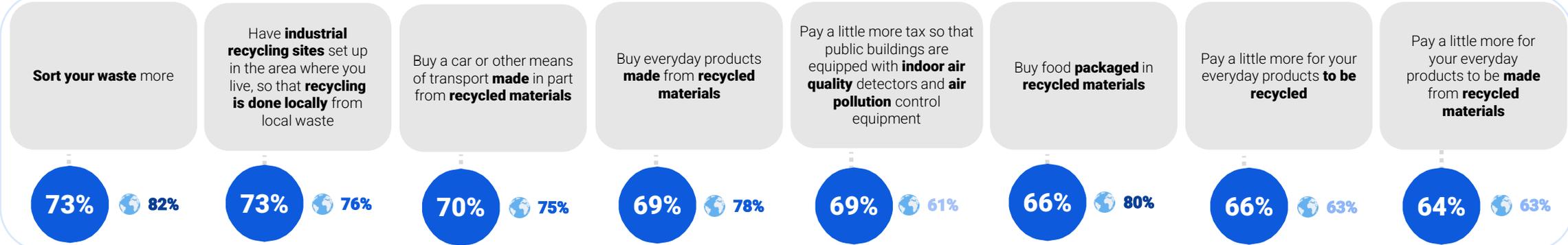
77% consider that the risk of **POLLUTION OF RESOURCES** and **IMPACT ON OUR HEALTH** is **serious and immediate**

76%

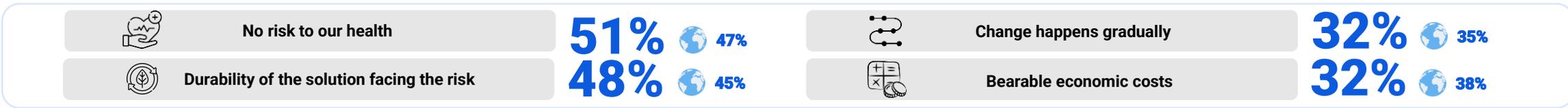
SOLUTIONS



ACCEPTABILITY



CONDITIONS





NIGERIA – Key figures

Believers in climate change

61%



75%

39%



25%

Climate sceptics

Ecological and climate vulnerability

70%



30%

feel anxious, give up long-term projects

24%



59%

are concerned about the situation

Degradation of the ecosystem and the biodiversity	86%	74%
Migratory movements caused by pollution and climate change	84%	70%
Afraid of getting sick because of pollution	83%	68%
Living conditions will become increasingly harsh	82%	74%
Material damage caused by natural disasters	82%	68%

The end of a world, but not the end of the world

84%

the future is still in our hands



60%

13% have a doubt



30%

2% It is too late



8%

71%



67%

costs caused by climate disruption and pollution are going to be more important than the investments needed for the ecological transformation

58%



55%

we need to CHANGE our ways of life, live more frugally

AND

PUT IN PLACE technological solutions to reduce climate disruption

Acceptability

Have incinerators near where you live	74%	63%
Sort your waste more	73%	82%
Have industrial recycling sites set up in the area where you live	73%	76%
Buy a car or other means of transport made in part from recycled materials	70%	75%
Have sewage treatment plants near where you live	70%	68%
Buy everyday products made from recycled materials	69%	78%
Eat food from agriculture using sewage sludge	69%	68%
Pay a little more tax so that public buildings are equipped with indoor air quality detectors	69%	61%
Pay a little more for your energy so that it emits less CO2 and is "local"	69%	61%
Eat food from agriculture using recycled water	68%	69%
Pay a little more for your everyday products to be recycled	66%	63%
Buy food packaged in recycled materials	66%	80%
Pay a little more for your everyday products to be made from recycled materials	64%	63%
Wash with recycled water	64%	66%
Wash your dishes and clothes with recycled water from wastewater treatment	59%	69%
Reduce your meat consumption	59%	67%
Pay a little more per m3 of water to develop wastewater reuse	58%	59%
Eat fish or meat from animals fed with fly larvae meal	52%	60%
Consume drinking water from wastewater treatment	39%	53%

Imagination of transformed world

55%

find it quite easy to imagine what the world and our daily lives might look like after the ecological transformation



39%

66%

believe we do NOT TALK enough about the SOLUTIONS TO PUT IN PLACE to mitigate pollution and climate disruption



56%

Better health	84%	75%
Happier	80%	69%
Better purchasing power	73%	53%
Frustrated to give up habits	67%	63%

Conditions



No health risk



Change happens gradually

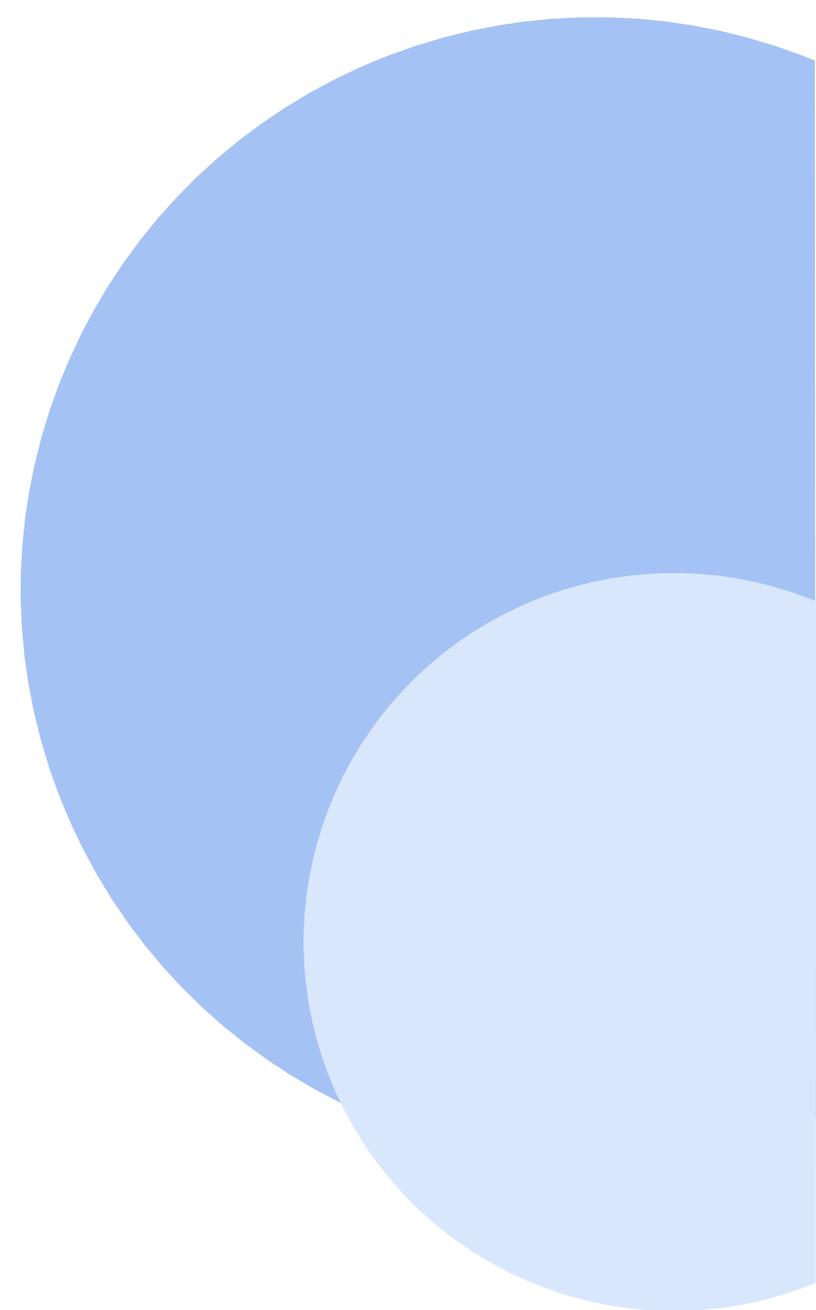


Be sure that the solution is really useful



Food and energy sovereignty

APPENDIX



PART A : DIAGNOSTIC

Existence of climate disruption

Q1. 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 disruption

Q2. 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 of the consequences of climate disruption

Q3. When you think about the risks related to climate disruption and pollution (water, air, soil), do you...

Scale from 0 to 10

- personally feel exposed and vulnerable to them?

0 means that you consider that there is no risk, that you are not exposed at all. 10 means that you feel very exposed and vulnerable to these risks. You can use the numbers in between to fine-tune your answer

1. The risk of falling ill owing to pollution (water, air, soil)
2. The risk of property damage caused by natural disasters (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 living conditions (extreme temperatures, limitation of water consumption for certain uses in case of drought, disappearance or decline in the quality of certain foods, etc.)

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

0 means that you consider there is no risk, that your country will not be affected by this risk. 10 means that you feel that your country is very exposed and vulnerable to this risk. You can use the numbers in between to fine-tune your answer

1. The degradation of the ecosystem, the biodiversity in my country (disappearance of animals, flora, etc.)
2. Migratory movements caused by pollution (water, air, soil) and the consequences of climate disruption (drought, famine, rising sea levels, etc.)

Eco-anxiety

Q4. When you think about climate disruption and the environmental situation (pollution, quality of biodiversity), which phrase best describes how you feel?

1. You are worried and anxious about the future, you think about it often and it prevents you from being at peace, or has even made you give up on long-term plans (having children, etc.)
2. You are concerned about the situation, but that doesn't stop you from being at peace or making long-term plans
3. You are not particularly concerned about the situation, there is really nothing to worry about

Climate and ecological future in our hands

Q5. 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

Evaluation of action/reaction compared to problem

Q6. Would you say that action and changes made in your country are commensurate with the risks and challenges of climate disruption and pollution?

1. Yes, definitely
2. Yes, somewhat
3. No, not really
4. No, not at all

Actors

Q7. In your opinion, who needs to take action for the success of the ecological transformation?

Multiple Answers Allowed

1. Businesses
2. States
3. Local authorities (town, county, region)
4. Charities and NGOs
5. Citizens
6. The European Union (*only for UE's country*)

Solutions public debate

Q8. In your country, would you say that there is enough or not enough talk about the solutions to be put in place (lifestyle changes, technological innovations, regulations, etc.) to mitigate pollution and climate disruption and adapt to the consequences thereof?

1. Yes, it is talked about enough
2. No, it is not talked about enough

Role of technology

Q9. 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 reduce our consumption, live more frugally (energy, food, transport, etc.)
2. Put in place and invent technologies to offset and reduce the consequences of pollution and climate disruption
3. 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

Cost of the climate and ecological action/inaction

Q10. 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?

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

PART B : SOLUTIONS ET 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 transformed world

Q11. 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?

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

ARE YOU WILLING / SOLUTIONS ET CONCRETE CHANGEMENTS

AXE 1 : Threats to biodiversity and food security

General context

The IPCC states that climate change and its consequences (soil depletion, drought, etc.) could render up to one third of current food production areas unsuitable by 2100. This would increase the number of people exposed to hunger, malnutrition and food-related mortality, due to the reduced availability of food and its nutritional quality. The ability to raise livestock in certain areas would also be reduced or even made impossible.

Perceived risk

Q12. For you, is this risk of lacking food and having poor-quality food serious and immediate or remote or even non-existent?

Scale from 0 to 10

0 means that you consider that this risk is non-existent, while 10 means that this risk is serious and immediate.

You can use the numbers in between to fine-tune your answer

Knowledge of solutions

Q13. A number of solutions already exist to respond to this risk. Some of these solutions allow us to protect our resources, others to limit our impact on the environment. Are you aware of each of the following solutions?

I was not aware of it, I am very surprised / I was not aware of it, but I am not surprised / I was already aware of it.

1. Using **processing technologies** to produce water to irrigate crops that meets health standards directly from **wastewater** (domestic, industrial and rainwater)
2. Using **organic waste** (plant and food waste) and sludge from wastewater treatment plants to produce "**organic**" fertilisers replacing "**chemical**" fertilisers
3. Feeding **fish and livestock** with **fly larvae meal** (instead of using agricultural land to produce feed for animals)
4. Developing **urban agriculture** (production of vegetables, fruit and other foods in towns and cities; on rooftops and in courtyards, shared vegetable gardens, public spaces, etc.)

Are you willing (per solution)

Q14. Reusing wastewater could involve the following things. Would you personally be willing to...?

Scale from 0 to 10

0 means that you are not at all willing to do each of these things, 10 means that you are completely willing.

You can use the numbers in between to fine-tune your answer.

1. Consume drinking water from wastewater treatment
2. Wash with recycled water from wastewater treatment
3. Wash your dishes and clothes with recycled water from wastewater treatment
4. Eat food from agriculture that uses recycled water directly from treated wastewater
5. Pay a little more per m³ of water to develop wastewater reuse in order to preserve the resource and guarantee its sustainability

Are you willing (per solution)

Q15. Changing food production methods could involve the following things. Would you personally be willing to...?

Scale from 0 to 10

0 means that you are not at all willing to do each of these things, 10 means that you are completely willing.

You can use the numbers in between to fine-tune your answer

1. Eat food from agriculture where the soil has been fertilised with fertiliser from sewage sludge
2. Eat fish or meat from animals fed with fly larvae meal
3. Reduce your meat consumption

Conditions of acceptability

Q16. Thinking about all these solutions and the consequences they might have, what are the most important conditions for you to make them easier to accept?

1. That it is guaranteed that there is no risk to my health
2. That it does not cost much more
3. If it does cost more, that the financial burden is shared fairly between parties
4. That it is clearly demonstrated to me how it provides a sustainable solution to the risks we face
5. That the change happens gradually

PART B : SOLUTIONS ET ACCEPTABILITY

AXE 2 : Climate disruption

General context

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. The climate impacts include an increase in natural disasters (floods, drought, 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.

Perceived risk

Q17. For you, is this risk of climate disruption serious and immediate or remote or even non-existent?

Scale from 0 to 10

0 means that you consider that this risk is non-existent, while 10 means that this risk is serious and immediate. You can use the numbers in between to fine-tune your answer.

Knowledge of solutions

Q18. A number of solutions already exist to respond to this risk, in particular to reduce CO₂ emissions from energy production. Are you aware of each of the following solutions?

I was not aware of it, I am very surprised / I was not aware of it, but I am not surprised / I was already aware of it.

1. Producing energy from the incineration of non-recyclable waste and biomass (agricultural waste, animal carcasses, etc.)
2. Equipping buildings with "smart" tools to optimise energy consumption (computer systems that measure energy consumption and temperature and connect them to heating appliances)
3. Capturing CO₂ directly when it is emitted by industries (before it reaches the open air) to transform it into methane or hydrogen (via a chemical process) – fuels with low greenhouse gas emissions

Are you willing (per solution)

Q19. Putting these solutions in place could involve the following things. Would you personally be willing to...?

Scale from 0 to 10

0 means that you are not at all willing to do each of these things, 10 means that you are completely willing. You can use the numbers in between to fine-tune your answer.

1. Have incinerators near where you live, for local energy production from the area's waste
2. Have sewage treatment plants near where you live, to produce energy locally (biomass) from the area's waste
3. Pay a little more for your energy so that it emits less CO₂ and is "local" (produced close to home)

Conditions of acceptability

Q20. Thinking about all these solutions and the consequences they might have, what are the most important conditions for you to make them easier to accept?

1. That it is guaranteed that there is no risk to my health
2. That it does not cost much more
3. If it does cost more, that the financial burden is shared fairly between parties
4. That it is clearly demonstrated to me that it is a sustainable solution for my country's energy independence
5. That it is clearly demonstrated to me that it will reduce greenhouse gas emissions

AXE 3 : Resources (scarcity et pollution)

General context

Each year, Ecological Debt Day (the date on which humanity has supposedly consumed all the resources that the planet is capable of regenerating in one year) comes increasingly earlier (last year it was 29 July). Moreover, according to scientists, the pollution of natural resources (air, water, soil) causes the death of 9 million people each year, three times more than malaria, tuberculosis and AIDS.

Perceived risk

Q21. For you, is this risk of resource scarcity and exhaustion (lack of drinking water, healthy soil for agriculture, etc.) serious and immediate or remote or even non-existent?

Scale from 0 to 10

0 means that you consider that this risk is non-existent, while 10 means that this risk is serious and immediate. You can use the numbers in between to fine-tune your answer.

Q22. For you, is this risk of pollution of resources (water, air, soil) and direct impact on your health serious and immediate or remote or even non-existent?

Scale from 0 to 10

0 means that you consider that this risk is non-existent, while 10 means that this risk is serious and immediate. You can use the numbers in between to fine-tune your answer.

Knowledge of solutions

Q23. A number of solutions already exist to respond to this risk. For some, it is a matter of a circular economy: recycling material to avoid extracting more; for others it is a matter of cleaning up natural resources (water, air, soil). Are you aware of each of the following solutions?

I was not aware of it, I am very surprised / I was not aware of it, but I am not surprised / I was already aware of it.

1. Recycling certain plastic waste (certain packaging, toys, PVC, etc.)
2. Recycling certain electrical and electronic waste
3. Recycling used electric batteries
4. Eco-designing products by integrating recycled raw materials of the same quality as virgin materials into the manufacturing process
5. Improving water treatment by eliminating micropollutants: toxic products such as pesticides, herbicides, household products, solvents, medicines, etc. present in small quantities
6. Cleaning up soil contaminated by pollutants such as hydrocarbons or heavy metals (lead, mercury, copper, zinc, etc.)
7. Reducing indoor air pollution (polluted by household products, candles, paint, dust, poorly maintained appliances, glue, etc.)

PART B : SOLUTIONS ET ACCEPTABILITY

Are you willing (per solution)

Q24. Putting these solutions in place could involve the following things. Would you personally be willing to...?

Scale from 0 to 10

0 means that you are not at all willing to do each of these things, 10 means that you are completely willing.

You can use the numbers in between to fine-tune your answer.

1. Buy everyday products (clothing, household goods, food packaging, etc.) made from recycled materials
2. Buy a car or other means of transport made in part from recycled materials
3. Pay a little more for your everyday products to be recycled
4. Pay a little more for your everyday products to be made from recycled materials
5. Have industrial recycling sites set up in the area where you live, so that recycling is done locally from local waste
6. Pay a little more tax so that public buildings (schools, hospitals, etc.) are equipped with indoor air quality detectors and air pollution control equipment
7. Sort your waste more (more waste categories)
8. Buy food packaged in recycled materials (recycled paper or plastic)

Conditions of acceptability

Q25. Thinking about all these solutions and the consequences they might have, what are the most important conditions for you to make them easier to accept?

1. That it is guaranteed that there is no risk to my health
2. That it does not cost much more
3. If it does cost more, that the financial burden is shared fairly between parties
4. That it is clearly demonstrated to me how it provides a sustainable solution to the risks we face
5. That the change happens gradually

Leverage effect for change

Q26. What might make you more willing to accept changes to our behaviour and our ways of living?

1. Fear of climate catastrophe
2. The fact that I can quickly see the positive effects of changing my behaviour
3. The feeling of being part of something, of a collective movement
4. Fear of being judged by others, that my behaviour will gradually no longer align with social norms
5. The fact that the law or regulations impose these changes on me
6. The fact that it will save me money
7. Having a real plan for the future of society that appeals to me and motivates me
8. If it helps to protect or improve my health and my quality of life
9. If everyone else also changes their behaviours and practices
10. If I am certain that it is really useful
11. The fact that my country is at the forefront of the ecological transition, to be proud of my country's involvement
12. The fact that these changes contribute to my country's food and energy independence (no longer depending or depending less on other countries)
13. Other, please specify:

Imagination of transformed world

Q27. If you imagine the world we would live in if we achieve the ecological transformation, in your opinion...?

1. We would live **healthier lives** / We would live **less healthy lives**
2. We would be **happier** / We would be **less happy**
3. We would have a **higher standard of living** / We would have a **lower standard of living**
4. We would **not be frustrated** that we were no longer able to do certain things we used to do / We would be **frustrated** that we were no longer able to do certain things we used to do
5. Society would be more **united** and **cohesive** / Society would be **more divided** and **fragmented**
6. On the whole, we would consume **less but better quality** / On the whole, we would consume **more and more, without really improving the quality**
7. We would have **better purchasing power** / We would have **less purchasing power**
8. We would be **less anxious about the future**, we would find it easier to plan for the future / We would be **more anxious about the future**, we would no longer make long-term plans