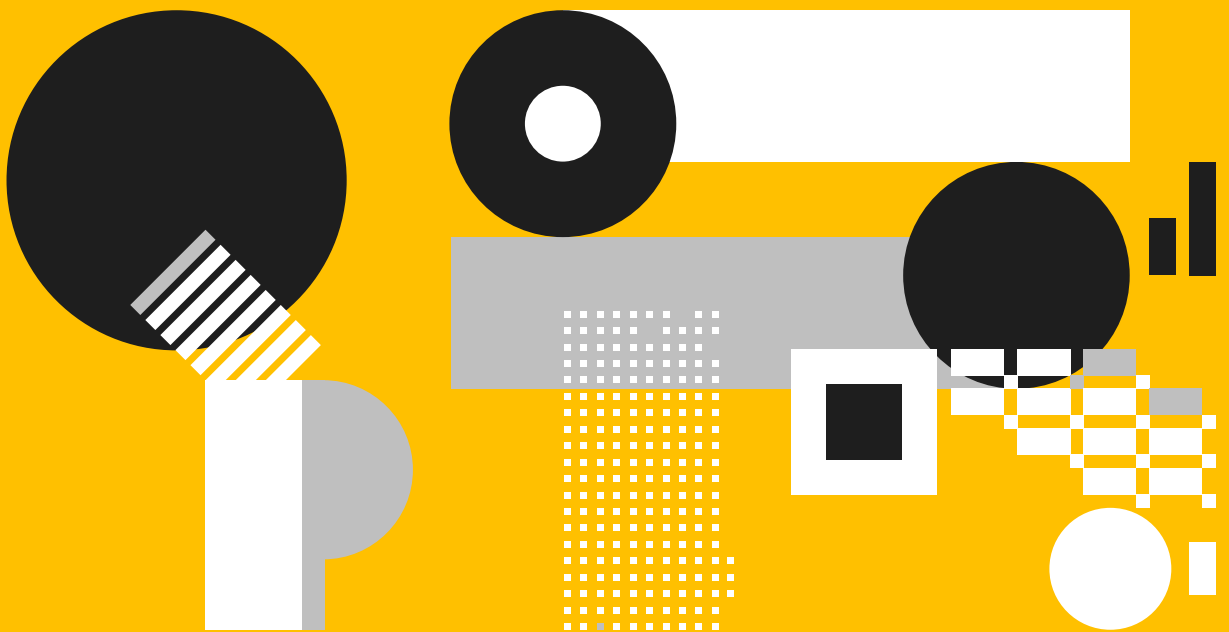


# Public Attitudes toward Clean Energy

# Nuclear Energy

The international index of what people think about clean energy



2023

**The Global  
Opinion**

**Energy  
Attributes**

**Demographic  
Breakdowns**

**What the  
Public Wants**



# Welcome

This Public Attitudes toward Clean Energy (PACE) Index is the world's largest publicly-released international study on what people think about nuclear energy. Surveying is conducted by Savanta, and commissioned and analyzed by Radiant Energy Group.

The PACE Index was set up to track support/opposition for clean energy sources, what drives those attitudes, and how institutions can better cater to what the public wants.

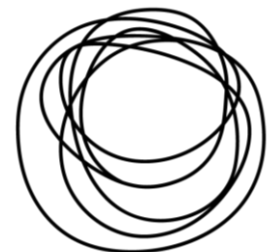
Radiant Energy Group is an energy consultancy that offers clear thinking and sound strategic advice on the energy transition. It provides leaders with the data-driven insights and roadmaps they need to bring about a low-carbon, high-energy future.

This report offers unprecedented insight into attitudes towards nuclear energy across the world.

- ◇ 20,122 nationally representative respondents
- ◇ 20 countries
- ◇ Autumn 2023  
17th Oct - 14th Nov, 2023
- ◇ 85% of the global population powered by nuclear represented

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# Foreword

This Public Attitudes toward Clean Energy (PACE) Index was launched to inform industry, government, and investors about what the public needs and expects from clean energy.



“This year may have marked a turning point for the nuclear energy industry. The COP28 pledge to triple global nuclear capacity by 2050 meets the public’s overwhelming demand for new nuclear to be built. The nuclear industry, as well as the governments and banks that support it, should carefully listen to what the public wants and start delivering beyond what the public expects.”

Richard Ollington  
Partner at Radiant Energy Group



“Governments that abandon nuclear energy are now facing a backlash from their voting citizens. It is striking that the four countries with the biggest nuclear phase-outs are now countries where the public overwhelmingly sees nuclear as being low cost, more so than even wind and solar.

Nuclear has long been trapped on the outside of the ESG world looking in. Our report suggests that financial institutions wishing to align themselves with the public’s new attitudes towards nuclear may need to update their standards to include nuclear in the future.”

Mark W. Nelson  
Managing Director at Radiant Energy Group

# Executive Summary

This Public Attitudes toward Clean Energy (PACE) Index tracks public perceptions of clean energy sources and what drives those attitudes. The index is the world's largest publicly-released international study on what people think about nuclear energy. Surveying is conducted by Savanta with data collected from over 20,000 respondents from 20 countries.

## The Global Opinion

- ▶ **1.5x more people support nuclear energy's use than oppose it.**  
Across the 20 countries surveyed, 28% of respondents oppose the use of nuclear energy while 1.5x more (46%) support it. 17 of the 20 countries surveyed have net support (support exceeding opposition) for nuclear energy's use. Support is over 3x higher than opposition in the world's two most populated countries, China and India.
- ▶ **Preference for nuclear energy is larger than for onshore wind, biomass from trees, or gas with carbon capture and storage.**  
25% of those surveyed say their country should focus on nuclear, behind only 33% preference for large-scale solar farms. Those with a technology-neutral and positive outlook to tackling climate change have a greater preference for nuclear than for any other source.

## Energy Attributes

- ▶ **Reliability is the public's highest-priority energy attribute. Nuclear is seen as the most reliable thermal source of energy.**  
No energy attribute is seen as important by a greater share of the public than reliability. While 66% of respondents view nuclear as reliable, biomass and gas are seen as reliable by fewer than 60%.
- ▶ **Emissions from nuclear energy are seen as high by the majority.**  
Over half (53%) of respondents see nuclear energy as creating *a fair amount* or *a great deal of* greenhouse gas emissions.
- ▶ **Cost of nuclear is seen as low by more people than the cost of wind or solar in countries that have previously phased out nuclear's use.**  
In Germany, Japan, South Korea and Sweden, countries that have had the largest politically-mandated nuclear phase-outs, nuclear energy is the most positively viewed technology for reducing energy bills.
- ▶ **Safety and waste concern is high. However, the correlation between safety or waste concern and support is relatively low.**  
Globally, 79% of respondents mention a concern about nuclear safety. Within this group, a majority of 40% nonetheless support the use of nuclear energy while a minority of 33% oppose it.

### Demographic Breakdowns

- ▶ **Gender and nuclear knowledge consistently divide nuclear support.**  
Male demographics and those self-identifying as most knowledgeable about how nuclear energy works are consistently the most supportive of nuclear energy's use.
- ▶ **Age and environmental concern inconsistently divide nuclear support.**  
In the majority of countries surveyed, younger and more climate-concerned demographics tend to be the least supportive of nuclear energy's use. However, this dynamic is not universal. In South Africa, younger and more climate-concerned demographics are the most supportive of nuclear energy's use.
- ▶ **Across the G7, *right-wing* voters are currently the most supportive of nuclear energy.**  
Nuclear sector employment standards, unionization rates, environmental regulation, and, often, nuclear plant state ownership, would suggest *left-aligning* voters could more closely identify with nuclear energy. Despite this, support for nuclear energy is strongest amongst right-wing voters.

### What the Public Wants

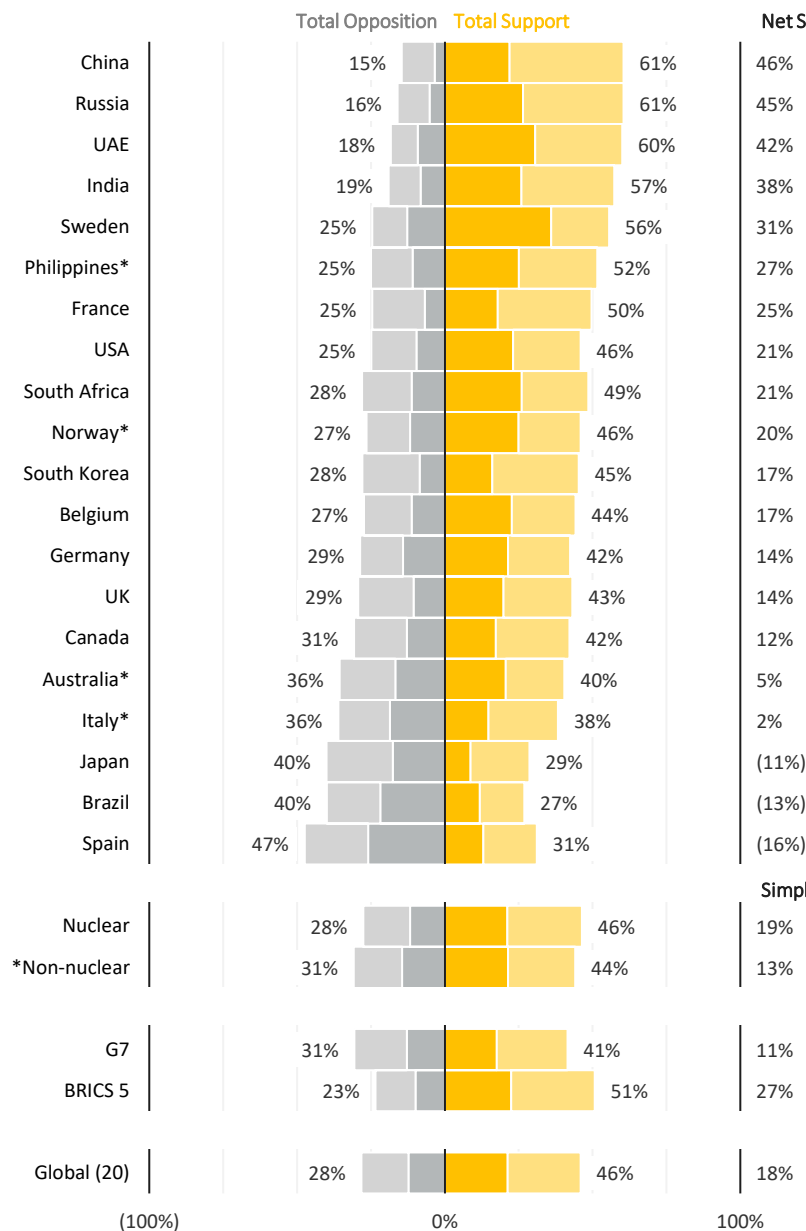
- ▶ **While *support/opposition* metrics provide a view of public sentiment they are a bad proxy for how the public wants governments to act.**  
Within the group of respondents who say they *tend to oppose* nuclear energy's use, 54% do nonetheless support government policy to keep operating existing nuclear plants and 17% wish to build more nuclear plants.
- ▶ **The public wants to keep using nuclear power and build new plants.**  
Within nuclear-powered countries, over 3x more respondents want to keep using nuclear power rather than phase it out. Within the four countries without existing commercial reactors, 2x more respondents want to build new nuclear power plants rather than ban their use.
- ▶ **ESG fund managers risk losing investors by excluding nuclear stocks.**  
In the US, 25% say they would prioritize socially responsible funds that include nuclear stocks, a greater share than the 20% who would prioritize funds that exclude nuclear.
- ▶ **The public wants to see greater reliability from nuclear energy.**  
The perceived reliability of nuclear energy is a key driver of its support. People who view nuclear energy as reliable have over 4x more support for its use. This *support multiplier* is larger than that seen in all other nuclear energy attributes, including safety and waste management.

# Nuclear support

To capture public support for nuclear energy’s use in electricity generation, this report measures nuclear energy’s net support, the difference between the share of the public in support and the share in opposition to its use. The higher the net support, the greater the overall public support for the energy is on balance.

## The majority of countries are net supporters of nuclear energy’s use

% that say they oppose, or support nuclear energy’s use in their country  
 Opinion: ■ Tend to oppose, ■ Strongly oppose, ■ Strongly support, ■ Tend to support



**Data Explainer**  
 In China 15% of the public opposes the use of nuclear energy and 61% support it, therefore nuclear has a net support of 46%.

**Large Leading Supporters**  
 In China, Russia, the UAE and India public support for nuclear is 3x higher than opposition. Together these countries account for over 1/3<sup>rd</sup> of the world’s population.

*“I support it as green and clean energy.”*  
 24, Female, China

**Leading Opposers**  
 In Japan, Brazil and Spain public opposition to nuclear energy exceeds support.

**Simple Average**  
 19%  
 13%

**Regional Blocks**  
 Net support for nuclear energy’s use is 16%pts higher in the BRICS countries than in the G7 countries.

Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country? Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don’t know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

# Relative support

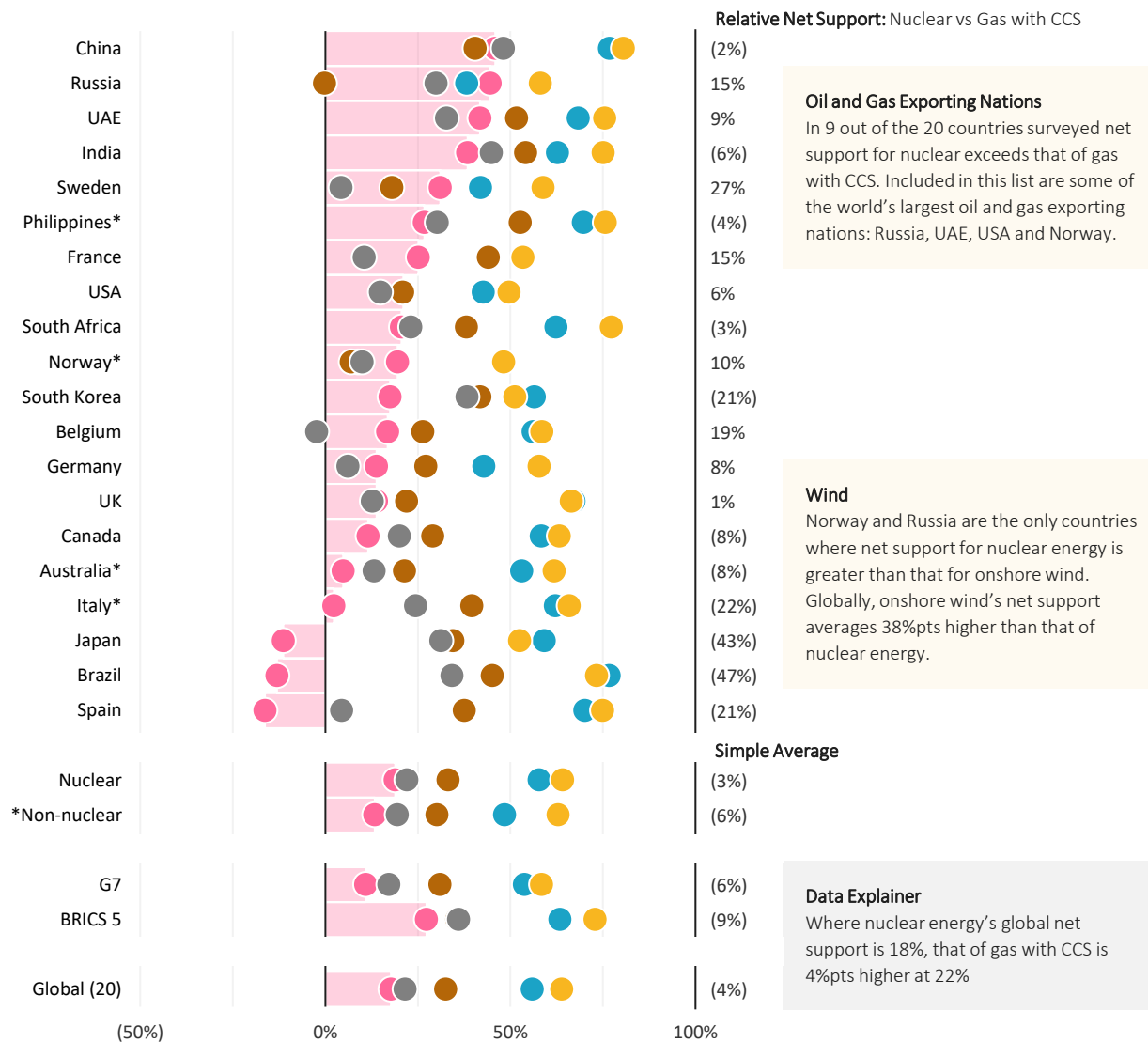
Cultural differences between countries affect how the public answers opinion polls, for example, Chinese respondents are less inclined to answer *don't know* to questions. To control against cultural differences between countries net support comparisons can be made within countries and across energies.

Nuclear's net support is compared to that of gas with carbon capture and storage (CCS). Both energies are baseload and dispatchable sources of low-carbon electricity. Both are outside of the 'renewable' nomenclature. Both are historically unpopular but seen by the IPCC and IEA as important components of the energy transition.

## Net support for nuclear tends to be lower than for other clean energies

Net support (total support – total opposition) for the use of different electricity sources in their country, %

Electricity source: ● Nuclear, ● Large-scale solar farms, ● Onshore wind farms, ● Biomass from trees, ● Gas with carbon capture and storage



**Oil and Gas Exporting Nations**  
In 9 out of the 20 countries surveyed net support for nuclear exceeds that of gas with CCS. Included in this list are some of the world's largest oil and gas exporting nations: Russia, UAE, USA and Norway.

**Wind**  
Norway and Russia are the only countries where net support for nuclear energy is greater than that for onshore wind. Globally, onshore wind's net support averages 38%pts higher than that of nuclear energy.

**Data Explainer**  
Where nuclear energy's global net support is 18%, that of gas with CCS is 4%pts higher at 22%

Q8. From what you know about each of the following energy options, to what extent, if at all, do you support or oppose using each one to generate electricity in your country? Select one response for each option  
Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose



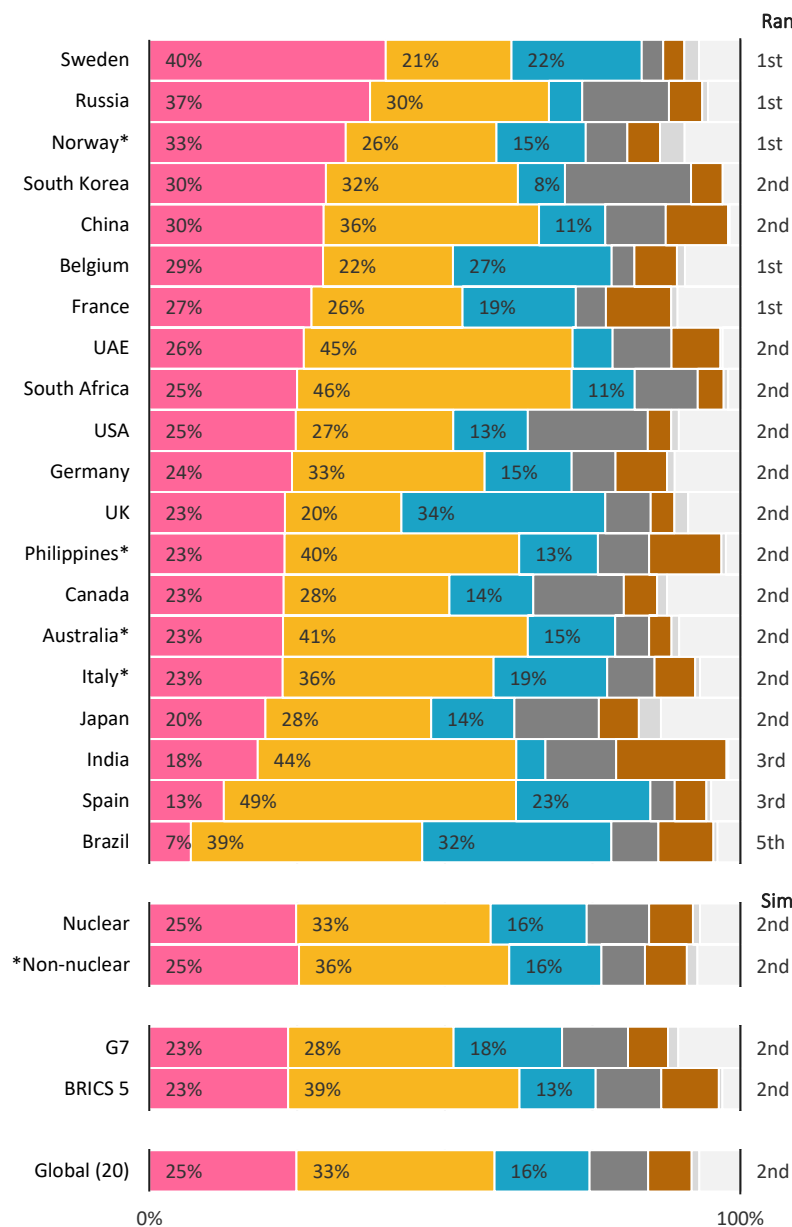
# Relative preference

The previous support/opposition question identifies the public appetite for an energy source. The below preference question provides a ranked view of which energy source the public would like its country’s energy transition to focus on. While all clean energy sources are required to decarbonize, a ranking is important in identifying which source the public thinks is under-represented in the energy transition.

## Nuclear is the second most preferred electricity source after solar farms

% that say they think their country’s energy transition should focus on each electricity source

Source: ■ Nuclear, ■ Large-scale solar farms, ■ Onshore wind farms, ■ Biomass from trees, ■ Gas with CCS, ■ Other, ■ Don’t know



**Reconciling Support and Preference Data**  
45% of people supporting nuclear energy think their country should focus on its use, a higher conversion rate than seen among supporters of large-scale solar farms (41%), onshore wind farms (21%), gas with CCS (17%) and biomass from trees (12%).

**UK Wind**  
The UK is the only country where the preference for onshore wind is greater than that of nuclear or large-scale solar farms.

**Sunny Countries**  
Preference for large-scale solar farms is highest among sunnier countries including: the UAE, South Africa, Australia, India and Spain.

**Data Explainer**  
Globally, across the 20 countries surveyed, 25% of people think their country should focus on nuclear in its future energy generation mix, behind 33% preferring large-scale solar deployment and ahead of the 16% preferring the construction of onshore wind.

Q3. Thinking about how your country might shift its current energy generation mix, which of the following types of energy do you think your country should focus on? Select one option  
Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, Gas with carbon capture and storage (CCS), Other, Don't know

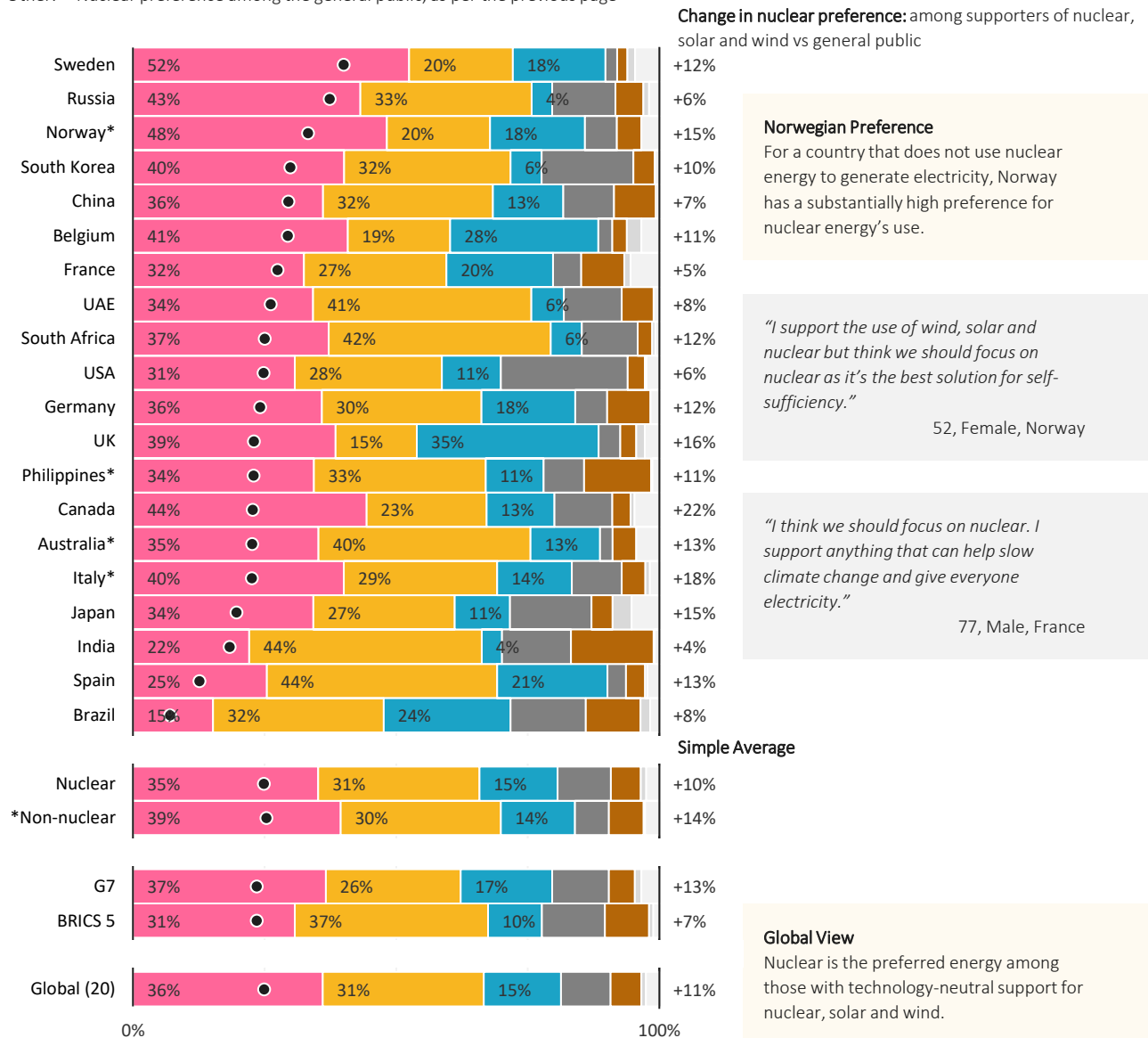
# Relative preference – among supporters of nuclear, solar and wind

This view of relative preference is narrowed in on the portion of the public that supports the use of three of the key low-carbon energies, the portion of the public most supportive of a technology-neutral *all of the above* approach to reaching net zero emissions.

## Nuclear energy’s preference is higher among those with a positive and technology-neutral outlook to tackling climate change

% that say they think their country’s energy transition should focus on each electricity source

Source: ■ Nuclear, ■ Large-scale solar farms, ■ Onshore wind farms, ■ Biomass from trees, ■ Gas with CCS, ■ Other, ■ Don’t know  
Other: ● Nuclear preference among the general public, as per the previous page



**Norwegian Preference**  
For a country that does not use nuclear energy to generate electricity, Norway has a substantially high preference for nuclear energy’s use.

*“I support the use of wind, solar and nuclear but think we should focus on nuclear as it’s the best solution for self-sufficiency.”*  
52, Female, Norway

*“I think we should focus on nuclear. I support anything that can help slow climate change and give everyone electricity.”*  
77, Male, France

**Global View**  
Nuclear is the preferred energy among those with technology-neutral support for nuclear, solar and wind.

Q3. Thinking about how your country might shift its current energy generation mix, which of the following types of energy do you think your country should focus on? Select one option  
Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, Gas with carbon capture and storage (CCS), Other, Don't know

Q8. From what you know about each of the following energy options, to what extent, if at all, do you support or oppose using each one to generate electricity in your country? Select one response for each option  
Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know

# Ranking of energy attributes

This chapter provides an overview of what attributes people see as the most important to their country’s future energy needs and how well nuclear meets those needs.

## People want reliable energy that is good for their health and the climate

% that say the energy attribute is in their top three most important considerations when providing for their country’s future energy needs  
Share: ■ ≥40%, ■ 30-40%, ■ 20-30%, ■ <20%

	Reliability	Health & safety	Tackling climate change	Self-sufficiency	Natural resource use	Waste management	Well regulated industry	All-in-cost	Well paid jobs
Australia*	52%	38%	40%	36%	23%	23%	25%	29%	16%
Belgium	43%	43%	42%	39%	26%	23%	17%	30%	17%
Brazil	47%	42%	50%	25%	35%	21%	32%	17%	18%
Canada	47%	43%	46%	30%	25%	24%	26%	23%	19%
China	48%	52%	41%	23%	34%	33%	21%	16%	12%
France	37%	44%	49%	37%	29%	31%	19%	18%	14%
Germany	47%	42%	44%	27%	32%	17%	16%	36%	15%
India	35%	51%	36%	20%	46%	36%	28%	19%	17%
Italy*	31%	48%	47%	28%	31%	36%	20%	18%	19%
Japan	52%	40%	43%	26%	29%	26%	10%	31%	9%
Norway*	48%	39%	33%	47%	32%	26%	23%	15%	14%
Philippines*	37%	59%	33%	26%	37%	29%	31%	12%	26%
Russia	50%	25%	31%	32%	23%	55%	33%	11%	30%
South Africa	57%	52%	37%	26%	31%	21%	23%	14%	34%
South Korea	56%	34%	57%	24%	35%	34%	21%	12%	9%
Spain	35%	42%	42%	36%	28%	24%	29%	26%	20%
Sweden	46%	38%	46%	44%	24%	25%	22%	24%	12%
UAE	40%	51%	42%	25%	37%	29%	21%	18%	25%
UK	54%	25%	50%	45%	24%	20%	26%	26%	16%
USA	43%	42%	36%	32%	28%	22%	23%	21%	20%
Nuclear	46%	42%	43%	31%	30%	28%	23%	21%	18%
*Non-nuclear	42%	46%	38%	34%	31%	29%	25%	19%	19%
G7	44%	41%	45%	32%	28%	25%	20%	25%	16%
BRICS 5	47%	44%	39%	25%	34%	33%	28%	15%	22%
Global (20)	46%	43%	42%	31%	29%	30%	23%	19%	19%

### Data Explainer

In Australia, 52% of the public say that they rate *reliability* in their top 3 most important considerations when providing for their country’s future energy needs.

### German Cost Concern

The importance of all-in cost is strongest in Germany, one of the countries most severely impacted by the recent post-2020 energy crisis.

*“We need to be self-sufficient in producing our own energy to save finding ourselves in a similar position to the energy crisis of recent times.”*

75, Female, UK

### Regional Blocks

In BRICS countries the creation of well paid jobs and having a well-regulated energy industry are more commonly prioritized.

Q10. Thinking about providing for your country’s future energy generation needs, which THREE of the following considerations are MOST important to you? Please select up to three  
All-in cost (i.e. cost of infrastructure, cost to consumers), Providing reliable energy, Providing self-sufficiency (i.e. not needing to import energy), Providing well-paid job opportunities, Tackling climate change, Natural resource use, Waste management, Health & safety, Well regulated industry (i.e. environmental impact, trusting industry to do what’s right), Don’t know, Other

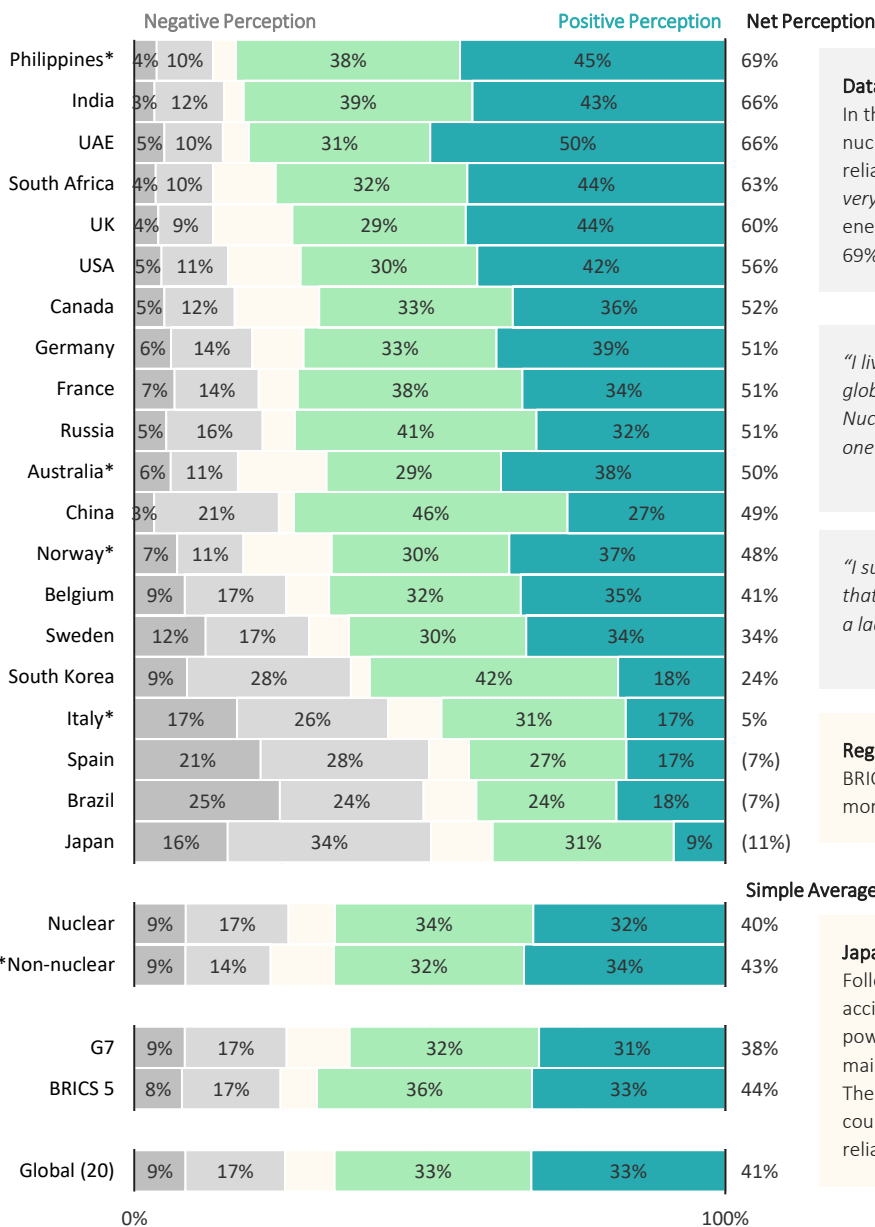
# Nuclear perception – Reliability

Globally, 46% of respondents say that reliability is one of its most important energy criteria (see p11). Nowhere is energy reliability important to more people than in South Africa, a country with frequent power cuts known locally as load shedding events. In South Africa nuclear energy’s reliability is well perceived with fewer than 14% seeing the energy as *not at all or not very reliable*.

## Nuclear’s reliability is well perceived in the majority of countries

% that say they view nuclear energy’s use as being reliable or not

Perception: ■ Not at all reliable, ■ Not very reliable, ■ Don’t know, ■ Fairly reliable, ■ Very reliable



### Data Explainer

In the Philippines 14% of the public view nuclear energy as *not at all* or *not very reliable*, whereas 83% view it as *fairly* or *very reliable*. On aggregate nuclear energy’s reliability has a net perception of 69% in the Philippines.

*“I live in a country badly affected by both global warming and load shedding. Nuclear would be like killing two birds with one stone.”*

21, Female, South Africa

*“I support nuclear energy in our country so that our country will no longer experience a lack of electricity.”*

24, Female, Philippines

### Regional Blocks

BRICS countries see nuclear energy as more reliable than in the G7.

### Simple Average

#### Japan Reliability

Following the 2011 Fukushima nuclear accident in Japan all the country’s nuclear power plants were closed for maintenance, and many still are closed. These closures likely contributed to the country’s negative perception of nuclear reliability.

Q6. How reliable, if at all, do you think (nuclear energy) would be as a source of energy? Select one response

Not at all reliable, Not very reliable, Fairly reliable, Very reliable, Don't know  
 Net perception = Very reliable + Fairly reliable – Not very reliable – Not at all reliable

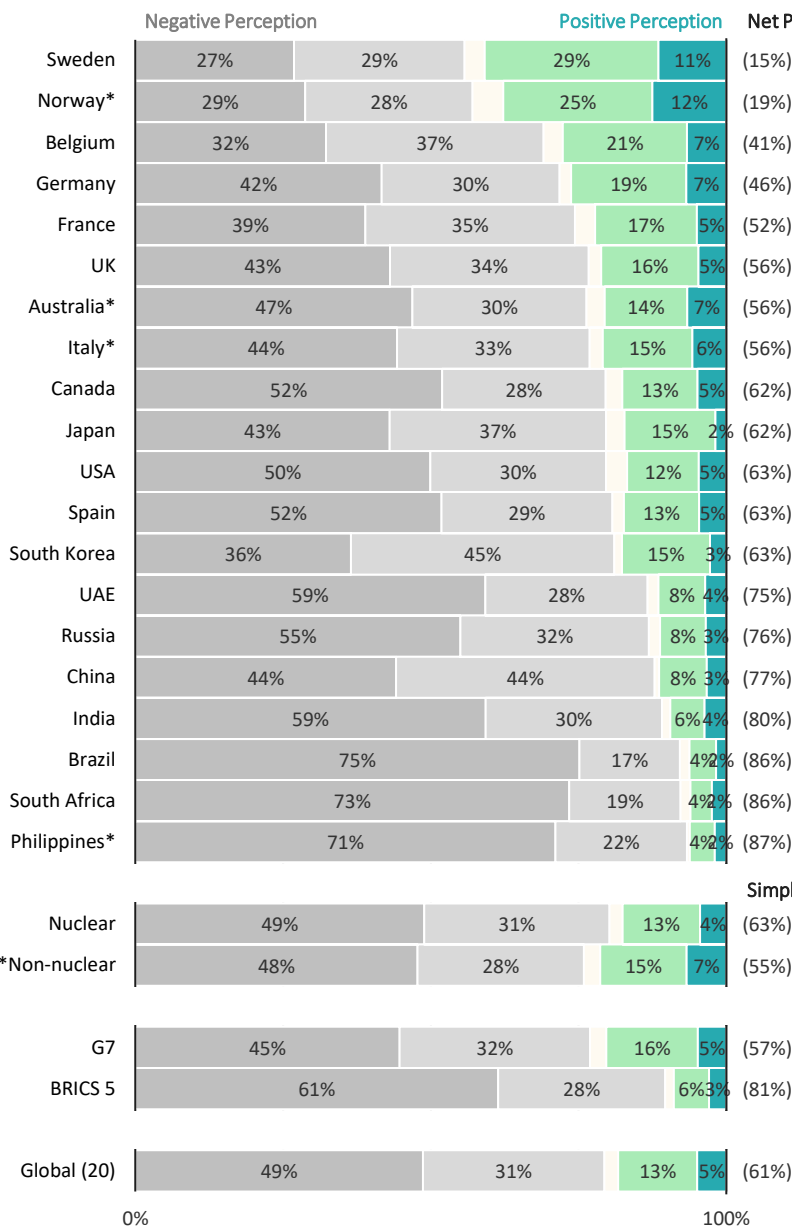
# Nuclear perception – Health & Safety

Globally, 43% of respondents say that health and safety performance is one of their most important energy criteria (see p11). Nuclear energy’s safety is poorly perceived with 79% of the public *fairly or very concerned*.

## In all countries surveyed the majority is concerned about nuclear safety

% that say they are concerned or not about the health and safety implications of nuclear energy’s use

Perception: ■ Very concerned, ■ Fairly concerned, ■ Don’t know, ■ Not very concerned, ■ Not at all concerned



### Correlation with Nuclear Support

China and Russia have the highest levels of support for nuclear energy (p7) however are also countries with high concern for its safety, suggesting safety concern has a low correlation with overall support. In both countries over 50% of the public is concerned about nuclear safety and supports the use of nuclear energy.

Globally, 79% of respondents mention a concern about nuclear safety. Within this group, a majority of 40% nonetheless support the use of nuclear energy while a minority of 33% oppose it (see p29).

*“The health effects from what ‘could’ happen in a nuclear disaster are not as bad as counting on the Middle East for oil or destroying our country with oil drilling.”*  
68, Male, USA

*“I know nuclear is something radioactive. I don’t want it for my environment or for us humans.”*  
50, Non-binary, Brazil

### Simple Average

### Regional Blocks

Concern about nuclear energy’s safety is higher in BRICS countries where concern for energy’s health and safety impact is more commonly prioritized than in the G7.

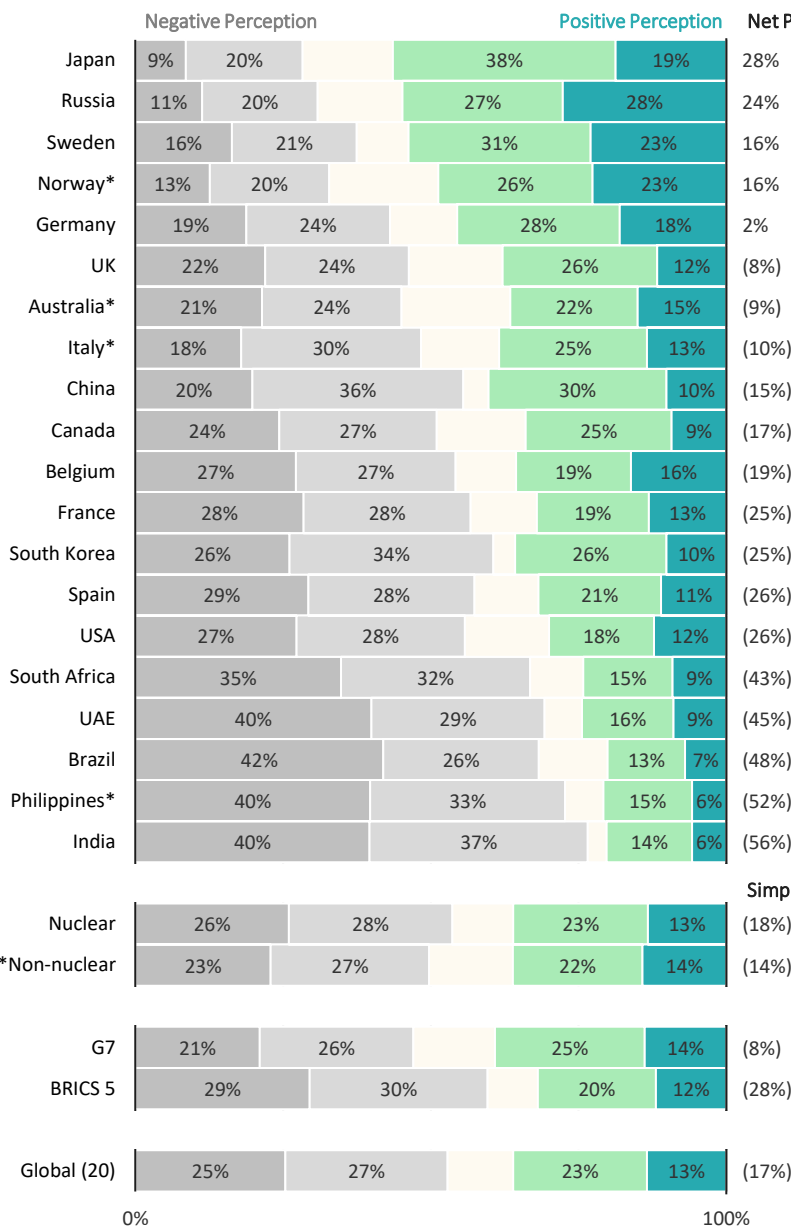
Q12\_3. How concerned are you, if at all, about [Health & safety (i.e. nuclear meltdowns, impact on people living nearby)] of nuclear energy’s use? Select one response  
Not at all concerned, Not very concerned, Fairly concerned, Very concerned, Don’t know  
Net perception = Not at all concerned + Not very concerned – Fairly concerned – Very concerned

# Nuclear perception – Emissions

Globally, 42% of the public say that the ability to tackle climate change is one of its most important energy criteria (see p11). Nuclear does not directly emit greenhouse gases (GHG) and is considered by the [UNECE](#) as the lowest lifecycle emitting source of energy. However, this view is not held by the broader public with 53% saying that nuclear creates *a fair amount* or *a great deal* of greenhouse gases that impact climate change.

## In most countries nuclear is on balance viewed as a GHG emitter

% that say they view nuclear energy's use as being a greenhouse gas (GHG) emitter or not  
 Perception: ■ A great deal, ■ A fair amount, ■ Don't know, ■ Not very much, ■ Not at all



*“Nuclear power generation has the advantages of no CO<sub>2</sub> emissions during power generation and stable power costs, making it possible to reduce CO<sub>2</sub> emissions to the maximum extent possible while maintaining energy supply stability and economic efficiency.”*  
 41, Prefer not to say gender, Japan

**COP28**  
 In the UAE, the Barakah Nuclear Energy Plant has contributed to the country's [world-leading](#) build-out of zero-carbon electricity, an achievement that should be celebrated when hosting the 2023 UN climate conference, however, the majority of Emiratis view nuclear energy as being of detriment to the climate.

*“Nuclear energy is not good for our current world owing to the level of damage it does to our climate.”*  
 35, Male, UAE

Q5. To what extent, if at all, do you think [nuclear energy] creates greenhouse gases that impact climate change? Select one response  
 Not at all, Not very much, A fair amount, A great deal, Don't know  
 Net perception = Not at all + Not very much – A fair amount – A great deal

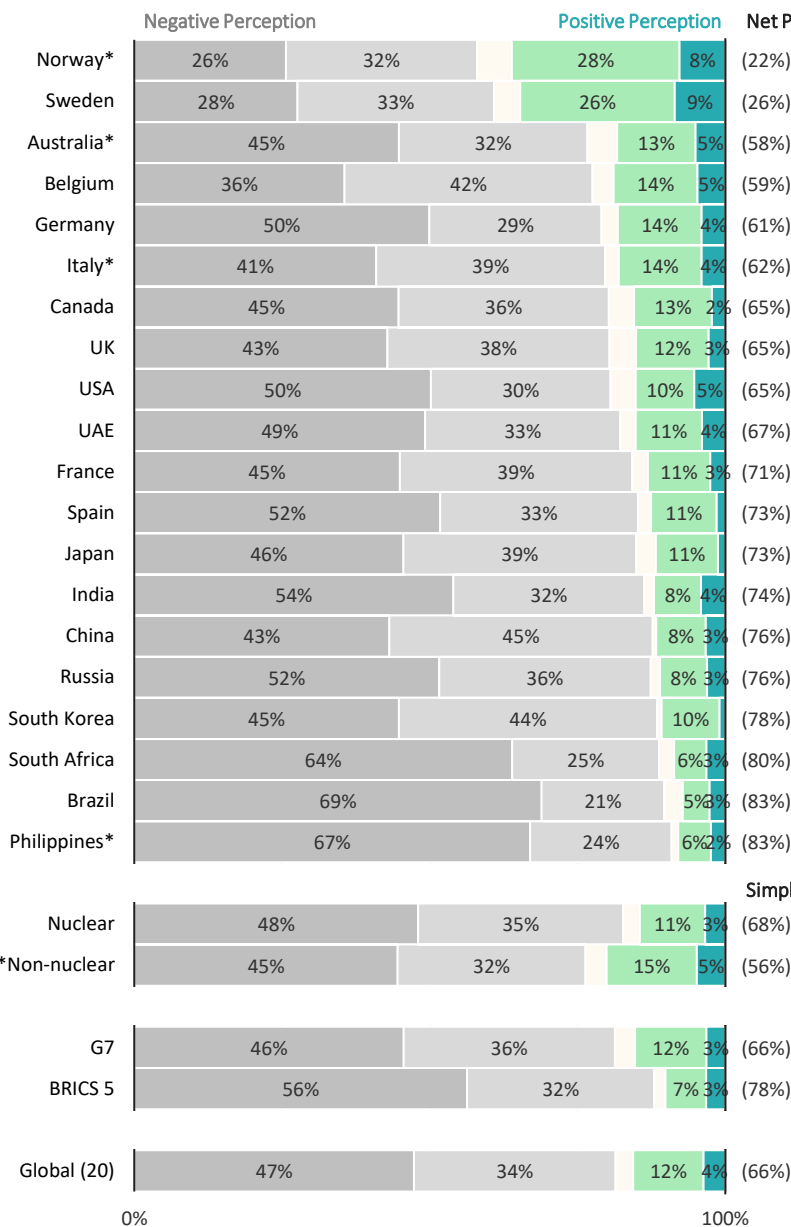
# Nuclear perception – Waste

Nowhere is waste management an important energy criteria to more people than in Russia. While Russian levels of support for nuclear’s use are the second highest in the world, Russians remain highly concerned about its waste management. Either a positive perception of nuclear energy’s other attributes outweighs that of its waste management, or Russians more harshly perceive nuclear waste management practices versus that of other energy sources.

## In all countries surveyed the majority is concerned about nuclear waste

% that say they are concerned or not about the waste management from nuclear energy’s use

Perception: ■ Very concerned, ■ Fairly concerned, ■ Don’t know, ■ Not very concerned, ■ Not at all concerned



### Nuclear Waste Recycling

France is a world leader in nuclear waste recycling with **10%** of its nuclear electricity originating from nuclear waste, otherwise known by the industry as *spent fuel*. However, France’s efforts in spent fuel recycling have not differentiated its public concern for nuclear waste from that of other countries.

*“It is a necessary evil. I am very concerned about nuclear waste and safety but tend to support its use.”*

68, Female, France

*“The issue of waste and the risk of accidents are weighty arguments against the use of nuclear power, but in a situation where the climate crisis is acute, nuclear power may be better than fossil fuels during a transitional phase.”*

43, Female, Norway

### Correlation with Nuclear Support

Globally, 35% of those surveyed express both a concern for nuclear energy’s waste management and support for nuclear energy’s use, suggesting correlation between the two metrics may be low.

Q12\_2. How concerned are you, if at all, about [waste management] of nuclear energy’s use? Select one response  
 Not at all concerned, Not very concerned, Fairly concerned, Very concerned, Don’t know  
 Net perception = Not at all concerned + Not very concerned – Fairly concerned – Very concerned

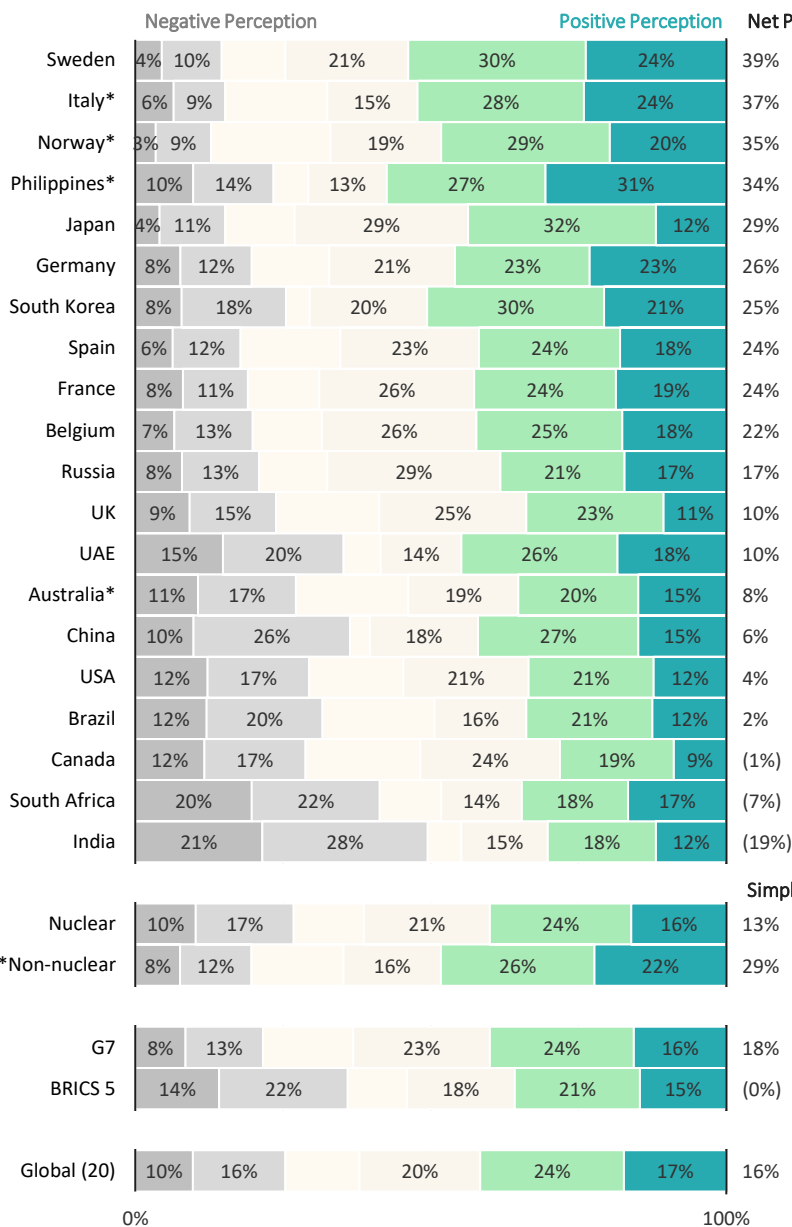
# Nuclear perception – Cost

Nowhere is the *all-in-cost*, including the cost of infrastructure and cost to consumers, of energy important to more people than in Germany (see p11). In Germany, a political decision to phase out nuclear energy contributed to the energy supply shortfalls in its 2021 energy price crisis. The German phase-out of nuclear energy may have contributed to 46% of the country’s public viewing the use of nuclear as leading to *slightly* or *much cheaper* energy bills.

## Nuclear’s cost is well perceived in the majority of countries

% that say they view nuclear energy’s use as having a negative or positive impact on their energy bills

Perception: ■ Much more expensive, ■ Slightly more expensive, ■ Don’t know, ■ No difference, ■ Slightly cheaper, ■ Much cheaper



**Non-nuclear-using Countries**  
 With the exception of Australia, the remaining three non-nuclear-using countries are highly positive about the technology’s potential to reduce their electricity bills.

*“I see the cost of nuclear electricity in France and I want the same here.”*  
 57, Female, Italy

*“Nuclear power is the only energy that is sufficiently low cost to be able to drive Japan’s economic growth. We’re not going to grow from fish exports are we.”*  
 64, Male, Japan

Q7. If your country were to use more [nuclear energy], what impact do you think this would have on your energy bills? Select one response  
 Much cheaper energy bills, Slightly cheaper energy bills, No difference, Slightly more expensive energy bills, Much more expensive energy bills, Don't know  
 Net perception = Much cheaper energy bills + Slightly cheaper energy bills – Slightly more expensive energy bills – Much more expensive energy bills



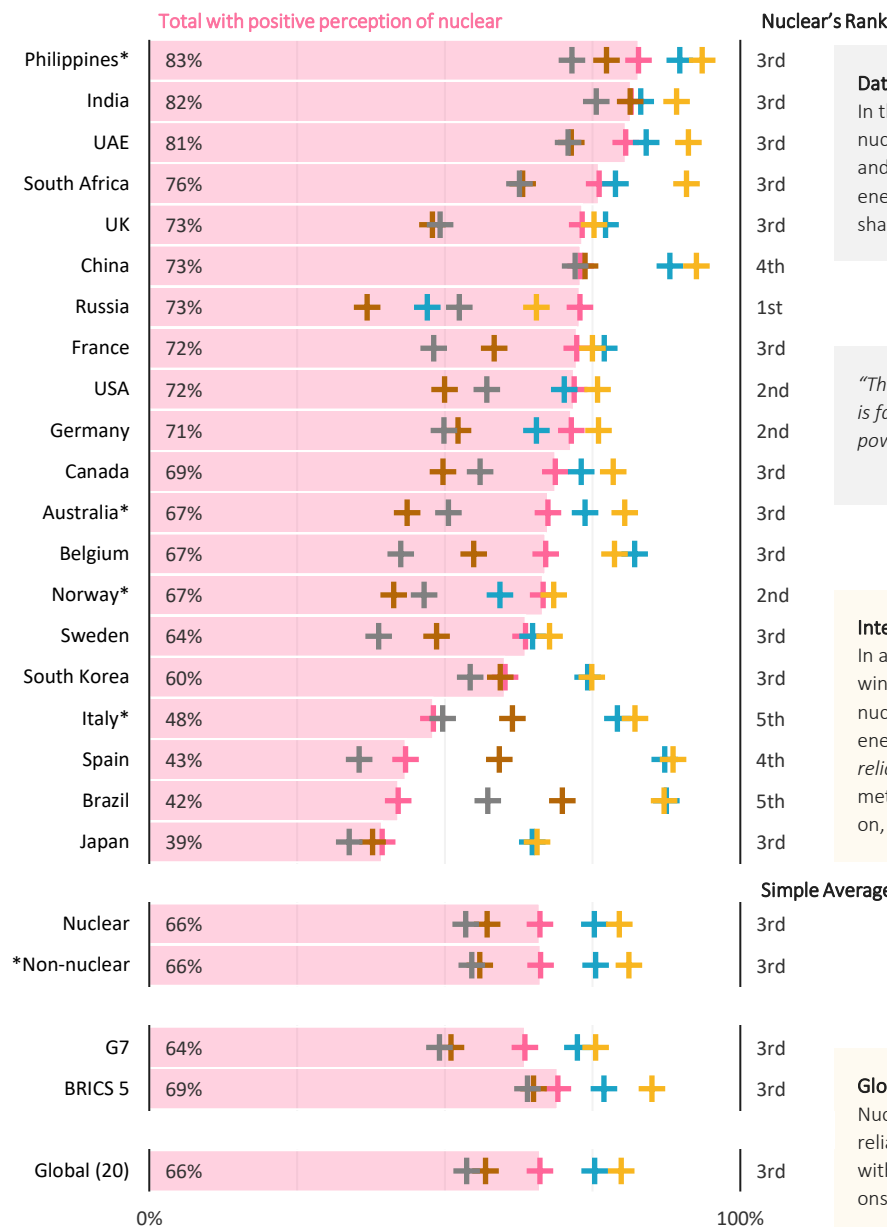
# Relative perception – Reliability

Energy reliability can mean different things depending on the energy source being discussed. It can mean capacity factor, generation every hour of the day. It can mean resilience, the ability to withstand uncontrolled events. It can mean uptime, or time without maintenance. To help control for these differences it helps to compare nuclear’s perceived reliability with that of fellow steam generator technologies like gas with CCS or biomass from trees.

## In most countries nuclear is seen as more reliable than gas and biomass

% that say they positively view energy as being *fairly* or *very* reliable

Electricity source: + Nuclear, + Large-scale solar farms, + Onshore wind farms, + Biomass from trees, + Gas with carbon capture and storage



**Data Explainer**  
 In the Philippines 83% of the public view nuclear energy as *fairly* or *very* reliable and of the energies surveyed, nuclear energy is seen as reliable by the 3<sup>rd</sup> largest share of the Pilipino public.

*“The operational record of nuclear power is far better than the other major kinds of power plants.”*  
 21, Female, South Africa

**Intermittent Reliability**  
 In all but four countries both solar and wind are seen as more reliable than nuclear. When discussing intermittent energy sources, for many people *reliability* may mean uptime more, a metric intermittent sources perform well on, than it means capacity factor.

**Simple Average**

**Global View**  
 Nuclear energy is generally seen as more reliable than biomass from trees or gas with CCS, but less reliable than solar and onshore wind.

Q6. How reliable, if at all, do you think the following energy options would be as a source of energy? Select one response for each option  
 Not at all reliable, Not very reliable, Fairly reliable, Very reliable, Don't know  
 Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, Gas with carbon capture and storage (CCS)

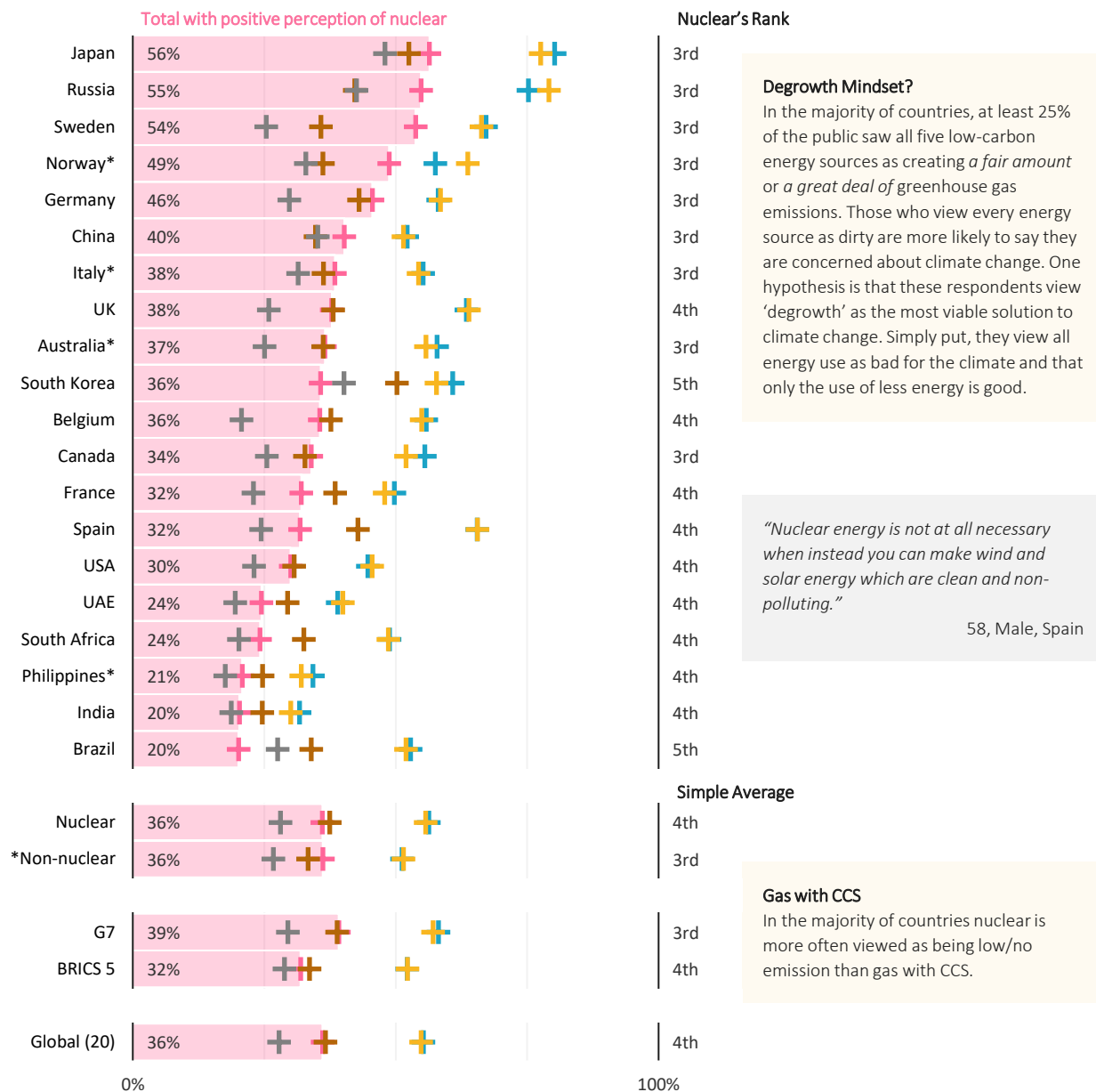
# Relative perception – Emissions

It is important for low/no greenhouse gas emitting energy sources to be recognized as such. A misunderstanding of an energy’s ability to tackle climate change can hinder public acceptance, slowing build-outs and leading to a slower and more costly transition. Nuclear, solar and wind do not directly emit GHG emissions and nuclear has **lower** indirect GHG emissions than any other energy. Neither of these attributes are well reflected in public opinion.

## In no country is nuclear seen as being lower emission than wind or solar

% that say they positively view energy as creating *not very much or none at all* greenhouse gas emissions

Electricity source: + Nuclear, + Large-scale solar farms, + Onshore wind farms, + Biomass from trees, + Gas with carbon capture and storage



Q5. To what extent, if at all, do you think the following energy options create greenhouse gases that impact climate change? Select one response for each option  
Not at all, Not very much, A fair amount, A great deal, Don't know  
Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, Gas with carbon capture and storage (CCS)

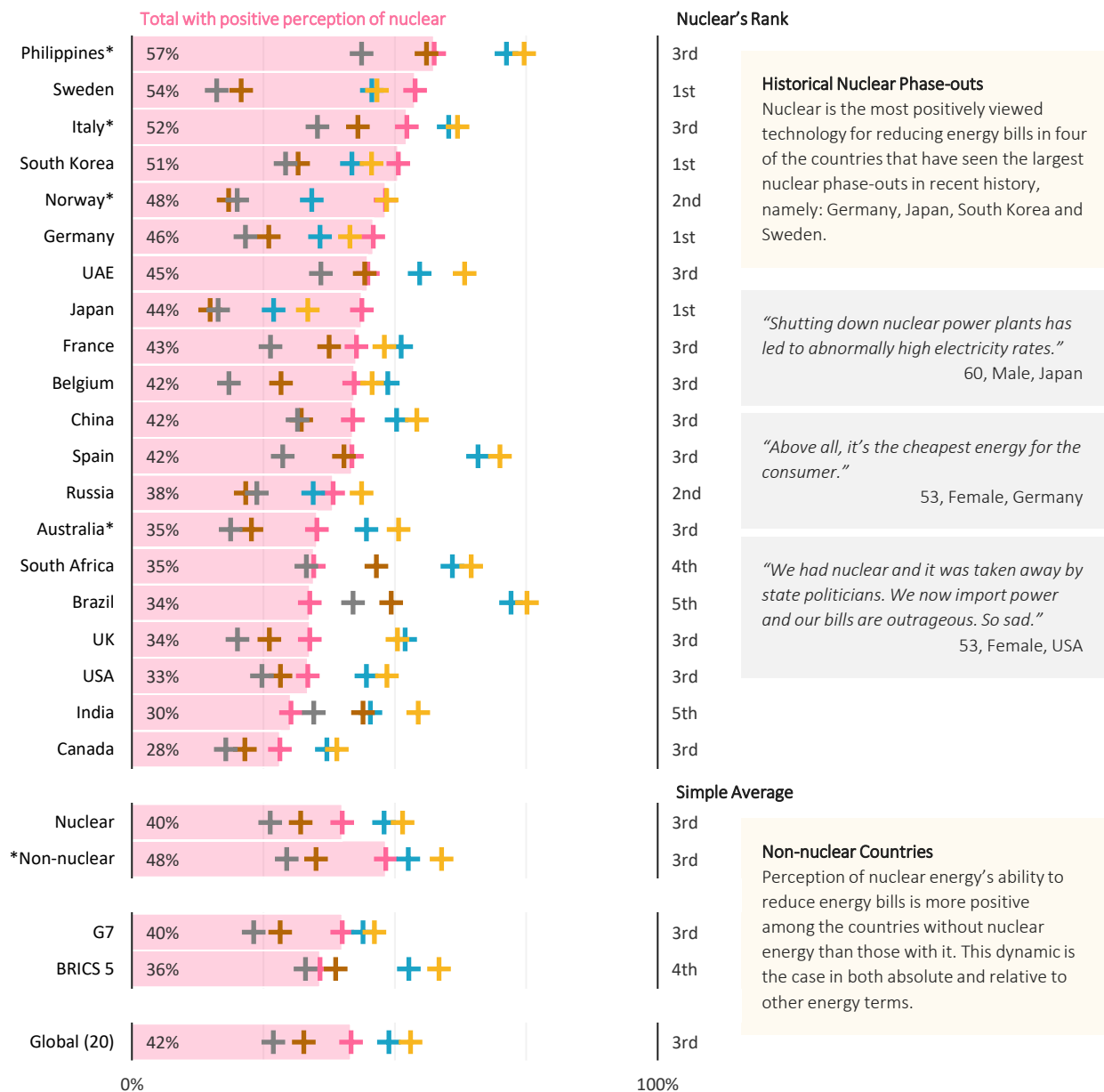
# Relative perception – Cost

Electricity market complexities including regulation, tax and subsidy regimes, and grid fees make it difficult for consumers to know how different energy source impact their utility bills. While rarely stated as being an important criteria (p11), cost is implicitly measured as being an important driver of public support (p29).

## In countries that have previously phased out nuclear’s use, the cost of nuclear is seen as low by more people than the cost of solar or wind

% that say they positively view energy as making energy bills *slightly* or *much* cheaper

Electricity source: + Nuclear, + Large-scale solar farms, + Onshore wind farms, + Biomass from trees, + Gas with carbon capture and storage



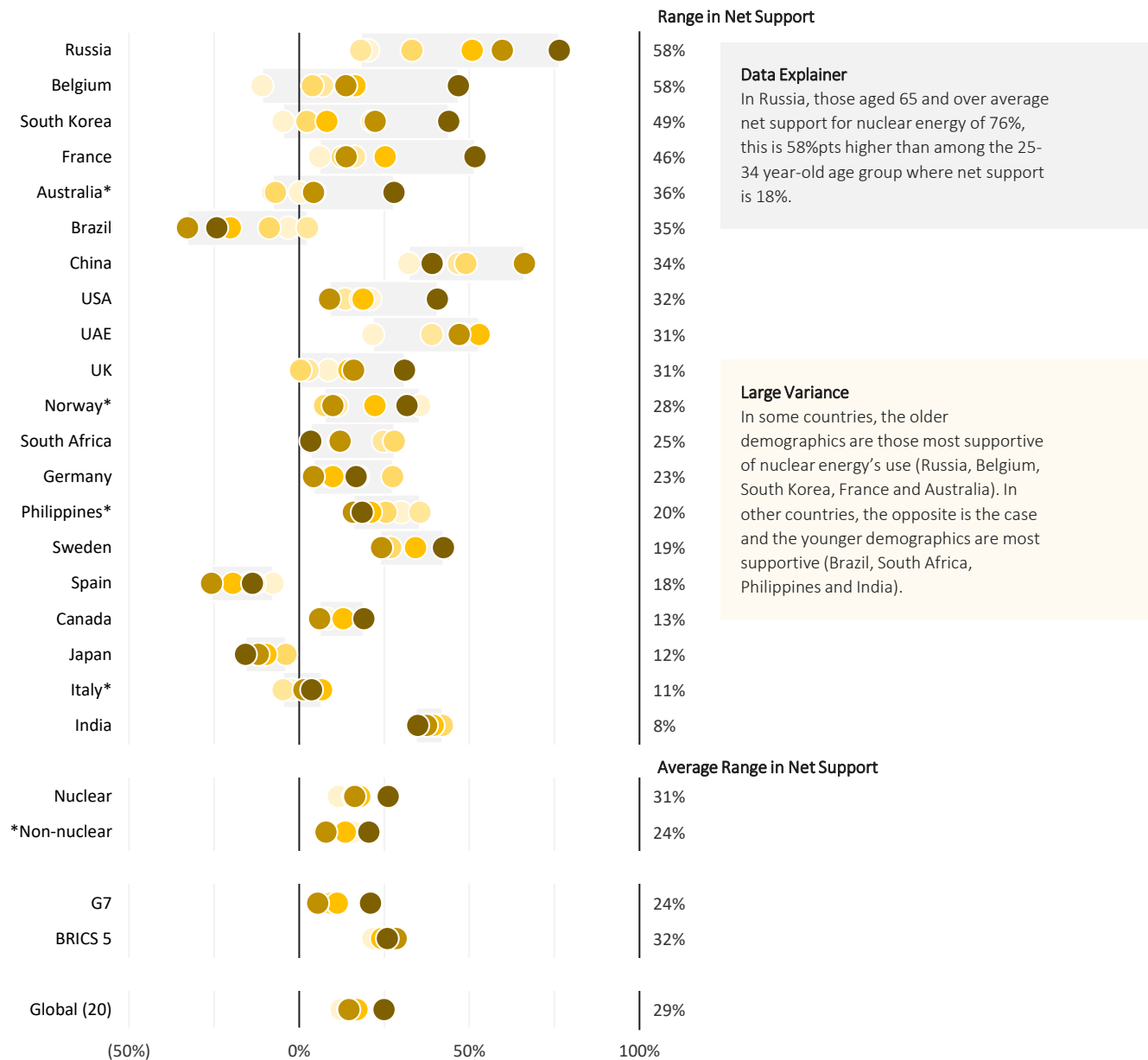
Q7. If your country were to use more of the following energy options, what impact do you think this would have on your energy bills? Select one response for each option  
Much cheaper energy bills, Slightly cheaper energy bills, No difference, Slightly more expensive energy bills, Much more expensive energy bills, Don't know  
Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, Gas with carbon capture and storage (CCS)

# Age

This chapter provides a view of the demographic variation in public attitudes towards nuclear energy. Of interest to those in the nuclear industry will be identifying the demographics with the greatest variation in net support for nuclear. In future reports, analysis will be provided to understand why those demographic variations have formed.

## Net support for nuclear varies inconsistently by age group

Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Demographic - Age: ● 18-24, ● 25-34, ● 35-44, ● 45-54, ● 55-64, ● 65+



Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

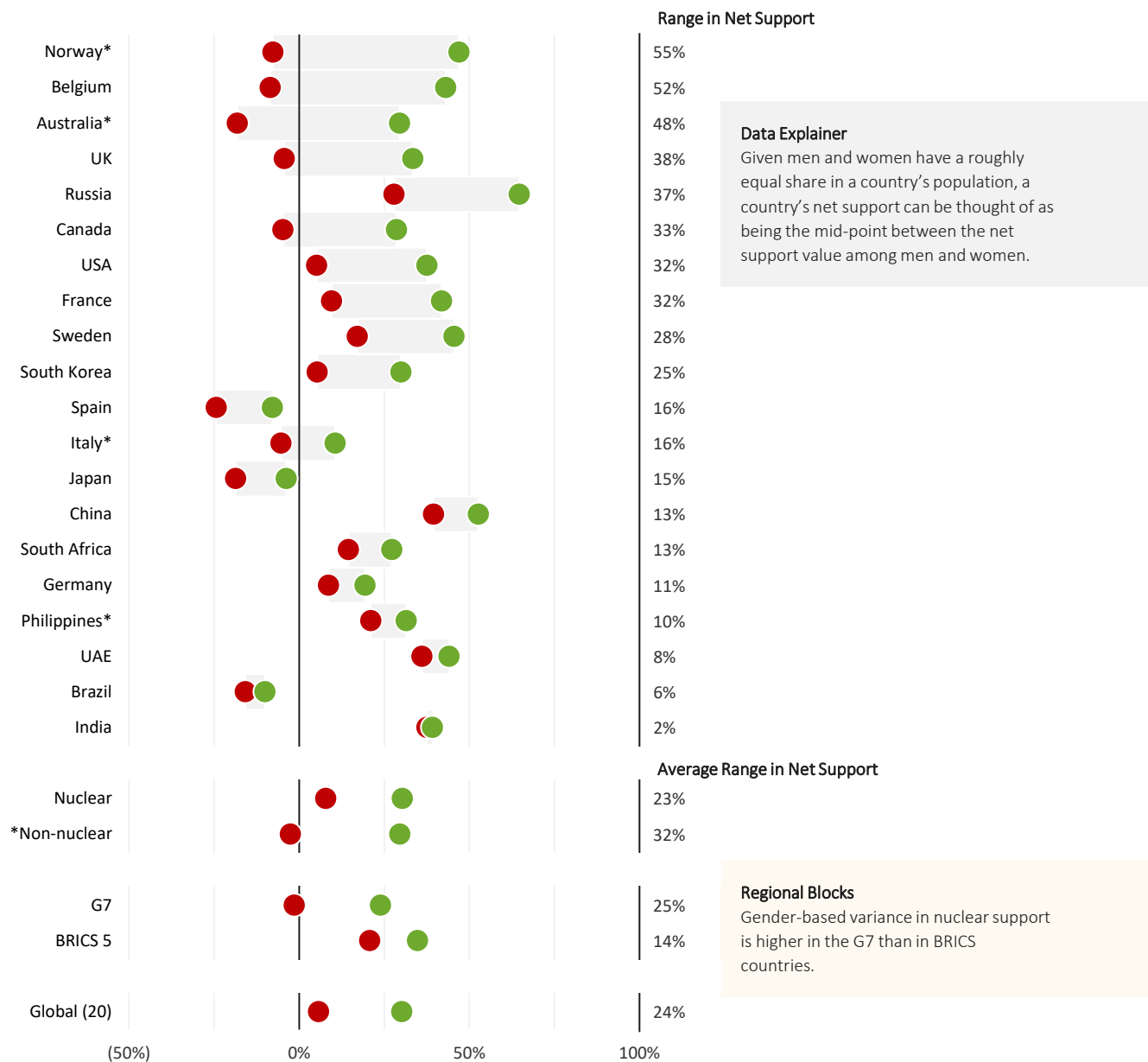
Q Age. How old are you? Move the slider until it shows your age in the box on the left  
 Grouped into 18-24 (not shown when sample size too small), 25-34, 35-44, 45-54, 55-64, 65+

# Gender

Of the five demographic splits analyzed in this chapter, gender has the second-largest variation in net support. In future reports analysis will deep dive into what drives this gender variation in net support for nuclear, and whether the same variation appears in other technologies.

## In all countries, men show greater net support for nuclear than women

Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Demographic - Gender: ● Women, ● Men



**Data Explainer**  
 Given men and women have a roughly equal share in a country's population, a country's net support can be thought of as being the mid-point between the net support value among men and women.

**Regional Blocks**  
 Gender-based variance in nuclear support is higher in the G7 than in BRICS countries.

Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

Q Gender. Are you...? Select one option  
 Female, Male, I identify in another way, Prefer not to say

# Nuclear knowledge

Survey respondents were asked to self-evaluate how much, if anything, they had heard and know about how nuclear energy works. This self-evaluated level of nuclear knowledge has a large and consistent correlation with net support for nuclear energy across all countries surveyed. Of the five demographic splits analyzed in this chapter, self-evaluated nuclear knowledge shows the largest variation in net support.

## Across all countries, net support varies greatly by knowledge level

Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Demographic – Nuclear knowledge: ● Don't know how it works, ● Know a little about how it works, ● Know a lot about how it works



Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

Q4\_1. How much, if anything, have you heard about [nuclear energy]? Select one response  
 I have heard about this energy option, and know a lot about how it works; I have heard about this energy option, and know a little about how it works; I have heard about this energy option, but don't know how it works; I have not heard about this energy option (not shown as sample size too small); Don't know

# Environmental concerns – Climate change concern

Support for nuclear would be expected to correlate with climate concern given nuclear does not directly emit GHG emissions, it is the electricity source with the lowest lifecycle emissions, and it has relatively low levels of environmental impact. However, this is not the case.

## Nuclear support is often lowest among those most climate-concerned

Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Demographic – Level of climate chance concern: ● Not very concerned, ● Fairly concerned, ● Very concerned



Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

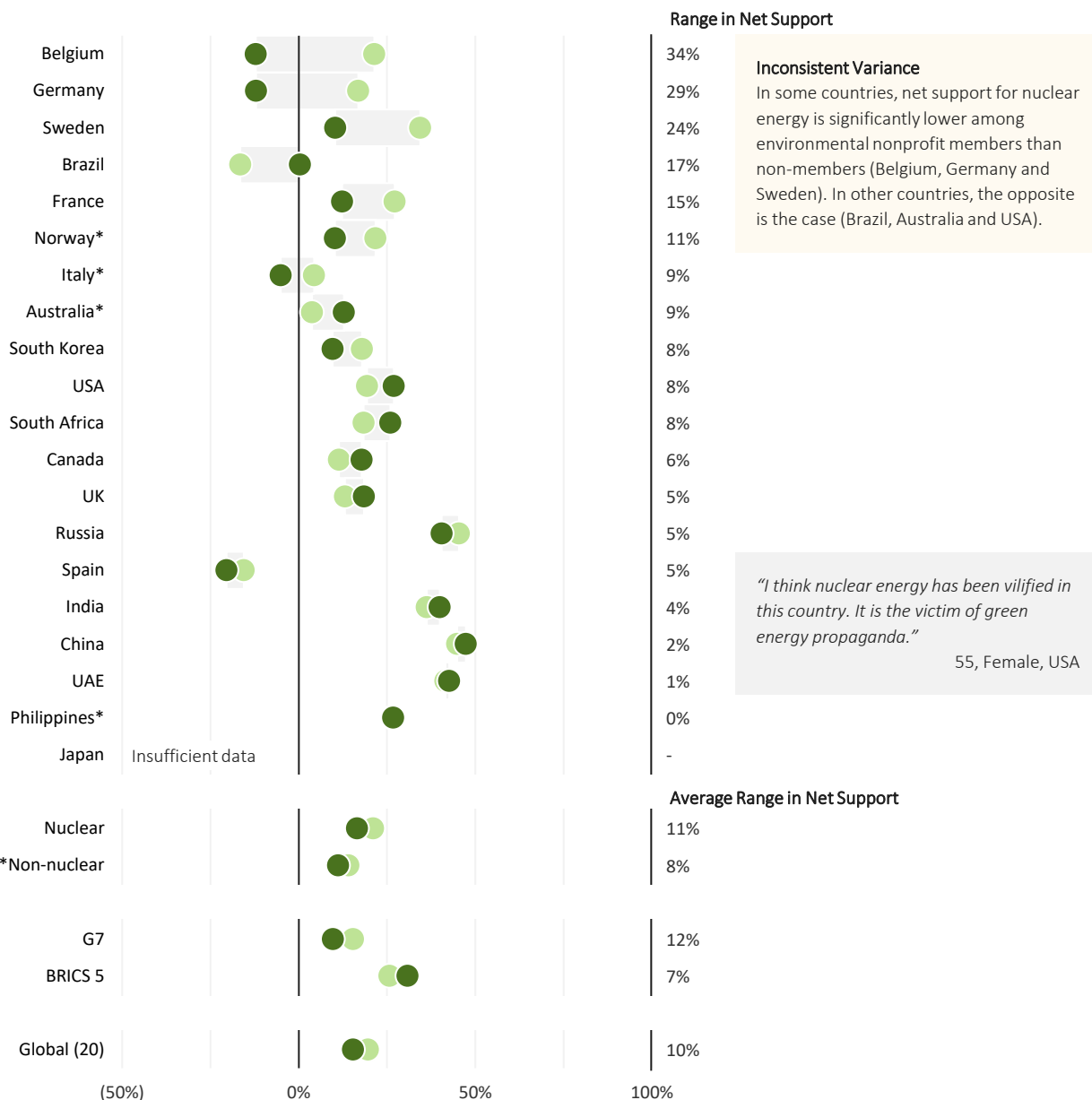
Q1. How concerned, if at all, are you about climate change? Select one option  
 Not at all concerned (not shown as sample size too small), Not very concerned, Fairly concerned, Very concerned, Don't know

# Environmental concerns – Environmental nonprofit membership

Survey respondents are asked whether they are members or supporters of any environmental organizations with Greenpeace, WWF and Friends of the Earth given as example organizations, examples with a known anti-nuclear stance.

## Enviro. nonprofit members in BRICS countries support nuclear more

Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Demographic – Membership of environmental nonprofit: ● No, ● Yes



**Range in Net Support**

**Inconsistent Variance**  
 In some countries, net support for nuclear energy is significantly lower among environmental nonprofit members than non-members (Belgium, Germany and Sweden). In other countries, the opposite is the case (Brazil, Australia and USA).

*"I think nuclear energy has been vilified in this country. It is the victim of green energy propaganda."*  
 55, Female, USA

Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

Q15. Are you a member or supporter of any environmental organizations (such as Greenpeace, WWF, Friends of the Earth)? Select one option  
 Yes, No, Prefer not to say



# Political affiliation

High and stable support for nuclear energy from successive governments is important to the nuclear industry. Countries with the most positive political environment for nuclear energy may see high net support for nuclear among voters of the leading party as well as a narrow range in net support between the voters of multiple parties. Without a positive policy environment, the long-term construction and operation of power plants can be hindered.

## Especially in the G7, there are large political divides in nuclear support

Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Demographic – Ranked political parties / groups with >10% public support at time of survey: ● 1<sup>st</sup> largest support, ● 2<sup>nd</sup>, ● 3<sup>rd</sup>, ● 4<sup>th</sup>



**Data Explainer**  
 In Germany, the supporters of the second highest polling party (Alternative für Deutschland) have the highest net support for nuclear at 54%, 101%pts higher than the net support for nuclear of Germany's fourth highest polling party (Die Grünen).  
 N.B. Political party polling at the time of surveying does not necessarily reflect which party is currently in power.  
*"Nuclear energy is being sacrificed by politicians for ideological approaches."*  
 71, Male, Germany

**Average Range in Net Support**  
 35%  
 41%  
 41%  
 22%  
 36%

**Regional Blocks**  
 Within BRICS countries, only in South Africa is there a significantly large political division in nuclear support.

Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

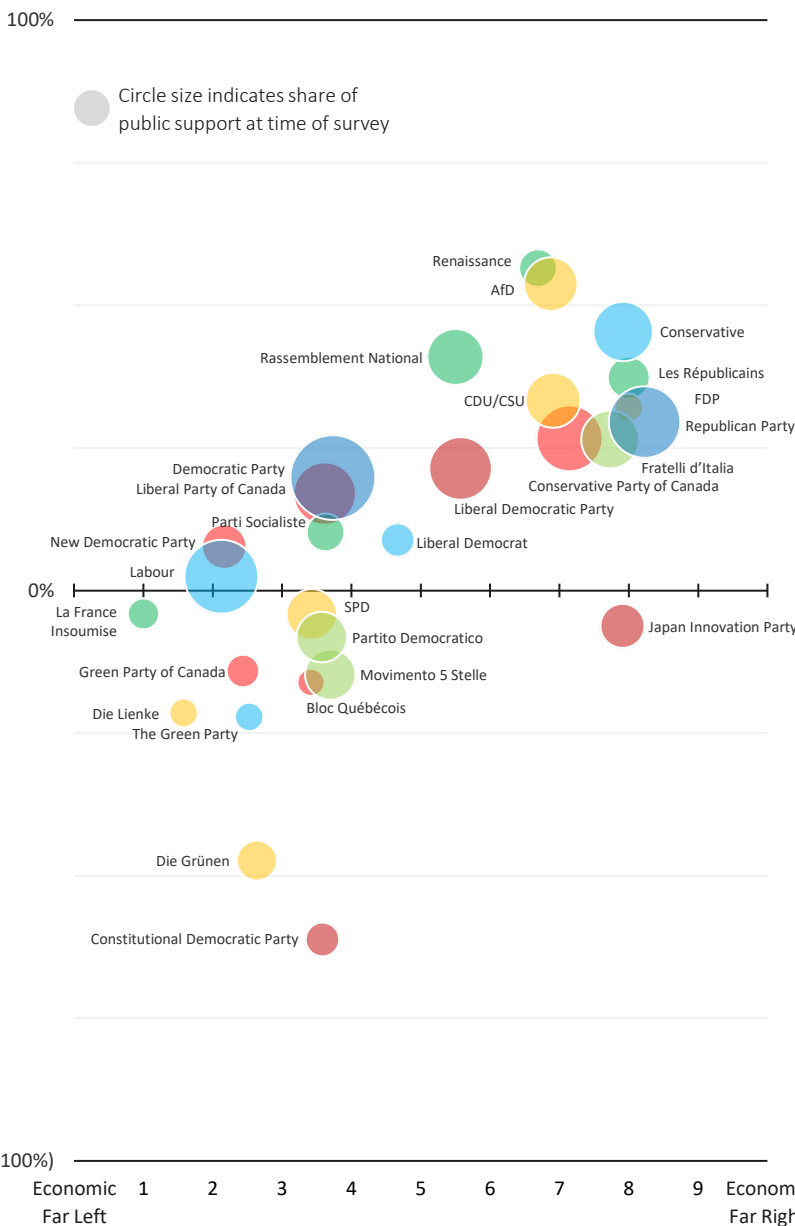
Q20. Which of the following political parties / groups would you be most likely to vote for? Select one option  
 Various country-dependent answers provided by polling agency, Savanta

# Political affiliation – G7

Nuclear sector employment standards, unionization rates, environmental regulation, and, often, nuclear plant state ownership, would suggest left-aligning voters could more closely identify with nuclear energy. However, when mapping nuclear support among voters by political party economic policy, we see *right-wing* voters are currently the most supportive of nuclear energy.

## Economically right-winged voters tend to be more supportive of nuclear

Economic left-right position of political parties, data by Global Party Survey, 0-10  
 Net support (total support – total opposition) for the use of nuclear energy in generating electricity in their country, %  
 Colored countries: ● Japan, ● Canada, ● Germany, ● Italy, ● France, ● United Kingdom, ● United States



### Data Explainer

The American Republican Party is scored by the Global Party Survey as being the most economically *right-winged* political party in the G7. Among people who would currently vote for the Republican Party, there is 30% net support for nuclear energy's use.

### Party Size

Across the G7 the larger political parties tend to have positive net support for nuclear energy's use.

### South Africa

Not displayed here, South Africa is one of the few countries surveyed where supporters of the more economically right-winged party, Democratic Alliance (DA), are least supportive of nuclear energy's use.

Q8. From what you know about [nuclear energy], to what extent, if at all, do you support or oppose using [it] to generate electricity in your country?  
 Select one response  
 Strongly oppose, Tend to oppose, Neither support nor oppose, Tend to support, Strongly support, Don't know  
 Net support = Strongly support + Tend to support - Tend to oppose - strongly oppose

Q20. Which of the following political parties / groups would you be most likely to vote for? Select one option  
 Various country-specific options provided by polling agency, Other (write in), Prefer not to say

# Politicians

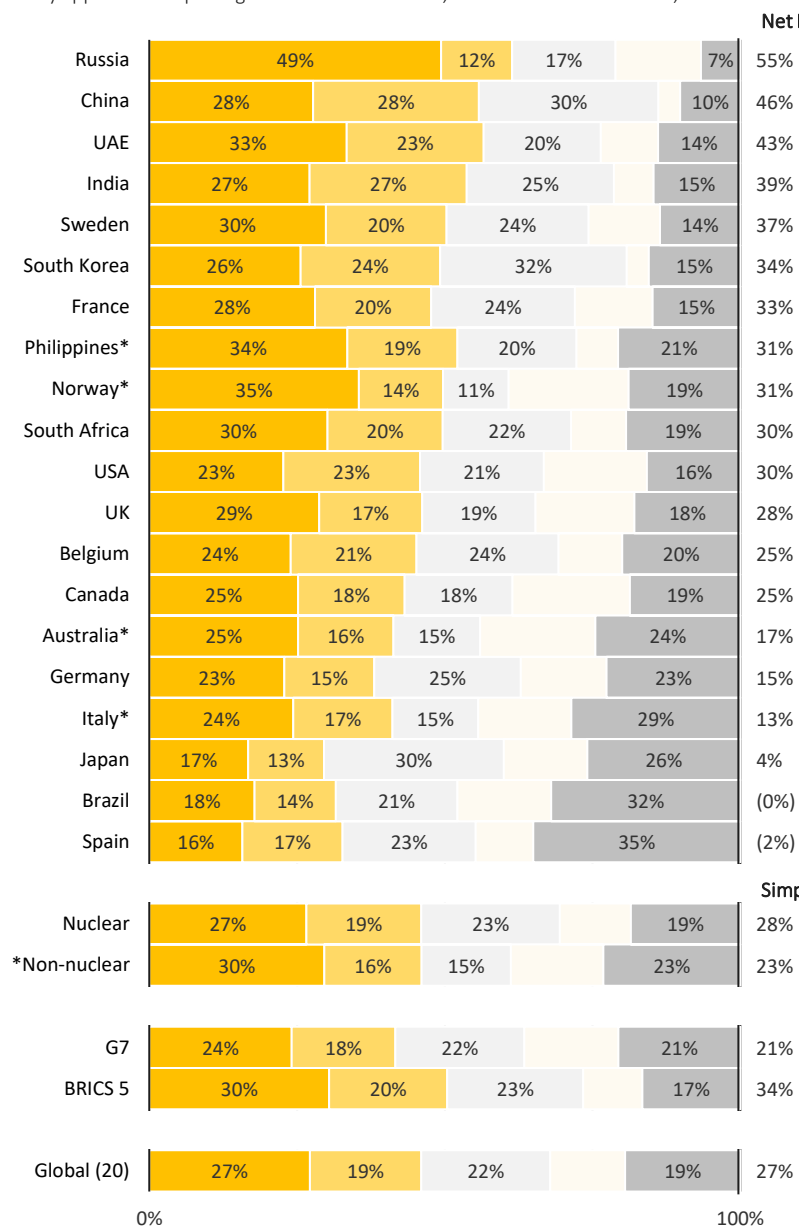
The nuclear industry is capital-intensive, highly regulated, and operates over long timeframes. Given all three of these nuclear industry dynamics, stable government policy support is important in ensuring nuclear’s success.

Governments seek to act in the public’s interest. Government nuclear energy policy benefits from understanding how the public wants nuclear to be policed.

## Globally, support for nuclear new builds is 2x the desire to ban its use

% that say they align with each policy approach on nuclear energy’s use in their country

Policy approach: Keep using, Build with subsidies, Build without subsidies, Do not build, Don’t know, Phase out and ban use



### Data Explainer

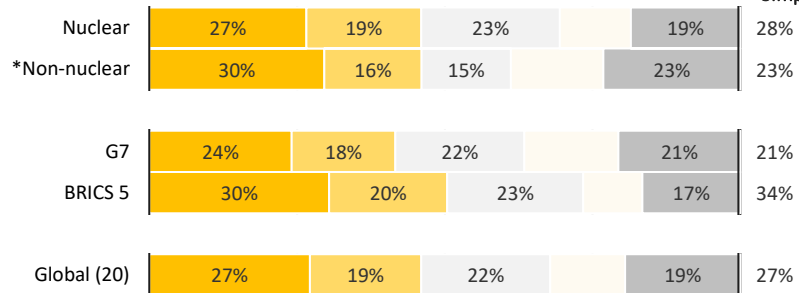
In Russia, 61% support government policy that seeks to build more nuclear reactors (49% with subsidies + 12% without subsidies); 17% wish for their government to maintain current nuclear reactors in operation but not to build more; and 7% of the population wish for their government to phase out and eventually ban the use of nuclear energy.

### Reconciling Support and Policy Preference

75% of people supporting nuclear’s use wish for their government to build new nuclear power plants. While those who tend to oppose nuclear energy have less support for nuclear new builds 54% of this group do support policy to keep operating existing nuclear plants and 17% wish for governments to build new nuclear plants.

*“It’s clean and cheap. I don’t understand why we don’t start up the nuclear power plants that are now resting.”*  
70, Female, Sweden

### Simple Average



### Global View

Over 3x more respondents want existing nuclear plants to continue being used rather than phased out and over 2x more respondents want new nuclear plants built rather than existing ones phased out.

Q9. Assuming all these energy options were viable for your country, which policy approach, if any, do you think your country should take on each of the following energy options? Select one response for each option

Phase out and ban use through political decisions  
 Keep using, but do not allow the building of any more  
 Keep using, and allow the building of more but without government subsidies  
 Keep using, and encourage the building of more with government subsidies  
 Don't know  
 Nuclear energy (shown), Onshore wind farms, Large-scale solar farms, Biomass from trees, Gas with carbon capture and storage (CCS)

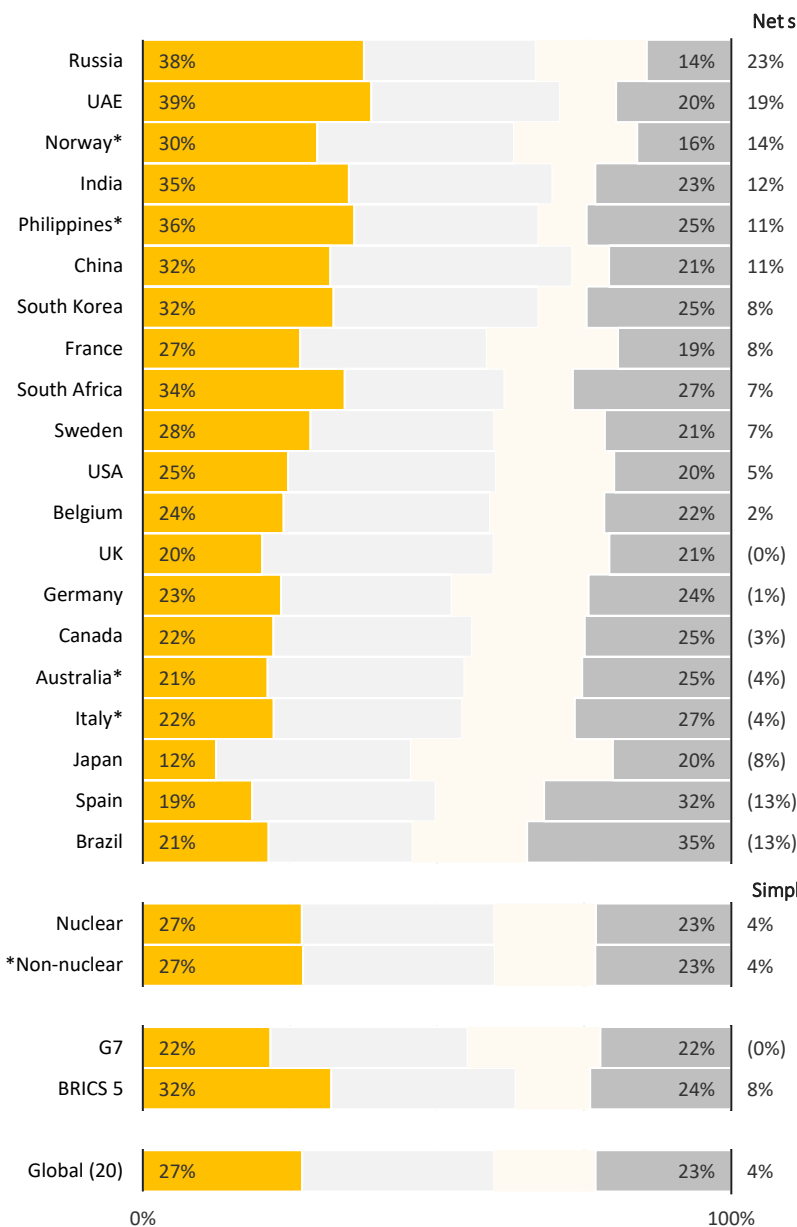
# ESG investors

Banks and pension funds can choose to invest in socially responsible industries, sometimes known as ESG investing. It is [reported](#) that no bank explicitly includes nuclear in its ESG investments. Many banks accept the [UNECE](#)'s finding that nuclear has a relatively low environmental impact and cite fear of investor backlash as their rationale for ESG exclusion. Our research seeks to put into context the public's priorities on nuclear's ESG in/exclusion.

## Globally, support for nuclear's ESG inclusion outweighs opposition

% that say they would prioritize nuclear's inclusion/exclusion from socially responsible and ESG investment funds

ESG selection criteria: ■ Prioritize **inclusion** of nuclear, ■ Priorities unaffected by nuclear, ■ Don't know, ■ Prioritize **exclusion** of nuclear



Net support for nuclear's ESG inclusion

### Data Explainer

In the UAE, home to one of the world's large financial centers, 39% of people would prioritize banks and pension funds that include nuclear energy in their socially responsible investments, whereas 20% would prioritize the opposite, the exclusion of nuclear.

*"It is very sustainable and I think a good investment for our country."*

26, Female, Philippines

### US Investor Backlash?

While including nuclear in socially responsible investment funds could deter 20% of the US population from investing in such funds, it could also incentivize a greater 25% of the US population to prioritize those funds over others.

### Regional Blocks

Across the G7 there is a comparable preference for nuclear's inclusion as exclusion from socially responsible investments.

Q11. Banks and pension funds can choose to invest in industries that are socially responsible, sometimes known as ESG, ethical, or sustainable investing. To what extent, if at all, would you prioritise banks and pension funds that include or exclude [nuclear energy] in their socially responsible investments?

Select one response

I would prioritise banks and pension funds that **include** this energy in their socially responsible investments

My priorities would not be affected by whether this energy is included or excluded from socially responsible investments

I would prioritise banks and pension funds that **exclude** this energy from their socially responsible investments

Don't know

# Nuclear industry

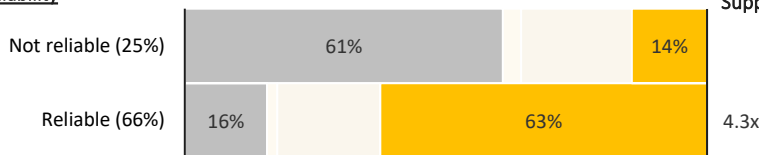
The nuclear industry invests in improving nuclear support. Understanding which attribute is most important in driving nuclear support guides the nuclear industry towards investing in the area of most concern to the public. Below is a simple driver importance analysis that compares levels of nuclear support amongst those with a positive and negative perception of each of its key attributes. Shapley Regression is used for more accurate analysis.

## Reliability is important in determining support for nuclear energy

% that say they oppose or support nuclear energy's use in their country

Opinion: ■ Oppose, ■ Don't know, ■ Neither support nor oppose, ■ Support

### Reliability



### Support multiplier

#### Data Explainer

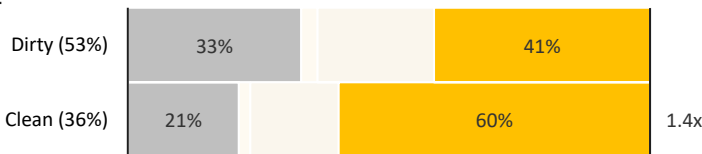
Globally, 66% of respondents view nuclear energy as reliable, 25% as not reliable and the remaining share that's not shown do not know what they think of nuclear energy's reliability.

Of the 66% of respondents who view nuclear energy as reliable, 63% support the use of nuclear energy in their country, a rate of support that is 4.3x higher than the rate of support shown amongst the respondents who do not see nuclear energy as reliable.

### Health & Safety



### Emissions



#### Reliability

Aligning with what respondents most commonly said is a primary energy criteria to them (see p11), a positive perception of nuclear energy's reliability is one of the largest determinants for nuclear energy support.

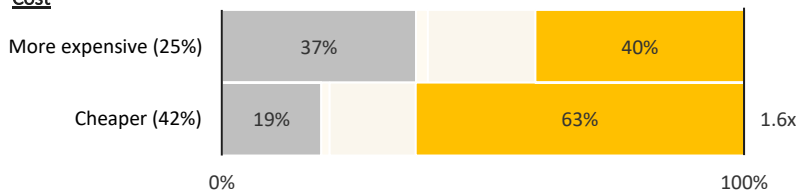
### Waste Management



*"I support it because it's cheap. I oppose it because it's dangerous."*

54, Male, Canada

### Cost



#### Health & Safety and Waste Management

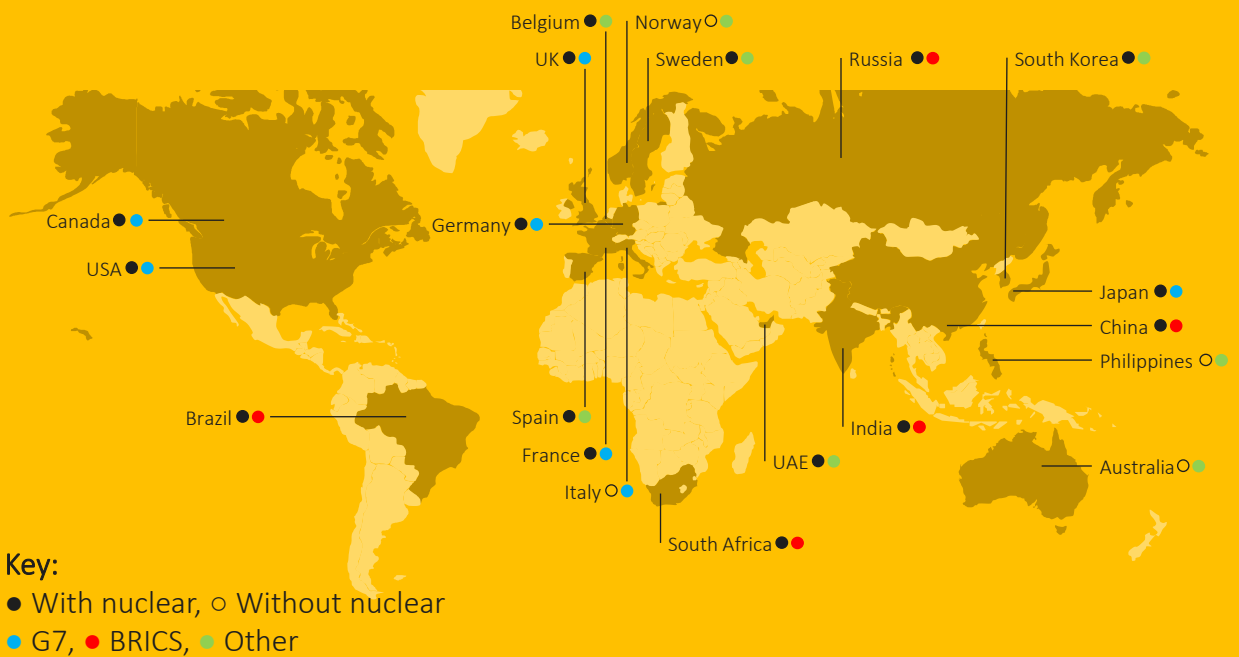
There is net support, more support than opposition, for nuclear energy's use within the large subset of people that are concerned about nuclear energy's health and safety or waste management.

# Methodology

This report presents insights from a study conducted by Savanta on behalf of Radiant Energy Group. The total sample size was 20,122 adults aged 18+ from 20 countries. Fieldwork was undertaken between 17<sup>th</sup> October and 14<sup>th</sup> November 2023, with the specific fieldwork periods varying slightly by market. The survey was carried out online. The figures have been weighted to be nationally representative within each market across age, gender and region.

## Country selection and sample sizing

20 countries were selected for the survey with each to receive a minimum of 1,000 respondents. The countries were selected to include all G7 and BRICS countries, the world's top 14 countries by 2022 nuclear electricity generation, the UAE (COP28 host, a future BRICS country, and a recent nuclear new build country), and four countries without nuclear electricity generation from across the world: Australia, Italy, Norway and the Philippines. As the world's 7<sup>th</sup> largest nuclear electricity generating country, Ukraine had been planned for inclusion but owing to recent difficulties in surveying in the country it was omitted from this survey.



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## **Radiant Energy Group’s questions and answer lists rationale**

In multiple questions, the list of energy options listed is based on large-scale onshore energies that are considered clean by some governments and have a potential for widespread scaling across the globe. The list includes Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS). The list does not include hydro, geothermal, offshore wind, tidal or wave energy due to not being applicable for every country and does not include rooftop solar due to its small-scale deployments less impacted by public opinion.

In question 10, the list of energy considerations is selected to include a broad mix of economic (cost, reliability, jobs), environmental (climate change, natural resource use, waste management), social (health & safety), and governance (well-regulated industry) criteria.

## **Calculation of net scoring**

Net support for energy sources is calculated by subtracting the share of the public that opposes the use of the energy source from the share of the public that supports the use of the energy source.

Net support (%) = Total support (%) – Total opposition (%)

Net perception for how energy sources perform against energy attributes is calculated by subtracting the share of the public that negatively perceives the energy source’s performance from the share of the public that positively perceives the energy source’s performance.

Net perception (%) = Total positive perception (%) – Total negative perception (%)

Totals are calculated using respondent-level data to improve the accuracy of results. Analysis of cross-tab data may lead to rounding errors when compared with respondent-level data.

For more information, please contact:

### **Richard Ollington**

Partner at Radiant Energy Group  
richard@radiantenergygroup.com

# Questionnaire

Listed are some of the questions asked in the survey, a subset of which are used in this report

--- Screening questions ---

## Q – Gender

Are you...? Select one option

Female

Male

I identify in another way

Prefer not to say

## Q16 – Age

How old are you? Move the slider until it shows your age in the box on the left

18-100

Don't know

## Q17 – Region

Firstly, where do you live? Select one option

Various country-dependent regions provided by Savanta as answers

--- Survey questions ---

## Q1

How concerned, if at all, are you about climate change? Select one option

Not at all concerned

Not very concerned

Fairly concerned

Very concerned

Don't know

## Q2

Thinking about environmental issues currently affecting the planet, which THREE of the following are MOST concerning to you? Please select up to three

Climate change

Biodiversity loss (i.e., disappearance of animals and other species)

Deforestation

Air pollution

Visual / Light pollution (i.e. disruption of views of nature)

Solid waste pollution and littering

Noise pollution

Thermal pollution

Soil contamination

Radioactive contamination

Water and microplastic pollution

I'm not concerned by any environmental issues

Don't know

Other {open}

## Q3

Thinking about how your country might shift its current energy generation mix, which of the following types of energy do you think your country should focus on? Select one option

Nuclear energy

Onshore wind farms

Large-scale solar farms

Biomass from trees

Gas with carbon capture and storage (CCS)

Other {open}

Don't know

## Q4

How much, if anything, have you heard about the following energy options? Select one response for each option

Asked for: Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

I have heard about this energy option, and know a lot about how it works

I have heard about this energy option, and know a little about how it works

I have heard about this energy option, but don't know how it works

I have not heard about this energy option

Don't know

## Q5

To what extent, if at all, do you think the following energy options create greenhouse gasses that impact climate change? Select one response for each option

Asked for: Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

Not at all

Not very much

A fair amount

A great deal

Don't know



---

**Q6**

**How reliable, if at all, do you think the following energy options would be as a source of energy?**

**Select one response for each option**

*Asked for:* Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

Not at all reliable  
Not very reliable  
Fairly reliable  
Very reliable  
Don't know

**Q7**

**If your country were to use more of the following energy options, what impact do you think this would have on your energy bills? Select one response for each option**

*Asked for:* Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

Much cheaper energy bills  
Slightly cheaper energy bills  
No difference  
Slightly more expensive energy bills  
Much more expensive energy bills  
Don't know

**Q8**

**From what you know about each of the following energy options, to what extent, if at all, do you support or oppose using each one to generate electricity in your country? Select one response for each option**

*Asked for:* Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

Strongly oppose  
Tend to oppose  
Neither support nor oppose  
Tend to support  
Strongly support  
Don't know

**Q9**

**Assuming all these energy options were viable for your country, which policy approach, if any, do you think your country should take on each of the following energy options? Select one response for each option**

*Asked for:* Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

Phase out and ban use through political decisions  
Keep using, but do not allow the building of any more

Keep using, and allow the building of more but without government subsidies

Keep using, and encourage the building of more with government subsidies

Don't know

**Q10**

**Thinking about providing for your country's future energy generation needs, which THREE of the following considerations are MOST important to you? Please select up to three**

All-in cost (i.e. cost of infrastructure, cost to consumers)

Providing reliable energy

Providing self-sufficiency (i.e. not needing to import energy)

Providing well-paid job opportunities

Tackling climate change

Natural resource use

Waste management

Health & safety

Well regulated industry (i.e. environmental impact, trusting industry to do what's right)

Other {open}

Don't know

None of these

**Q11**

**Banks and pension funds can choose to invest in industries that are socially responsible, sometimes known as ESG, ethical, or sustainable investing. To what extent, if at all, would you prioritise banks and pension funds that include or exclude the following energy options in their socially responsible investments? Select one response for each option**

*Asked for:* Nuclear energy, Onshore wind farms, Large-scale solar farms, Biomass from trees, and Gas with carbon capture and storage (CCS)

I would prioritise banks and pension funds that **include** this energy in their socially responsible investments

My priorities would not be affected by whether this energy is included or excluded from socially responsible investments

I would prioritise banks and pension funds that **exclude** this energy from their socially responsible investments

Don't know

---

**Q12**

**How concerned are you, if at all, about the following considerations of nuclear energy's use? Select one response for each option**

*Asked for: Waste management, Health & safety (i.e. nuclear meltdowns, impact on people living nearby); Time it takes to build*

Not at all concerned  
Not very concerned  
Fairly concerned  
Very concerned  
Don't know

**Q13**

**Which of the following, if any, have been your TWO MAIN sources of information about nuclear energy? Please select up to two options**

Your home energy provider  
Independent research (e.g., books, internet, lectures, etc.)  
School  
Friends and family  
Environmental groups (e.g., Greenpeace, WWF, Friends of the Earth)  
Social media  
News and television programmes  
Businesses  
Government  
Don't know  
Other {open}

**Q14**

**What comments, if any, do you have relating to the reasons for you supporting or opposing nuclear energy? Type your answer below**

{Open}

**Q15**

**Are you a member or supporter of any environmental organizations (such as Greenpeace, WWF, Friends of the Earth)? Select one option**

Yes  
No  
Prefer not to say

**Q16 – See screening questions**

**Q17 – See screening questions**

**Q18**

**Which of the following best describes your race / ethnicity? Select one option**

Various country-dependent race / ethnicities provided by Savanta as answers

**Q19**

**Approximately, what is your total household income, including any bonuses and income from investments, before taxes? Select one option**

Various country-dependent financial brackets provided by Savanta as answers

**Q20**

**Which of the following political parties / groups would you be most likely to vote for? Select one option**

Various country-dependent political parties / groups provided by Savanta as answers

**Q21**

**Do you live in a... Select one option**

Urban area - a city / metropolis  
Sub-urban area - a small or medium-sized town  
Rural area

**Q22**

**Do you have children aged under 18? Select one option**

Yes, one child aged under 18  
Yes, more than one child aged under 18  
No, I don't have any children aged under 18

**Q23**

**What is the most senior education degree you have obtained? Select one option**

No education  
Primary school diploma  
Lower secondary school license  
High school diploma  
University degree  
Post-graduate degree  
PhD and above  
Don't know

# Authors



## Richard Ollington

Richard Ollington holds an MEng in Mechanical Engineering from Cambridge University and has worked as a strategy consultant in the industrials and energy industry for global clients. His work on the ESG inclusion of green technologies has been read by bankers and journalists across London and New York. He is based in London.



## Mark W. Nelson

Mark W. Nelson holds an MPhil in Nuclear Engineering from Cambridge University and has been a consultant to the clean energy industry and environmental organizations around the world. His analytical work has been covered in the New York Times, Bloomberg, Wall Street Journal, and leading European papers. He is based in Chicago.

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# About Radiant Energy Group

Radiant Energy Group is an energy consultancy that offers clear thinking and sound strategic advice on the energy transition. We provide leaders with the data-driven insights and roadmaps they need to bring about a low-carbon, high-energy future.

Contact us at [info@radiantenergygroup.com](mailto:info@radiantenergygroup.com)

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Savanta is a fast-growing, data, market research and advisory company. Savanta informs and inspires its clients through powerful data, empowering technology and high-impact consulting, all designed to help its clients make better decisions and achieve faster progress.

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