PERILS OF PERCEPTION

Environmental PerilsApril 2021



GAME CHANGERS



These are the latest findings from Ipsos' Perils of Perception survey. The survey was conducted in 30 markets and asked people about what individuals can do to tackle climate change.

For the purpose of this study, the main sources of 'actual' data for impacts of individual actions on climate change can be found at the end of the report.



Summary

Despite <u>high concern</u> and <u>high confidence</u> that we know what to do in our own lives to combat climate change, misperceptions are rife and many often just don't know.

Across markets, people on average underestimate the most impactful climate actions they can take, and overestimate the least impactful ones

Awareness of the climate change impacts we are already seeing is low. Few knew how warm recent years have been, or how many lives are already impacted by climate change

Climate action
messaging can <u>confuse</u>:
many think it's better to
<u>eat local</u> meat rather
than imported plants,
when the reverse is true:
<u>vegetarianism</u> is far
more impactful



A Global Market Average of 7 in 10 agree:

"I understand what action I need to take to play my part in tackling climate change."

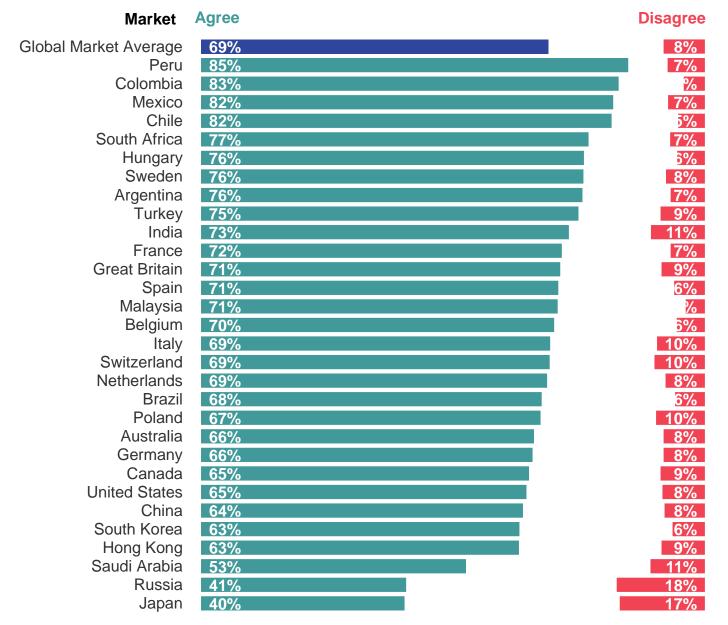
But do we really?



To what extent do you agree or disagree with the following:
I understand what action I need to take to play my part in tackling climate change

In almost every market, a majority agree they understand what action they need to take to tackle climate change.

But do we really?





Behavioural perceptions

How do we reduce our climate change impact?





Looking at well-known 'green' actions, how does the public rank potential greenhouse gas savings from each?



From this list of options, which three do you think would most reduce the greenhouse gas emissions of an individual living in one of the world's richer countries?

Global Market Averages

While all actions can make a difference, the most impactful actions are ranked too low, and the least impactful actions ranked too high in the public's estimations of carbon savings.

Global Market Average		Actual rank	CO ₂ saved (tonnes)
Recycling as much as possible	59%	7	0.2
Buying energy only from renewable sources (e.g. wind power, hydro- electric)	49%	4	1.5
Replacing a typical car with an electric car or hybrid	41%	5	1.1
Replacing traditional incandescent lightbulbs with low energy compact fluorescent (CFL) or LED lightbulbs	36%	9	0.1
Hang-drying their clothes, instead of using an electric or gas dryer	26%	8	0.2
Avoiding one long-distance flight (lasting six hours or more)	21%	3	1.6
Not having a car	17%	2	2.4
Eating a plant-based diet	14%	6	0.8
Having one fewer child	11%	1	58.6*

Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb – 5 Mar 2021

NB: Emissions saved from having one fewer child is calculated by quantifying future emissions of descendants based on historical rates, based on heredity



^{*}Source: Institute of Physics, 2017. The most effective individual steps to tackle climate change aren't being discussed. Available here: https://phys.org/news/2017-07-effective-individual-tackle-climate-discussed.html

From this list of options, which three do you think would most reduce the greenhouse gas emissions of an individual living in one of the world's richer countries?

Global Market Averages

The difference is clear when ranked by actual order — actions like recycling, hangdrying and using low energy light bulbs are overestimated compared with not having a car at all or avoiding long-distance flights

Global Market Average	_	Actual rank	CO ₂ saved (tonnes)
Having one fewer child	11%	1	58.6*
Not having a car	17%	2	2.4
Avoiding one long-distance flight (lasting six hours or more)	21%	3	1.6
Buying energy only from renewable sources (e.g. wind power, hydro- electric)	49%	4	1.5
Replacing a typical car with an electric car or hybrid	41%	5	1.1
Eating a plant-based diet	14%	6	0.8
Recycling as much as possible	59%	7	0.2
Hang-drying their clothes, instead of using an electric or gas dryer	26%	8	0.2
Replacing traditional incandescent lightbulbs with low energy compact fluorescent (CFL) or LED lightbulbs	36%	9	0.1

Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb – 5 Mar 2021



^{*}Source: Institute of Physics, 2017. The most effective individual steps to tackle climate change aren't being discussed. Available here: https://phys.org/news/2017-07-effective-individual-tackle-climate-discussed.html

Market summary – three most effective actions for reducing an individual's greenhouse gas emissions

Top three actions:

#1 action in market #2 action in market

#3 action in market

From this list of options, which three do you think would most reduce the greenhouse gas emissions of an individual living in one of the world's richer countries?

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Recycling as much as possible	59%	66%	58%	60%	63%	59%	56%	64%	48%	64%	67%	70%	55%	49%	59%	61%	55%	64%	62%	47%	63%	61%	66%	45%	62%	56%	68%	66%	51%	59%	54%
Buying energy only from renewable sources (e.g. wind power, hydroelectric)	49%	70%	45%	44%	49%	40%	41%	72%	39%	64%	58%	34%	45%	42%	39%	64%	43%	49%	39%	50%	43%	48%	64%	38%	62%	59%	42%	59%	38%	47% 4	43%
Replacing a typical car with an electric car or hybrid	41%	48%	31%	24%	51%	40%	29%	54%	49%	54%	45%	27%	39%	20%	39%	36%	42%	42%	42%	45%	54%	44%	44%	29%	46%	40%	50%	42%	27%	60%	42%
Replacing traditional incandescent lightbulbs with low energy compact fluorescent (CFL) or LED lightbulbs	36%	37%	32%	32%	43%	34%	31%	28%	39%	36%	39%	37%	21%	29%	44%	37%	40%	41%	46%	43%	42%	42%	37%	30%	43%	47%	39%	41%	25%	25% 3	37%
Hang-drying their clothes, instead of using an electric or gas dryer	26%	20%	32%	25%	25%	26%	29%	23%	26%	25%	27%	40%	20%	27%	26%	14%	29%	30%	24%	26%	31%	33%	32%	21%	31%	22%	21%	25%	24%	26% ′	18%
Avoiding one long-distance flight (lasting six hours or more)	21%	14%	17%	39%	13%	23%	29%	13%	19%	10%	22%	33%	29%	42%	21%	27%	21%	22%	9%	20%	14%	13%	15%	33%	14%	17%	10%	17%	42%	22% ′	15%
Not having a car	17%	16%	19%	23%	15%	17%	28%	12%	6%	16%	14%	16%	24%	23%	29%	21%	13%	10%	14%	11%	16%	11%	11%	25%	16%	17%	23%	14%	30%	19% ′	15%
Eating a plant-based diet	14%	11%	18%	16%	10%	12%	17%	9%	17%	6%	5%	7%	21%	19%	15%	13%	24%	12%	12%	20%	14%	16%	7%	23%	4%	9%	11%	16%	21%	14% ′	14%
Having one fewer child	11%	8%	14%	14%	8%	11%	15%	10%	5%	16%	5%	9%	19%	9%	11%	7%	18%	5%	5%	10%	6%	7%	12%	22%	14%	6%	4%	11%	21%	8% ′	10%



Going beyond the (more) obvious, what other actions could we take, and do we understand what impact they would have?



Which of the following actions do you think appear in the top 30 ways of reducing our personal climate change impact? Please select up to five.

Global Market Averages

Respondents were generally more accurate in selecting actions in the top ways to reduce our climate impact.

However, half believed less packaging (52%) and buying less (46%) were in the top thirty, more than, for example, renovating or refurbishing housing for efficiency (35%).

True rank **Global Market Average** 52% 38th Less packaging 46th 46% Buying fewer items, or more durable items More energy-efficient cooking equipment, using cleaner fuel or **9**th 46% renewable energy 23rd Growing or producing your own food 37% 27th 36% Car pooling/sharing 6th Refurbishing and renovating housing for efficiency 35% Fuel efficient driving practices (e.g. using the correct gear, and 33% 34th driving more slowly) 26% 57th Green roofs - partially or completely covered with vegetation 13% 31st Having smaller living spaces / or co-housing to fill empty rooms 25th Not having pets

Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb - 5 Mar 2021

*Source: Ivanova et al., 2020. Quantifying the potential for climate change mitigation of consumption options. Available here: https://iopscience.iop.org/article/10.1088/1748-9326/ab8589/pdf



Which of the following actions do you think appear in the top 30 ways of reducing our personal climate change impact? Please select up to five.

Global Market Averages

The difference is clearer when ranked by actual order – actions such as buying products with less packaging and buying fewer or more durable items are overestimated compared with refurbishing homes for energy efficiency.

Global Market Average		True rank
Refurbishing and renovating housing for efficiency	35%	6 th
More energy-efficient cooking equipment, using cleaner fuel or renewable energy	46%	9 th
Growing or producing your own food	37%	23 rd
Not having pets	5%	25 th
Car pooling/sharing	36%	27 th
Having smaller living spaces / or co-housing to fill empty rooms	13%	31 st
Fuel efficient driving practices (e.g. using the correct gear, and driving more slowly)	33%	34 th
Less packaging	52%	38 th
Buying fewer items, or more durable items	46%	46 th
Green roofs - partially or completely covered with vegetation	26%	57 th

Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb - 5 Mar 2021

*Source: Ivanova et al., 2020. Quantifying the potential for climate change mitigation of consumption options. Available here: https://iopscience.iop.org/article/10.1088/1748-9326/ab8589/pdf



Market summary – top three actions perceived to be in the top thirty ways to reduce climate change impact

Top three actions:

#1 action in market #2 action in market

#3 action in market

Which of the following actions do you think appear in the top 30 ways of reducing our personal climate change impact?

		•		•	•	(*)	•	4		-			<u>4</u> ≥ 7 ≥		%		(0				4	(*)		0				+	(*	
	тот	ARG	AUS	BEL	BRA	CAN	СН	CHL	CHN	COL	ESP	FRA	GB	GER	нк	HUN	IND	ITA	JAP	KSA	KOR	MAL	MEX	NLD	PER	POL	RUS	SAF	SE	TUR	USA
Less packaging	52%	44%	51%	58%	61%	58%	65%	45%	44%	40%	59%	59%	61%	65%	72%	59%	32%	56%	55%	70%	18%	55%	32%	52%	38%	61%	48%	48%	50%	58%	40%
Buying fewer items, or more durable items	46%	49%	41%	44%	46%	46%	51%	53%	38%	50%	37%	50%	50%	49%	68%	44%	32%	43%	50%	60%	27%	29%	42%	45%	50%	60%	37%	36%	67%	44%	39%
More energy-efficient cooking equipment, using cleaner fuel or renewable energy	46%	50%	44%	31%	43%	31%	24%	57%	56%	51%	44%	17%	43%	18%	64%	61%	47%	29%	48%	63%	46%	51%	46%	50%	55%	53%	48%	62%	30%	69%	37%
Growing or producing your own food	37%	61%	43%	31%	33%	43%	26%	51%	28%	57%	19%	32%	44%	25%	34%	27%	35%	30%	24%	21%	42%	48%	46%	15%	41%	36%	40%	65%	38%	44%	40%
Car pooling/sharing	36%	33%	37%	37%	21%	48%	31%	48%	39%	51%	43%	42%	39%	28%	46%	24%	39%	22%	23%	26%	25%	53%	50%	28%	34%	21%	21%	42%	53%	22%	50%
Refurbishing and renovating housing for efficiency	35%	29%	32%	61%	21%	39%	51%	30%	9%	23%	50%	56%	40%	48%	20%	68%	33%	52%	20%	36%	23%	29%	26%	56%	26%	22%	24%	25%	20%	28%	43%
Fuel efficient driving practices (e.g. using the correct gear, and driving more slowly)	33%	29%	29%	25%	24%	30%	27%	31%	36%	30%	31%	31%	36%	32%	25%	30%	45%	26%	48%	53%	43%	31%	33%	26%	36%	30%	23%	44%	27%	38%	39%
Green roofs - partially or completely covered with vegetation	26%	20%	19%	18%	27%	20%	32%	18%	34%	24%	17%	18%	17%	31%	49%	30%	42%	21%	22%	18%	55%	29%	22%	29%	23%	27%	23%	43%	11%	27%	21%
Having smaller living spaces / or co- housing to fill empty rooms	13%	14%	17%	17%	9%	15%	12%	9%	16%	10%	8%	9%	9%	9%	12%	7%	23%	11%	11%	14%	17%	10%	13%	11%	14%	7%	9%	13%	13%	26%	14%
Not having pets	5%	2%	6%	5%	4%	5%	4%	2%	8%	3%	3%	5%	5%	5%	11%	5%	8%	7%	7%	12%	13%	5%	4%	8%	2%	4%	3%	2%	6%	4%	4%



Impacts of climate change



Climate change already displaces more people than conflict, but only a minority know this.



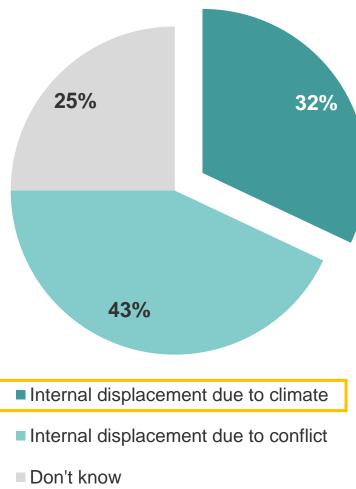
In 2020, do you think more people suffered internal displacement as a result of conflict (such as war, criminal and political violence) or as a result of climate and weather-related disasters (such as hurricanes, storms and flooding)?

Global Market Averages

Two in five (43%) believe conflict to be the greater cause of internal displacement, while a third (32%) chose climate and weather-related disasters.

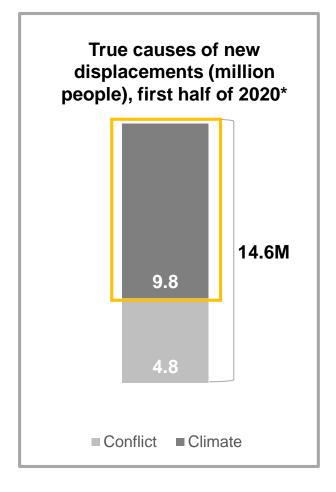
The true cause (climate and weather) accounted for two thirds (67%) of new displacements in the first six months of 2020.

Global Market Average





*Source: GRID, 2020. 2020 Mid-Year Update. Available here: https://www.internaldisplacement.org/sites/default/files/publications/documents/2020%20Mid-year%20update.pdf





In 2020, do you think more people suffered internal displacement as a result of conflict (such as war, criminal and political violence) or as a result of climate and weather-related disasters (such as hurricanes, storms and flooding)?

In most markets, respondents perceived conflict as being the greater cause of internal displacement, although with some exceptions – such as the US, France, China and Japan

Market	Conflict	Climate/weather-related
Global Market Average	43%	32%
Turkey	68%	24%
Colombia	67%	22%
Chile	58%	28%
Hong Kong	57%	27%
Saudi Arabia	55%	20%
Mexico	54%	33%
Peru	51%	37%
Hungary	49%	31%
Germany	47%	25%
Sweden	44%	34%
India	44%	40%
Malaysia	44%	38%
Switzerland	43%	32%
Argentina	43%	33%
Spain	43%	26%
South Korea	42%	39%
South Africa	40%	41%
Netherlands	40%	24%
Brazil	39%	39%
Great Britain	39%	32%
Italy	38%	29%
Australia	37%	30%
Belgium	37%	30%
Canada	34%	31%
Poland	33%	31%
Russia	31%	35%
United States	31%	43%
France	29%	39%
China	26%	40%
Japan	23%	41%



Feeling hot, hot? Only one in twenty-five of the public know that all of the last six years were among the hottest on record.



The World Meteorological Organization collects annual global temperatures, to see whether they are rising or falling across the world. Records begin in 1850. Since 2015, how many years have been the warmest year on record?

Global Market Averages

Nearly all respondents either underestimated (22%) or were unsure (73%) of how many years since 2015 have been the warmest on record.

Only one in twenty-five (4%) correctly stated that the 6 years since 2015 have been the warmest on record.

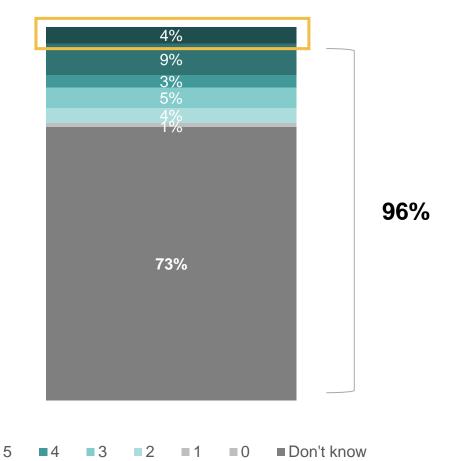
Global Market Average

Average response among those giving an answer:

Since 2015, 4 years have been the warmest on record

Actual data:

Since 2015, **6 years** have been the warmest on record



Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb - 5 Mar 2021



^{*}Source: The World Meteorological Organisation, 2021. 2020 was one of three warmest years on record. Available here: https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-record

Climate change and diet





Going <u>plant-based</u> makes more of a difference to your carbon footprint than <u>eating local</u>, but the public guess this is the other way around.



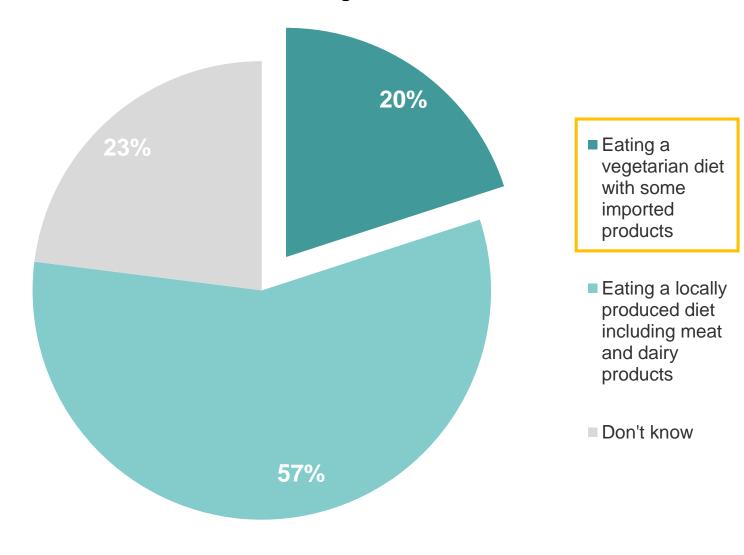
And which of these two actions do you think would most reduce an individual's greenhouse gas emissions?

Global Market Averages

Eating local does not necessarily mean eating greener, as switching to a vegetarian diet including some imported fruit and vegetables more effectively reduces an individual's greenhouse gas emissions.

However, three in five (57%) perceived eating a locally produced diet that includes some animal foodstuffs as being the more environmentally friendly diet.

Global Market Average



Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb - 5 Mar 2021



^{*}Source: Our World in Data, 2020. You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local. Available here: https://ourworldindata.org/food-choice-vs-eating-local

And which of these two actions do you think would most reduce an individual's greenhouse gas emissions:

Eating a diet that is mostly locally produced, including locally produced meat and dairy products?

Eating a vegetarian diet, even if some of the fruit and vegetables have been imported from other countries?

In most markets, respondents perceived a locally produced diet to have lower emissions than a vegetarian one with some imported produce. India was the exception, with respondents more evenly split.

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Market	Locally produced	Vegetarian
Global Market Average	57%	20%
Hungary	77%	11%
Switzerland	73%	15%
France	70%	7%
Belgium	68%	14%
Sweden	66%	18%
Germany	64%	14%
Great Britain	62%	18%
Canada	62%	10%
Mexico	62%	19%
South Africa	62%	22%
Japan	62%	10%
Australia	60%	17%
Italy	60%	18%
Spain	59%	14%
Netherlands	59%	23%
Hong Kong	56%	29%
Turkey	56%	16%
Saudi Arabia	55%	24%
United States	55%	13%
South Korea	53%	18%
Russia	52%	12%
Poland	51%	11%
China	51%	20%
Peru	51%	29%
Malaysia	50%	25%
Argentina	50%	26%
Chile	46%	30%
Colombia	45%	37%
India	44%	47%
Brazil	41%	31%



The true meaning of food miles? Public understanding of relative impact of meat and miles is low. We have little idea of how burgers compare to carbon emissions from driving.



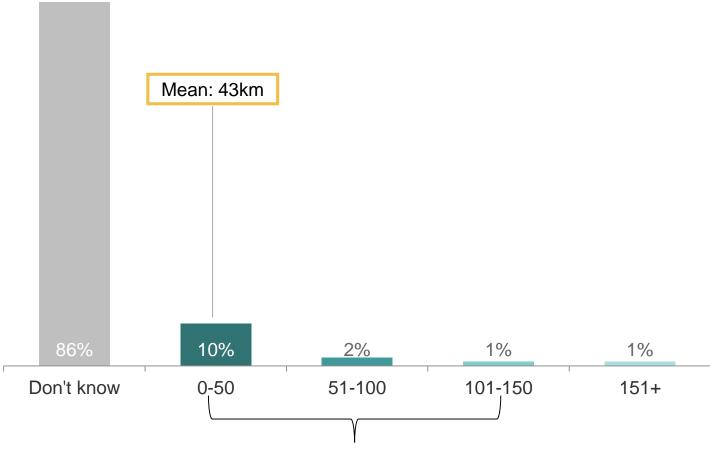
The amount of carbon dioxide released into the atmosphere as a result of making one beef burger is equivalent to driving how far in a car?

Global Market Averages – mean in km

The majority of respondents (86%) could not say how many km of driving a beef burger was equivalent to. Of those who answered, one in ten (10%) believed this to be 50km or less.

The true journey range is between 38 and 119km, depending on car efficiency. The average answer (43km) came at the lower end of this range.

Global Market Average



Range*: 38 - 119km

Base: 21,011 online adults aged 16-74 across 30 markets, 19 Feb - 5 Mar 2021

*Source: Our World in Data, 2020. You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local. Available here: https://ourworldindata.org/food-choice-vs-eating-local; IEA 2021. Tracking Transport 2020. Available here: https://www.iea.org/reports/tracking-transport-2020/rail#abstract . Quarter pounder burger patty weight of 113.4g is assumed.



These are the findings of the *Global Advisor* wave 152 (GA 152) an Ipsos survey conducted between February 19 and March 5, 2021.

The survey instrument is conducted monthly in 30 markets around the world via the Ipsos Online Panel system.

The markets reporting herein are Argentina, Australia, Belgium, Brazil, Canada, China, Chile, Colombia, France, Great Britain, Germany, Hungary, Hong Kong, India, Italy, Japan, Malaysia, Mexico, the Netherlands, Peru, Poland, Russia, Saudi Arabia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey and the United States of America.

For the results of the survey presented herein, an international sample of 21,011 adults aged 18-74 in the US, Canada, Hong Kong, Malaysia, South Africa, and Turkey, and age 16-74 in all other markets, were interviewed. Approximately 1000+ individuals participated on a market by market basis via the Ipsos Online Panel with the exception of Argentina, Chile,

Colombia, Hong Kong, Hungary, India, Malaysia, Mexico, the Netherlands, Peru, Poland, Russia, Saudi Arabia, South Africa, South Korea, Sweden, Switzerland and Turkey, where each have a sample approximately 500+. The precision of Ipsos online polls are calculated using a credibility interval with a poll of 1,000 accurate to +/-3.5 percentage points and of 500 accurate to +/- 5.0 percentage points. For more information on the Ipsos use of credibility intervals, please visit the Ipsos website.

17 of the 30 markets surveyed online generate nationally representative samples in their countries (Argentina, Australia, Belgium, Canada, France, Germany, Great Britain, Hungary, Italy, Japan, the Netherlands, Poland, South Korea, Spain, Sweden, Switzerland and United States).

The samples in Brazil, Chile, mainland China, Colombia, Hong Kong, India, Malaysia, Mexico, Peru, Russia, Saudi Arabia, South Africa and Turkey are more urban & educated, and/or more affluent than the general population. We refer to these respondents as "Upper Deck Consumer Citizens". They are not nationally representative of their market.



Summary of sources for actual data

A range of data sources were used to derive the 'true' values referenced in this deck. Details of each source and any assumptions made are included on the relevant slides. The full list of sources is included below:

GRID, 2020. 2020 Mid-Year Update. Available here: https://www.internal-displacement.org/sites/default/files/publications/documents/2020%20Mid-year%20update.pdf

;IEA 2021. Tracking Transport 2020. Available here: https://www.iea.org/reports/tracking-transport-2020/rail#abstract

Institute of Physics, 2017. *The most effective individual steps to tackle climate change aren't being discussed.* Available here: https://phys.org/news/2017-07-effective-individual-tackle-climate-discussed.html

Ivanova et al., 2020. Quantifying the potential for climate change mitigation of consumption options. Available here: https://iopscience.iop.org/article/10.1088/1748-9326/ab8589/pdf

Our World in Data, 2020. You want to reduce the carbon footprint of your food? Focus on what you eat, not whether your food is local. Available here: https://ourworldindata.org/food-choice-vs-eating-local

The World Meteorological Organisation, 2021. 2020 was one of three warmest years on record. Available here: https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-record



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"Game Changers" – our tagline – summarises our ambition to help our 5,000 clients to navigate more easily our deeply changing world.

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GAME CHANGERS

In our world of rapid change, the need for reliable information to make confident decisions has never been greater.

At Ipsos we believe our clients need more than a data supplier, they need a partner who can produce accurate and relevant information and turn it into actionable truth.

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To do this we use the best of science, technology and know-how and apply the principles of security, simplicity, speed and substance to everything we do.

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