# Climate Change: Surveys From Fifteen Countries

A Campaign Strategy Paper Chris Rose April 2015 (correction 2018[1])

chris@campaignstrategy.co.uk www.campaignstrategy.org

## Introduction

From 2011 – 2015 Cultural Dynamics Strategy (CDSM www.cultdyn.co.uk) and my company (Campaign Strategy Ltd) ran a number of values-segmented surveys for Greenpeace. Some of the data are published here with the permission of Greenpeace. Responses to some of the statements on climate and energy are summarised here. I am grateful to the organisation for sharing this information.

Each survey was nationally representative by age and sex and fielded by GMI, with a sample of at least 2000. As well as values-segmenting questions, the surveys tested many other questions in the form of statements to which people are asked to respond on a 'Likert' scale of 1-5, from 'strongly disagree' to 'strongly agree', making the results a lot more insightful than those from either/or questions.

Part One shows the topline responses from Argentina, Philippines, China, Kenya, Brazil, South Africa, Thailand, Australia, Indonesia, US, Turkey, India, UK, Japan and Russia. Part Two discusses the differences in response across Motivational Values Groups.

## Part One: Opinions on Climate and Energy

### Belief in Climate Change

A great deal of attention has been focused on the issue of whether people "believe in" climate change. A statement tested in these surveys was *'Climate change – I don't believe in it'*.

In Anglo-centric media, polling and political circles, 'belief' in climate change it is still often cited as '*the* political problem' or '*the* communications issue'. This becomes a self-fulfilling prophecy if polls are then used to justify political inactivity, and even more so, if they lead climate advocates to start trying to 'shift belief' and thereby focus attention on that instead of things such as what you can do about climate change.

As shown later, 'disbelief' in climate change is strongly influenced by unconsciously-held motivational values and is therefore not only largely impervious to 'facts and information'

[1] Chart on page 30 corrected 22 3 18. Formerly two countries were listed as China. The first in the table is Argentina, as now shown.

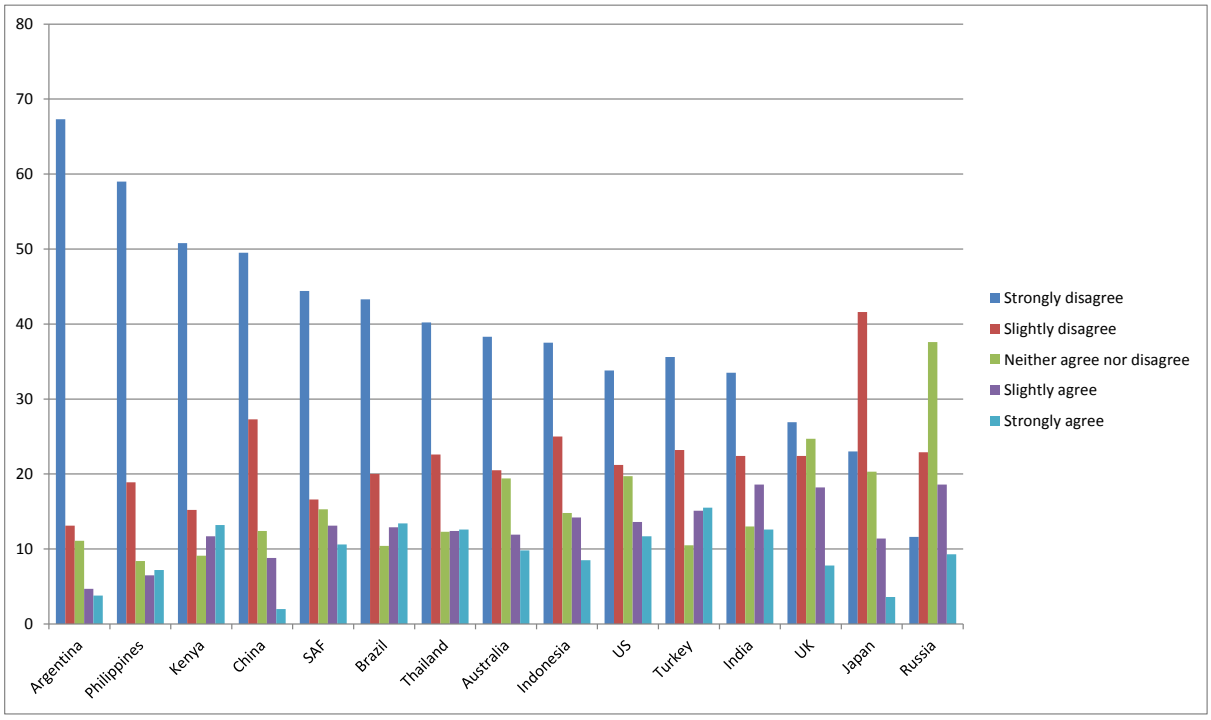
but very strongly affected by factors like the source of any 'message', and the anticipated consequences such as perceived threats to identity or opportunity.

In addition, because many of polls are conducted in the United States and to a lesser extent the UK, and these are then widely discussed in English language media and social media, there is a bias to assume that they represent 'people' across the world. In fact most people in other countries are a lot more convinced about climate change than those in the US and UK.

Campaigners, academics and advocates don't always help because those on a mission to 'shift climate belief' may also develop confirmation bias, seeking and interpreting data to reinforce the conviction that differences in 'belief' are significant.

The table and graph below show the 'topline' results for 15 Countries, here ranked by the % 'strongly disagreeing' with the statement *'Climate change – I don't believe in it'*.

| Climate change - I don | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Argenti | Philippi | Kenya | China | SAF | Brazil | Thailan | Australi | Indone | US | Turkey | India | UK | Japan | Russia |
| Strongly disagree | 67.3 | 59 | 50.8 | 49.5 | 44.4 | 43.3 | 40.2 | 38.3 | 37.5 | 33.8 | 35.6 | 33.5 | 26.9 | 23 | 11.6 |
| Slightly disagree | 13.1 | 18.9 | 15.2 | 27.3 | 16.6 | 20 | 22.6 | 20.5 | 25 | 21.2 | 23.2 | 22.4 | 22.4 | 41.6 | 22.9 |
| Neither agree nor disag | 11.1 | 8.4 | 9.1 | 12.4 | 15.3 | 10.4 | 12.3 | 19.4 | 14.8 | 19.7 | 10.5 | 13 | 24.7 | 20.3 | 37.6 |
| Slightly agree | 4.7 | 6.5 | 11.7 | 8.8 | 13.1 | 12.9 | 12.4 | 11.9 | 14.2 | 13.6 | 15.1 | 18.6 | 18.2 | 11.4 | 18.6 |
| Strongly agree | 3.8 | 7.2 | 13.2 | 2 | 10.6 | 13.4 | 12.6 | 9.8 | 8.5 | 11.7 | 15.5 | 12.6 | 7.8 | 3.6 | 9.3 |




The blue lines indicate the percentage of people *strongly* disagreeing ie strong 'believers'. This choice represents over 50% of the population in Argentina, the Philippines and Kenya, and over a third of the population in China, South Africa, Brazil, Thailand, Australia, Indonesia, the US, Turkey and India. Only in the UK, Japan and Russia is 'strong belief' below 30%.

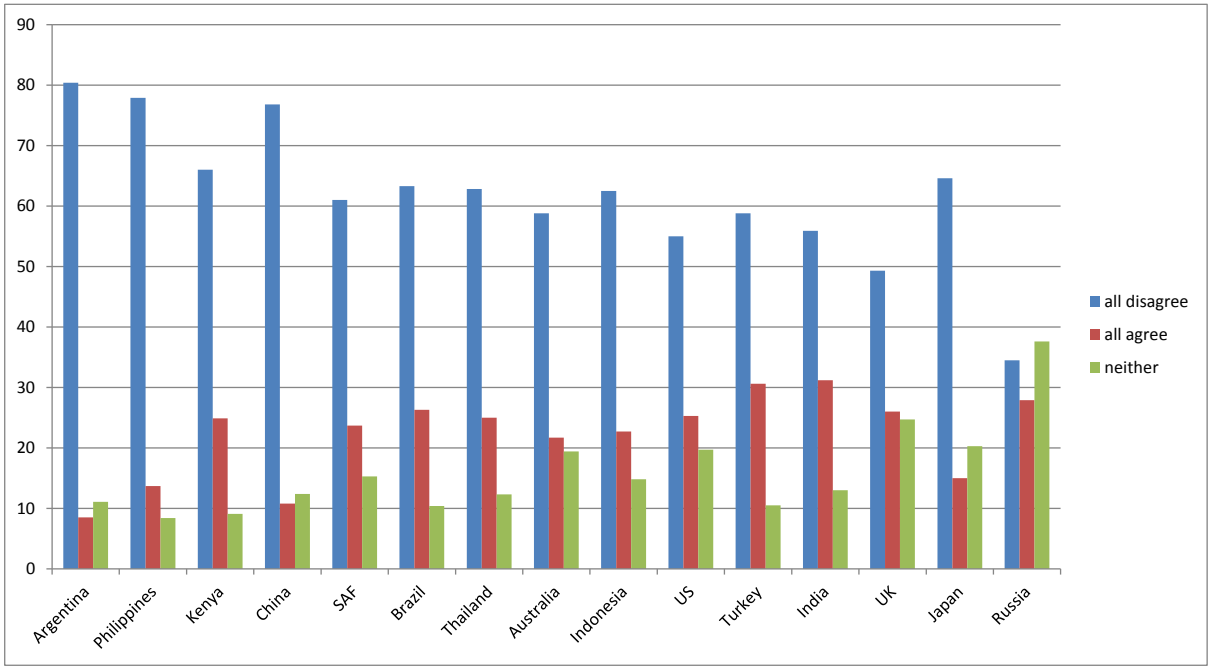
People selecting a 'strongly' option are most likely to be the ones who may act on an opinion so in this case it represents the "green base" for taking action to combat climate change[2].

The table below also gives the figures for total agree and disagree, ie strongly + slightly.

| | Argenti | Philippin | Kenya | China | SAF | Brazil | Thailan | Australi | Indone | US | Turkey | India | UK | Japan | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strongly disagree | 67.3 | 59 | 50.8 | 49.5 | 44.4 | 43.3 | 40.2 | 38.3 | 37.5 | 33.8 | 35.6 | 33.5 | 26.9 | 23 | 11.6 |
| Slightly disagree | 13.1 | 18.9 | 15.2 | 27.3 | 16.6 | 20 | 22.6 | 20.5 | 25 | 21.2 | 23.2 | 22.4 | 22.4 | 41.6 | 22.9 |
| all disagree | 80.4 | 77.9 | 66 | 76.8 | 61 | 63.3 | 62.8 | 58.8 | 62.5 | 55 | 58.8 | 55.9 | 49.3 | 64.6 | 34.5 |
| Slightly agree | 4.7 | 6.5 | 11.7 | 8.8 | 13.1 | 12.9 | 12.4 | 11.9 | 14.2 | 13.6 | 15.1 | 18.6 | 18.2 | 11.4 | 18.6 |
| Strongly agree | 3.8 | 7.2 | 13.2 | 2 | 10.6 | 13.4 | 12.6 | 9.8 | 8.5 | 11.7 | 15.5 | 12.6 | 7.8 | 3.6 | 9.3 |
| all agree | 8.5 | 13.7 | 24.9 | 10.8 | 23.7 | 26.3 | 25 | 21.7 | 22.7 | 25.3 | 30.6 | 31.2 | 26 | 15 | 27.9 |
| neither | 11.1 | 8.4 | 9.1 | 12.4 | 15.3 | 10.4 | 12.3 | 19.4 | 14.8 | 19.7 | 10.5 | 13 | 24.7 | 20.3 | 37.6 |

Most climate belief surveys only ask if people agree or not, or allow 'neither' or sometimes 'don't know'. The table below gives the total agreement – neither – total disagreement.

| | Argenti | Philippin | Kenya | China | SAF | Brazil | Thailan | Australi | Indone | US | Turkey | India | UK | Japan | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| all disagree | 80.4 | 77.9 | 66 | 76.8 | 61 | 63.3 | 62.8 | 58.8 | 62.5 | 55 | 58.8 | 55.9 | 49.3 | 64.6 | 34.5 |
| all agree | 8.5 | 13.7 | 24.9 | 10.8 | 23.7 | 26.3 | 25 | 21.7 | 22.7 | 25.3 | 30.6 | 31.2 | 26 | 15 | 27.9 |
| neither | 11.1 | 8.4 | 9.1 | 12.4 | 15.3 | 10.4 | 12.3 | 19.4 | 14.8 | 19.7 | 10.5 | 13 | 24.7 | 20.3 | 37.6 |



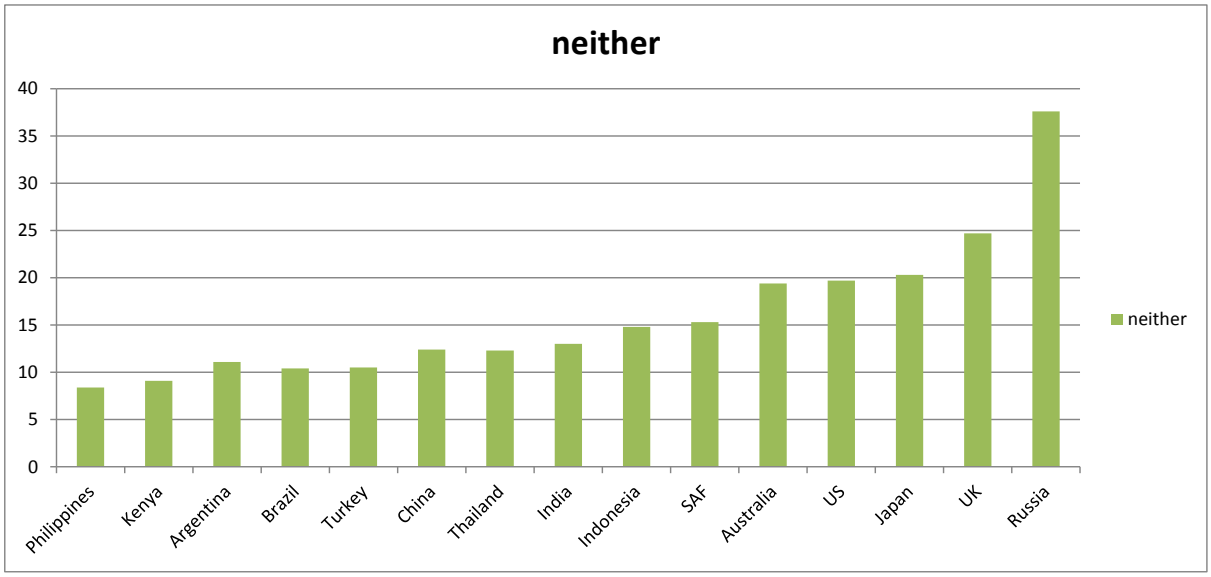

In contrast to the conventional wisdom that 'people' don't accept climate change and that's a problem for 'getting action', these data show that in every one of 15 countries, with very different cultures, energy dependencies and other factors, the total disagrees (ie 'believers') outweigh the total agrees. In other words 'believers' outweigh 'sceptics' in every country.

In 14 of 15 the total disagrees also exceed the 'neithers'. The exception is Russia.

[2] The high percentage of 'slightly disagrees' in Japan is due to the less expressive nature of Japanese society. The Japan survey found similar values-skews on many topics to other countries but they were 'damped' in intensity. More of the Japanese population lies in the central VMs who express their values quietly. It is not so much a consensual society as a mutually respectful society – Pat Dade pers comm.

Here is the 'neither' data:

| | Philippi | Kenya | Argenti | Brazil | Turkey | China | Thailan | India | Indone | SAF | Australi | US | Japan | UK | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| neither | 8.4 | 9.1 | 11.1 | 10.4 | 10.5 | 12.4 | 12.3 | 13 | 14.8 | 15.3 | 19.4 | 19.7 | 20.3 | 24.7 | 37.6 |



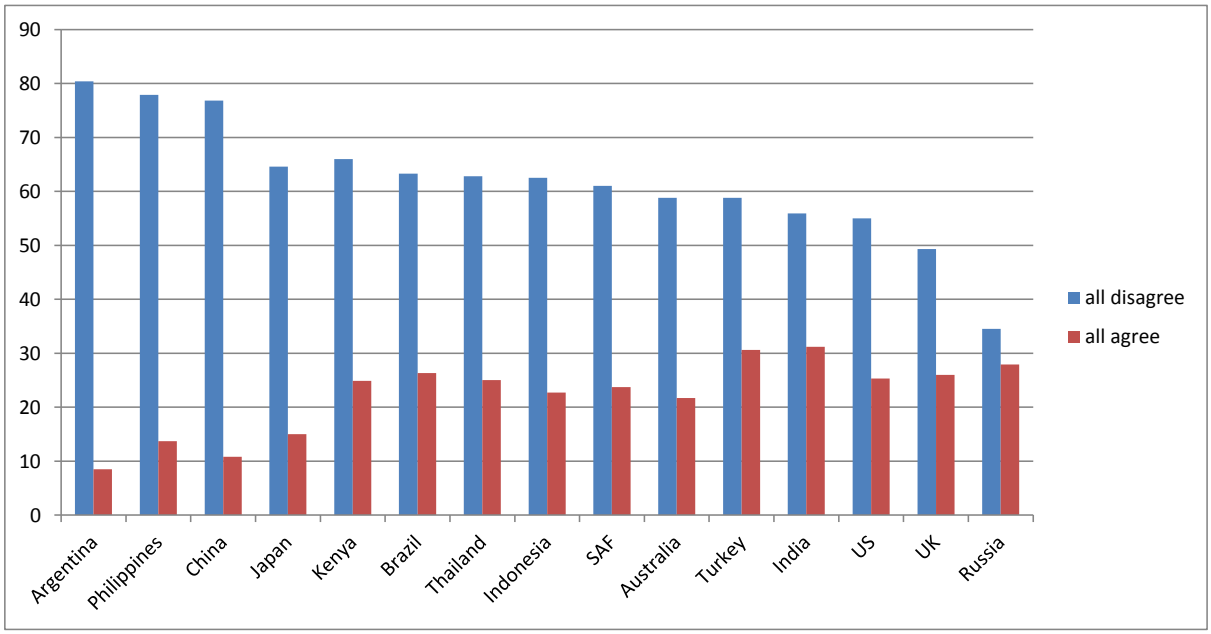

Opting for 'neither' in such a survey can be down to a number of possible factors. People do not answer these sorts of questions analytically (Daniel Kahneman's System 2) by calculation or reference to verifiable facts. They may do that with a question like 'how many cats do you own ?' but anything demanding hard mental work or giving an opinion on a complex 'issue' gets answered by use of mental shortcuts such as values and heuristics (Kahneman's System 1). We don't notice System 1 but it immediately suggests the 'obvious answer'. Kahneman calls it a 'mechanism for jumping to conclusions' and it enables us to function on a daily basis. It's a positive hindrance in science.

'Neither' may result from 'not knowing what to think' as in a situation where there are no messengers associated with the issue who I usually follow or agree with. Robert Cialdini who also studied heuristic decision making, cites in his best-selling book *Influence* the example of a woman who was how she would vote in a referendum on smoking controls, she declared that it was "hard to know" because there were "celebrities advocating for and against it".

Picking 'neither' may also result from never having thought about it, which means that in countries where the 'issue' is not salient, in the media and so on, there may be more 'neithers'. Or, if the media relays a lot of conflicting information and frames climate change as 'an undecided' or 'open' issue. In Britain the BBC had a policy of presenting 'climate change science' as undecided, in contrast to the view of most scientists, until 2014.

Total agree and total disagree is probably the best representation of a political lens: the people who if there was a 'vote', would vote one way or the other.

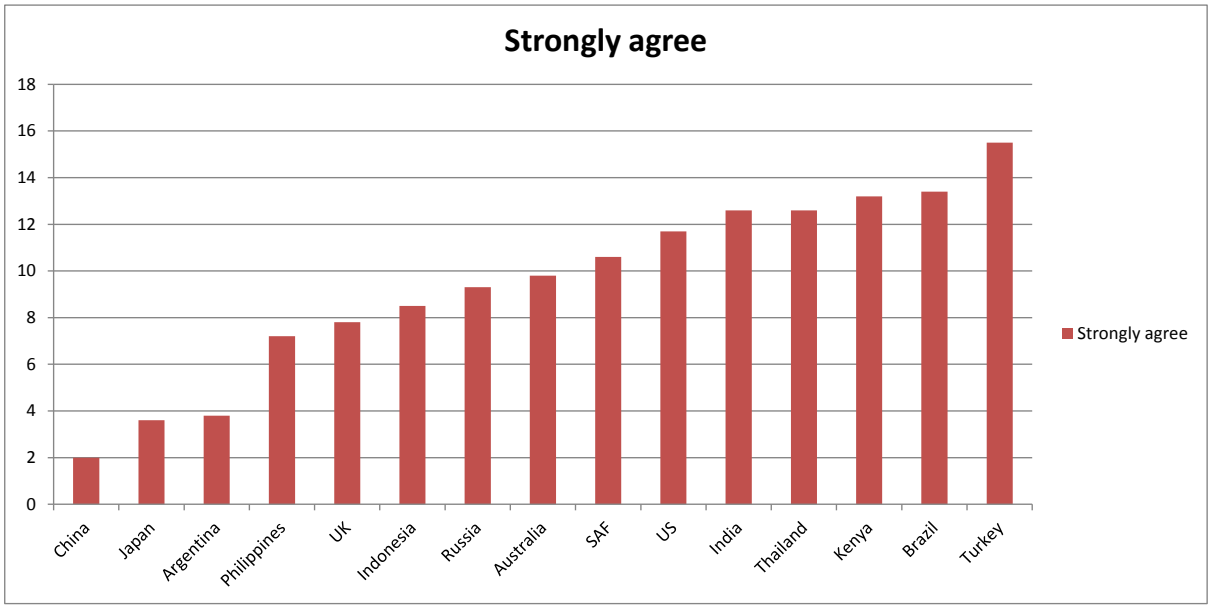
| | Argenti | Philippi | China | Japan | Kenya | Brazil | Thailan | Indone | SAF | Australi | Turkey | India | US | UK | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| all disagree | 80.4 | 77.9 | 76.8 | 64.6 | 66 | 63.3 | 62.8 | 62.5 | 61 | 58.8 | 58.8 | 55.9 | 55 | 49.3 | 34.5 |
| all agree | 8.5 | 13.7 | 10.8 | 15 | 24.9 | 26.3 | 25 | 22.7 | 23.7 | 21.7 | 30.6 | 31.2 | 25.3 | 26 | 27.9 |




In all countries, more people believe in climate change than do not believe in it, even in Russia.

The data below shows the 'strongly agrees', that is the 'climate sceptics' or 'deniers'. The 'Strongly agrees' are the only ones likely to actually support a climate sceptic campaign.

| | China | Japan | Argenti | Philippi | UK | Indone | Russia | Australi | SAF | US | India | Thailan | Kenya | Brazil | Turkey |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strongly agree | 2 | 3.6 | 3.8 | 7.2 | 7.8 | 8.5 | 9.3 | 9.8 | 10.6 | 11.7 | 12.6 | 12.6 | 13.2 | 13.4 | 15.5 |




In no case does this 'strong sceptic' option reach 20%. The highest is Turkey at 15.5%. So why is so much attention given to the US seeming to be 'climate sceptic' ?

The US is the sixth most sceptical on this basis, which might seem surprising given the amount of controversy in the media, and the focus on this topic in blogs and polls in the US. However it has to be borne in mind that, depending on the action-mechanisms in play, what matters may not be overall 'public opinion' but that of decision-makers and influencers of all kinds.

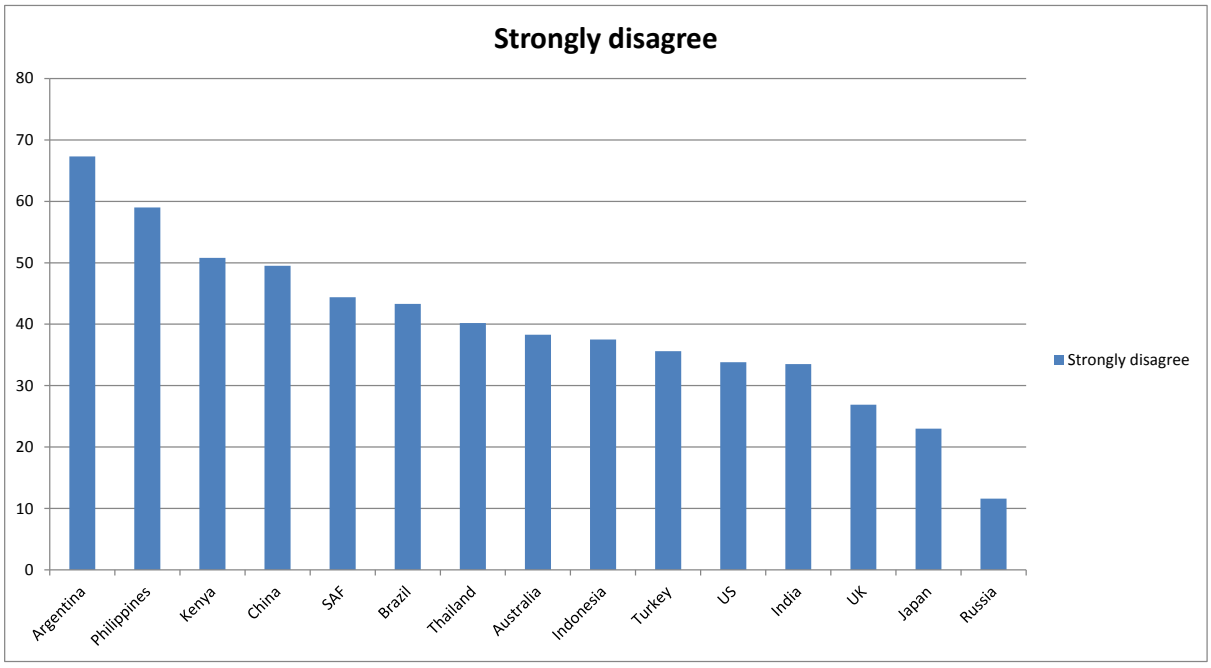
In the US, public opinion on climate change is very different from opinion in political circles, especially amongst Republican activists and Congress people. One 2015 survey found 56% of congressional Republicans are climate sceptic, while in 2014 Politifact found only 8 of 278 congressional Republicans (3%) who had not expressed scepticism.

Numerous other polls show that Republican *voters* actually back action on climate change, for example 51% in January 2015. If it's framed as about cutting 'carbon pollution', 54% of conservative Republicans, 71% of 'Liberals' and 74% of 'Moderate' Republicans support action, and 86% of Liberal Republicans, 62% of Moderates and 38% of Conservative Republicans think climate change is real.

However you look at it, the American voters, even Republicans, are far more pro-climate than the Republican politicians. This is probably because the politicians have invested most in making 'sceptic' public statements. The 'consistency effect' then dictates that you do not change your view. They are 'dug in'. Of course many are partly bankrolled by the fossil fuel industry but their position is probably as much psychologically driven as financially.

Below is the data from the 'strongly disagrees' or climate-change-believers.

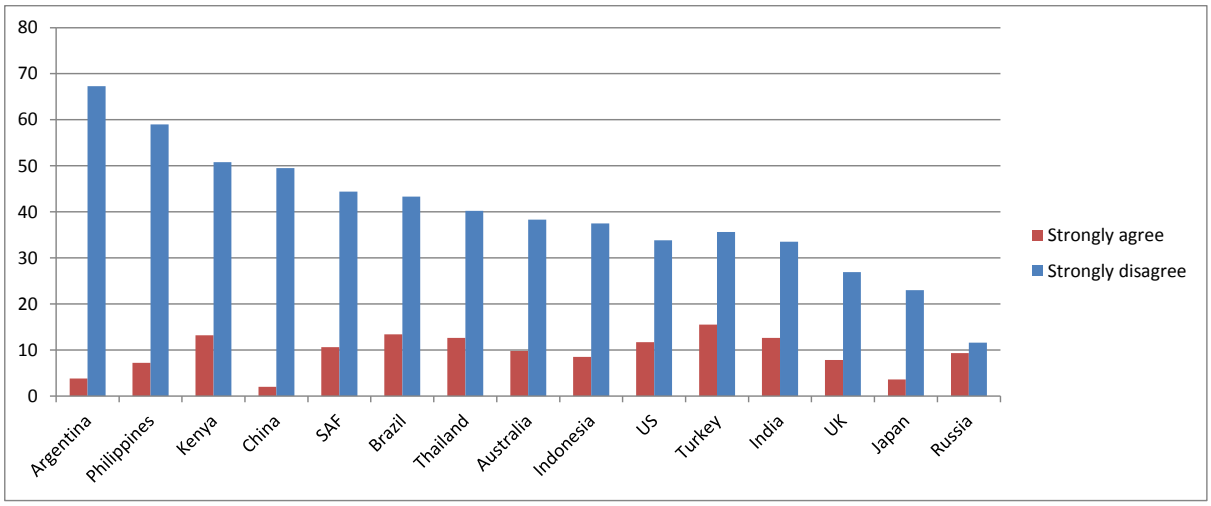
| | Argenti | Philippin | Kenya | China | SAF | Brazil | Thailan | Australi | Indone | Turkey | US | India | UK | Japan | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strongly disagree | 67.3 | 59 | 50.8 | 49.5 | 44.4 | 43.3 | 40.2 | 38.3 | 37.5 | 35.6 | 33.8 | 33.5 | 26.9 | 23 | 11.6 |



Note that whereas the previous chart reached only 16%, this reaches over 60%. These people represent the 'base' most available to be mobilised, and in every country except UK, Japan and Russia is exceeds 30%.

Finally here are the 'strongly agree' (sceptic) and 'strongly disagree' (believers). This probably best represents the potential for a sustained public row (as opposed to between elites such as politicians or media pundits) on 'belief' in climate change.

| | Argenti | Philippi | Kenya | China | SAF | Brazil | Thailan | Australi | Indone | US | Turkey | India | UK | Japan | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strongly agree | 3.8 | 7.2 | 13.2 | 2 | 10.6 | 13.4 | 12.6 | 9.8 | 8.5 | 11.7 | 15.5 | 12.6 | 7.8 | 3.6 | 9.3 |
| Strongly disagr | 67.3 | 59 | 50.8 | 49.5 | 44.4 | 43.3 | 40.2 | 38.3 | 37.5 | 33.8 | 35.6 | 33.5 | 26.9 | 23 | 11.6 |




In every country, the strong climate believers outnumber the strong climate sceptics. In Argentina by 10:1, in Philippines 8:1, even in the US by about 3:1, in Turkey by more than 2:1, and in the UK by almost 4:1. Only in Russia are they almost equally matched.

Results like these do not suggest that there is a significant global problem of public opinion on climate change.

**Seeing is Believing**

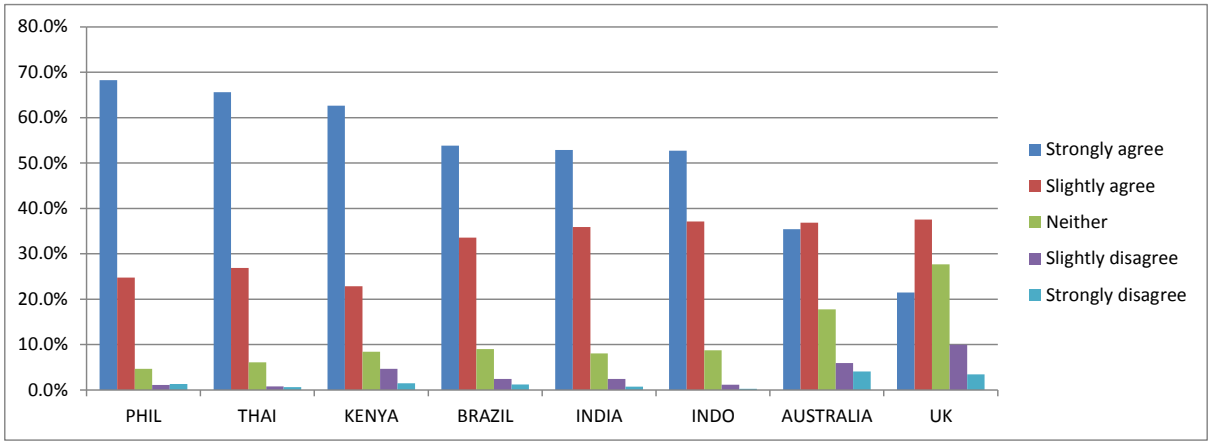
Some surveys have also asked people about the 'reality' of climate change, that is, have they noticed it ? Whereas climatologists have strict analytical techniques for answering this question, using modelling with and without the effect of greenhouse gas pollution, and statistics on long term 'climatologies', ordinary folk can also answer it in other ways. These boil down to whether or not they have noticed something odd or different happening about the weather, if this affects established expectations about things like the arrival or departure of migrant birds, flowering and fruiting times of plants, the timing of frosts and snow, or of wet or dry seasons or frequency of floods and storms.

These in turn are tested and verified by social conversations. This is a largely intuitive rather than analytical process and it is much less politicised than the "belief in climate change"

question, and therefore less of an 'identity test' (which is influenced at an individual level by how important factors like identity are for the person – see Part Two).

We have tested the statement '*I have noticed that the climate seems to be changing*' in eight countries.

| | I have noticed that the climate seems to be changing. | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PHIL | THAI | KENYA | BRAZIL | INDIA | INDO | AUSTRA | UK |
| Strongly agree | 68.3% | 65.6% | 62.6% | 53.8% | 52.9% | 52.7% | 35.4% | 21.4% |
| Slightly agree | 24.7% | 26.9% | 22.9% | 33.6% | 35.9% | 37.1% | 36.8% | 37.5% |
| Neither | 4.6% | 6.1% | 8.4% | 9.0% | 8.0% | 8.7% | 17.8% | 27.6% |
| Slightly disagree | 1.1% | 0.8% | 4.7% | 2.4% | 2.4% | 1.2% | 5.9% | 9.9% |
| Strongly disagree | 1.3% | 0.6% | 1.4% | 1.2% | 0.7% | 0.2% | 4.1% | 3.4% |




All the less developed countries return a very high response of having noticed that the climate is changing. In all eight countries, even in the UK, a majority agree that they have noticed the climate changing.

This can be compared to results for the statement: '*climate change – I don't believe in it*', which was discussed earlier.

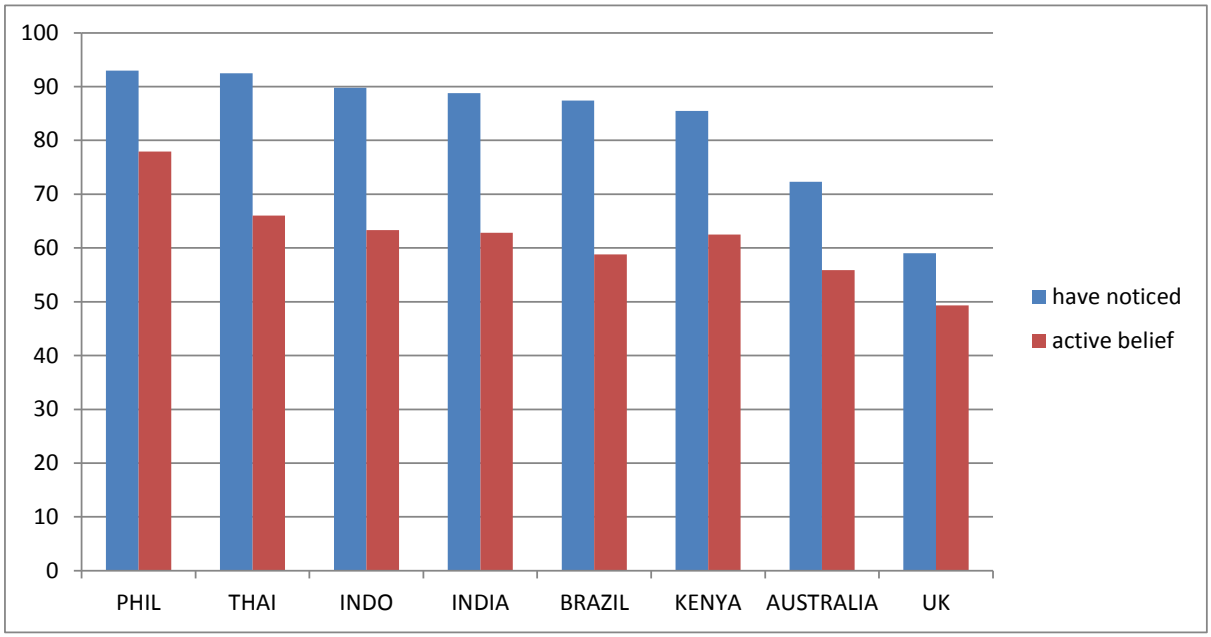
The data for these eight countries are shown below.

| Climate change - I don't believe in it | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Philippin | Kenya | Brazil | Thailand | Australia | Indonesi | India | UK |
| Strongly disagree | 59 | 50.8 | 43.3 | 40.2 | 38.3 | 37.5 | 33.5 | 26.9 |
| Slightly disagree | 18.9 | 15.2 | 20 | 22.6 | 20.5 | 25 | 22.4 | 22.4 |
| Neither agree nor | 8.4 | 9.1 | 10.4 | 12.3 | 19.4 | 14.8 | 13 | 24.7 |
| Slightly agree | 6.5 | 11.7 | 12.9 | 12.4 | 11.9 | 14.2 | 18.6 | 18.2 |
| Strongly agree | 7.2 | 13.2 | 13.4 | 12.6 | 9.8 | 8.5 | 12.6 | 7.8 |

If we compare the responses to the two statements, and draw out those who agree that they have noticed the climate changing (strongly or slightly), and those who 'believe in

climate change' (active belief = slightly plus strongly disagree with 'I don't believe' in climate change), we get the following:

| I have noticed that the climate seems to be changing. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | PHIL | THAI | INDO | INDIA | BRAZIL | KENYA | AUSTRA | UK |
| have noticed | 93 | 92.5 | 89.8 | 88.8 | 87.4 | 85.5 | 72.3 | 59 |
| active belief | 77.9 | 66 | 63.3 | 62.8 | 58.8 | 62.5 | 55.9 | 49.3 |




In every country, more people have 'noticed' climate change than 'believe in' climate change. These are two different 'frames'. One is about belief and is politicised, the more so in countries where political parties have divided over the question (as in Australia and the UK, and even more so in the US). That has made attitudes to 'climate' an us-or-them identity test and any question about climate change is then intuitively answered by a reflexive (unconscious) test along the lines of "am I one of those people ?". The other is not usually politicised and is answered by reference to what we have seen around us, eg at work, on the farm or in the garden.

This indicates that (a) responses are not analytical but emotional or intuitive (b) the history of the 'issue' affects perceptions and reflexes through framing, and (c) if the communications purpose is to lead to action of some sort on climate change, it is better not to start by introducing the question of 'belief' but to start with having-noticed climate change, in other words to raise it as a reality not a belief.

Re-framing it as about [the future of our] children, or taking small-and-easy actions, is likely to make it easier still to lead to action.

In contrast, raising the 'belief' frame, plays into the strategy of sceptics who have long sought not so much to win any debate over the existence of climate change but merely to

extend the period in which politicians waited for 'scientific uncertainties' to be resolved. Frank Luntz, strategy adviser to the US Republicans noted in a 2003 memo to the Bush administration:

*"Voters believe that there is no consensus about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly.*

*"Therefore, you need to continue to make the lack of scientific certainty a primary issue in the debate."*

The results summarised above show that in all eight countries, a majority of people believe they have noticed the climate is changing, and, in all cases this exceeds the number who 'believe in' climate change. To this extent there is little practical need to expend effort trying to convince 'people' that climate change is real, because they already agree that it is. Indeed obvious attempts to do so are likely to create media hooks and opportunities which can be exploited by the small residue of climate sceptics, and the propaganda organisations funded by the fossil fuel industries to try and sustain doubt in the public mind, or at least in the media discussion.

**Support for Action on Climate**

Real action on climate involves not doing things that add to the greenhouse gases into the air, such as burning oil, coal or gas. Unfortunately that was not how the political framing of the issue developed.

When the current concern about climate change was ignited in the political world by scientific analysis in the late 1980s, the international institutional response involved establishment of the Intergovernmental Panel on Climate Change [IPCC] and the United Nations Framework Convention on Climate Change [UNFCC]. The first pronounced on what was 'known' from science, the second on what would be done through politics.

This system institutionalised the concept that the problem was first scientific and then political in that order, and created a framer's playground which was used very effectively by the fossil fuel lobby. They were able to exploit the nature of science in which all knowledge is conditional, provisional and tentative, not absolute, to sustain disbelief and delay political action. Naievety amongst scientists (who ran the IPCC) about how communications really works, also played a part and is still common. It was mirrored by scientific illiteracy in the political classes of most countries (who decided things at the UNFCC) and in much of the media (who told the public story). We are living with the consequences.

A great deal of media coverage of 'climate' was then framed in these terms: scientific uncertainty (or not) and political agreement (mainly between nation states) or not.

Of course the science is essential, as is inter-governmental action but the 'agenda' created was dysfunctional. Decisions actually driving climate outcomes were often almost invisible in the process. For example, choices about which energy systems and technologies to use, and the lifestyle choices put to consumers. There was for instance, no attempt to start a negotiation over carbon stockpiles [fossil fuel resources and reserves], which is one of the most obvious high-level political requirements.

Only in more recent decades has this begun to change, and when choices such as use of renewables are put to the public, the results are striking. A number of different but related questions about energy were asked in eight countries in these surveys (see below: the figures are percentage in agreement with the statement).

| | |
|---|---|
| I would support the Indian government diverting investment from coal to renewable energy sources | 84.2 |
| I support Kenya moving away from coal to renewable energy (like solar) | 83.9 |
| Russia should invest in energy efficiency and alternative energy to decrease its dependency on oil and gas. | 78.8 |
| I support the Philippines reducing coal burning and increasing clean renewable energy such as wind power or solar power as the main source of electricity. | 93.9 |
| [same question] Thailand | 88.3 |
| [same question] Indonesia | 94.8 |
| [same question] China | 87.8 |
| I support Kenya increasing clean energy such as wind or solar power as the main source of electricity. | 86.9 |
| [same question] Turkey | 91.8 |
| [same question] Britain | 66.7 |
| [same question] Australia | 79.7 |
| I support Britain getting rid of coal as a way of making energy | 32.1 |
| [same question] Australia | 51.1 |
| [Same question] Turkey | 61.1 |

There is majority support for increasing renewables as the main source of electricity in every country, and for similar questions about more renewables instead of oil and gas. The flat 'no coal' question with no alternative specified gets majority support in Australia and 32.1% in the UK, although that is not due to majority support for coal, rather 45% saying 'neither'.

Many other surveys show overwhelming public support for switching to renewable energy. Any reluctance is mainly driven by concerns about feasibility. Questions that *only* propose eliminating the problem, such as 'get rid of coal', get a lower positive response than those which also propose a solution, such 'as move from coal to renewables'. Such top-line population wide responses disguise the fact that there are significant differences between

motivational values groups (see Part Two), with some people being much more ready to embrace change than others. The differing proportions of these groups in society is an underlying factor which accounts for a significant part of the country-to-country differences seen above and in other surveys.

**The Consistency Effect**

Another psychological factor is simply consistency: people who know they are personally invested in 'the problem' would rather not have to change, and for them change is more uncomfortable than for people who are not directly connected to the source of the problem. They then adopt opinions which help resolve this 'cognitive dissonance', for example by deciding that change is not necessary, or cannot be achieved, or both. In this case that means adopting climate sceptic views (no problem), or rejecting the viability of renewables (no solution to go to).

This is probably why a 2013 poll found a strong majority belief in human-made climate change amongst Canadians in every Province except one. This was Alberta, home of the Tar Sands; hideously polluting but also job-creating. The difference is likely to be due to rationalisation, not special knowledge of climate change science.

Similarly, when a 2008 survey asked a wide range of mainly US earth scientists 'Do you think human activity is a significant contributing factor in changing mean global temperatures?', of over 3,000 responses, 82% said 'yes' but only 48% of those working as 'economic geologists'. The most obvious explanation is that if (happiness in) your job depends upon not believing something (it is damaging the planet), you are more likely to shape your opinions accordingly.

This is also why showing that renewables do work technically (eg a community is renewables powered), are accepted (eg householders are happy to have panels on their homes), give rewards (eg payments to householders) and are working at scale (eg Fossil Fuels Just Lost the Race Against Renewables' – Bloombergs 2015), all have the effect of shifting opinion about both renewable energy *and* climate change. A viable attractive alternative reduces the psychological need to deny the problem. Climate scepticism and renewables viability are not different issues but psychologically one and the same.

This in turn means that trying to convert 'sceptics' by arguing with them about climate evidence is far less effective than arranging evidence for them to see, encounter and experience which enables them to conclude for themselves ("I saw it, it's true") that renewables work. In transition some may still *say* they are climate sceptic (see Change Outcomes: Minds Can Follow) but what does it matter if someone says that, while powering their home with renewables and, driving an electric car ? For the climate, it's the lack of 'carbon' emissions that count. Climate change is not caused by opinions.

When advocates persist in trying to 'win the argument' or 'change the minds' of a minority of sceptics, they can perpetuate the frame of 'a society divided' by an issue it is not divided on. At an individual level, they are likely to entrench commitment to a 'sceptic' point of view that people would otherwise eventually forget they held, just as a nation with widespread racist views can gradually lose them, and no-one can remember thinking like that.

Campaigners who understand communications need to make sure they are not fighting the last war, and in this case, to try and help scientists and others who may not understand communications so well, to make sure that their communications do not inadvertently perpetuate a problem.

## Part 2: How Motivational Values Underlie Polling Responses on Climate

Unconscious motivational values play a significant role in determining 'opinions' about climate and energy measured in polling.

What people know about climate change or energy in 'factual' terms (Kahneman's System 2) plays almost no part in their responses to polling. Instead their responses are heavily influenced by the way their values lead them to interpret and react to a statement or question (part of Kahneman's System 1 but operating in a way that varies systematically across three main 'Maslow Groups', and within each of them, four more discrete Values Modes)[3]. These 'values' are not reflective and intellectual as in philosophical values, and nor are they cultural but derive from the fulfilment or not of unconscious needs, which are met or not according to individual life experiences.

These 'values' are about how people see and make sense of the world and what they perceive as undoubtedly true at the most basic level, such as the importance or success, or ethics, care for others or safety, and whether the world is a 'dangerous place'.

Working with values mapping company CDSM, I have been publishing data on the different responses to environmental campaigns across the three main Maslow Groups [Security Driven aka Settlers; Outer Directed aka Prospectors; Inner Directed aka Pioneers] since 2004, and specifically on climate since 2005. With Greenpeace and other Non-Governmental Organisations, with private businesses and public bodies, we have completed

[3] An introductory guide to this system of motivational values at the level of Maslow Groups (MGs: Settler, Prospector, Pioneer) is provided here, and one on communicating with them here. The differences between the four Values Modes (VMs) in each of the three MGs, are explained here: Settler, Prospector, Pioneer.

dozens of quantitative surveys and qualitative research projects covering one or another aspect of 'climate'. Some of the work is linked here.

The CDSM UK model, based on asking up to 8,500 people 1,000 questions, and comparing all the results in order to produce statistical 'values maps', has been calibrated with work conducted by Shalom Schwartz into universally applicable values in over 60 countries. This model has been used to run the surveys discussed in this paper (for questions about the model contact Pat Dade at CDSM but the basics are explored in the 2011 book *What Makes People Tick: The Three Hidden Worlds of Settlers, Prospectors and Pioneers*).

**An Introduction to the Values Modes System**

The CDSM segmentation is psychographic, that it is it maps people into groups according to their psychology by asking about attitudes and beliefs, rather than putting people into groups by age, sex, wealth or other measures (although the surveys also collect those data).

Evidence suggests that as Abraham Maslow proposed, people start life as Settlers and may, as and if they meet their dominant needs (for safety, security, identity and belonging), transition into Prospectors (with a dominant need for success, esteem of others and then self-esteem), and then sometimes to become Pioneers (where their dominant needs are for self-direction, holism, ethics, universalism, innovation and new ideas). People can therefore 'move' from being Security Driven to Outer Directed to Inner Directed (from Settler to Prospector to Pioneer). In contrast new behaviours start with the Pioneers[4], and if they spread, move first to Prospectors and then to Settlers.

The three main MGs (Maslowian Groups) of Settler, Prospector and Pioneer have different underlying (unconscious) needs which shape their dominant beliefs and attitudes about what is really important in life. This creates three different mind-sets or versions of 'common-sense'. This is something taken seriously but decided entirely by 'intuition' (unconsciously, by values etc.).

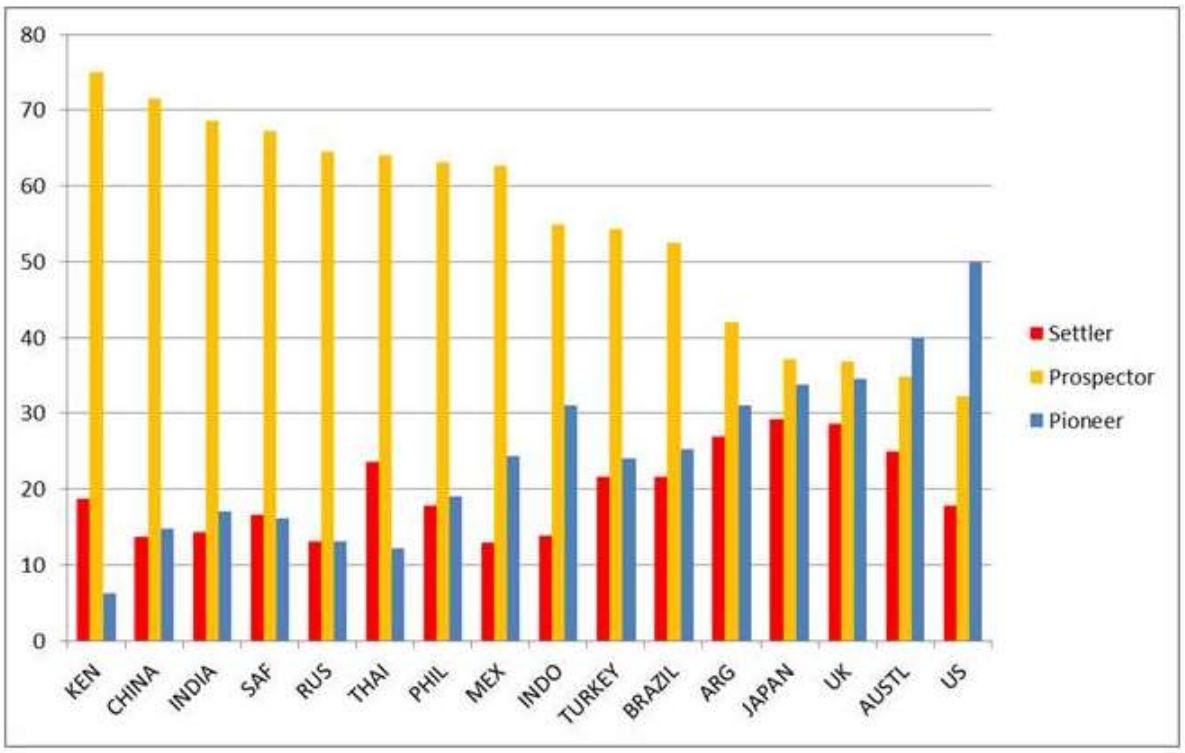
Over time, almost all societies studied by CDSM and others (such as Ron Inglehart in the World Values Survey) show a long term shift from being Settler dominated to Pioneer, via Prospector. The underlying causes of this are measured at international scale by researchers such as Hans Rosling and include improving social health, education, lifespan, sanitation etc.

Values change relatively slowly and mainly on an inter-generational basis. In recent decades some, such as the UK in which there are roughly equal numbers of Settlers, Prospectors and Pioneers, look rather stable. Many others are much more dynamic because there is rapid

[4] This happens by default because Pioneers are by their outlook more experimental and are not held back from trying completely novel behaviours by a concern not to be seen to fail (Prospectors) or a fundamental desire not to see any change that is not absolutely necessary (Settlers)

underlying social change and often, a young and growing population. All the developing countries[5] surveyed here have a majority Prospector population.

Below: gross percentage of each MG in fifteen countries (ranked by % Prospector)




This therefore means that for ideas to spread and be accepted, and for new behaviours to be acted upon, in those countries they need to 'work' for Prospectors.

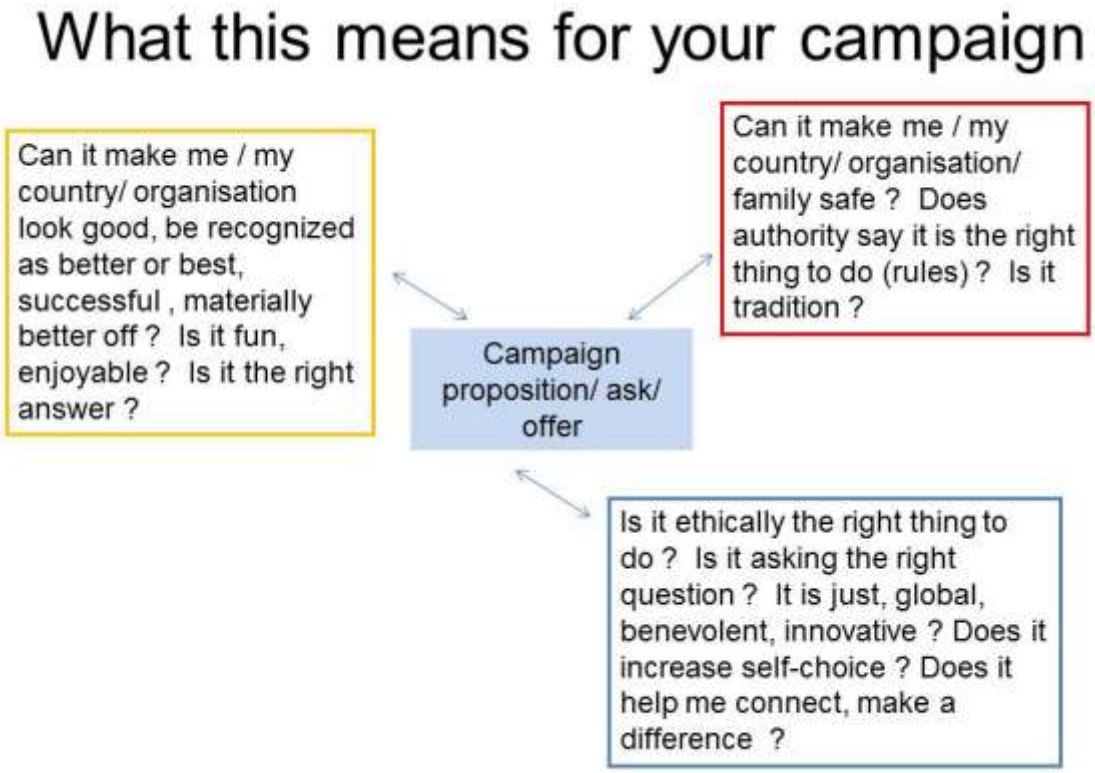
In a democratic pluralist country, few proposals will have 'political legs' unless they have at least tacit support from a broad range of groups and people in society, and this means that any idea – such as the existence of climate change or the desirability of taking action against it – needs to resonate with Pioneers and Prospectors and Settlers.

However, as shown below, this is easiest to achieve on complex, big global issues such as climate change, with Pioneers. The Pioneers also tend to dominate 'cause' groups especially ethical and universalist ones and if a topic becomes polarised along opposed values lines, the result can be a stand-off, leading not to change but an 'issue' which appears politically intractable, even insoluble. This has in the past been a problem for climate change in countries like the US and UK where it has a long history of values polarisation, embedded in politics and media differences.

[5] Except Argentina at over 40% but it is notable the there is sometimes a debate about whether Argentina is a 'developing country'

The good news is that it does not need to be like that and thankfully, in most developing economies it is not so polarised. This is one reason why the 'old' economies (see data in Part One) look more climate sceptic than the newer ones (the Prospectors in the new economies have embraced support for renewables over fossil fuels and do not dispute the existence of climate change).

In effect the three groups have different versions of what 'common sense' looks like and thus how they test any ask or offer.



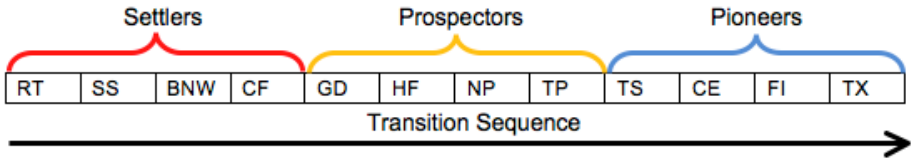

Above: the guiding questions a Settler (red), Prospector (yellow) or Pioneer (blue) might ask themselves if they assessed a proposition.

The simplest application of this model to communications is therefore to tune it to match the values behind these sorts of questions. A common misunderstanding (amongst Pioneers), leading to a reluctance to apply the insights of the model, is that this means offering Prospectors material rewards because they are 'materialistic'. In reality the need to be met is for *esteem* of others or self-esteem: material goods are merely one way to signal that success. Esteem may be gained by economic success but it may not.

Getting an educational qualification, winning new friends, being popular and admired, looking good and being seen to do so, winning a competition (or being approved of for taking part), simply being thanked and liked, and a host of other factors may all confer

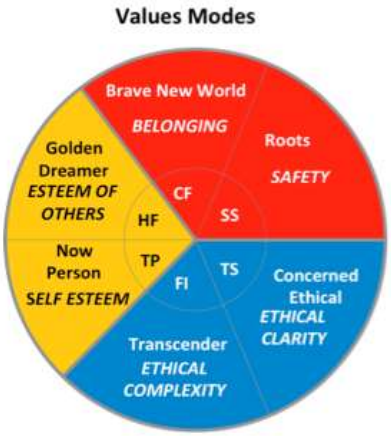
esteem but need not involve material consumption. What does not work for Prospectors is telling them they should not try to succeed, or asking them to give up an opportunity without providing something better (such as better technology). Climate advocates need to think positively, and some are.

The 'Transition Sequence' people may experience as they then move between VMs:

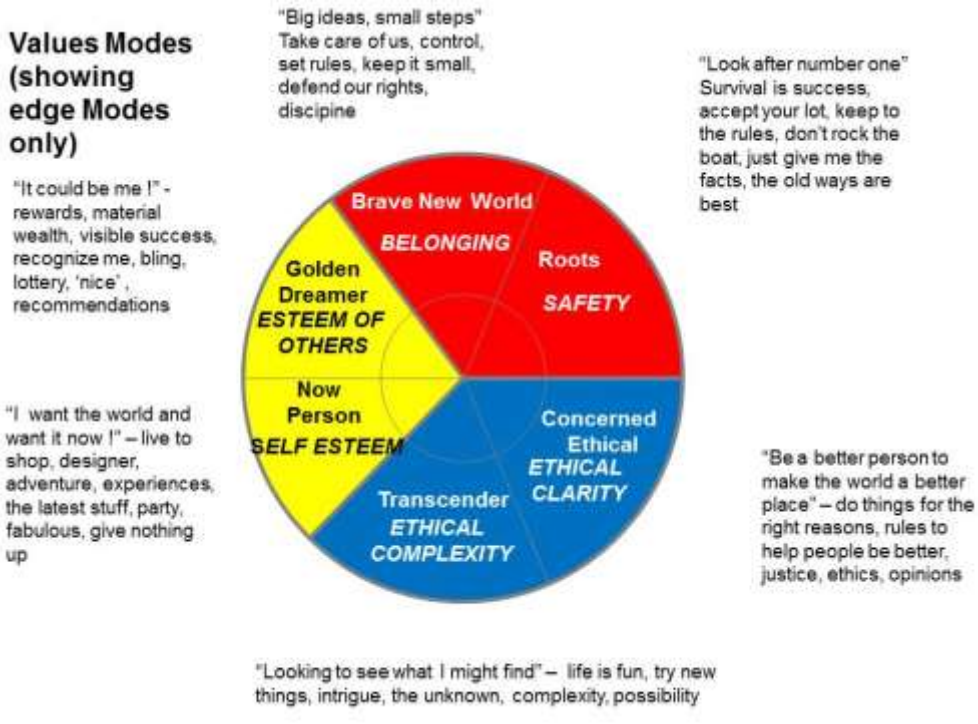



The names given to each Values Mode by CDSM are shown below, together with a schematic version of the 'Values Map':

| | |
|---|---|
| RT | Roots |
| SS | Smooth Sailing |
| BNW | Brave New World |
| CF | Certainty First |
| GD | Golden Dreamer |
| HF | Happy Follower |
| NP | Now Person |
| TP | Tomorrow Person |
| TS | Transitional |
| CE | Concerned Ethical |
| FI | Flexible Individualist |
| TX | Transcender |




The six outside edge Values Modes are the most influential. The 'inside' Values Modes are driven by the same general motivational pulls as those lying further to the 'edge' – they are in effect like pale reflections of the outside edge Modes. Some of the characteristic attitudes of the six outside VMs are shown below.



Although there are many additional variations, in almost all surveys we have found an inflexion between the Pioneers together with the Prospector Now People (most change oriented), and the Prospector Golden Dreamers together with the Settlers (less change oriented). This divide is demonstrated later and is primarily caused by two factors.

First, the Settlers have a lower sense of self-agency: they feel they cannot change the world, rather it determines them. The Pioneers have the highest sense of self-agency: they assume that where there is a will, there is a way, even on climate change. The Golden Dreamer Prospectors are more like the Settlers in this regard, and so reluctant to take on new behaviours unless the consequent success seems pretty well guaranteed. The Now People, having largely achieved esteem of others, are more optimistic and self-confident, and in this respect more like the Pioneers: hence the difference within the Prospectors.

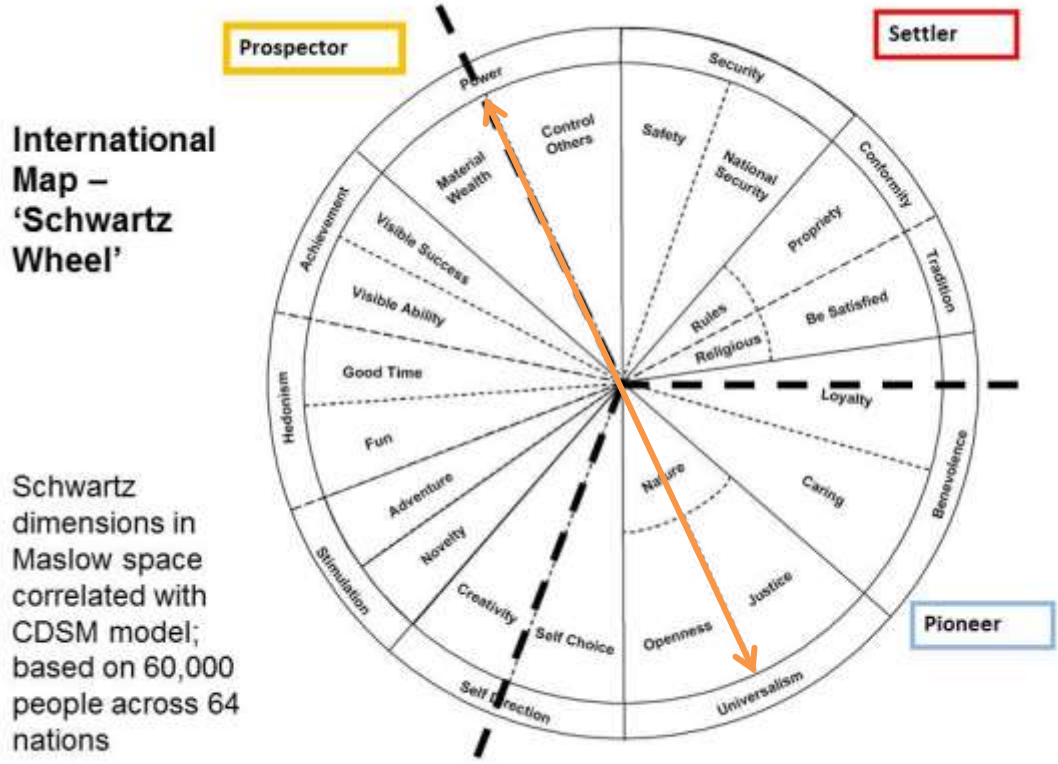
The second factor is caused by the Golden Dreamers' high need to achieve success and to do so quickly. Having just exited Settler world they are as unsure about how this may happen as they are sure that it is necessary. They are therefore very sensitive to anything that threatens their prospects for success, such as loss of control or opportunity, and have a high need for material success and power (not being controlled by others). This leads them to reject the opposite, 'universalism', which is espoused by many Pioneers: the idea that everyone should be treated equally, whoever or wherever they are. (This power v universalism axis is the source of a great deal of political polarisation).

To Golden Dreamers life is a zero sum game: if you have success I won't. So if responses to climate change require giving up opportunity, they will tend to be very against it. Some Pioneers regard this as 'unethical' but Golden Dreamers don't do Pioneer ethics.

Because the Golden Dreamers are very conscious of the Now People, who are the arbiters of what is 'fashionable', the Now People are a highly influential group. For achieving change, the most important point on the values map is between the Transcender Pioneers, and the Now People Prospectors, as it is the bridge across which ideas can move from Pioneer to Prospector. This at least has the advantage of greatly reducing the size of target audience needed to effect change.

Finding out where these groups stand on key topics is therefore very useful.

CDSM's UK system has been calibrated against the internationally verified Schwartz values research (below). Each of the segments in the diagram is labelled with a values short-hand and they lie along antagonisms. For example power is the 'opposite' of universalism and conformity and tradition are opposite to, or antagonistic to, hedonism and stimulation.




Above: international version of the model ('Power v Universalism' marked by the orange arrows)

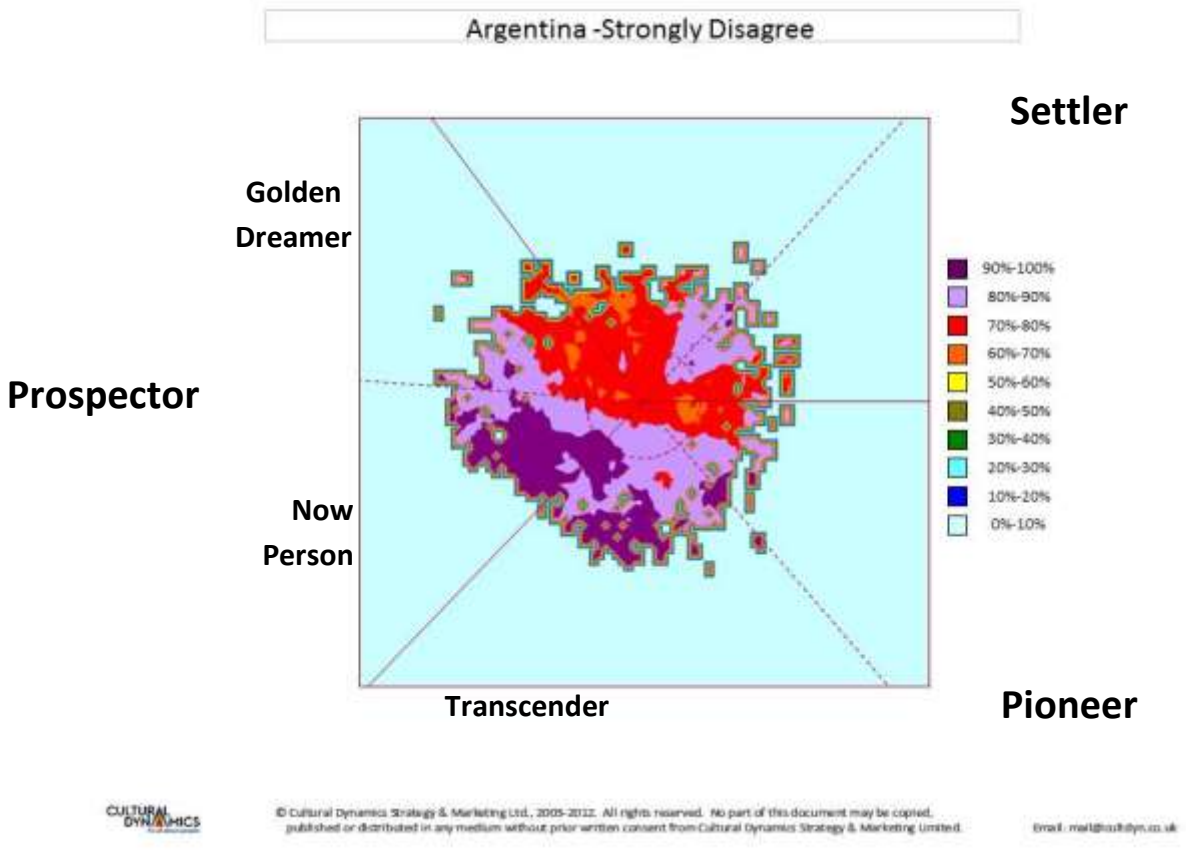
**Climate and Values**

Below are some 'gradient maps' showing the relative 'espousal' (ie agreement or disagreement) with the statement 'Climate change – I don't believe in it'.

This is the top level simplest picture of values response and it is possible to delve into it and show the detail of many values factors that underlie it.

Note that these diagrams visualise the data for the relevant question option (strongly disagree with 'Climate change – I don't believe in it'), across the values map but do not show the numbers of people in the different values groups (see chart on page 15). In some countries the three Maslow Groups are roughly equal in size but in most they are not.

Argentina

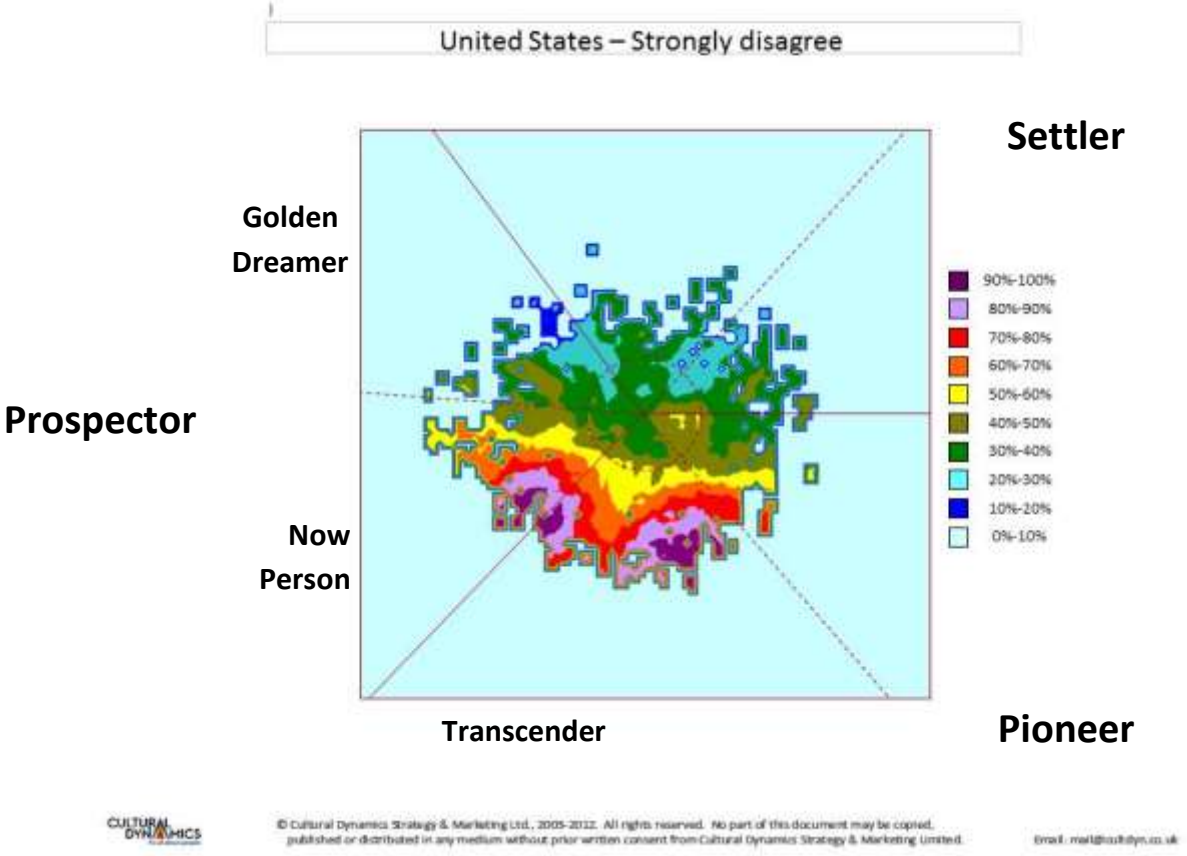



As shown above, Argentina is the country with highest disagreement: 80.4% disagree (ie they *do* believe in climate change) and 67% 'strongly'. Dark purple shows that in that area of the map, over 90% 'disagree'. National 'belief in' climate change is so high that the lowest 'espousal' is still over 60% (see key).

This means that although disagreement with the statement is highest at the bottom left (Transcenders and Now People, who will make up the 'natural' climate advocates) it is widely shared amongst all Settlers and Prospectors. Here are the topline data again:

| | Argenti | Philippin | Kenya | China | SAF | Brazil | Thailan | Australi | Indone | US | Turkey | India | UK | Japan | Russia |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strongly disagree | 67.3 | 59 | 50.8 | 49.5 | 44.4 | 43.3 | 40.2 | 38.3 | 37.5 | 33.8 | 35.6 | 33.5 | 26.9 | 23 | 11.6 |
| Slightly disagree | 13.1 | 18.9 | 15.2 | 27.3 | 16.6 | 20 | 22.6 | 20.5 | 25 | 21.2 | 23.2 | 22.4 | 22.4 | 41.6 | 22.9 |
| all disagree | 80.4 | 77.9 | 66 | 76.8 | 61 | 63.3 | 62.8 | 58.8 | 62.5 | 55 | 58.8 | 55.9 | 49.3 | 64.6 | 34.5 |
| Slightly agree | 4.7 | 6.5 | 11.7 | 8.8 | 13.1 | 12.9 | 12.4 | 11.9 | 14.2 | 13.6 | 15.1 | 18.6 | 18.2 | 11.4 | 18.6 |
| Strongly agree | 3.8 | 7.2 | 13.2 | 2 | 10.6 | 13.4 | 12.6 | 9.8 | 8.5 | 11.7 | 15.5 | 12.6 | 7.8 | 3.6 | 9.3 |
| all agree | 8.5 | 13.7 | 24.9 | 10.8 | 23.7 | 26.3 | 25 | 21.7 | 22.7 | 25.3 | 30.6 | 31.2 | 26 | 15 | 27.9 |
| neither | 11.1 | 8.4 | 9.1 | 12.4 | 15.3 | 10.4 | 12.3 | 19.4 | 14.8 | 19.7 | 10.5 | 13 | 24.7 | 20.3 | 37.6 |

United States






Here, in the US, there is by comparison huge polarisation. Remember that this is only the people picking the option 'strongly disagree'.

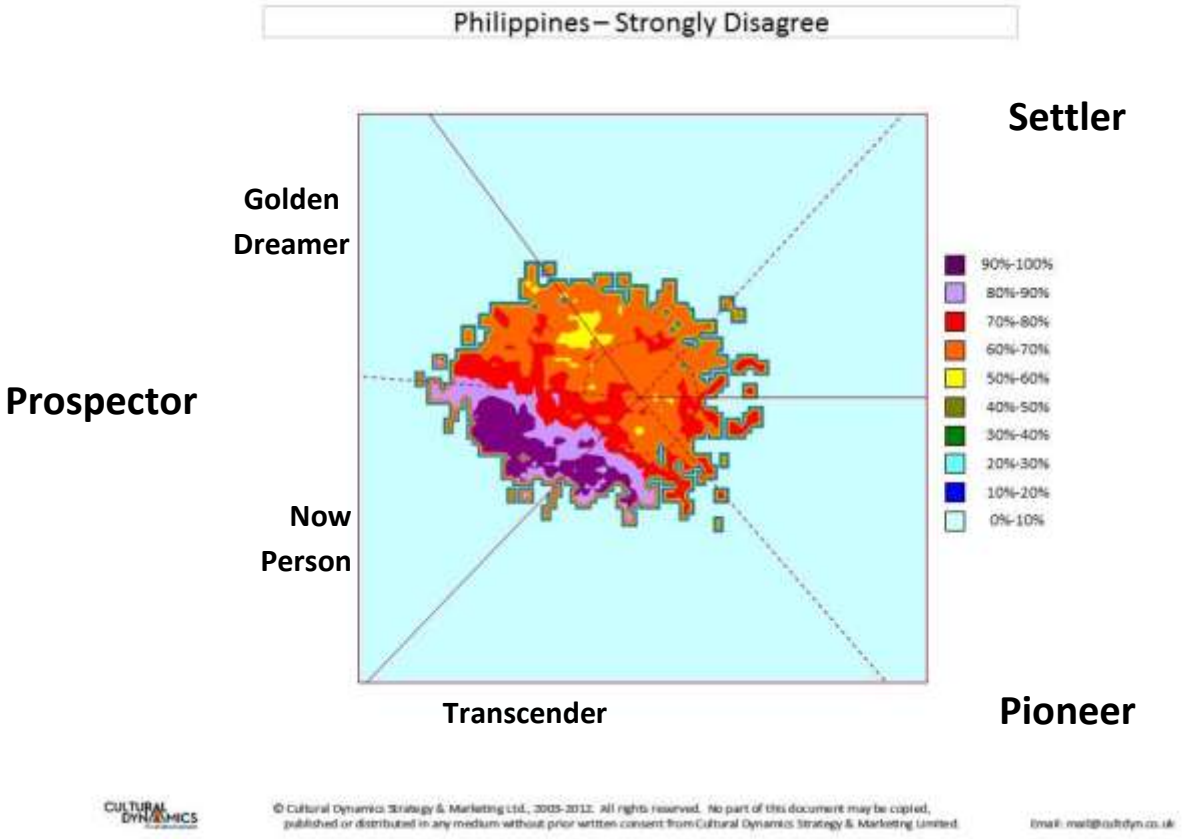
In the US 55% disagreed in total, 33.8% strongly so.

It shows that this is again a view concentrated amongst the Transcender Pioneers and the Now People but there are far fewer who take this view in the Settlers and Golden Dreamers.

This is a recipe for values conflict along the lines of the 'wheel' diagram shown earlier. If something becomes an 'identity test', answered by asking "am I one of those sorts of people ?", then values provide the most potent frame of reference (especially for Settlers who have an unmet need to assert/achieve identity-belonging). This is what has happened on climate in the US which makes change slow in coming. Note that the very lowest score lies at the far edge (dark blue and pale sky blue merging with the background colour) of the Golden Dreamers, top left, where there is maximum agreement with 'power'.

However what this diagram does <u>not</u> show is that the population is not equally spread across the map in the US. The Pioneers are now the largest group (49.9%). This means that the Pioneer area is more numerically influential than this map may suggest but the terms-of-debate problem (avoiding a values conflict) remains.

Philippines



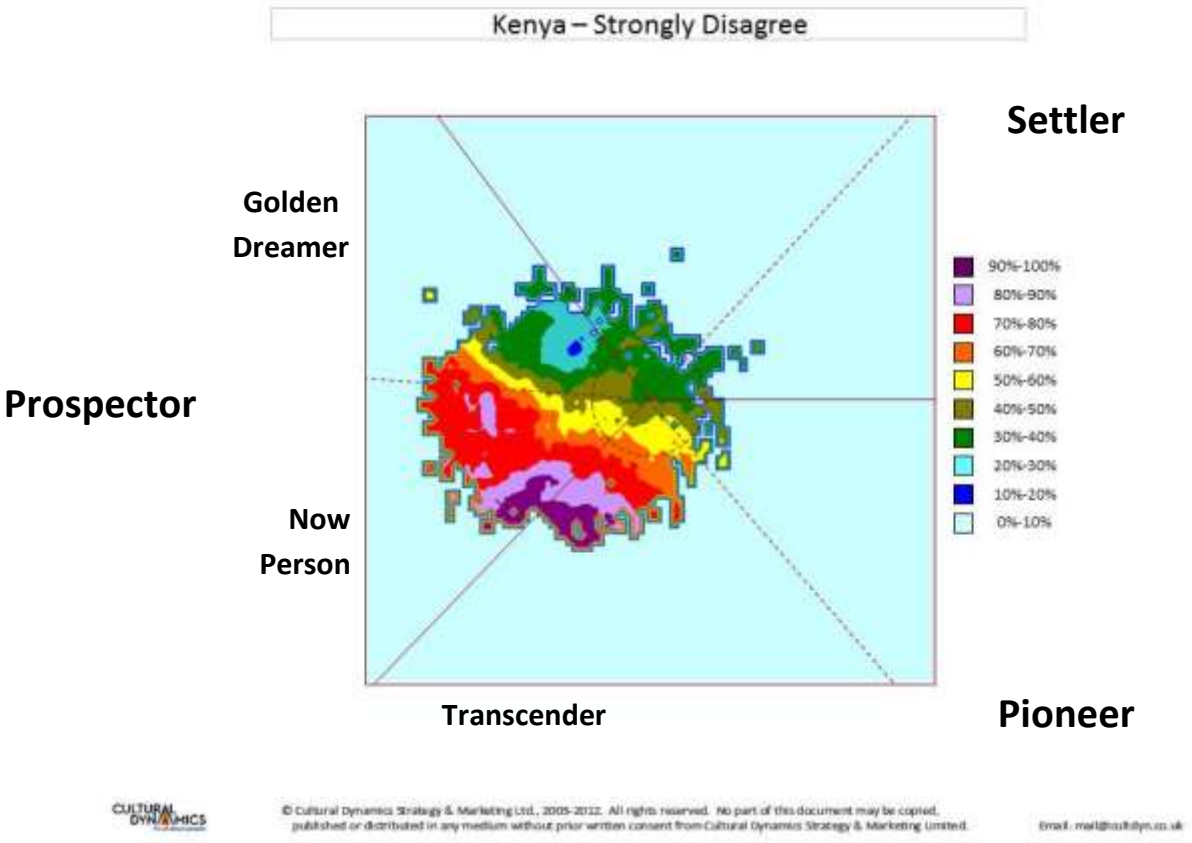

The Philippines looks more like Argentina than the US and is another very non-sceptic country: 77.9% 'disagree' with the statement and 59% do so 'strongly'.

For climate advocacy and campaign purposes, Argentina and the Philippines are similar in terms of overall population opinion but Argentina is around 40% Prospector and the Philippines is over 60% so the target audiences and social dynamics will be very different.

Plotting the 'agrees' or 'sceptics' and the 'neithers' would be a guide to who needs to be influenced, or catered for.

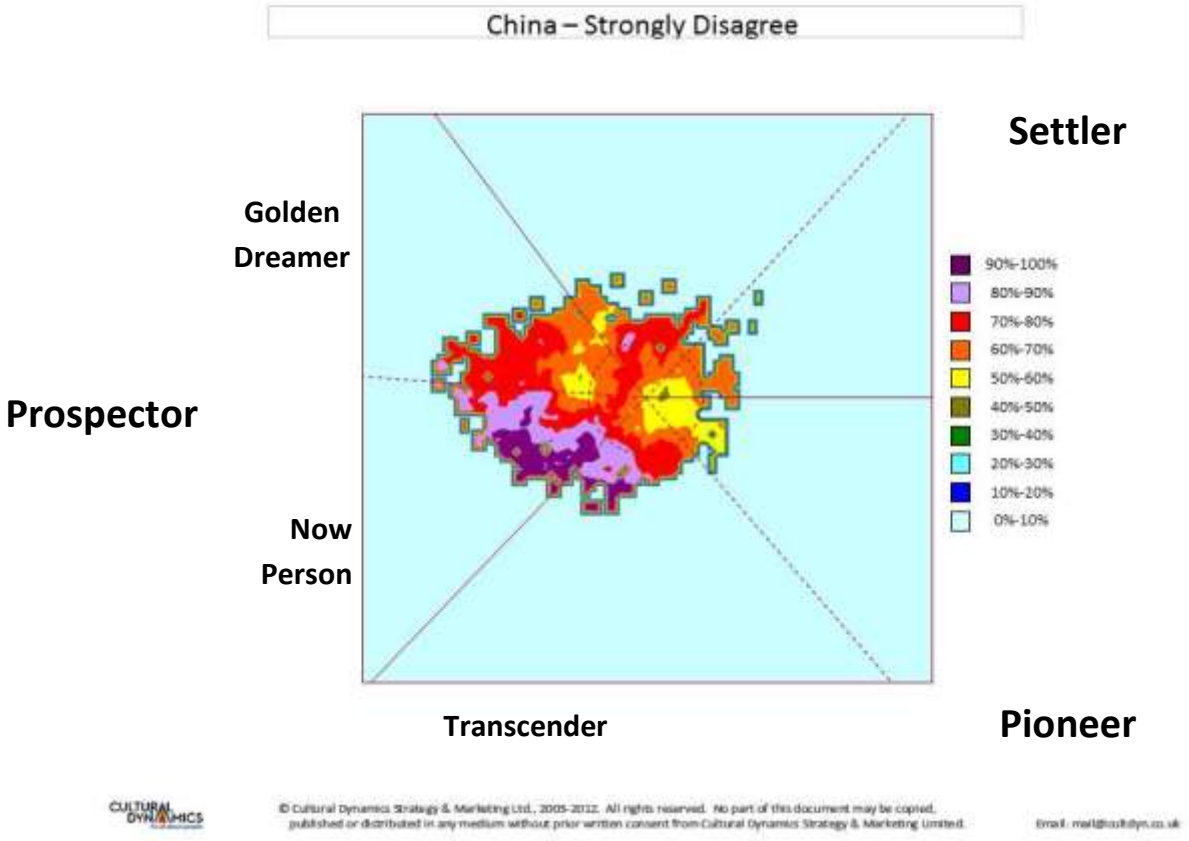
The Now People and Transcenders are the 'base' for climate action.

Kenya




In Kenya 66% disagree and 50.8% strongly. The Now People and Transcenders are the 'base' for climate action but the map shows much greater difference between the Golden Dreamers + Settlers and the Now People + Pioneers than in the Philippines, looking more like the US. In both these countries climate 'scepticism' is concentrated in the Settlers and Golden Dreamers.

China

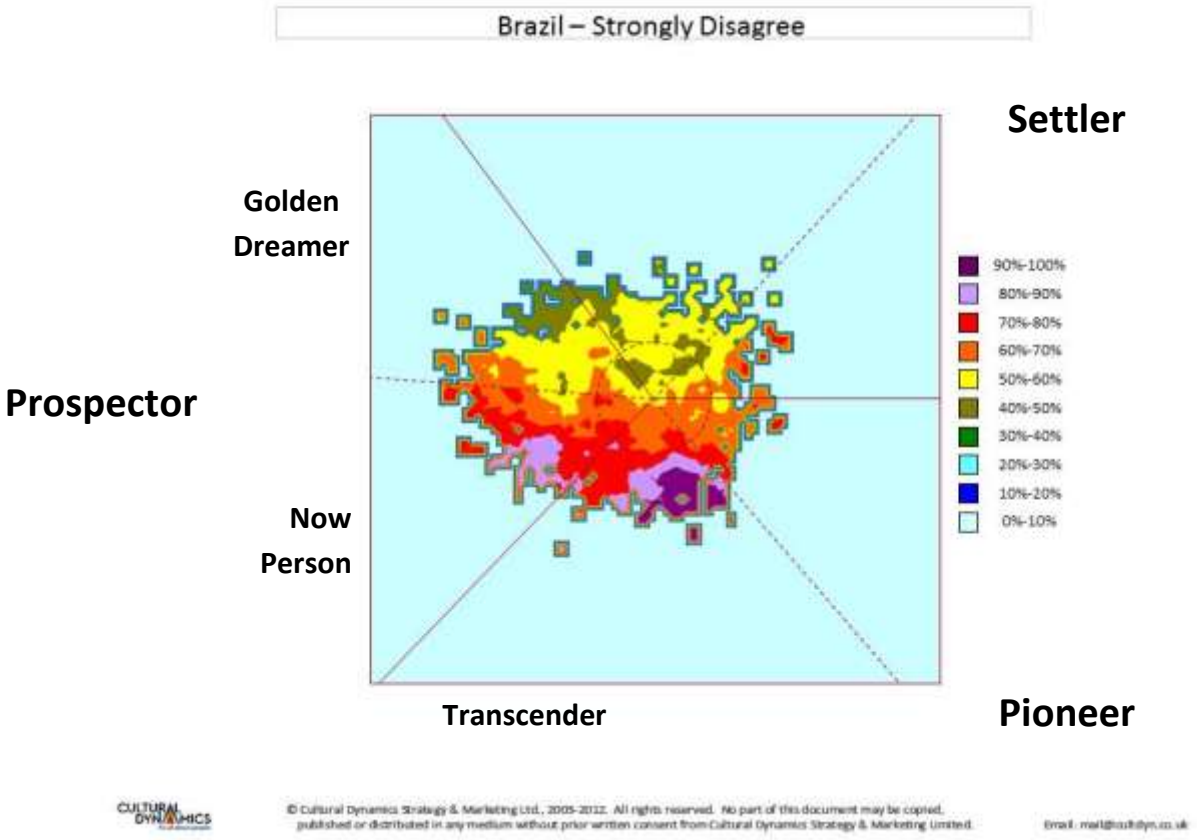




Even in China which has had a very different social history, and where there is very high overall acceptance of climate change as a reality (76.8% 'disagree' with the statement, 49.5% 'strongly') the values response to this statement has the same pattern as in the other countries.

(The overall shape of the map 'bulging out' to the left, is a result of the underlying shape of the values distribution which is skewed heavily to Prospector).

Brazil

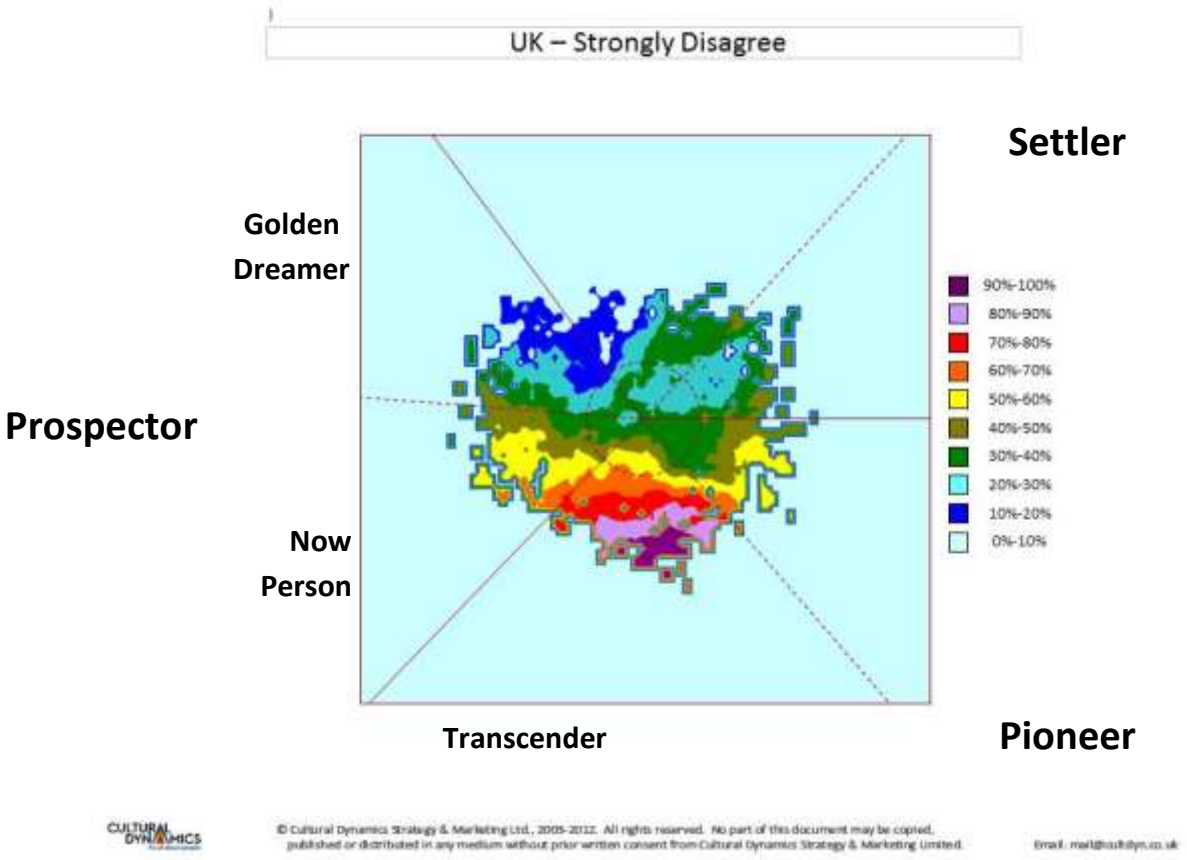





Brazil shows an almost perfect inflection across the middle of the map from left to right, between the Golden Dreamers plus Settlers on the one hand, and the Now People and Pioneers on the other.

In Brazil, 63.3% 'believe in' climate change and disagree with the statement, and 43.3% do so 'strongly'.

UK



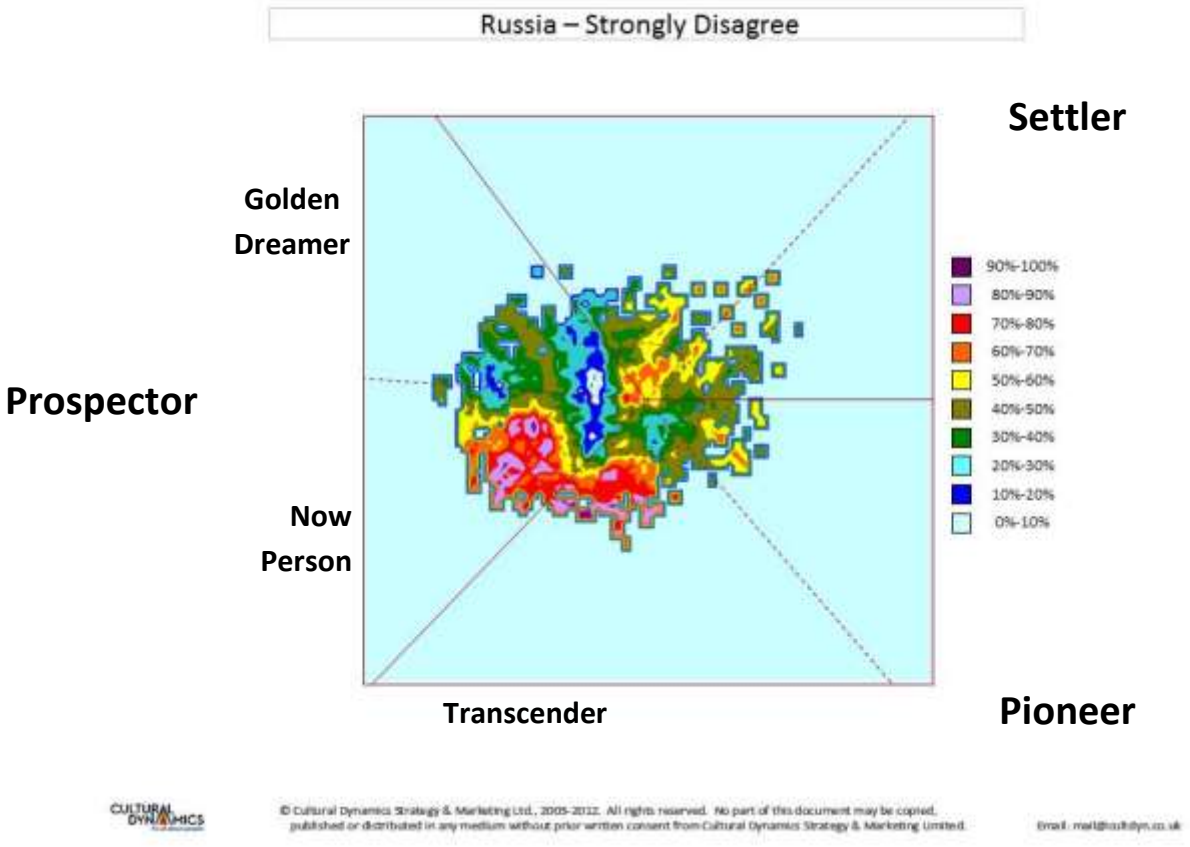



The UK is the first map in this series where the Now People, while significantly 'warmer' to believing in climate change than the Golden Dreamers (and much more so than the Settlers), are not as warm as the Transcender Pioneers. The UK still has a problem with values polarisation on this topic. The lack of strong support is clearly concentrated in the Golden Dreamer area and the adjacent Settler Values Mode of the Brave New Worlds (this area is the core values base of *The Sun* newspaper and the political party UKIP).

49.3% of people in the UK disagree with the statement, and 26.9% do so 'strongly'. Unfortunately because people tend to socialise (and in particular, share options) with others who have the same values as themselves and consume the same media etc., they tend to think "well everyone I know thinks X" so this 26.9% may often be baffled by the apparent paradox that they hear sceptical values reported while not knowing anyone 'like that'.

In fact outright scepticism in the UK is not the problem, so much as the large 24.7% who say 'neither'.

Russia




The Russian values map for this question shows the same concentration of 'strong disagreement' with the statement as in other countries in that it is maximised in the Now People and the Transcenders but here it is greater in the Now People than the Transcenders.

Some 37.6% picked 'neither' in Russia, just 11.6% strongly disagreed and overall 34.5% disagreed. 27.9% agreed, ie were 'sceptic'.

Over 60% of the Russian population is Prospector with the rest roughly equally divided between Settler and Pioneer.

* * *

The above maps illustrate one important insight gained through values-segmented surveys which ordinary opinion polls do not show: that climate belief or scepticism is strongly values driven. These differences are also frequently consistent across populations between different countries and tend to be independent of other more often used metrics such as wealth, social class, age or sex. Where there are significant age or sex differences we have

found that these are cultural, ie they are more country specific. Motivationally people from a values group are also more similar to one another than to others of the same age from another group.

The 'gradient maps' are a quick and relatively easy way to see if there is a 'values issue' on a statement and what it looks like but they do not tell us how significant it is in practical terms unless we also take into account the sizes of the values groups in the population (see eg chart on p 15 for Maslow Groups). CDSM take this into account by 'indexing', assigning an index of 100 to a result if it is in line with the population average taking into account the size of the MG or VM concerned, and less than 100 if the result is less than expected, and over 100 if it is more than expected.

They then colour code the indexes to show how statistically significant the difference is.

| | |
|---|---|
| | Over-represented, significant at 99% confidence level. |
| | Over-represented, significant at 97.5% confidence level. |
| | Over-represented, significant at 95% confidence level. |
| | Neither over nor under represented (at or close to population average) |
| | Under represented, significant at 95% confidence level |
| | Under represented, significant at 97.5% confidence level |
| | Under represented, significant at 99% confidence level |

Below are two data tables, from Kenya and Australia, showing the response to each of the 1-5 options for each of the 12 Values Modes, to the statement: 'Climate change – I don't believe in it'.

The tables are in 'transition order' reflecting the transition people are thought to make, if they do, from one VM to the next: RT Roots> SS Smooth Sailing> BNW Brave New World> CF Certainty First> GD Golden Dreamer> HF Happy Follower> NP Now Person> TP Tomorrow Person> TS Transitional> CE Concerned Ethical> FI Flexible Individualist> TX Transcender.

Strongly agree (scepticism in this case) is at the top, and strongly agree is at the bottom. (The first row for each option shows the number of people in the sample selecting that option. The second shows the % within the VM and the third shows the % which that VM contributes to that option.)

Kenya:

| Climate change - I don't believe in it. | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum of CWSA | | | | | | | | | | VM | | | | |
| Q16r3 | RT | SS | BNW | CF | GD | HF | NP | TP | TS | CE | FI | TX | Grand Total | |
| Strongly agree | 1 | 4 | 6 | 13 | 80 | 16 | 106 | 12 | 3 | 1 | 10 | 25 | 278 | |
| | 8.6% | 18.6% | 14.0% | 25.7% | 18.2% | 6.6% | 11.6% | 10.1% | 9.7% | 7.3% | 8.7% | 10.5% | 13.2% | |
| | 0.4% | 1.5% | 2.3% | 4.7% | 28.9% | 5.6% | 38.3% | 4.4% | 0.9% | 0.4% | 3.5% | 9.1% | | |
| | 65 | 141 | 106 | 194 | 138 | 126 | 87 | 76 | 74 | 55 | 66 | 80 | | |
| Slightly agree | 3 | 7 | 6 | 5 | 98 | 20 | 56 | 16 | 3 | 2 | 20 | 9 | 246 | |
| | 26.7% | 29.5% | 13.7% | 10.6% | 22.3% | 1.5% | 6.1% | 12.9% | 10.4% | 10.5% | 18.5% | 3.6% | 11.7% | |
| | 1.4% | 2.7% | 2.5% | 2.2% | 40.0% | 8.2% | 22.9% | 6.4% | 1.1% | 0.7% | 8.3% | 3.5% | | |
| | 228 | 252 | 117 | 90 | 191 | 184 | 52 | 111 | 89 | 90 | 158 | 31 | | |
| Neither agree nor disagree | 1 | 6 | 4 | 10 | 51 | 9 | 51 | 22 | 4 | 3 | 8 | 21 | 191 | |
| | 8.6% | 26.9% | 8.8% | 19.7% | 11.6% | 9.7% | 5.5% | 18.2% | 15.3% | 20.8% | 7.5% | 8.6% | 9.1% | |
| | 0.6% | 3.2% | 2.1% | 5.3% | 26.9% | 4.7% | 26.7% | 11.6% | 2.2% | 1.7% | 4.3% | 10.8% | | |
| | 95 | 297 | 97 | 217 | 128 | 106 | 61 | 201 | 168 | 228 | 82 | 95 | | |
| Slightly disagree | 2 | 1 | 11 | 11 | 72 | 15 | 136 | 21 | 6 | 2 | 19 | 24 | 319 | |
| | 14.2% | 5.0% | 23.2% | 21.6% | 16.2% | 6.4% | 14.8% | 17.1% | 22.1% | 15.7% | 17.0% | 9.9% | 15.2% | |
| | 0.6% | 0.4% | 3.3% | 3.5% | 22.5% | 4.8% | 42.6% | 6.5% | 1.9% | 0.8% | 5.9% | 7.4% | | |
| | 94 | 33 | 153 | 143 | 107 | 108 | 97 | 113 | 146 | 103 | 112 | 65 | | |
| Strongly disagree | 5 | 5 | 18 | 11 | 139 | 33 | 571 | 51 | 11 | 7 | 53 | 161 | 1067 | |
| | 41.8% | 20.0% | 40.3% | 22.4% | 31.6% | 5.8% | 62.0% | 41.7% | 42.4% | 45.7% | 48.3% | 67.3% | 50.8% | |
| | 0.5% | 0.4% | 1.7% | 1.1% | 13.1% | 3.1% | 53.5% | 4.7% | 1.1% | 0.7% | 5.0% | 15.1% | | |
| | 82 | 39 | 79 | 44 | 62 | 71 | 122 | 82 | 84 | 90 | 95 | 133 | | |
| Grand Total | 13 | 23 | 46 | 51 | 441 | 93 | 921 | 121 | 27 | 16 | 111 | 239 | 2101 | |
| | 0.6% | 1.1% | 2.2% | 2.4% | 21.0% | 4.4% | 43.8% | 5.8% | 1.3% | 0.7% | 5.3% | 11.4% | | |

Australia

| Climate change - I don't believe in it. | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum of CWSA | | | | | | | | | VM | | | | |
| Q16r6 | RT | SS | BNW | CF | GD | HF | NP | TP | TS | CE | FI | TX | Grand Tot |
| Strongly a | 14 | 9 | 18 | 12 | 66 | 9 | 9 | 8 | 5 | 11 | 12 | 24 | 197 |
| | 11.1% | 9.7% | 14.2% | 7.7% | 28.3% | 8.0% | 4.3% | 5.5% | 5.0% | 7.9% | 6.1% | 6.5% | 9.8% |
| | 7.1% | 4.6% | 9.1% | 6.1% | 33.5% | 4.6% | 4.6% | 4.1% | 2.5% | 5.6% | 6.1% | 12.2% | |
| | 113 | 99 | 145 | 79 | 289 | 82 | 44 | 56 | 51 | 80 | 62 | 66 | |
| Slightly ag | 8 | 15 | 18 | 23 | 57 | 22 | 20 | 13 | 18 | 8 | 12 | 25 | 239 |
| | 6.3% | 16.1% | 14.2% | 14.7% | 24.5% | 9.6% | 9.5% | 8.9% | 17.8% | 5.7% | 6.1% | 6.8% | 11.9% |
| | 3.3% | 6.3% | 7.5% | 9.6% | 23.8% | 9.2% | 8.4% | 5.4% | 7.5% | 3.3% | 5.0% | 10.5% | |
| | 53 | 136 | 119 | 124 | 206 | 165 | 80 | 75 | 150 | 48 | 52 | 57 | |
| Neither ag | 31 | 18 | 28 | 38 | 32 | 26 | 46 | 42 | 21 | 22 | 44 | 43 | 391 |
| | 24.6% | 19.4% | 22.0% | 24.4% | 13.7% | 23.2% | 21.8% | 28.8% | 20.8% | 15.7% | 22.4% | 11.6% | 19.4% |
| | 7.9% | 4.6% | 7.2% | 9.7% | 8.2% | 6.6% | 11.8% | 10.7% | 5.4% | 5.6% | 11.3% | 11.0% | |
| | 127 | 100 | 113 | 125 | 71 | 119 | 112 | 148 | 107 | 81 | 115 | 60 | |
| Slightly di | 23 | 20 | 30 | 37 | 37 | 22 | 38 | 44 | 18 | 30 | 52 | 62 | 413 |
| | 18.3% | 21.5% | 23.6% | 23.7% | 15.9% | 9.6% | 18.0% | 30.1% | 17.8% | 21.4% | 26.5% | 16.8% | 20.5% |
| | 5.6% | 4.8% | 7.3% | 9.0% | 9.0% | 5.3% | 9.2% | 10.7% | 4.4% | 7.3% | 12.6% | 15.0% | |
| | 89 | 105 | 115 | 115 | 77 | 96 | 88 | 147 | 87 | 104 | 129 | 82 | |
| Strongly d | 50 | 31 | 33 | 46 | 41 | 33 | 98 | 39 | 39 | 63 | 76 | 216 | 771 |
| | 39.7% | 33.3% | 26.0% | 29.5% | 17.6% | 19.5% | 46.4% | 26.7% | 38.6% | 49.3% | 38.8% | 58.4% | 38.3% |
| | 6.5% | 4.0% | 4.3% | 6.0% | 5.3% | 4.3% | 12.7% | 5.1% | 5.1% | 8.9% | 9.9% | 28.0% | |
| | 104 | 87 | 68 | 77 | 46 | 77 | 121 | 70 | 101 | 129 | 101 | 152 | |
| Grand Tot | 126 | 93 | 127 | 156 | 233 | 112 | 211 | 146 | 101 | 140 | 196 | 370 | 2011 |
| | 6.3% | 4.6% | 6.3% | 7.8% | 11.6% | 5.6% | 10.5% | 7.3% | 5.0% | 7.0% | 9.7% | 18.4% | |

In both cases there is a trend along the 'values transition' which runs from RT>TX (dashes). On this question in most countries, the difference is most marked in terms of over-indexes between the BNW (Brave New World) Settlers and Golden Dreamers (GD) Prospectors, at one end, and the TX Pioneers at the other.

There is also an inflexion (solid line) lying between the GD Golden Dreamers, who over index on 'agree', and their adjacent outside edge VM the Now People, who over index on *disagree*.

Despite the huge economic and social differences between Australia and Kenya the pattern is the same. For example TX Transcender Australians over index on strongly disagree at 152

(52% more than the population average) while Australian Golden Dreamers over index on 'strongly agree' at 289 or almost three times the population average. In Kenya the TX Transcenders over index on strongly disagree at 133 (33% more than the population average) while Kenyan Golden Dreamers over index on 'strongly agree' at 194 or almost twice the population average.

These differences are significant at the 99% confidence level (red colouring). Both populations have an inflexion between the Golden Dreamers and the Now People, is splitting the Prospectors.

If there is any doubt that this values effect applies more widely, here are the index data from 12 countries for strongly agree (climate sceptic) and disagree (non-sceptic) by Values Mode.

| Climate change - I don't believe in it. | | | | Strongly agree | | | STRONG SCEPTIC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | VM | | | |
| | RT | SS | BNW | CF | GD | HF | NP | TP | TS | CE | FI | TX |
| ARGENTINA | 93 | 0 | 216 | 45 | 134 | 91 | 62 | 126 | 91 | 129 | 121 | 68 |
| THAILAND | 138 | 207 | 187 | 139 | 98 | 62 | 76 | 75 | 78 | 58 | 45 | 29 |
| US | 222 | 152 | 216 | 82 | 190 | 127 | 51 | 57 | 53 | 140 | 96 | 53 |
| INDONESIA | 119 | 44 | 221 | 58 | 179 | 76 | 113 | 88 | 69 | 69 | 67 | 52 |
| PHILIPPINES | 44 | 165 | 150 | 112 | 136 | 98 | 55 | 166 | 115 | 0 | 27 | 52 |
| INDIA | 86 | 186 | 134 | 89 | 142 | 93 | 72 | 72 | 38 | 106 | 75 | 41 |
| CHINA | 0 | 0 | 228 | 52 | 170 | 65 | 87 | 0 | 0 | 0 | 145 | 118 |
| BRAZIL | 43 | 104 | 149 | 163 | 127 | 68 | 94 | 77 | 60 | 162 | 62 | 77 |
| UK | 122 | 39 | 189 | 95 | 205 | 78 | 60 | 81 | 48 | 80 | 38 | 29 |
| RUSSIA | 196 | 111 | 241 | 101 | 134 | 46 | 97 | 90 | 85 | 126 | 51 | 64 |
| AUSTRALIA | 113 | 99 | 145 | 79 | 289 | 82 | 44 | 56 | 51 | 80 | 62 | 66 |
| KENYA | 65 | 141 | 106 | 194 | 138 | 126 | 87 | 76 | 74 | 55 | 66 | 80 |

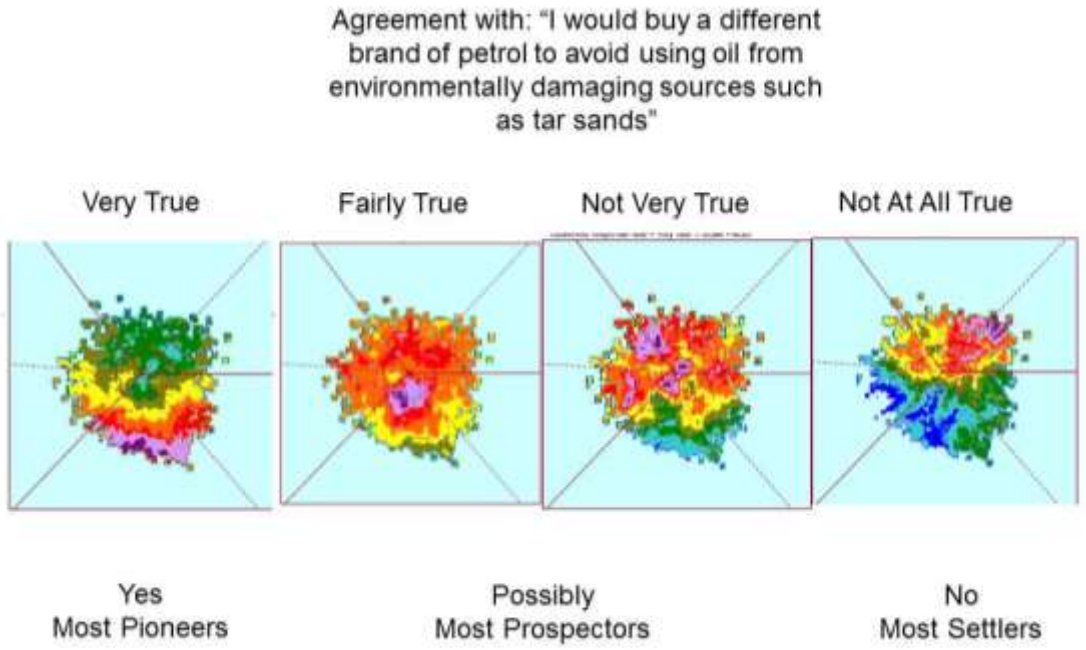
| Climate change - I don't believe in it. | | | | Strongly disagree | | | STRONGLY NON- SCEPTIC (believer) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RT | SS | BNW | CF | GD | HF | NP | TP | TS | CE | FI | TX |
| ARGENTINA | 104 | 83 | 93 | 103 | 94 | 92 | 113 | 82 | 89 | 89 | 108 | 109 |
| THAILAND | 125 | 95 | 100 | 90 | 89 | 91 | 113 | 114 | 118 | 102 | 99 | 143 |
| US | 65 | 59 | 69 | 80 | 56 | 54 | 127 | 73 | 107 | 102 | 72 | 145 |
| INDONESIA | 93 | 72 | 58 | 92 | 73 | 113 | 107 | 95 | 117 | 91 | 99 | 136 |
| PHILIPPINES | 98 | 73 | 88 | 94 | 92 | 89 | 118 | 104 | 102 | 133 | 90 | 116 |
| INDIA | 97 | 103 | 64 | 91 | 78 | 74 | 142 | 71 | 106 | 137 | 104 | 136 |
| CHINA | 119 | 93 | 96 | 89 | 91 | 96 | 117 | 98 | 86 | 68 | 84 | 124 |
| BRAZIL | 111 | 86 | 78 | 76 | 85 | 86 | 110 | 109 | 100 | 88 | 108 | 139 |
| UK | 81 | 75 | 53 | 77 | 59 | 66 | 128 | 96 | 74 | 132 | 122 | 213 |
| RUSSIA | 183 | 44 | 122 | 89 | 87 | 79 | 114 | 72 | 51 | 100 | 96 | 135 |
| AUSTRALIA | 104 | 87 | 68 | 77 | 46 | 77 | 121 | 70 | 101 | 129 | 101 | 152 |
| KENYA | 82 | 39 | 79 | 44 | 62 | 71 | 122 | 82 | 84 | 90 | 95 | 133 |

The values effect (see column colours) is very clear. Brave New World (BNW) Settlers and Golden Dreamer (GD) Prospectors consistently over-index (red/orange) on strong climate sceptic (top), while Now People (NP) Prospectors tend to under index (blue/green), along with Pioneers, especially Transcenders (TX).

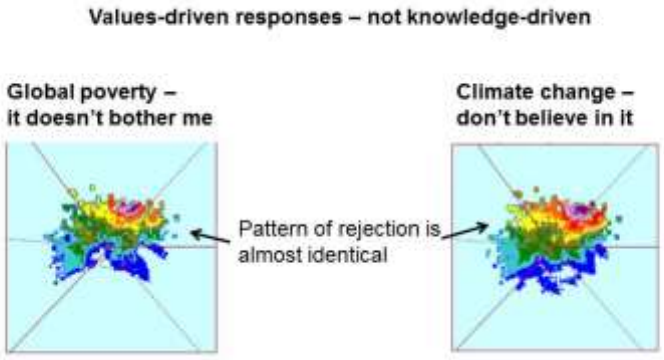
In contrast, the VMs Now People (NP) and Transcenders (TX) both strongly and consistently over index on being non-sceptic, or 'believers' in climate change. The GDs and BNWs under

index. These differences occur across a group of countries with different economies, demographics, cultures and social systems.

If we were to look at questions about willingness to take positive action to avoid adding to climate change, we would see a similar pattern, for example on the renewables statements reported earlier. Below is an example from the UK testing the (theoretical) idea of better petrol (non tar-sand). [From a non-Greenpeace survey].




The *global* nature of the climate problem, as well as the possible personal consequences of taking action, have a lot to do with such responses. Settlers are not globally orientated but if the topic was more local or national and they and their family or community had a direct stake in it, the response might look very different. The global effect is also evident in the UK responses shown below, on two apparently disconnected issues: global poverty and climate change (here the climate data is agreement with scepticism).



This does not mean Settlers are 'uncaring'. Settlers are often strong givers to *local* charities: to kith and kin and our community or our place, as in "charity begins at home" or "our boys".

**Conclusions**

1. There is no evidence that 'climate change disbelief' or scepticism is a significant problem in public opinion (as opposed to politics and media). In 15 of 15 countries surveyed, climate 'believers' outweigh 'sceptics'.
2. In no case in 15 countries does 'strong scepticism' (strongly agreeing with the statement "Climate Change – I don't believe in it") reach more than 20%. In the US it is under 12% despite a majority of Republican politicians (but not Republican voters) being 'sceptic'.
3. In all countries surveyed, more people believe in climate change than do not believe in it.
4. Polls run in the US and UK do not represent the rest of the world: the public in the great majority of countries are much less climate sceptic than those in a country like Britain. Strong 'believers' outweigh 'strong sceptics' in Argentina more than 10:1, in the Philippines more than 8:1, and even in the UK 4:1, in the US about 3:1 and in Turkey, the most 'sceptic' of the 15, by more than 2:1.
5. A majority in all countries (eight tested) agree they have noticed the climate changing. Significantly more agree with this than agree that they 'believe in' climate change. This apparent paradox is due to both questions being assessed intuitively not analytically but in different ways.
6. There is majority support for increasing renewable energy as the main source of electricity in all eight countries where questions were asked (in most cases over 70%).
7. Values segmented responses show that unconsciously-held motivational values are determining differences in public opinion on 'climate change' within countries, and the willingness to engage in the steps required to tackle it.
8. The Now People Prospectors and the Transcender Pioneers are consistently the 'climate leader' Values Modes. The Golden Dreamer Prospectors and Brave New World Settlers lead the sceptics.
9. This is true across countries with very different cultures, political and social systems and at different stages of development.
10. Opinion polls that do not take values into account are blind to these insights and communications campaigns drawn up on the basis of 'normal' opinion polls can easily be wrongly framed or targeted at as a result.
11. The underlying values biases or skews are consistent across countries despite the big differences in the <u>overall level</u> of climate belief or scepticism (and although not much explored here, when it comes to taking action such as supporting renewables, unless

the ask/offer is reformulated to match Settler or Golden Dreamer Prospector values).

12. Other unconscious (Kahneman System 1) factors such as framing and heuristics, intersect with values to drive behaviour and opinion, even leading to people saying they have noticed the climate changing is happening, while also saying that climate change does not exist.
13. Climate advocates and communicators need to utilise values insights to improve their communications and avoid perpetuating redundant frames such as societies divided over climate change. This only plays into the hands of their opponents in the fossil fuel lobby. They also need to influence climate scientists not to inadvertently create the same effect.

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Contact: chris@campaignstrategy.co.uk