APPENDICES to the Climate Outreach report

Climate Visuals

Seven principles for visual climate change communication (based on international social research)

Read the report and visit the online image bank www.climatevisuals.org

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Climate Outreach

The Old Music Hall, 106-108 Cowley Road, Oxford OX4 1JE

Phone: + 44 (0) 1865 403 334 / email: info@climateoutreach.org

@climateoutreach / www.climateoutreach.org

Appendix 1: Images used in the research

1.1 Images used in the online survey and discussion groups

49 images were used in the discussion groups, with 24 images in total in the online survey. Each survey participant viewed 6 images (from either the Causes, Impacts or Solutions categories). Within each of these categories, one images was 'localised' to be relevant to the country participants were from (e.g. German participants saw an image of a German flood, if they were in the Impacts category).

The images in Table 1 are listed according to the three categories used in the survey and on climatevisuals.org. Note that not all images used in the discussion groups are presented, due to purchasing costs. However, all the images used in the discussion groups are described verbally in words in Appendix 1.2. Where a suitable generic alternative was available, and where purchasing costs were high, tested images have been substituted with a 'Creative Commons' image.

Accompanying each image are some simple 'descriptive' statistics, noting the mean rating assigned to each image (across all participants) on each of the image questions.

Images used in the research

Category: Climate Causes



Image 1. MAN AND FIRE. Used in discussion groups (category B1: Ordinary people). © Ed Kashi



Image 2: SMOKESTACKS. Used in survey. Photo: Andreas Habich (CC BY-SA 3.0)

| SURVEY RESULTS (mean scores) | | | | | | | | |
|---|-----------------------------|--|------------------------|--|--|--|--|--|
| Understanding1: 4 | 1.25 | Affect ² : -2.72 | | | | | | |
| Info seek motiv.3: | 2.72 | Share image ¹ : 3.57 | | | | | | |
| Beh. change des | ¹ : 3.64 | Support gov policy4: 5.17 | | | | | | |
| Urgency for other | s ¹ : 3.88 | Prevention policy ¹ : 3.63 | | | | | | |
| Adaptation policy | ¹: 3.68 | Others share image ³ : 2.88 | | | | | | |
| Scored top 3 of all causes images for 9/10 questions, of which top 1 for 7. See Appendix 4.2. | | | | | | | | |
| ¹ 1–5 scale | ² -5 to +5 scale | 3 1-4 scale | ⁴ 1–7 scale | | | | | |
| | | | | | | | | |



Image 3: DEFORESTATION. Used in discussion groups (category C1: Causes) and survey. © Greenpeace / Daniel Beltrá

Understanding¹: 3.94
Info seek motiv.³: 2.85
Beh. change des.¹: 3.53
Urgency for others¹: 3.65
Adaptation policy¹: 3.52

Affect²: -2.34
Share image¹: 3.59
Support gov policy⁴: 5.05
Prevention policy¹: 3.46
Others share image³: 2.81

Scored top 3 of all causes images for 8/10 questions, of which top 1 for 2. See Appendix 4.2.

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 4: MEAT-EATING. Used in discussion groups (category C1: Causes) and survey. © Lisa A / Shutterstock

SURVEY RESULTS (mean scores)

Understanding¹: 3.21 Affect²: -0.39
Info seek motiv.³: 2.16 Share image¹: 2.6
Beh. change des.¹: 2.43 Support gov policy⁴: 3.83
Urgency for others¹: 2.4
Adaptation policy¹: 2.4
Others share image³: 2.04



Image 5. FAMILY AND CAR. Used in discussion groups (category C1: Causes). © EduWales / Alamy Stock Photo



Image 6: HIGHWAY GERMANY
Used in survey. Photo: Markus Tacker (CC BY-ND 2.0).
Country specific: Germany

SURVEY RESULTS (mean scores)

Understanding¹: 4.11 Affect²: -1.64
Info seek motiv.³: 2.42 Share image¹: 3.1
Beh. change des.¹: 3.23 Support gov policy⁴: 4.72
Urgency for others¹: 3.24 Prevention policy¹: 3.07
Adaptation policy¹: 3.16 Others share image³: 2.45

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 7: HIGHWAY UK. Used in survey. Photo: Highways England (CC BY 2.0). Country specific: UK

Understanding¹: 3.98 Affect²: -1.89
Info seek motiv.³: 2.17 Share image¹: 3.09
Beh. change des.¹: 3.08 Support gov policy⁴: 4.64
Urgency for others¹: 3.23 Prevention policy¹: 3.15
Adaptation policy¹: 3.11 Others share image³: 2.37

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 8: HIGHWAY US. Used in survey. Photo: Florian (CC BY-ND 2.0). Country specific: US

SURVEY RESULTS (mean scores)

Understanding¹: 4.05
Info seek motiv.³: 2.42
Beh. change des.¹: 3.35
Urgency for others¹: 3.32
Adaptation policy¹: 3.19

Affect²: -1.76
Share image¹: 3.22
Support gov policy⁴: 4.74
Prevention policy¹: 3.15
Others share image³: 2.53



Image 9: TAR SANDS. Used in discussion groups (category C1: Causes) and survey. Photo: Dru Oja Jay (CC BY 2.0)

SURVEY RESULTS (mean scores)

Understanding¹: 3.24
Info seek motiv.³: 2.62
Beh. change des.¹: 3.2
Urgency for others¹: 3.36
Adaptation policy¹: 3.25

Affect²: -1.71
Share image¹: 3.28
Support gov policy⁴: 4.68
Prevention policy¹: 3.23
Others share image³: 2.61

Scored top 3 of all causes images for 6/10 questions. See Appendix 4.2.

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 10: COAL RAILROAD. Used in discussion groups (category C1: Causes) and survey. Photo: Zhart (CC BY-SA 3.0)

SURVEY RESULTS (mean scores)

Understanding¹: 3.24 Affect²: -1.13
Info seek motiv.³: 2.52 Share image¹: 3.14
Beh. change des.¹: 2.98 Support gov policy⁴: 4.45
Urgency for others¹: 3.04 Prevention policy¹: 2.97
Adaptation policy¹: 2.97 Others share image³: 2.44

¹ 1–5 scale ²-5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale

Category: Climate Impacts



Image 11: MAN IN WATER. Used in discussion groups (category C2: Impacts) and survey. © Paula Bronstein

SURVEY RESULTS (mean scores)

Understanding¹: 3.47
Info seek motiv.³: 2.59
Beh. change des.¹: 3.12
Urgency for others¹: 3.34
Adaptation policy¹: 3.24
Affect²: -1.66
Share image¹: 3.18
Support gov policy⁴: 4.59
Prevention policy¹: 3.21
Others share image³: 2.59

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale

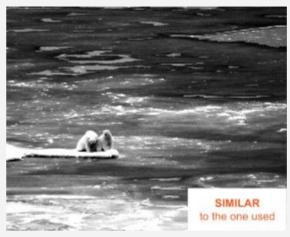


Image 12: POLAR BEAR. Used in discussion groups (category C2: Impacts) and survey. Photo: U.S. Geological Survey (CC0 1.0)

SURVEY RESULTS (mean scores)

Understanding¹: 4.34 Affect²: -1.75
Info seek motiv.³: 2.95 Share image¹: 3.85
Beh. change des.¹: 3.8 Support gov policy⁴: 5.33
Urgency for others¹: 3.92 Prevention policy¹: 3.75
Adaptation policy¹: 3.76 Others share image³: 3.06

Scored best of all impact images for 9/10 questions. See Appendix

4.2.



Image 13: TUVALU SIGN. Used in discussion groups (category A1: Location, international pairs) and survey. © [Unknown]

SURVEY RESULTS (mean scores)

Understanding¹: 3.68 Affect²: -0.86
Info seek motiv.³: 2.61 Share image¹: 3.33
Beh. change des.¹: 3.32 Support gov policy⁴: 4.77
Urgency for others¹: 3.42 Prevention policy¹: 3.29
Adaptation policy¹: 3.31 Others share image³: 2.68

¹ 1–5 scale ²-5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 14: MARRIED COUPLE. Used in discussion groups (category B1: Ordinary people) and survey. © Francis R. Malasig/epa/Corbis

SURVEY RESULTS (mean scores)

Understanding¹: 3.34 Affect²: -0.3
Info seek motiv.³: 2.5 Share image¹: 3.16
Beh. change des.¹: 3.07 Support gov policy⁴: 4.55
Urgency for others¹: 3.22 Prevention policy¹: 3.11
Adaptation policy¹: 3.16 Others share image³: 2.56



Image 15: FLOOD UK. Used in discussion groups (category A1: Location, UK pairs) and survey. Photo: Matt Black (CC0 1.0). Country specific: UK

Understanding¹: 3.97 Affect²: -1.07
Info seek motiv.³: 2.59 Share image¹: 3.4
Beh. change des.¹: 3.32 Support gov policy⁴: 4.75
Urgency for others¹: 3.5 Prevention policy¹: 3.4
Adaptation policy¹: 3.47 Others share image³: 2.75

1 1–5 scale 2-5 to +5 scale 3 1–4 scale 4 1–7 scale



Image 16. FARMER IN DROUGHT. Used in discussion groups (category A2: Cliches). © Reuters



Image 17. PHILIPINES DAMAGE. Used in discussion groups (category C2: Impacts). Photo: Asian Development Bank (CC BY-NC-ND 2.0)



Image 18. FLOOD UK. Used in discussion groups (category B1: Ordinary people). Photo: Wendy North (CC BY-NC-ND 2.0)



Image 19: FLOOD US. Used in survey. Photo: DVIDSHUB (CC BY 2.0). Country specific: US

SURVEY RESULTS (mean scores)

Understanding¹: 4.19 Affect²: -1.8
Info seek motiv.³: 2.82 Share image¹: 3.63
Beh. change des.¹: 3.52 Support gov policy⁴: 5.01
Urgency for others¹: 3.8 Prevention policy¹: 3.6
Adaptation policy¹: 3.6 Others share image³: 2.9

Scored top 3 of all impact images for 9/10 questions. See Appendix 4.2.

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 20: FLOOD GERMANY. Used in survey. © Michaela Rehle/Reuters. Country specific: Germany

SURVEY RESULTS (mean scores)

Understanding¹: 4.25 Affect²: -2.08
Info seek motiv.³: 2.9 Share image¹: 3.44
Beh. change des.¹: 3.59 Support gov policy⁴: 5.14
Urgency for others¹: 3.72 Prevention policy¹: 3.53
Adaptation policy¹: 3.62 Others share image³: 2.92

Scored top 3 of all impact images for 9/10 questions. See Appendix

4.2.

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 21. FIGHTING NOT DROWNING. Used in discussion groups (category B2: Protest). Photo: 350.org (CC BY-NC-SA 2.0)



Image 22: GLACIER. Used in discussion groups (category C2: Impacts) and survey. © Gary Braasch

Understanding¹: 3.8 Affect²: -0.58 Info seek motiv.3: 2.62 Share image¹: 3.4 Support gov policy⁴: 4.84 Beh. change des. 1: 3.34 Urgency for others¹: 3.38 Prevention policy¹: 3.29 Adaptation policy¹: 3.29 Others share image³: 2.67 ¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale

Category: Climate Solutions



Image 23: SOLAR SCHOOL. Used in discussion groups (category C3: Solutions) and survey. © Oliver Rudkin/10:10

SURVEY RESULTS (mean scores)

Understanding¹: 4.01 Affect²: 2.03 Info seek motiv.3: 2.69 Share image¹: 3.44 Support gov policy⁴: 4.76 Beh. change des. 1: 3.32 Urgency for others¹: 3.33 Prevention policy¹: 3.22 Adaptation policy¹: 3.27 Others share image³: 2.59

Scored top 3 of all solutions images for 10/10 questions, of which

top 1 for 1. See Appendix 4.2.

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 24. DRAUGHT PROOFING. Used in discussion groups (category C3: Solutions). © Transition Belsize



Image 25: INSULATION. Used in discussion groups (category C3: Solutions) and survey. Photo: Simon Williams (CC BY-NC-ND 2.0)

Understanding¹: 3.83 Info seek motiv.³: 2.49 Beh. change des.¹: 3.04 Urgency for others¹: 2.99 Adaptation policy¹: 2.99

¹ 1–5 scale ² -5 to +5 scale

Affect²: 1.65

Share image¹: 3.11 Support gov policy⁴: 4.43 Prevention policy¹: 2.92 Others share image³: 2.31

³ 1–4 scale ⁴ 1–7 scale



Image 26: OBAMA US. Used in discussion groups (category B3: Politicians) and survey. Photo: United Nations Photo (CC BY-NC-ND 2.0). Country specific: US

SURVEY RESULTS (mean scores)

Understanding¹: 2.72 Affect²: -0.45
Info seek motiv.³: 2.02 Share image¹: 2.49
Beh. change des.¹: 2.33 Support gov policy⁴: 3.55
Urgency for others¹: 2.54 Prevention policy¹: 2.49
Adaptation policy¹: 2.44 Others share image³: 2.02

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 27: CAMERON UK. Used in discussion groups (category B3: Politicians) and survey.

© Andrew Parsons/PA/Pool/Reuters/Corbis. Country specific: UK

SURVEY RESULTS (mean scores)

Understanding¹: 2.43 Affect²: -0.35 Info seek motiv.³: 1.82 Share image¹: 2.48 Beh. change des.¹: 2.21 Support gov policy⁴: 3.52 Urgency for others¹: 2.33 Prevention policy¹: 2.29 Adaptation policy¹: 2.36 Others share image³: 1.92

1 1–5 scale 2-5 to +5 scale 3 1–4 scale 4 1–7 scale



Image 28: MERKEL GERMANY. Used in survey.
© Guido Bergmann/Bundesregierung-Pool via Getty Images.
Country specific: Germany

SURVEY RESULTS (mean scores)

Understanding¹: 3.74 Affect²: 0.56
Info seek motiv.³: 2.43 Share image¹: 2.9
Beh. change des.¹: 2.98 Support gov policy⁴: 4.25
Urgency for others¹: 3.11 Prevention policy¹: 2.91
Adaptation policy¹: 3.07 Others share image³: 2.37

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 29: BLUE FACE. Used in discussion groups (category B2: Protest) and survey. © Franck Robichon/European Pressphoto Agency

Understanding¹: 2.91 Info seek motiv.³: 2.07 Beh. change des.¹: 2.51 Urgency for others¹: 2.75 Adaptation policy¹: 2.61 Affect²: -0.08 Share image¹: 2.62 Support gov policy⁴: 3.85 Prevention policy¹: 2.61 Others share image³: 2.18

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale



Image 30: SOLAR ROOF. Used in discussion groups (category C3: Solutions) and survey.

© IDCOL

SURVEY RESULTS (mean scores)

Understanding¹: 3.94 Affect²: 2.23
Info seek motiv.³: 2.7 Share image¹: 3.52
Beh. change des.¹: 3.4 Support gov policy⁴: 4.82
Urgency for others¹: 3.39 Prevention policy¹: 3.29
Adaptation policy¹: 3.36 Others share image³: 2.72

Scored top 3 of all solutions images for 10/10 questions, of which top 1 for 9. See Appendix 4.2.



Image 31: KID ON BIKE. Used in discussion groups (category C3: Solutions) and survey. © Jeremy Sutton-Hibbert

SURVEY RESULTS (mean scores)

Understanding¹: 3.69
Info seek motiv.³: 2.48
Beh. change des.¹: 3.08
Urgency for others¹: 3.12
Adaptation policy¹: 3.11

Affect²: 1.49
Share image¹: 3.24
Support gov policy⁴: 4.53
Prevention policy¹: 3.01
Others share image³: 2.52

Scored top 3 of all solutions images for 7/10 questions. See Appendix 4.2.

¹ 1–5 scale ² -5 to +5 scale ³ 1–4 scale ⁴ 1–7 scale

1.2 Description of all images used in discussion groups

| Dimension | lmage label | UK | Germany | | |
|--------------------------------|----------------|--|--|--|--|
| Cliche | A1 | A shot from above of a man and cow in a very dried-out landscape | A shot from above of a man and cow in a very dried-out landscape | | |
| | A2 | A photoshopped image of a hand holding a burning globe | A photoshopped image of a hand holding a burning globe | | |
| | А3 | An image of melting ice in the Arctic | An image of melting ice in the Arctic | | |
| | A4 | A polar bear sits on a small stump of ice, looking at the viewer | A polar bear sits on a small stump of ice, looking at the viewer | | |
| Location (paired images) | B1 | American child holding sign at demo reading "Don't mess up the planet (I need it)" | American child holding sign at demo reading "Don't mess up the planet (I need it)" | | |
| | B2 | Children smiling behind a sign celebrating solar | Children smiling behind a sign celebrating solar | | |
| | В3 | A sign to UK towns underwater in a flood. One of the towns is "Ditherington" | An underwater sign. It reads "Restaurant hotel" and looks like it should be above a door | | |
| | B4 | A child in Tuvalu holds up a sign reading "To the rest of the world please could you prepare a place for my country to stay" | A child in Tuvalu holds up a sign reading "To the rest of the world please could you prepare a place for my country to stay" | | |
| | B5 | Children in Kenya examine a solar panel | Children in Kenya examine a solar panel | | |
| | В6 | Children walk together in a flooded landscape in Bangladesh | Children walk together in a flooded landscape in Bangladesh | | |
| People | C1 | A just-married couple in the Philippines show their rings, with part of their flooded village behind them | A just-married couple in the Philippines show their rings, with part of their flooded village behind them | | |
| | C2 | A silhouetted family on bikes | A silhouetted family on bikes | | |
| | C3 | A distressed-looking man points to an oil flaring site in Nigeria | A distressed-looking man points to an oil flaring site in Nigeria | | |
| | C4 | A flooded UK town, with two people in the foreground | A person in a red jacket surveys a flooded river in Germany | | |
| | C5 | A family with a dog wave from behind a solar panel | A family with a dog wave from behind a solar panel | | |
| | C6 | In Senegal, a man in traditional dress stands in dry farmland | In Senegal, a man in traditional dress stands in dry farmland | | |
| | C7 | A headshot of a protester. His face is painted blue and he is in front of a sign reading "Climate justice now" | A headshot of a protester. His face is painted blue and he is in front of a sign reading "Climate justice now" | | |
| Protest | D1 | A small boat holds up a sign reading "No Arctic oil" in front of an oil rig | A small boat holds up a sign reading "No Arctic oil" in front of an oil rig | | |

| | D2 | A woman shouts into a loudspeaker at a protest | A child at a protest holds a model hand reading "Energie burger-hand" |
|-------------|----|---|---|
| | D3 | A group of adults from a Pacific island in traditional dress stand in the sea holding up a sign reading "We are not drowning We are fighting!!" | A group of adults from a Pacific island in traditional dress stand in the sea holding up a sign reading "We are not drowning We are fighting!!" |
| | D4 | Two young women hold a sign saying "hipsters divest" | An anti-coal protest. Protesters in the foreground hold a sign reading "Klima schutzen – Kohle stoppen!". There are cooling towers in the background. |
| | D5 | A shot from above of a multicoloured protest. Protestors are communally holding a very large sign reading "Climate Justice" | A shot from above of a multicoloured protest. Protestors are communally holding a very large sign reading "Climate Justice" |
| | D6 | Naked people standing on a glacier | Naked people standing on a glacier |
| | D7 | A large number of people bury their heads in the sand on a beach | A large number of people bury their heads in the sand on a beach |
| Politicians | E1 | David Cameron holds a husky in the Arctic | David Cameron holds a husky in the Arctic |
| | E2 | In a large conference hall, negotiators sit at desks under big images of polar bears | In a large conference hall, negotiators sit at desks under big images of polar bears |
| | E3 | A panel of men and women sit in front of a sign reading "UN climate change conference Lima Cop20/CMP 10" | A panel of men and women sit in front of a sign reading "UN climate change conference Lima Cop20/CMP 10" |
| | E4 | A shot of the House of Commons, taken from the Thames to look like it's underwater | Angela Merkel looks out of the window of an aircraft at offshore wind turbines |
| | E5 | Leonardo diCaprio stands in front of a dry looking river | Leonardo diCaprio stands in front of a dry looking river |
| | E6 | President Obama gestures in front of a sign reading "CMP5 Copenhagen" | President Obama gestures in front of a sign reading "CMP5 Copenhagen" |
| Causes | F1 | A man holds a knife and fork and looks at a large steak | A man holds a knife and fork and looks at a large steak |
| | F2 | A shot from above of a tar-sand mining area | A shot from above of a tar-sand mining area |
| | F3 | A Chinese coal-miner stands next to a cart holding coal | A Chinese coal-miner stands next to a cart holding coal |
| | F4 | An aerial shot of cattle and burning forest | An aerial shot of cattle and burning forest |
| | F5 | A power station emits a lot of smoke into the atmosphere | A power station emits a lot of smoke into the atmosphere |
| | F6 | Three children in school uniform gathered around a people-carrier | Traffic on a German road |
| | | | |

| Impacts | G1 | A photo of a glacier in 1932 is held up in front of the same glacier in 1999 | A photo of a glacier in 1932 is held up in front of the same glacier in 1999 |
|-----------|----|--|--|
| | G2 | In Pakistan, a man is caught in a flood | In Pakistan, a man is caught in a flood |
| | G3 | An Australian family shelters from a wildfire under a jetty | An Australian family shelters from a wildfire under a jetty |
| | G4 | A little girl sits in a dried up lake | A little girl sits in a dried up lake |
| | G5 | A field in the sunshine | A field in the sunshine |
| | G6 | A street in Tacloban, after the typhoon | A street in Tacloban, after the typhoon |
| Solutions | H1 | In Bangladesh, two men put a solar panel on a roof | In Bangladesh, two men put a solar panel on a roof |
| | H2 | A man fits a draught excluder to a doorframe, watched by his family | A man fits a draught excluder to a doorframe, watched by his family |
| | Н3 | An offshore wind farm at sunset | A large number of wind turbines in a field |
| | H4 | Cyclists on a major street in Mexico city | Cyclists on a major street in Mexico city |
| | H5 | A cyclist in silhouette, on a windfarm | A cyclist in silhouette, on a windfarm |
| | H6 | Two men in a nuclear power station | Two men in a nuclear power station |
| | H7 | A man rolls out roof insulation | A man rolls out roof insulation |

Appendix 2: Stakeholder interviewees and key points arising

Interviewee: NGO stakeholder

Key points:

Preference for groups rather than individuals in images, to show that climate change action is mostly in groups.

Not keen on pics of electric buses with lots of adverts on their side displaying how green they are Would like to test picture of children celebrating with solar panels because "There will definitely be a lot of these" in the future

Interviewee: NGO stakeholder

Key points:

Charismatic megafauna are good because "it pulls viewers in and they engage with it. If you show a polar bear leaping from one piece of ice to another, it grabs their attention, more than other pictures on the problems side"

Cute and appealing idea is 'out of date' – though useful on fundraising.

On impacts side – look for images that "say it all in one pic" – e.g. a picture of destroyed forest, then a clean line, and it's next to pristine forest – you get a sense of what has been destroyed. Otherwise you don't get any scale or sense of it.

Interviewee: NGO stakeholder

Key points:

"It's a truism that we often don't really know the response our use of imagery generates. For our social media likes and shares give an indication of a certain appreciation but it's also hard to quantify what that really might translate to in terms of a) engagement (driving membership, donations, or signing petitions) or b) whether images are deepening the understanding of issues."

"The visual vocabulary for climate change has not changed significantly in years really – even organisations like Getty Images are scratching their heads as much as NGOs in terms of how to refresh it."

Interviewee: Private sector stakeholder

Key points:

Should categorise images not just by what is there (e.g. solar panels) but by emotion (e.g. find a 'proud/happy photo')

In choosing photos to test it's a good idea to have an idea of what emotions you want to evoke Humour makes images more memorable, more shareable on social media

Interviewee: Media stakeholder

Key points:

It's quite territorial – different interests protecting their right to choose different photos For example, with the Guardian, news, features editors all have their own picture editors and views – so it's hard to say 'the Guardian does this'. It does lots of things.

During the "for the love of..." campaign WWF did lots of agonising about how to go 'beyond the polar bear' e.g. pictures of bees.

Interviewee: Policy stakeholder

Key points:

"We are aware of research that says lots of TV programmes on climate change are too subtle in their reference to the issues, which means people don't pick up on the core messages. Perhaps this is similarly the case with imagery, and pictures that we think are imaginative and take an alternative approach are not clear enough in their message when viewed by the lay person..."

Interviewee: Media stakeholder

Key points:

We don't have data on what pics more useful, but if you put a good picture on a story it "doubles the number of people" looking at it

Guardian tries to "avoid generic" photos, make it not too much about the natural world, it's about people

Accuracy is important – e.g. if it's sea ice, is that the right thing to be showing? Academics tell us "a misleading photo undermines their trust in the whole article, even if all the text is accurate" Always better to hone in on one particular person or animal, if there's thousands of animals we don't care so much.

Interviewee: Academic stakeholder

Key points:

"Greenpeace had a significant impact on creating visual image – polar bear and walrus, back in 90s there were no icons, greenpeace pushed the impacts and iconic animals, these pre-dated online image banks...up until a point it was definitely NGOs pushing it, this shifted since mid 2000s, images have proliferated, since late 2000s non-env NGOS started to think about bringing more of a human dimension to climate change..."

Interviewee: Academic stakeholder

Key points:

There is a need for large-scale testing of images, through quantitative research

Appendix 3. Additional details on methodology

3.1 Qualitative research - discussion groups

The facilitators used variations on the following questions to prompt responses to images shown in the British and German discussion groups:

1. Understanding & salience:

- "What is this trying to convey/what does it show?"
- "Would you associate this with climate change without knowing that you were looking at a climate change image?"
- "Does the scene depicted seem familiar (is this a good or bad thing)?"
- "Is it difficult to understand?"

2.Psychological distance/self-identification:

- "Does the image 'connect' with you?"
- "Does the image seem close to home, or distant and unfamiliar?"
- "Are the people in the image 'like you' or 'other'?"

3. Affect (emotion):

- "Does the image convey an emotion, and if so, how does this make you feel?" "Fearful/fatalistic or hopeful/optimistic? Worried or reassured?"
- "Does the image depict something/someone 'good/desirable/right' or 'bad/wrong/evil'?"

4. 'Action' (efficacy) & 'personal engagement':

- "Does the image spark any desire to 'respond' to the situation depicted?"
- "What kind of response? Something you could do yourself: supporting a campaign, lobbying politicians, wanting to know more?"

5. Politics & values:

- "What (if any) political sentiments does the image convey? What values does it communicate?"
- "Do these match or conflict with your own?"

6. Aesthetics & humour

- "Do you find the image visually attractive or not? Is it the sort of image you would want to look at?"
- "Did the image surprise you or make you laugh? Is that a good or a bad thing?"

3.2 Quantitative research - online survey

The following questions were asked after participants viewed each image:

| Q1. To what extent do you feel as though you have an understanding of what this image is trying to convey? | | | | | | | |
|---|---|----------------------|---------------------------------|-----------------------------|--|--|--|
| | Not at all | Not very much | A little bit | Somewhat | Completely | | |
| this imag | scale of -5 to +5 e make you feel? Ily Negative" -4 | , | really negative" Neutral +1 | | eally positive," how does +5 "Really Positive" | | |
| | motivated do you | u feel to seek out m | | about what this i | mage depicts? Very motivated | | |
| willing wo | ould you be to sh | are this image with | friends on socia | ıl media? | how much more or less | | |
| Q5. Does environm | • | e you want to chang | ge your own beh A little bit | avior to reduce y Somewhat | our impact on the | | |
| Q6. Does change? Much les support | s Somewhat less | • • | | Slightly more Sor | s to tackle climate mewhat more Much more supportive supportive | | |
| Q7. Would this image make someone feel like climate change is a more urgent problem or less urgent problem? Not at all Not very A little bit Somewhat Very | | | | | | | |
| Q8. After seeing this image, how supportive do you think someone would be of government policies focused primarily on preventing climate change? Not at all supportive A little supportive Somewhat supportive Moderately supportive Very supportive | | | | | | | |
| Q9. After seeing this image, how supportive do you think someone would be of policies focused primarily on preparing or adapting to future climate change impacts? Not at all supportive A little supportive Somewhat supportive Moderately supportive Very supportive | | | | | | | |
| Q10. How willing do you think others would be to share this image on social media or talk about it with their family and friends? | | | | | | | |
| | Not at all willing | A little willing | Some | what willing | Very willing | | |

Appendix 4: Expanded findings

4.1 Expanded qualitative findings

4.1.1 Participants' values, social views and attitudes to climate change

When asked about what qualities participants admired in a person, the most popular answer was honesty. They also valued similar principles such as integrity, loyalty, respect, kindness, caring about other people and being "humble and not arrogant". These findings closely match previous Climate Outreach research with a number of different audiences¹.

In both the UK and Germany, the participants did not see these values reflected in society, however. Particularly in London, the general feeling was one of disillusionment and dissatisfaction – with today's values described as "superficial", "selfish", driven by appearance and dishonest. A couple of group members, remarked that they themselves were more altruistic than this and felt at odds with society's values.

The groups were generally negative about the future. One focus group participant in Berlin, for example, remarked "I think there will be some dramatic changes in the next ten or twenty years, I think we are heading towards a crisis".

Despite this, no one in any of the groups mentioned climate change as a concern spontaneously – rather focusing on refugees, poverty and the cost of housing as the major issues of concern. When climate change was raised by the facilitator, most participants acknowledged it as an important issue. The universal view among German and UK participants, however, was that climate change was not a central issue in their lives or in society – "It's always at the back of the queue which I think is a shame..." commented one participant. Personal lives, particularly money issues, were seen as more pressing, and climate change a largely theoretical threat. Several participants argued that climate change is an issue our "kids' kids" will be dealing with – a prospect that prompted guilt, but not self-motivation.

Cynicism about society's self-serving values also appeared to affect the participants' views on society's ability (or inability) to tackle climate change. As one German participant put it "I would say no-one here really cares. When they care for something that is helping and supporting the fight against climate change, it is because they are taking care of themselves."

In all the focus groups, however, participants spoke passionately about local environmental issues – the cleanliness of their local area, packaging, waste or food. On more than one occasion, introducing the subject of climate change often led rapidly to a conversation about waste issues. The groups appeared more comfortable speaking passionately about this more tangible environmental issue. Again, this

Marshall, G., Corner, A. & Clarke, J. (2015). How to talk climate change with the centre-right: An election guide. Oxford: Climate Outreach. Available online at http://climateoutreach.org/resources/election-guide/

Marshall,G. & Corner, A. (2015). Starting a New Conversation on Climate Change with the European Centre-Right: A Practical Toolkit. Oxford: Climate Outreach. Available online at

http://climateoutreach.org/resources/starting-a-new-european-conversation-on-climate-change-with-the-centre-right/

Corner, A. & Roberts, O. (2014a). Young Voices: How Do 18–25 Year Olds Engage with Climate Change? Oxford: Climate Outreach. Available online at

 $\underline{\text{http://climateoutreach.org/resources/research-reveals-current-climate-engagement-strategies-are-failing-to-reach-engagement-strategies-are-failing-t$

Corner, A.J. & Roberts, O. (2014b). How narrative workshops informed a national climate change campaign. Oxford: Climate Outreach. Available online at

http://climateoutreach.org/resources/how-narrative-workshops-informed-a-national-climate-change-campaign/

¹ See e.g.:

reflects previous research², which has suggested that framing conversations about climate change and energy use around the concept of 'waste' could be an effective way of engaging people who might otherwise ignore a message about climate change³.

4.1.2 Climate change scepticism

Several participants expressed some degree of scepticism about climate change – relating to whether it is solely caused by humans or constitutes a serious problem. No-one, however, rejected the idea of human-induced climate change entirely. In several cases participants who expressed doubts about how climate change is presented, went on to engage fully with the rest of the discussion – including discussing their future worries about its impacts. This reinforces the impression that climate change scepticism is in a large part a reaction against its political and social representation.

The groups expressed a sense that climate change is a very complicated issue – "complex and uncertain" and it's an "article of faith" to believe in it. In addition several group members viewed the issue as highly politicised – politicians "abuse" the topic to their own ends and this makes the science less trustworthy.

As one German participant put it "A volcano...which is a natural thing, erupting, is much worse than all the pollution that humans make, but this has not been said because obviously a volcano isn't politically interesting."

² Parkhill, K.A., Demski, C., Butler, C., Spence, A. & Pidgeon, N. (2013). *Transforming the UK Energy System: Public Values, Attitudes and Acceptability: Synthesis Report.* London: UKERC;

³ Corner, A.J. & Roberts, O. (2014b). How narrative workshops informed a national climate change campaign. Oxford: Climate Outreach. Available online at

4.2 Expanded quantitative findings: Descriptive statistics for image questions

- Q1. To what extent do you feel as though you have an understanding of what this image is trying to convey? (1 = Not at all; 5 = Completely)
- Q2. On a scale of -5 to +5, where -5 equals "really negative" and +5 equals "really positive," how does this image make you feel?
- Q3. How motivated do you feel to seek out more information about what this image depicts? (1 = Not at all motivated; 4 = Very motivated)
- Q4. Compared to most other images about climate change that you've seen, how much more or less willing would you be to share this image with friends on social media? (1 = Much less willing; 5 = Much more willing)
- Q5. Does the image make you want to change your own behavior to reduce your impact on the environment? (1 = Not at all; 5 = Very much)
- Q6. Does the image make you more or less supportive of government policies to tackle climate change? (1 = Much less supportive; 7 = Much more supportive)
- Q7. Would this image make someone feel like climate change is a more urgent problem or less urgent problem? (1 = Not at all urgent; 5 = Very urgent)
- Q8. After seeing this image, how supportive do you think someone would be of government policies focused primarily on preventing climate change?

 (1 = Not at all supportive: 5 = Very supportive)
- Q9. After seeing this image, how supportive do you think someone would be of policies focused primarily on preparing or adapting to future climate change impacts? (1 = Not at all supportive; 5 = Very supportive)
- Q10. How willing do you think others would be to share this image on social media or talk about it with their family and friends. (1 = Not at all willing; 4 = Very willing)

| - | e-by-image survey mean scores | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | # of Top 3's | # of #1's |
|--------------|----------------------------------|------------------|-----------|----------|----------|----------|----------|----------|----------|------------------|----------|--------------------|--------------|
| | Img 2: SMOKE STACKS | 4.25 [1] | -2.72 [8] | 2.72 [2] | 3.57 [2] | 3.64 [1] | 5.17 [1] | 3.88 [1] | 3.63 [1] | 3.68 [1] | 2.88 [1] | 9 | 7 |
| | Img 4: MEAT-EATING | 3.21 | -0.39 [1] | 2.16 | 2.6 | 2.43 | 3.83 | 2.4 | 2.34 | 2.4 | 2.04 | 1 | 1 |
| | Img 5: DEFORESTATION | 3.94 | -2.34 [7] | 2.85 [1] | 3.59 [1] | 3.53 [2] | 5.05 [2] | 3.65 [2] | 3.46 [2] | 3.52 [2] | 2.81 [2] | 8 | 2 |
| | Img 6: HIGHWAY GERMANY | 4.11 [2] | -1.64 [3] | 2.42 | 3.1 | 3.23 | 4.72 | 3.24 | 3.07 | 3.16 | 2.45 | 2 | |
| CAUSES | lmg 7: HIGHWAY UK | 3.98 | -1.89 [6] | 2.17 | 3.09 | 3.08 | 4.64 | 3.23 | 3.15 | 3.11 | 2.37 | | |
| | Img 8: HIGHWAY US | 4.05 [3] | -1.78 | 2.42 | 3.22 | 3.35 [3] | 4.74 [3] | 3.32 | 3.15 | 3.19 | 2.53 | 3 | |
| | Img 9: TAR SANDS | 3.24 | -1.71 | 2.62 [3] | 3.28 [3] | 3.2 | 4.68 | 3.36 [3] | 3.23 [3] | 3.25 [3] | 2.61 [3] | 6 | |
| | lmg 10: COAL RAILROAD | 3.24 | -1.13 [2] | 2.52 | 3.14 | 2.98 | 4.45 | 3.04 | 2.97 | 2.97 | 2.44 | 1 | |
| | Category means: | 3.52 | -1.75 | 2.34 | 3.03 | 2.98 | 4.46 | 3.05 | 2.94 | 2.97 | 2.37 | | |
| | Img 11: MAN IN WATER | 3.47 | -1.66 | 2.59 | 3.18 | 3.12 | 4.59 | 3.34 | 3.21 | 3.24 | 2.59 | | |
| | Img 12: POLAR BEAR | 4.34 [1] | -1.75 [6] | 2.95 [1] | 3.85 [1] | 3.8 [1] | 5.33 [1] | 3.92 [1] | 3.75 [1] | 3.76 [1] | 3.06 [1] | 9 | 9 |
| | lmg 13: TUVALU SIGN | 3.68 | -0.86 [3] | 2.61 | 3.33 | 3.32 | 4.77 | 3.42 | 3.29 | 3.31 | 2.68 | 1 | |
| | Img 14: MARRIED COUPLE | 3.34 | -0.3 [1] | 2.5 | 3.16 | 3.07 | 4.55 | 3.22 | 3.11 | 3.16 | 2.56 | 1 | 1 |
| IMPACTS | lmg 15: FLOOD UK | 3.97 | -1.07 | 2.59 | 3.4 | 3.32 | 4.75 | 3.5 | 3.4 | 3.47 | 2.75 | | |
| | Img 19: FLOOD US | 4.19 [3] | -1.8 [7] | 2.82 [3] | 3.63 [2] | 3.52 [3] | 5.01 [3] | 3.8 [2] | 3.6 [2] | 3.6 [3] | 2.9 [3] | 9 | |
| | Img 20: FLOOD GERMANY | 4.25 [2] | -2.08 [8] | 2.9 [2] | 3.44 [3] | 3.59 [2] | 5.14 [2] | 3.72 [3] | 3.53 [3] | 3.62 [2] | 2.92 [2] | 9 | |
| | Img 22: GLACIER | 3.8 | -0.58 [2] | 2.62 | 3.4 | 3.34 | 4.84 | 3.38 | 3.29 | 3.29 | 2.67 | 1 | |
| | Category means: | 3.65 | -1.37 | 2.58 | 3.29 | 3.23 | 4.70 | 3.37 | 3.26 | 3.29 | 2.65 | | |
| | Img 23: SOLAR SCHOOL | 4.01 [1] | 2.03 [2] | 2.69 [2] | 3.44 [2] | 3.32 [2] | 4.76 [2] | 3.33 [2] | 3.22 [2] | 3.27 [2] | 2.59 [2] | 10 | 1 |
| | Img 25: INSULATION | 3.83 [3] | 1.65 [3] | 2.49 [3] | 3.11 | 3.04 | 4.43 | 2.99 | 2.92 | 2.99 | 2.31 | 3 | |
| SOLUTIONS | Img 26: OBAMA US | 2.72 | -0.45 [8] | 2.02 | 2.49 | 2.33 | 3.55 | 2.54 | 2.49 | 2.44 | 2.02 | | |
| | Img 27: CAMERON UK | 2.43 | -0.35 [7] | 1.82 | 2.48 | 2.21 | 3.52 | 2.33 | 2.29 | 2.36 | 1.92 | | |
| | Img 28: MERKEL GERMANY | 3.74 | 0.56 | 2.43 | 2.9 | 2.98 | 4.25 | 3.11 | 2.91 | 3.07 | 2.37 | | |
| | Img 29: BLUE FACE | 2.91 | -0.08 [6] | 2.07 | 2.62 | 2.51 | 3.85 | 2.75 | 2.61 | 2.61 | 2.18 | | |
| | Img 30: SOLAR ROOF | 3.94 [2] | 2.23 [1] | 2.7 [1] | 3.52 [1] | 3.4 [1] | 4.82 [1] | 3.39 [1] | 3.29 [1] | 3.36 [1] | 2.72 [1] | 10 | 9 |
| | Img 31: KID ON BIKE | 3.69 | 1.49 | 2.48 | 3.24 [3] | 3.08 [3] | 4.53 [3] | 3.12 [3] | 3.01 [3] | 3.11 [3] | 2.52 [3] | 7 | |
| | Category means: | 3.10 | 1.03 | 2.16 | 2.72 | 2.61 | 3.92 | 2.74 | 2.64 | 2.69 | 2.16 | | |
| Total means: | | 3.42 | -0.70 | 2.36 | 3.01 | 2.94 | 4.36 | 3.05 | 2.95 | 2.98 | 2.39 | | |

All differences are significant (due to the large sample). "Top 3's" refers to ranks for that category. Please note the different scales used for the questions. Means are slightly biased by image scores that differ between countries (averaging across all of these images).