

When Climate Communication Goes Bad

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Talking or listening?

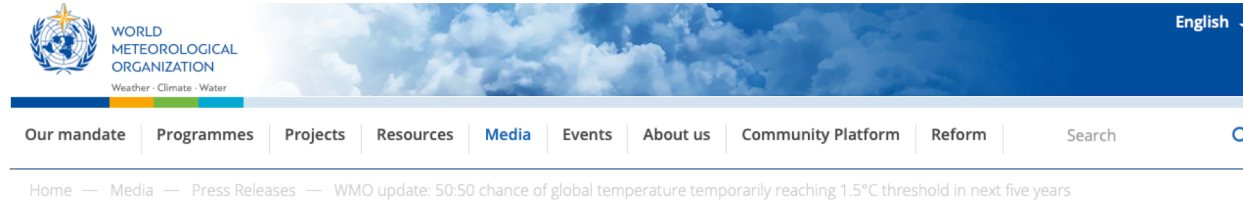


Language choices

Terms that have different meanings for scientists and the public

Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing cycle
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing

Clarity and consistency



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WMO update: 50:50 chance of global temperature temporarily reaching 1.5°C threshold in next five years

Dr Leon Hermanson, of the Met Office led the report. He said: “Our latest climate predictions show that continued global temperature rise will continue, with an even chance that one of the years between 2022 and 2026 will exceed 1.5 °C above pre-industrial levels. A single year of exceedance above 1.5 °C does not mean we have breached the iconic threshold of the Paris Agreement, but it does reveal that we are edging ever closer to a situation where 1.5 °C could be exceeded for an extended period.”

“This study shows – with a high level of scientific skill – that we are getting measurably closer to temporarily reaching the lower target of the Paris Agreement on Climate Change. The 1.5°C figure is not some random statistic. It is rather an indicator of the point at which climate impacts will become increasingly harmful for people and indeed the entire planet,” said WMO Secretary-General Prof. Petteri Taalas.

Fail to prepare, prepare to fail


nature geoscience

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Emission budgets and pathways consistent with limiting warming to 1.5 °C

[Richard J. Millar](#) , [Jan S. Fuglestedt](#), [Pierre Friedlingstein](#), [Joeri R. Matthews](#), [Ragnhild B. Skeie](#), [Piers M. Forster](#), [David J. Frame](#) & [Myl](#)

[Nature Geoscience](#) 10, 741–747 (2017) | [Cite this article](#)

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Climate change not as threatening to planet as previously thought, new research suggests

The Telegraph

Global warming may be occurring more slowly than previously thought, study suggests

Previous climate models may have been 'on the hot side'

Harry Cockburn | Tuesday 19 September 2017 01:32 | 545 comments



INDEPENDENT



THE  TIMES

We were wrong — worst effects of climate change can be avoided, say experts

Scientists admit that world is warming more slowly than predicted

Fail to prepare, prepare to fail

Clarification on recent press coverage of our '1.5 degrees' paper in Nature Geoscience

20 September 2017



A number of media reports have asserted that [our recent study in Nature Geoscience](#) indicates that global temperatures are not rising as fast as predicted by the Intergovernmental Panel on Climate Change (IPCC), and hence that action to reduce greenhouse gas emissions is no longer urgent.

Both assertions are false.

“The models warm rapidly after 2000, and we haven’t seen that in the observations... by the time we get to 550bn tonnes of carbon, the models are saying we ought to be at 1.3°C, and the Met Office data tells us... we’re probably around 0.9-1.0°C.”

People are not like you

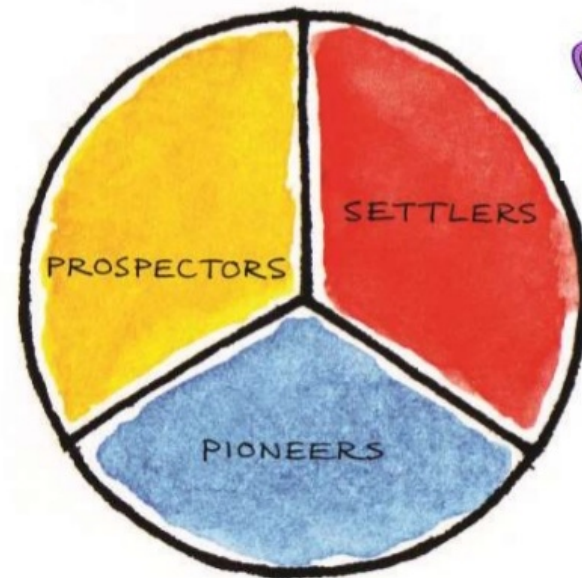


'Three Worlds' model

Drivers and behaviours – unmet needs



Prospectors –
outer directed:
need for success,
esteem of others
then self esteem.
Acquire and
display symbols of
success.

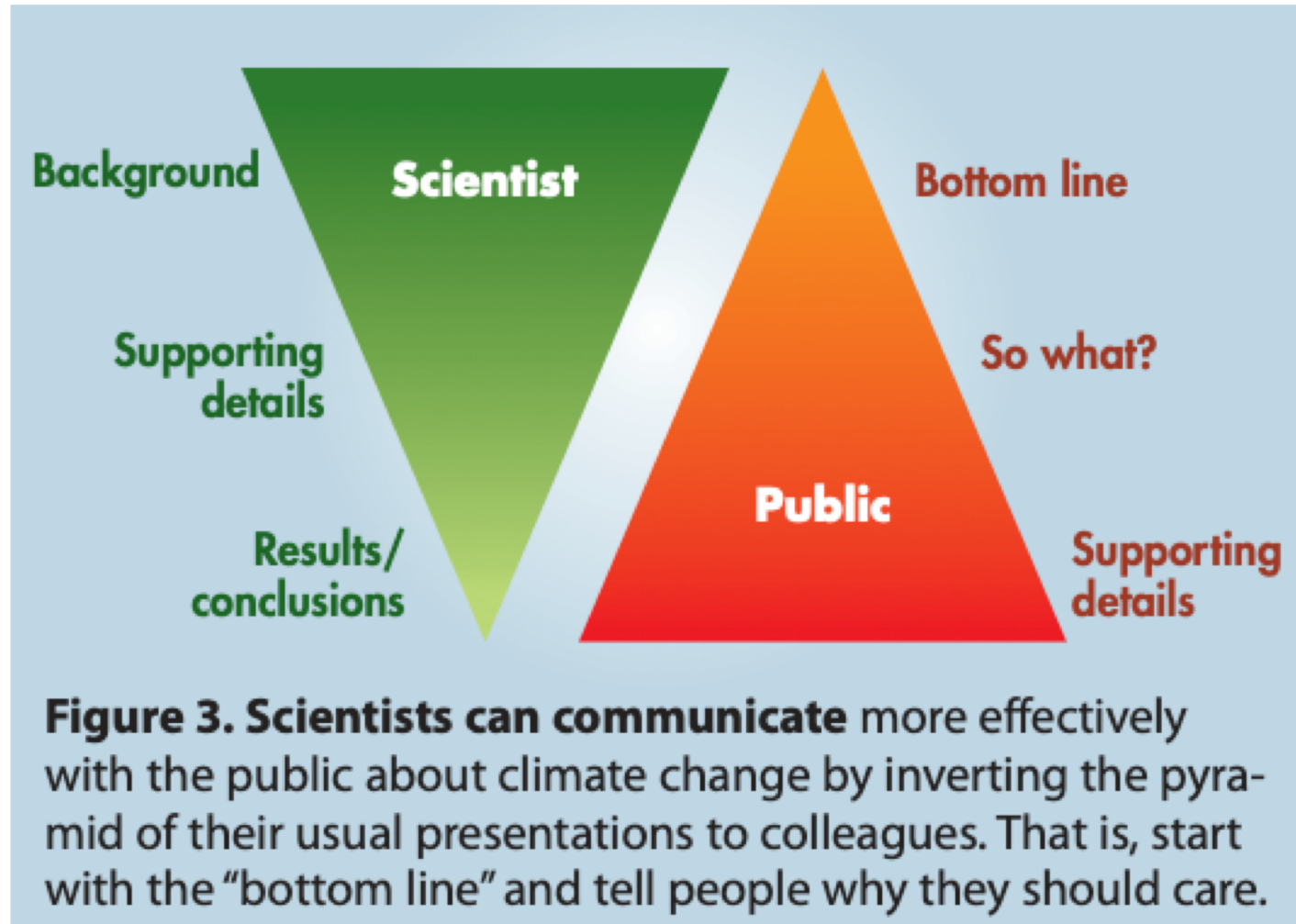


Settlers - need for
security driven:
safety, security,
identity belonging.
Keep things small,
local, avoid risk



Pioneers – inner directed. Need to
connect actions with values, explore
ideas, experiment. Networking,
interests, ethics, innovation

How to tell the story



Use the social science

DO	DON'T
✓ Use personal stories that resonate with the audience's key values	✗ Rely on big numbers - claims about the efficiency or profitability of renewable technologies may not be trusted
✓ Use narratives around 'balance', 'responsibility', 'common sense' and 'avoiding waste'	✗ Assume conventional 'environmental' language will work
✓ Talk about the health benefits - link leaky inefficient homes and dirty fossil fuels to poor health outcomes	✗ Assume that 'fuel poverty' is a universally accepted concept - people may defend living with inefficient houses as a measure of personal hardiness
✓ Be moderate and balanced when discussing renewable technologies	✗ Over-hype or exaggerate the likely benefits of renewable technologies - over-optimistic claims are likely to backfire
✓ Be honest and open about the challenges of transitioning to a low carbon economy	✗ Focus on the investment opportunities in renewable technologies - they are not yet viewed as a place for 'smart money'
✓ Use credible and authentic messengers	✗ Assume big corporations are well-regarded
✓ Rebuild trust by being straightforward about the motivations of the renewables industry: that it is a business opportunity (as the fossil fuel industry was before it)	✗ Rely on messengers who are perceived as having a vested interest in renewables
✓ Focus on local democracy and community-based renewable generation	✗ Assume any positive acceptance of renewable infrastructure, particularly large-scale wind farms
✓ Differentiate between younger and older centre-right audiences	✗ Antagonise older and probably more sceptical audiences by forcing the issue of climate change

Renewables in post-Brexit Britain

- Subsidies – re-frame as investments
- Renewables-based system is only way to end subsidies, reach free-market Nirvana
- New term for future system - “flexigrid”?
- Reclaim terms such as pragmatic, economic, rational
- Emphasise public opinion
- Renewable energy as as Made in Britain
- Tackle efficiency vs growth



Framing opens doors

Daily Mail

Truth about the ice caps scares me as a scientist and a mum

Ecology · Climate Change · Arctic
30 Jul 2015

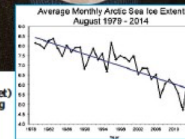
IT'S correct to point out the 'inconvenient truth' that the area of the Arctic ocean covered by ice has increased in the past two summers (Mail). But I'm afraid this masks the really inconvenient truth — that, overall, the ice is melting, bringing major risks for people and animals living in the Arctic, including whales, fish and seals — and potential changes to the weather here. Satellites have been measuring the area of Arctic ice cover since 1979. Over that period, the area covered each summer has shrunk by nearly a third — as can be seen in the chart from the U.S. National Snow and Ice Data Centre (above right). The exact area varies from year to year

depending on criteria such as the direction of the wind, which brings colder or warmer weather, just as it does in Britain. In August 2013 and 2014, the area was higher than in the previous three summers. But 2007 and 2012 saw much smaller areas of ice than we might have expected. Once you average out these year-to-year blips, the shrinking of the summer sea ice is unmistakable. This gradual melting is a result of the overall warming of the air and ocean. And that is due, in large part, to carbon dioxide emitted into the atmosphere by power stations, factories and vehicles burning coal, oil and gas. Making predictions is difficult, but if greenhouse gas emissions are not significantly reduced, then Arctic sea ice is likely to disap-

pear completely in summer from the middle of this century. This could be catastrophic for life in the region. But it can be averted if urgent action is taken to reduce our use of coal, oil and gas. It's always tempting to select one or two facts and build around them the story that climate change isn't a real issue. Unfortunately, it is real. I have studied climate change for more than 35 years, but besides being a scientist I'm also a mother, and what I see in my scientific work disturbs me as a parent. Judging by opinion surveys, I'm not alone — four out of five people want to see governments cutting greenhouse gas emissions. The good news is that with costs of clean energy falling all the time, it's becoming more and more af-



Fears: Joanna Haigh and (inset) a chart showing the shrinking Arctic ice cap



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fordable. Prof JoAnna hAiGh, co-director, Grantham

Preparing to succeed

- Think about your audience – engage with respect
- Plain language: problem words (mitigation, ambition, parties, non-state actors, cross-cutting issues, COP, IPCC...)
- Avoid detailed statistics & percentages where you can – simple formulations are good
- Know what you want to say...
- ...and what you don't want to say
- ...and rehearse!
- Have analogies, examples, visualisations ready
- Engage the audience – why should they care?
- Be yourself – 'a scientist and a (???)'