How to talk about climate change:

A toolkit for encouraging collective action

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For those working on achieving meaningful action about climate change, locally and internationally, effective communications can create hope, improve people’s understanding of the causes and solutions, open doors to collaboration between people, business and politicians, and motivate people to act in meaningful ways, to be agents of change. We can inspire our children, show them all that is possible when adults come together to work on understanding the problems, and building better systems for them and their children and the planet we live in partnership with.

Our communications must therefore have a sound evidential basis. We need to know they will be effective, ethical and have an impact in helpful ways. Mainstream climate communication has, to date, focussed heavily on fear, economic impacts, and led with facts. And while climate change is alarming, urgent, has significant economic repercussions, and requires people to think productively about the causes and solutions, inspiring action at the right level requires more than communicating the facts and the dangers. We need strategies grounded in the evidence of persuasive communication: the science of story.

This toolkit is to help us use strategies that inspire hope, build connections between people, open doors to people developing more productive understandings of the causes of climate change, and encourages collective action on evidence-informed solutions, across local and international settings. We have drawn on many disciplines from cognitive psychology, implementation science through to cognitive linguistics. The science of story takes us beyond repetition of the facts and framing of fears, and into the realms of story-telling with science.

How we created this report

We undertook a pragmatic narrative review of the existing literature, with a focus on summary and review documents. We searched for both unpublished and published literature, focussing on climate change communication with an emphasis on values, frames, explanatory chains, and metaphors.

We identified literature in three ways:

1. We identified existing organisations and reports known to us.
2. We conducted a formal literature search of academic databases.
3. We did a general online search using the term “climate change messaging“ to locate other organisations working in this space, and any studies they have conducted.

We also searched for, and have included, publically available communications that illustrate how to implement the findings of this review. The full review is available on request.
Components of evidence-led communication

At The Workshop, we have developed an evidence-led framework for communicating research and science, and inspiring action in relation to the big issues of the world. Issues that require our collective action, often at a systems or structural level (as opposed to individual behaviour change). For example, reprogramming our economy so we no longer rely on fossil fuels.

To help us navigate a busy world full of information, humans have a default to fast thinking. We take many mental short-cuts such as using emotions to judge information, seeking that which fits with what we already believe and making use of frames and metaphors to help us understand complex ideas. This default makes it challenging for experts and communicators to convey complex and abstract issues like climate change.

Our communications framework draws on research from multiple disciplines from social and behavioural psychology, communication science through to cognitive linguistics to help communicators work in concert with people’s thought processes and motivations. We use this framework to discuss our findings from the climate change literature.

Communicating climate change: what the evidence tells us

**Audience**

Generally speaking, there are three main groups of people to consider when communicating issues and considering who you want to persuade.

**Supporters or base**

These are people who already agree with you about both the problem and best solutions. Your base is your most important communication channel, so it is critical that your messages appeal to them, however
you should never test a message only on the base to assess whether it is effective. Your base is already persuaded and will usually agree with and share any message (even ones that are problematic).

Your base needs access to effective messages to share with their persuadable friends and colleagues.

**Firmly opposed**

People who are opposed to your policies and practices. It is very resource intensive work to open a door to the evidence for this group with a new and more compelling narrative because they often also oppose your goals. They may respond negatively - and loudly - to a message that makes your case well. If you are time and resource limited (which we all are, all the time) focus your messaging on the persuadables.

**Persuadables**

This group usually, but not always, includes most people in the population. They either don’t think much about an issue or don’t have a fixed view on how to achieve a better outcome. Importantly, these people can be persuaded or dissuaded of the benefits of your course of action depending on how we talk about and frame the issue.

On the other hand, this audience can also be persuaded by an opposing take on both the problem and the solution. So it's important that we don’t inadvertently create opportunities for that opposing view to be presented to them in the guise of presenting our evidence-based message. More on this below.

**How to choose a message based on your audience**

You want to communicate messages that activate your base and convince those who are open to persuasion. So we recommend testing messages on both your base and persuadable audiences, and advise against testing on your base alone.

A good, clear message that articulates your definition of the problem and solutions will likely also alienate the firmly opposed, so don’t be afraid of messages that are unpopular with people who are fixed in their opposing views. Focus on the larger group of people who are persuadable, and on engaging your base to spread your well-crafted and tested messages to their persuadable friends and family.

**What about other ways of segmenting your audience?**

While audiences can be segmented in many different ways, this approach is core to our evidence-based communications framework because it presents the most pragmatic and strategic audience analysis for organisations wanting to have the greatest impact with limited time and resources.

It also helps avoid some common messaging pitfalls including:

- Developing and testing messages for our base: because they are already convinced of our message they are good at interpreting ambiguous messages in the way we intended them to be read; however when those ambiguous messages are shared with persuadable audiences they are just as likely to interpret them in ways that are contrary and harmful to our intended message.

- Wasting our time trying to persuade the firmly opposed: not only is this a non-productive use of our limited time and resources, but it can result in us publicly engaging in the harmful work of trying to debunk myths (more on this below) or inadvertently reinforcing frames that are fundamentally unhelpful to our message.

However, alongside this foundational audience analysis there will often be good reasons to segment your audience further, and this can be especially useful when thinking about which helpful values to engage in your messages. More on this below.
Constructing a good message: the principles

Give people a positive vision of the more hopeful future

People respond to hope and a vision, but because our brains have a negativity bias, we need a vision to be repeated frequently for it to stick. Spend time developing the picture of the better world you want people to help you build.

In order to inspire and motivate people, we need to give them something to work towards. There is a reason Martin Luther King Jnr had a dream and not just a list of problems. And it wasn’t for lack of problems. Helping people to imagine a better future helps us get on the front foot rather than simply defining ourselves by what we are against.

A vision is also an important positive counterpoint to the constant reminders we have about the problems we face. People need reminding and reassuring that a better future is possible. A vision does not have to be exhaustive in detail, but the more of a picture we can paint, the more evocative and emotive it will be.

Based on the research we recommend the following:

• Develop and lead with a clear, concrete vision for the change you want in the world. You may have a single large vision and many smaller visions for the many areas of climate action.
• Emphasise the potential for humans to develop solutions to this problem, frame these solutions using positive wording choices, and show how people can become involved and take action.

“It in the past, buildings were designed to hold people and things and to receive energy along a one-way artery from a faraway grid. Under a Green New Deal, that way of building would be considered outdated and obsolete. Instead, buildings would be considered mini power plants that can not only produce enough energy to supply their own needs, but also fuel vehicles and send excess energy back to the grid.”

https://www.architecturaldigest.com/story/green-new-deal-architecture

It is your job to show people the brighter, more hopeful future that is possible. We discuss where information about the serious risks and impacts fit in the section titled “Facts and Casual Stories”.

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<tr>
<td>Leading with facts and problems.</td>
<td>Lead with a positive concrete vision.</td>
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Avoid negating and myth busting

Repetition of a message, even to negate it, helps spread that information to new persuadable audiences.

Our brains respond to and remember information better upon repetition. We are also notoriously bad at remembering the source of information. So we may attribute negated (and incorrect) information to a trusted source. If you negate bad information (i.e. spend time explaining why an idea is wrong), you risk spreading it further.

One of the short-cuts of our “fast-thinking” brain systems is to protect what we already believe. So negating bad information may inadvertently help people develop a stronger adherence to unproductive beliefs.

Mythbusting, where we set up a myth vs fact format, may give persuadable people (who may have little knowledge about climate change) the idea that the science on human-caused climate change is more controversial than it really is. Researchers suggest that as a result persuadables will want to avoid “picking a side”, which is not your goal.

Sell the cake not ingredients

Lead your messages with the information most likely to motivate people to act. People are motivated by the things they care about most, and by their hope for and belief in a better future, not by a policy or technical solution.

Instead of trying to educate people about the process to get something, show them what they get. Tell people how the change will enhance our lives.

Avoid trying to get people to see why they should act by leading with facts, telling them all the problems we are facing, or the technical changes that need to be made to current policies and practices. For example, the policy ingredient might be a carbon tax, but the cake is: “communities fueled entirely by clean power”.

The details (or ingredients to bake the cake) are still important, but you can fill in the details of the ingredients once you’ve got people engaged. Ingredients don’t motivate people to act. Facts are important, but avoid using them as the WHY people should act (more below to use facts effectively).
Instead reframe the debate entirely. Another way to think about is to focus on telling your positive story for action, not repeating the opposing argument, even to try to debunk it!

<table>
<thead>
<tr>
<th>Avoid</th>
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<tbody>
<tr>
<td>Negating someone else’s untrue story.</td>
<td>Your story and actions. Note: developing a story that is in response to someone else’s untrue story is still mythbusting, eg “climate change is real”, is drawing to people’s attention the story that climate change is not real.</td>
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Name agents

It is critical that people can see and understand that people are responsible for what happens in our world, both in causing the degradation of our environment and choosing to do something about it. Always name agents.

Without a clear understanding of the ways that people have made choices that created the problems we face, it’s hard for people to understand or imagine that those same problems could also be solved by people making different choices. This is especially critical when we are communicating big, complex problems where the causes are not immediately clear to many people.

For example, often in climate change messages the ‘agent’ or character causing problems, is climate change itself e.g. ‘How climate change creates refugees’.

While climate change does have these negative impacts, it is human choices that drive the continued use of fossil fuels, deforestation and a failure to help those in poverty to adapt. We want our audience to understand that human choices could change this.

Name the human agents responsible for the problem and what they need to do differently. In this example, it’s not hard for the reader to imagine how 22 companies could act differently.

The manner in which you name agents will depend on your organisation’s appetite for risk, and the outcome you are working towards. But without a clear human agent, your message risks reinforcing a sense of helplessness.

Avoid Replace with

“Climate change is destroying our future”.

“People in government (name a politician) have failed to commit to policies to transition us to an economy that doesn’t rely on carbon”. 

[Links and images deleted for text-based format]
Inspire people to be the agents of climate action

Research suggests that framing all people, or a nation, as responsible for climate change is unhelpful. However, showing people that many others in their community are taking climate action is helpful.

People are afraid of appearing biased, incompetent or disagreeing with others — there is a social risk. They also tend to underestimate how many others share their opinion on climate. Communicating that people are not alone in their desire for action on climate change is helpful.

Research shows “self-censorship about anthropogenic climate change decreases when people understand just how many others acknowledge its reality and are concerned about it.”

The speak up campaign from the Climate Coalition was designed to both engage people in community action and show the numbers of people in communities who want to take action.

Bad behaviours not bad people

While naming agents is critical for people to feel that this is a solvable problem, it is important to not write off those whose support is needed to enact important changes.

For example labelling the government as corrupt or bankers as greedy, frames the institutions as too broken to fix. Instead focus on people’s behaviour: why it is a problem and how it can be changed.
Below are examples of campaigns highlighting that behaviour change is possible from people in government and industry (e.g. financial institutions).

![Image](https://www.stopadani.com/shifting_the_politics)

**Climate coalition: naming MPs as having behaved positively and asking them to do so again**

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<th>Avoid</th>
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<tbody>
<tr>
<td>Labelling politicians or institutions as corrupt, evil or dispositionally broken.</td>
<td>Naming the problematic behaviour and/or naming the new behaviour required.</td>
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**Lead with shared helpful values**

Values are a way to conceptualise what matters most to us in life; they are at the heart of human motivations. Values are why we come to believe certain things about climate change and act in certain ways.

Beliefs flow from values. For example if I highly value national security, I am more likely to believe the information that tells me divesting from a carbon economy will threaten our nation's position and security.

Researchers have found a number of recurring human values and mapped them. While people tend to prioritise particular values, we all hold a very wide range of values that appear on this map.


A growing body of research shows that in order to improve the likelihood that people will act on big collective issues, like climate change, we need to engage all people with our shared helpful values, also known as intrinsic values. Specifically these include values in the self-direction, universalism and benevolence groups on the map. Helpfully, most people across the world say these are the things that matter to them (though conversely find it hard to believe others do!).

By engaging people with values that relate to people and the planet (helpful and intrinsic values) and avoiding engaging with people around dollars, cents, power or fear, we can open a side-door for people to consider climate evidence and action. Instead of trying to force people through a door they won’t go through with facts that challenge their existing beliefs, we open a side-door for them to consider new information in the context of their deeply held values.

The research on climate change and climate action can guide us even more specifically when using values to communicate. Researchers suggest we:

- move away from an individualistic motivations towards those that encouraging people to act collectively as citizens to find solutions,
- avoid appealing solely to fear and guilt; (see ‘Frames and Language’ for more on crisis and fear framing),
- appeal to people’s sense of community membership to inspire action, (e.g “humans, together, we have achieved so much” and “We believe that a future where we no longer contribute to climate change is possible, will you be part of bringing about that change?”)
- appeal to intrinsically valued long-term environmental goals and outcomes, e.g “We need ambitious legislation to protect the things we love from climate change” (see more examples below), and
- explore different intrinsic values for different audiences.

Specifically, on exploring different helpful or intrinsic values for different audiences, we suggest there are different options, depending on time and resources available. These are:

1. Focus solely on identifying intrinsic values to engage with a persuadable audience,
2. Segment audiences and find specific intrinsic values that appeal to each, or
3. Combine different types of helpful values—as some researchers suggest—for example combine freedom with self-transcending values like concern for the welfare of others.

FrameWorks Institute and ecoAmerica in the US found that two intrinsic values in particular, protection and responsibility, moved people in the US to think more productively about the role of humans in climate change and support policies that reduce carbon emissions. Interconnection and innovation also tested well (the tested messages that led with these values and helped people think more productively are in the box below). These four values are located in the universalism (protecting the environment and interconnections), benevolence (responsibility), self-direction (ingenuity) sections of the Schwartz values map. Appealing to scientific authority was not helpful according to the FrameWorks Institute research.
FrameWorks Tested Values led Messages

1. Protection: “It’s important that we protect people and places from harm. We can do this by solving the issues facing our environment. This means stepping in to ensure people’s safety and well-being to the best of our ability and safeguarding the places we depend on. We also need to take measures to eliminate or reduce risks, making sure that people are able to go about their lives freely. Concern for the welfare of others and vigilance in preserving our habitats are the hallmarks of a protective approach. Simply put, we have a duty to protect our surroundings. Protection is the right thing for us to do.”

2. Responsible Management: “It’s important that we take responsible steps to manage the issues facing our environment. This means thinking carefully about problems and focusing on the best ways to deal with the problems we face. We also need to keep future generations in mind while we look for the best solutions. Open-mindedness and long-term planning are the hallmarks of responsible management. Simply put, we should take a practical, step-by-step approach that relies on common sense and uses all the evidence we have to take care of our surroundings. Managing challenges responsibly is the right thing for us to do.”

3. Interconnection: Our fate is intertwined with the fate of the ocean. What happens in the ocean reflects and affects what happens on land: it’s one interactive system. By recognizing the connection between human practices and their impacts on marine life and habitats, we can do a better job of leaving the ocean in good shape for the next generation.

4. Innovation: We have the capacity to solve difficult problems through innovation and ingenuity. We have a history of being resourceful, clever, and thoughtful to solve problems and generate new ideas. It’s time to phase out old technologies and practices that contribute to climate change, and start supporting energy innovations that benefit both our ecosystems and our economy.

1 https://frameworksinstitute.org/assets/files/PDF_oceansclimate/climatechangeandtheocean_mm_final_2015.pdf
The Climate Coalition in the UK developed a campaign based around two types of values: protection for the environment that people love, and human ingenuity or creativity.

Their video (available here https://www.theclimatecoalition.org/the-next-great-human-achievement) is particularly focussed on ingenuity and self-respect values.

Whatever intrinsic values you choose to work with, the research emphasises the need to focus on collaboration and community action, and avoid implying that acting on climate issues is an ideological war between groups, or provoking anger and defensiveness in the groups you want to persuade.

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<tr>
<td>Making the ‘why’ we should act on climate about cost, power, or because something dreadful will happen if we don’t.</td>
<td>Our ability to find creative solutions together, being responsible, loving and wanting to protect the environment we care about, and each other. Tip: consider different intrinsic values for different audiences.</td>
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Which frames and language work best for climate action?

Frames are part of our “fast-thinking” brain system: mental short-cuts we take to make sense of information quickly. With certain words or images come pre-existing packages of meaning (frames), determined by our common knowledge, assumptions and beliefs. Using even a single word or image evokes associated meanings, whether or not the speaker intends to do so.

Words and their meaning are neurologically hard-wired together. For example say ‘red-tape’ and it evokes a particular set of understandings about bureaucracy and whether it works. Likewise the words ‘consumer’ and ‘citizen’ carry with them very different sets of understandings about who we are, and what kinds of solutions we can pursue for big problems.

The words, images, and the language we use to frame climate change and climate action evoke a shared story or narrative about causes and solutions. Those frames will either open or close doors to people being able to see and respond to particular actions. We need to use frames that engage people in collaborative evidence-based action, and avoid those that don’t.

Research on climate change gives some guidance on the types of frames to use and to avoid.

Do frame local impacts and actions

Research suggests climate change discussions need to be framed as matters related to current impacts at the local level to make it personally relevant. Specifically focussing on the places and things that have meaning for people.

Of particular relevance to New Zealand and the Pacific, is that climate change has cultural implications and is disrupting traditional knowledge and culture in island societies. Highlight what those losses could mean, how affected communities are adapting, and what action is needed could be helpful.

For example. The “Show the love” campaign in the UK highlights risk to the places people love in local areas in the UK.

On the right is an example of focussing on local action being taken towards transitioning to carbon zero economy to frame local collaborative action.

Avoid

Framing far-reaching impacts (eg polar bears dying).

Replace with

Local and relevant impacts and action (e.g sea level erosion in local communities, and local council adaptation responses).


Glasgow and Edinburgh race to become first major UK city to reach ‘net zero’ | via @telegraph

Glasgow and Edinburgh race to become first major UK city to reach ‘net zero’ carbon emissions.

telegraph.co.uk

2:42 AM · 15-May-2019
Avoid leading with crisis or catastrophe frames instead focus on problem-solving and urgency to act frames

When messages are tested, negative appeals (e.g. to fear or guilt) are mostly counterproductive. Based on their findings, the FrameWorks Institute and other researchers recommend that we avoid starting communications with a “crisis frame” especially when working with those who are not in your base.

It is possible that the ‘crisis’ frame may work to motivate the base to take action, however, the risk is that they will assume that such framing will also motivate persuadable groups to act, however the research evidence tells us that it is unlikely. Given that you want your base to share your message with their persuadable friends and family, it makes sense to avoid messages that are unhelpful with persuadables—even if your base are motivated by them.

Researchers tell us it is also important to consider the kind of frames people have already been exposed to. For example, a study of UK tabloid stories on climate change (which reach a wide audience) found that:

“.....news articles on climate change were predominantly framed through weather events, charismatic megafauna and the movements of political actors and rhetoric, while few stories focused on climate justice and risk. In addition, headlines with tones of fear, misery and doom were most prevalent.....”

Those exposed to such frames and messages need us to deliver more effective messages.

There is also an open question as to whether we need to focus on persuading people climate change is real (using crisis and emergency framing) and instead focus all our energy on action. A central focus on making the case for the “realness”, may inadvertently reinforce the narrative already in existence that climate change has nothing to do with human activity (in other words are we engaging in a type of negating?).

Overall, research indicates that while doom and gloom messages are unproductive, it is important to strike a balance between seriousness and hope, to avoid making people feel unrealistically complacent.

Instead focus on:
1. The ability of people to problem solve this crisis.
2. The urgency to accelerate action.

Example of framing urgency but not doom and gloom from the climate coalition.

For example start with helpful values around human ingenuity, discuss local impacts, and focus on the urgency of accelerating collaborative actions that are being taken to reduce our dependence on fossil fuels (refer to facts and causal stories and pulling it all together for more guidance).

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<tr>
<td>Leading with crisis/emergency or fear framing in which we continue to make the case that climate change is real, happening and a threat to life.</td>
<td>Helpful values, collective action frames, and cover the urgent need to accelerate action that is already happening to reduce carbon (this may include asking government to declare an emergency for the purposes of accelerating action).</td>
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Use adaptation & progress frames, avoid cost-benefit & trade-off frames

Another type of frame that the research suggests is helpful are those that emphasise that we are already adapting and making progress on climate action, and that others need to get on board or be left behind.

Similar to building hope, and framing with self-direction values, adaptation and progress frames make it seem inevitable that we will solve this with the right action. People like to be on the right side of history. As an example see ‘Rise for Climate’ message at left.

Framing the climate action as being about economic trade-offs and choices, on the other hand, pulls the idea that humans are subservient to the economy into the frame. This belief evokes the belief that we can only make limited choices within the context of what the economy will allow, as opposed to the reality, which is that the economy and economic rules are constructed by people and can and should work for people and the planet.

Cost-benefit framing (i.e. we should act because it will cost more if we don’t) pulls people away from the intrinsic collective value of the environment and frames climate action purely as a money saving exercise. Not only is this neither the best nor most motivating reason why we should take climate action (intrinsic values like our love for the planet are much stronger reasons why), cost-benefit framing also sets our case up to fail if at any point it can be argued that it would cost more to engage in climate action than not.

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<tbody>
<tr>
<td>Telling people we should act now because it will cost more later, or that we need to trade something off.</td>
<td>Our ability to adapt and progress and solve this problem and that we are already taking action.</td>
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Use the “Land Ethic” frame, avoid the “Dominion” frame

Frame the protection of plants and landforms as an ethical issue rather than as a matter of human dominion or control over the environment.

The FrameWorks Institute have found that when media stories pit environmental health and economic health against each other the connection between human wellbeing and the environment is not shown, and nature is portrayed as “subservient to human exploitation”.

Such findings indicate that the dominion framing might need to be actively pushed back, rather than simply avoided. Remember: unhelpful frames like this can best be pushed back by consistently and clearly replacing them with more helpful frames, not by trying to negate or debunk the unhelpful frame.
Other frames to use and avoid

Other frames that research supports as useful in motivating collective action, and those to avoid, include:

**Ingenuity**
By being resourceful and innovative, we can come up with new ways to tackle difficult problems.

**Energy Shift**
By using energy sources that don’t add to the heat-trapping blanket effect, such as solar energy, we can get the climate system back to functioning the way it should.

**Energy Efficiency**
While we work towards moving away from fossil fuels for energy altogether, we can use much less of the kinds of energy that add heat-trapping gases to our atmosphere.

**Change the Conversation**
We all have a part to play in building support for action on climate and ocean change. By talking more often about these issues, and by joining groups, we can make a difference.¹

**Public health**
The air we breathe, the water we drink and the eco-systems we rely on (e.g. acidification of the ocean threatening sea life and hence human wellbeing) are fundamental to the health of a population, climate change (or the factors leading to climate change such a CO2 from car use) compromises these supportive systems.

**Interconnections**
Show the interconnections between climate and other systems-level problems e.g. extractive economy hurts the environment and workers.

**Scientific debate**
Use the “scientific debate” frame, and avoid the “balancing norm” frame when discussing science. Using the balancing norm frame implies that journalistic objectivity and fairness requires telling “both sides of the science story” and usually pits scientists against fossil fuel industry representatives or think tank spokespeople. The research suggests scientists should not engage in this type of debate, and instead only debate the methods and validity of the science with other scientists.

**Science as Truth not Theory**
The word “theory” frames a lack of confidence and surety in the science for the public—it is a hedging word that is exploited by fossil fuel industry. Research shows that scientists should get used to explaining theory as truth without qualifications when speaking to the public. For example after a catastrophic event people are willing to see the issue through a different frame. Scientists can frame the truth here: “The truth is that these weather events will increase in the future because humans are putting too much Co2 into the atmosphere which is trapping heat like and blanket and causing the ocean to warm”. Use the word truth not theory.

**Metaphors**
Metaphors, like frames, are another way our brain takes short-cuts to grasp complex and abstract ideas quickly. A metaphor connects something we understand on a practical everyday level and connects it to the abstract or complex to make sense. “Economic weather report” situates the economy as a natural force, “driving the economy” situates the economy as something people control. We use metaphors frequently, and sometimes we can inadvertently undermine the understandings we want people to focus on and the action we want them to take by using particular metaphors.

The choice of metaphor can provide an indication of how governments and scientists are framing particular climate change solutions, and how acceptable they expect the solutions to be.

Metaphors that have been tested and shown to help people both understand the cause of climate change and motivate them to act in collective ways include the following:

¹ [http://frameworksinstitute.org/assets/files/climate/NNOCCI_flyer_02.pdf](http://frameworksinstitute.org/assets/files/climate/NNOCCI_flyer_02.pdf)
1. **Heat Trapping Blanket of CO2 Simplifying Model:**
   “Global warming is caused, in part, by the man-made blanket of carbon dioxide that surrounds the earth and traps in heat. It is thickened by burning large quantities of fossil fuels – coal, oil and natural gas. By burning these fossil fuels, we release Carbon Dioxide (CO2) into the air where it builds up, the globe warms and the atmospheric balance that keeps the climate stable is disrupted.”

2. **The Climate’s heart** - uses the metaphor of a heart’s role in regulating the body’s temperature to explain the ocean’s role in climate regulation

3. **Osteoporosis of the sea** - uses the metaphor of osteoporosis to explain the impact that acidification has on the chemistry of the ocean and how this impacts sea life

4. **Regular vs Rampant CO2** - explains human agency in carbon production and the difference between regular levels of CO2 produced by ‘normal life processes’ and the rampant levels produced by burning fossil fuels (for example).

These are all described briefly in the factsheet:
http://frameworksinstitute.org/assets/files/climate/NNOCCI_flyer_02.pdf

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Avoid

| Untested, alarmist metaphors e.g “loaded dice,” “time bomb” and “slippery slope”, or any metaphor if you are unclear of what it evokes. |

Replace with

| Productive tested metaphors e.g heat trapping blanket, climate’s heart. |

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Visual metaphors

Research on visual representations of climate change has found that “...imagery plays a role in either increasing the sense of importance of the issue of climate change (saliency), or in promoting feelings of being able to do something about climate change (efficacy) – but few, if any, images seem to do both.”

Images that frame energy futures and lifestyle choice imagery support feelings of being able to do something about climate change (self-efficacy).

Images of visual impacts made climate change seem important (e.g., picture showing flooded land, melting ice caps, polar bears, floods or dried river beds) but also made people feel less engaged or empowered.

The research is not entirely clear on visual metaphor use, but alarmist or catastrophic imagery seems less likely to spur collective action. Testing other imagery before using it is important in this case, local imagery is worth investigation given the research on framing local impacts.

Other language

Research shows that certain words are more, or less, helpful in evoking collective action in climate change:

<table>
<thead>
<tr>
<th>Avoid</th>
<th>Replace with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politician</td>
<td>Elected official or community leader</td>
</tr>
<tr>
<td>Government</td>
<td>Our state/community</td>
</tr>
<tr>
<td>Making business pay</td>
<td>Responsible business</td>
</tr>
<tr>
<td>Pollution-dependent economy</td>
<td>Clean energy economy and jobs</td>
</tr>
</tbody>
</table>

Facts and causal stories

Creating an environment in which people can think productively about climate change and action, requires the use of facts to frame necessary action not just to describe the problem. Facts themselves are not the story, they are a character in it.

People tend to think fast and struggle to grasp the abstract and complex however, we can use something called explanatory chains to build simple but productive mental models for people about cause, effect and necessary solutions.

Researchers in the US have tested some explanatory chains and identified specific climate change explanatory chains that give information about processes, rather than just effects.

Researchers also suggest that values messages and explanatory chain messages should be combined for greater effect.

Researchers further recommend that when using explanatory chains we:

- Identify the cause of the problem upfront (i.e., fossil fuels and carbon emissions).
- Provide general conceptual accounts of mechanisms (i.e., do not get lost in details).
- End with broad repercussions (show people why they should care by connecting the effects to broader impacts).
- Clearly identify agents when also explaining the cause and effects.
A further suggestion for future development of explanatory resources is about visualisation. A 2014 review of communication strategies found a number of suggestions for computer-aided visualisations of climate change processes, such as showing landscape change under different conditions, to enhance understanding and motivate behavior change.

<table>
<thead>
<tr>
<th>Avoid</th>
<th>Replace with</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describing the problem with a lot of facts about climate change destroying our ecosystem.</td>
<td>Explanatory chains that start with cause, lead people through effects, and end with solutions for example this tested chain from Frameworks:</td>
</tr>
<tr>
<td></td>
<td>“Some carbon dioxide, or CO2, is needed for life processes. We can call this “regular CO2.” But CO2 is not just something that we breathe out and plants take in. It’s also something that gets put into the air when we use any kind of fossil fuel - when we burn coal to create electricity, or use oil to fuel transportation or manufacturing. These things are putting a lot of CO2 into the atmosphere and oceans. We can call this Rampant CO2 because there’s too much of it and it’s getting out of control. Rampant CO2 accumulates in the wrong places like the ocean, and causes a number of problems in the climate and ecosystems. We’ll always need regular levels of carbon dioxide, but we need to start reducing rampant levels of carbon dioxide.”</td>
</tr>
</tbody>
</table>

The messengers

The messengers who convey climate change messages also matter. Research on messengers and trust is complex; it is not as simple as sharing a person’s group identity, or using institutions that should be considered trustworthy.

Researchers suggest that in communicating climate change and climate action we:

- Use a wide range of messengers so that each target audience will recognise them as values aligned, and help depolarise the issue.
- Use people who are well qualified to comment on the context of the message. For example, religious leaders may be trusted to deliver messages about climate change as a moral issue and weather people on the warming trends.
- Use unexpected messengers, who may align with persuadable people’s values, for example businesses on political advocacy.
- Emerging evidence suggests that intergenerational messengers may be effective—specifically young people/children talking to their parents and grandparents appears to depoliticise climate issues (for example the “Elbow Your Elders” campaign https://www.nature.com/articles/s41558-019-0463-3)
Pulling it all together - using the components to tell a story

Just like we need to build the foundations to a structure before we put on the roof, so the components of evidence-led communication need to be brought together in a certain way.

Using the structure of a story is one way to bring these components together successfully. People are hard-wired to respond to stories. We attend to and retain information better when it is within a story. Stories, to paraphrase Christina Baldwin, are the water we swim in. Effective communications about climate change need to have an overarching story.

To tell a story you need a plot—a sequence of events and the outcomes, cause and effect—and you need to link the helpful values that matter, with the actions that people take.

Key elements of your message

1. **WHO**—Decide the characters & agents: who are the characters in your story. These could be the reader, the writer, children, a politician, the fossil fuel executives, a system even.

2. **WHAT**—Articulate a vision: the better future that your character wants. Be specific and concrete: e.g an economy based on 100% renewable energy, new jobs in wind farms, solar and sustainable buildings, workers who are paid a living wage to produce renewable energy etc.

3. **WHY**—Identify helpful values: why they want this, what are the helpful values that matter? E.g innovation “working together have solved many big problems throughout history, we can rise to this one”.

4. **BARRIERS**—Specify the problem/barriers to achieving the vision: attributing cause and effect based on evidence (with agents of this cause and effect named). There may be multiple causes, barriers and effects, try to keep it simple.
   a. Cause of the initial problem (e.g the burning of fossil fuels by humans releases carbon into the atmosphere).
   b. Mediating factors (e.g our heavy reliance on fossil fuels to do basic things in society, and power our growing economy, which means people are contributing too much carbon— rampant carbon. Meanwhile the executives of fossil fuel companies are undermining our collective attempts to rebuild our economy on renewables)
   c. Outcomes: by not reigning in the fossil fuel industry and urgently transforming our economy to renewable energy sources our politicians are allowing too much rampant carbon to go into the atmosphere, and this is creating a heat trapping blanket and warming our oceans, creating extreme weather patterns.

5. **HOW**—Solutions: Attributing better outcomes based on evidence of the cause (e.g we can limit this warming, and adapt, by limiting the amount of rampant carbon we put in our atmosphere by urgently accelerating the work many people are doing to build a 100% renewable energy system).

6. **ACTION/RESOLUTION**—this must be in proportion to the size of the problem you have described and be specific (e.g politicians need to recognise the opportunity we have right now, urgently commit to limiting warming to 1.5 degrees, and redirect all their attention and resources to support people who are already building a new economy based on renewable energy.)
BE THE CHANGE - BECOME A 100% RENEWABLE ENERGY CHAMPION TODAY!

Access to energy is key to development. But our dependence on fossil fuels now threatens our very existence as it is a major cause of climate change. The 100% RE Champions’ Initiative calls on celebrities, specialists, climate leaders and other prominent persons to add their voice to the groundswell of ordinary people from all corners of the globe demanding urgent change. We must start to rely on 100% renewables for all our energy needs to ensure equitable access, health, jobs and prosperity.

We must do it now!

http://www.go100re.transitioninaction.org/