INTRODUCTION

How do we talk about it? How do we talk about this human caused change which is heating and ruining our world’s climate?

Both of us (Jeff & Marc) see that we can stop this heating by transitioning the world economy away from those things that heat the climate to new technologies already on the shelf that stop doing that. There are many energies working in our favor, in public sentiment, in government support, and from market forces. Yet, countervailing forces thwart progress toward healing the world’s climate. We feel that our personal and organizational attempts to communicate about climate have been pretty ineffective outside that group of people who already understand the issue. We see an emergency and get frustrated when our efforts to connect with friends and recruit potential allies get little response.

Who should read this paper? Individuals or any organization who wish to communicate with regular people in America about climate change. These regular Americans are concerned, perhaps really concerned about climate change. But they are taking their kids to school, or they have demanding jobs, or they don’t see themselves as science minded, or something like that. Yet, they do know that something is off. Summers are hotter. Winter isn’t as cold. And there are all these disasters plaguing the news. We need these good folks to care, to vote, maybe get involved politically, and to do their part in making personal changes which will then be seen by their neighbors.

What do we want to promote?
a) climate messages that are being shown by research to be more effective for regular people,
b) more consistent messaging across our climate movement,
c) messaging which not only does not exacerbate our national divisions, but also brings people together for this common problem, and
c) further investigation on the reader’s part: we suggest active research efforts on this topic.

It is critical to move into a future for which we can be proud to effectively communicate today more broadly so that we have more impact on changing buy-in and behaviors. Being more consistent across organizations will improve our effectiveness. People hearing truthful, simple, repeated, and hopeful messages from many sources obtain greater buy-in. Even so, there is an urgency to transition away from our use of fossil fuels. “Later is too late.”

QUICK ANSWERS
(For those who don’t want to read to the end, here’s our conclusions.)
• LATER IS TOO LATE – a most potent message!
• Protect the planet for FUTURE GENERATIONS.
• We envision a FUTURE FOR WHICH WE CAN BE PROUD.
• The evidence for global heating so clear, it really is a BIPARTISAN PROBLEM.

Also Remember:
• KEEP IT SIMPLE.
• Have a CLEAR ASK.
• Be honest and truthful.
• It is methane pollution. (Or “methane pollution, formerly known as “natural” gas.”)
• The effects of climate change are verifiable through observation by anyone looking.
• Contrary to the messaging of the backward looking interests, the problem is largely the responsibility of corporate and political choices.
• It is about the freedoms that have come with our civilization.
• It is about empowering ourselves to help shape our future together.
• Yet, individual choices still significantly matter.
• Engage with your heart, meet your audiences as personally as possible.
• The majority of the American public wants action now.

Now that you know our conclusions, we will offer some principles about how we got there. Sometimes embedded in the principles and then following them, you will get links that inform our principles. Following the Principles is a final comment before a list of some of some Materials That May Be Helpful.

PRINCIPLES
1. Keep it simple.
While this paper is not simple (in fact we hope that it leads you to do further research¹ and carefully craft your message,) your results should be for that majority of Americans who are concerned about climate change but are not the most technically minded. Something clear, true, repeatable, and simple. Every time we share a true, clear, repeatable, and simple message, we help it to get repeated by those who have heard it.

And stop using jargon, and if you must, say what you mean is in common terms and then use the technical word. Also, no acronyms. Both jargon and acronyms are simply confusing, most people don’t understand them.

2. Start by telling stories.
Build relationships and show your vulnerability by letting know people who you are.²

¹ A great place to start is here: https://climatecommunication.yale.edu/ Spend a good amount of time on this site.
A story from Jeff – Over the years new technologies that help us stop burning fossil fuels have come along. I (Jeff) have for a long time anticipated their arrival in the marketplace. When LED bulbs first came out, I was quick to grab one or two. They were expensive then! I put a few up over the dining room table. I didn’t tell my wife that I did it, just to see if she noticed. She didn’t, so the next time I went to the hardware store, I picked up a few more. And then the price came down, not quite to where it is today, but much more reasonable, and I replaced every bulb in the house. Our electric bill went down measurably. Even buying the expensive ones made us money! A good investment.

A story from Marc: When I read “This Changes Everything” by Naomi Klein in 2015, I decided to shift my professional focus from water to climate. The book did change everything. I had not been fully aware of the implications of climate change for humanity and our planet, even after working for EPA for 28 years. I feel a responsibility to my kids and grandkids to take care of our planet. We are trashing the very air that supports the planet, for future generations to inherit it. It’s fulfilling to be active working on the most important thing I know. One of my main frustrations has been communicating with others on climate issues. My emails elicit no response or change. Those who profess concern choose to be very passive, or totally not paying attention. That has resulted in this paper.

3. Figure out your frames

Your “frame” is the basic truth(s) that you want to convey. What do you really want to say? If you find your frame connected to your heart, you are probably getting close to the reality of what you want to say. We communicate with other people, it’s relational. What in your heart do you want to say to them? How can they best hear what you want to say? This isn’t just sharing your fear or anger, although sometimes it might be that, for a moment. But where do you want things to go? What is the result that you want? Could it be that you want to see your grandkids breathing free as they play on the lawn on a hot summer’s day? Could it be that you want people to respect each other and each other’s space and not pollute other people’s air? Do you have a vision of all life on earth living in a beautiful harmony?

This whole matter of frames means that we will pay attention to and listen to our audiences and hear what they need to hear for us to communicate well. As individuals our default is to think that our personal way of perceiving the world is the only way to do it. There are different sorts of people in any given population who conceptualize things differently; this is natural, not something needing to be fixed. There are also different people in the United States in this moment, who have been shaped to think certain ways. With the issue of climate change, we need to say some things broadly, below you will find some frames which we suggest. In all cases, we need to speak the truth.

However, sometimes frames are superficial, they don’t get to the heart of the matter. This is essential. If you don’t get to the heart of the matter, you will be wasting your time trying to clarify things later. For example, here’s a frame that has been developed to divert the listener from the heart of the matter. It is said in CRED® commercials that the important thing to look at is leaky “natural” gas pipelines and how industry is addressing this. This all sounds good, but it is a diversion. How do we frame this issue to be truthful about pollution and climate change? The product of those pipelines, methane, propels three existential problems. That methane creates these three: ozone pollution, ocean acidification, and a

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3 Much has been written about “frames.” We start with the work of George Lakoff. Our version of frames is our own.
4 Scientific American 02 01 2024
5 https://www.cred.org/explore/is-fracking-regulated/
hotter climate. We might say fracking is as polluting to the lungs of the earth as a cigarette is to your lungs. We talk about the climate and keeping the world a beautiful place.

Consider the basic truth of what you want to say. Come up with metaphors that speak from your heart to the hearts of your audience. Be basic. Be true. Your opponents, in their well-funded research, will spread their counter truths to yours. They will even anticipate what you might say.

**HERE ARE SOME FRAMES WE SUGGEST.**

If you try them, please let us know how they work for you.

**A tested frame: Later is Too Late**

The truth of this slogan is, yes, evident to those familiar with the science; yet it also resonates with every American who may not understand the mechanics of the climate that is changing around them and their families but knows that the climate has heated and continues to get worse. The effects of climate change are growing right before our eyes. And the idea that we can wait to resolve this tomorrow, or even in the next decade, is delusional. The world’s climate, our local climate, and the future climate of our children and their children will only worsen with delay. It needs to be repeated over and over again. **Later is Too Late.**

**Another tested frame: It’s about our children and their children’s world.**

People have an innate concern for the generations, for those who come after them. This concept has been shown universally as the most important concern of people. And it is also not too late, in this moment, where we can emphasize the future in positive terms, with pictures of what that future can be for our children and their children.

**A frame that should work: We can build a future for which we are proud!**

We need to hold in our minds how good things can be with a whole lot less pollution coming from every aspect of extracting, reshaping, and using fossil fuels. Yes, there are tradeoffs, the footprint of eight or nine billion people will hit heavily on the land, no matter what we do. But we can have a livable climate and delightful landscapes and bequeath it to our grandchildren. And a future orientation is exactly what we need to walk together with those who will own that future. It is a walk worth taking!

**A frame to help people look around and see:** **Look around and see the effects of climate change.**

The proof that people can see, if they are able (or willing) to see across years and decades, is that the predictions of the scientific community have come true. Extreme weather, floods, fires, and rising temperatures are, if anything, worse than predicted. You don’t need to understand the science of atmosphere heating gases when an extraordinarily massive hurricane hits the coast, or when prices go up on cotton or olive oil because large areas of cropland experience abnormal drought. The examples are plentiful and usually available for your particular location. Don’t neglect to look at the rise in insurance rates, or other inflationary costs, that follow from one area’s being hit by climate events extending to your location. The migrant crisis is due, in part, to climate disruption, and will only get

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6 [https://potentialenergycoalition.org/](https://potentialenergycoalition.org/)  These folks have also done some amazing work testing ways of talking about climate change.
7 [climate.copernicus.eu](http://climate.copernicus.eu)
8 [the ParliamentMagazine.eu](http://the ParliamentMagazine.eu)
9 [the Economist](http://the Economist)
worse as some places become less productive and hotter. And remember, sometimes you will need to cite examples of the worldwide nature of the crisis.

A frame to reach most people: **It is pollution!**
People understand pollution— it’s anything that harms everyone that people send into the world. Regular folks don’t need to figure out the science unless they want to figure all that out. They may not understand the reflectivity of CO2 to infrared wavelengths, but they do understand things that are dirty. And, indeed, given the emission of heat-trapping gas’ catastrophic results of ozone, dust, smoke, mud, and destruction, the heating earth is creating great amounts of pollution that threaten our beautiful lives and the lives of our children and our children’s children. So, unless you are addressing a technical audience, it’s not “emissions,” it’s not “particulates,” it’s not CO2 and/or “natural” gas. It’s pollution. It’s dirty. It’s the contamination of our world. (If you are specifically talking about “natural” gas, be more honest and say, “methane pollution.”)\(^\text{10}\)

A basic frame to help the fearful: **It’s a transition.**
Those who cling to the old, polluting ways, would scare people that we are saying that we environmentalists say that everything must happen overnight. However, we know that we cannot make all the necessary changes overnight. It is a transition that must be made with definite steps, one after the other. However, the more the clingers to the old ways succeed in stalling the transition, the more abrupt it will inevitably be. Either one way or another, the physical properties of the situation do not pay attention to our squabbles, they continue to do what they do.

A frame for politics: **It should be a bipartisan issue!**
Climate science is clear and settled. Decades ago, scientists predicted the sort of climate changes that we are seeing more and more of with our own eyes. The science deniers want to call us “radical”. We don’t accept their frame. We are the ones who observe that the climate science has been borne out by experience that anyone can see. And since it is so obvious, it should reasonably be bipartisan. We are the ones who implicitly call for unity among Americans. We know that the divisions in America are manufactured, and so manufactured in order to divide and control. But we don’t focus too much on that.

A basic frame: **We are truthful.**
We are in this for the long term. Nothing beats credibility. If you make a mistake, admit it. Yes, there are people out there who may twist whatever you say. These folks are not your immediate audience. We are engaging with those who will have a conversation where both people listen to each other; in such a setting honesty does its work.

A basic frame for Americans: **It is about Freedom!**
The new energy economy provides more choices. We can lead the world in the new technologies. We Americans can INVEST in America. We Americans can INVEST in new American jobs. The new electric future gives individuals, families, and America the power to be free. We can be patriotic and want to invest in things in which together we Americans are PROUD. We are patriotic if we invest in things that

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\(^{\text{10}}\) [methane-matter-strategic-communications-for-climate-action/]
leave no one behind, that build wealth in concert with the survival of life on the planet and in the oceans.

A basic frame: **We can accomplish what is needed.**
Yes, everyone who lives on the planet is a victim of the heating climate, but we are not powerless, especially we rich Americans. We take responsibility. From changing the system, to working politically, to dealing with one’s own “carbon footprint,” there are changes that we have power over and must make.

A basic frame: **Have a clear ask.**
Only by being clear about something actually useful that people can do does any of this make sense. Ask people to learn what the problems are and research how to solve them. Ask them to organize, even if it is just a couple of friends. Or join an organization. As an individual, make changes that reduce their emissions: buy a heat pump for heating or cooling, insulate their home, install an electric stove, use public transit when possible, and, if they drive, drive an electric car.\(^{11}\) Ask people to simply stop burning fossil fuels as much as possible.

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\(^{11}\) [https://www.rewiringamerica.org/](https://www.rewiringamerica.org/) These folks advocate for and clearly explain the “electrification of everything.”
A FINAL COMMENT: THE SHAPE OF THE FUTURE.
We can’t tell what the future holds, but we have some pretty good clues. The technological advances of civilization since the implementation of fossil fuels have been unrelenting and accelerating. What these technologies have done to the human community and to the makeup of individuals is obvious to those of us who have experienced many shifts in technology over the course of our lives. When we (both Marc and Jeff are in their 70’s) reflect back merely to our grandparents, who were born before the age of the automobile, what has happened in a few generations is stunning. Today, we humans really don’t know how to deal with our cell phones, much less AI. But here we are. We hang between climate catastrophe and a remarkable, cleaner, cheaper future. Marc and Jeff affirm that our core humanity still resides within us all. It is worth saving. It is worth making better, more just, more kind, more relaxed. With more butterflies and birds. With clean rivers and thriving corals.

So, we hope that those reading this will agree that fighting for a good future is what will bring most people along with us. “Banning” this or that looks at the past. “Transitioning to” brings us into a good, realizable future. Now, we don’t know exactly how it will play out. But with a positive, future orientation, not implied, but clearly articulated, we can lead others into a better place.

Matt Burgess\textsuperscript{12} reports that democracies perform better than autocracies in fighting climate change. So, there is a happy convergence for us. How do things matter. Do we work for all people and not the few? Do we work to empower each other rather than keep it for ourselves? Do we possess, starting within ourselves, habits that lead to the building of communities? Will we lead our communities to build the human community we want to see? Will our children and their children be proud of us for what we have done here?

What we in the environmental movement do know is this: \textit{Later is indeed too late}. We can’t fix every justice problem in the short moment of a couple of decades that we must get off of fossil fuels. Making our American culture more just and compassionate may not happen in those two decades and we can’t fix our culture if, globally, there is not enough food. Later is too late. So, our climate communication needs to be effective in helping us quickly transition away from fossil fuels. When we communicate, we need to tend both to our locality and to our nation and to our world. This may seem impossible; how can we actually understand all that needs to be said in every instance? It can be hard work to modulate our message for others. Wouldn’t it be better just to say it as frantically as we feel it? Well, maybe that’s the best some of us can do. But the best communication is relational, it considers the other people in the conversation. Good conversation empowers the other to make their best decisions. It is small “d” democratic. And isn’t that the world we want? A place where people respect each other as individuals, worthy of being part of the circle of humanity?

Spend some time. Imagine a good future for this world with all these billions of fellow people in it. And be that future you want it to be.

Jeff and Marc welcome feedback and conversation. Please feel free to contact us!

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\textsuperscript{12} See page 9
SOURCES AND MATERIALS THAT MIGHT BE HELPFUL
These sources are not in any order; they are all worth looking into.

1. Here’s the results of a study of TikTok and climate change.13
   • Political content underperforms The relative underperformance of political content, despite high engagement rates, suggests a different approach is needed to reach a wider audience.
   • Identifying Influence Total plays is not an especially helpful way of identifying users with the potential to influence.
   • Finding Partners This report identifies a number of TikTok users who produce content with impressive rates of engagement and could be useful influencing partners for campaigns.
   • If in doubt, go cute. If you want to create viral TikTok content, use footage of cute animals to make your point.
   • Hold Your Fire Content criticizing people, including politicians, underperforms. Our solution to this conundrum is to plead for bipartisanship.

2. Here’s the link to a global study that includes the relative power of arguments to deal with climate change in the United States.14 Here’s the PDF version.15 On the PDF go to page 91 for USA specifics. Here are some takeaways from this report. The impact is expressed in the amount of impact the argument holds. For example, 12x is twelve times the impact of 1x.

   12x  To Protect the planet for future generations.
   7x   To protect ourselves from extreme weather.
   5x   To protect our health by reducing air and water pollution.
   1x   To reduce social inequality and support those impacted by climate change. 16
   1x   To increase jobs, opportunities, and economic growth.

3. Yale University Center of Climate Communication is collecting good data on American attitudes on climate heating.17 The amount of people who are concerned about the issue in the United States is a very positive thing, In general, people are seeing the issue for what it is. And a more recent report which underscores this point, but also makes the point that while Americans are concerned about human caused climate heating, they don’t talk about it much! 18

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13 https://climate-citizen-insights.s3.eu-west-1.amazonaws.com/u23gpwq2vruehd2scrlupk7ival
16 In the very short amount of time we have to do what needs to be done, we can’t hope to make the world fully just. What we can do along the way towards that goal, great! But we must be clear that while we seek a more just world, our first priority must be to stop fueling climate heating that destroys the climate for future generations. We can’t justice if it is too hot to grow enough food.
17 https://climatecommunication.yale.edu/visualizations-data/ycom-us/
4. **HOW TO TALK WITH PEOPLE ABOUT CLIMATE CHANGE**

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Credit: Susan Joy Hassol, styled by Scientific American.\(^{19}\)

5. Finally, Jeff and Marc had a conversation with Matt Burgess\(^{20}\), assistant professor at University of Colorado at Boulder, Colorado. Matt brings a more mainstream language perspective. Here are some notes from our conversation. And this is really worth it: follow this [link](https://www.scientificamerican.com/article/the-right-words-are-crucial-to-solving-climate-change/) for a very productive meeting with Matt with good data on the state of the American populace. You will need this code to get into the video: w$k6PT1a. And [here](https://www.mattburgess.ca/talks-videos) is a link to Burgess’s slide deck; no access code needed.

- Use messages that resonate across the political spectrum.
- Be positive about the new energy economy. Framed with expanding choice rather than “banning” or ending options.
- Not identity, not anti-American.
- Hope rather than doom.
- IRA is popular.
- The business case is getting better and better.
- Nuclear is more popular.
- Be an honest broker.
- Be plain spoken instead of using hyperbole and histrionics.
- Carrots over sticks.
- Tax corporate emissions.
- Optimism over pessimism.
- Patriotism!
- Invest in something that we are PROUD of.
- No one gets left behind.
- Net metering
- Divide is between hard right and everyone else.
- If you frame climate in terms of race, it resonates LESS.
- If you frame climate in terms of economic class, it resonates MORE.

\(^{19}\) [https://www.scientificamerican.com/article/the-right-words-are-crucial-to-solving-climate-change/](https://www.scientificamerican.com/article/the-right-words-are-crucial-to-solving-climate-change/)

\(^{20}\) [https://www.mattburgess.ca/talks-videos](https://www.mattburgess.ca/talks-videos)