Frequently Asked Questions

California Climate Breakthrough Initiative













Context for Action

Thirty years from now, the only thing that will appear important about this historical moment is whether or not we did anything meaningful to confront climate change. The reason is simple: We are drastically altering the very life support system upon which we depend. And we have only a very narrow window of opportunity to avert catastrophic impacts to society. The time for action is now; each day we delay the required emission cuts become steeper. Yet, non-binding international climate agreements continue to allow global greenhouse gas levels to soar.²

The time to act—at scale—is now. The transformation of our carbon-intensive system can only succeed by raising public support, an effort that must be funded by billions of philanthropic dollars and must be on the scale of a presidential campaign.

Issues, Questions, and Answers

Issue 1: I keep hearing that global warming is a major problem.

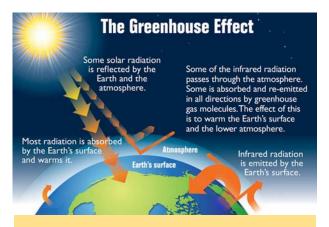
Q 1.1: Why is that the case?

A: Climate change is one of the greatest challenges humanity has ever faced. The burning of fossil fuels, deforestation, and certain agricultural practices release greenhouse gases—especially carbon dioxide (CO2)—that trap heat in the atmosphere.

Since we began burning fossil fuels and drastically altering forest cover 250 years ago, Earth's average temperature has risen 0.9°Celsius (1.5° Fahrenheit). This seemingly small increase has already had an enormous effect. The trapped heat draws more moisture into the atmosphere, and changes the global weather patterns. Some regions are battered by more frequent and severe storms with heavier precipitation, flooding, and mudslides. Other areas are becoming drier, leading to more fires, water shortages, and crop damage. Polar ice is melting, causing sea level to rise. This devastation will only increase as temperatures rise. As more carbon is dumped into the atmosphere, the risk of runaway heating is increased.

To maintain a livable climate, humanity must quickly alter its practices. We are currently deeply dependent on fossil fuels for transportation, food production, electricity, and other aspects of modern life. And we are clearing vast swaths of forest. Trees store carbon, and when they are lost due to deforestation, this stored carbon is released back into the atmosphere as CO2, contributing to global warming.

We must overhaul our policies, infrastructure, and activities in order to transition to a low carbon, renewable energy economy and to maintain and restore forest cover.



The "Greenhouse Effect"

Carbon dioxide, water, methane and other atmospheric gases trap a certain amount of the Sun's energy and warm the Earth, thus earning the title "greenhouse gases." CO2 is a major greenhouse gas, even though only a trace is in our atmosphere. Water vapor and methane are also major greenhouse gases. At the proper levels, these gases create moderate temperatures for humanity and life to flourish. Without this warming blanket, Earth's temperature would be about 60°F cooler, making it 0°F on average.

It is the excessive buildup of greenhouse gases that poses a threat for humanity. Since the beginning of the Industrial Age in the mid-1700s, humanity's burning of fossil fuels has increased atmospheric CO2 levels from 280 to 400 parts per million (ppm)—about a 40% increase. By increasing the abundance of these gases in the atmosphere, human-kind is increasing the overall warming of the Earth's surface and lower atmosphere, a process called global warming.

¹ Everything else – the financial crisis, the social networking revolution, building bridges between the West and Islam, China's democratization – pales in significance beside the question of whether we managed to stop our climate from radically changing.

² We are currently at a global CO2 level of about 400 ppm (the highest in 3 million years): http://tinyurl.com/lyr7qc2, rising 2-4% per year: http://tinyurl.com/cO2-trends. Note this does not account for additive CO2e concentrations: http://tinyurl.com/GHGs-478ppm.

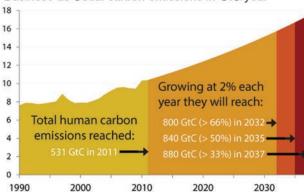
Issue 2: I keep reading about carbon dioxide emissions, atmospheric carbon levels, and carbon budgets, but I don't understand what this means or what I can do about it.

Q 2.1: I hear that time is running out; what does that mean?

A: By 2011 the world had already emitted 531 gigatons (billion tons) of carbon (GtC). This is about two-thirds of the total we can emit to have a 66% chance of staying within the 2°C heat limit, according to the 2013 IPCC assessment. This leaves only another 270 GtC we can emit before we exceed the total "carbon budget" of 800 GtC (this includes all GHG emissions). If global carbon emissions continue to grow at 2% each year, as they have done over the last decade, we will blow through the 800 GtC carbon budget at the start of 2032 – a mere eighteen years from now.

Blowing the Carbon Budget

Business as Usual carbon emissions in GtC/year



Under business as usual with an emissions growth of 2% per year, we would exceed our carbon budget and the 2°C ceiling by 2032, in just eighteen years, which would be unprecedented in recorded history and very dangerous.

Notes: % in parentheses are the chances of limiting warming to 2°C. Assumes limited further non-CO2 forcings as per RPC 2.6.

Data: Budget: IPCC WGI AR5. Historical: Global Carbon Project.

The Cohenhagen Accord

In 2009, the world defined a global goal to guide emission reduction efforts. At Copenhagen, 141 countries, representing over 87% of global emissions, agreed that holding global temperature increase to below 2°C above preindustrial levels was needed to prevent dangerous climate change.

Unfortunately, the Copenhagen Accord is not legally binding, meaning that countries may continue to emit greenhouse gases at an increasing rate.



Scientists warn of abrupt and disruptive effects of global warming

Scientists have sounded the alarm with the release of studies challenging the idea that global warming is occurring gradually over the century and that its worst effects can be avoided by keeping emissions below a critical threshold.

A National Research Council report says the planet is warming so quickly that the world should expect abrupt and unpredictable consequences in a matter of years or a few decades. Among the changes already underway are the sudden decline in Arctic sea ice and climbing extinction rates. Scientists based their findings, in part, on the study of climate history as recorded in tree rings, ocean sediment and ice cores. They found the timeline punctuated by big, sudden changes, including ocean circulation shifts and mass extinctions.

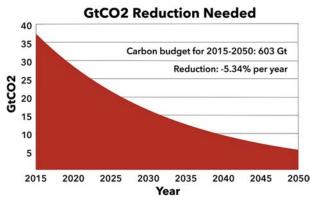
As a result of the burning of fossil fuels, industrial activity and deforestation, the amount of carbon dioxide and other heat-trapping greenhouse gases in the atmosphere has soared to levels not seen in millions of years, with global temperatures rising by about 1.5 degrees Fahrenheit (0.9°Celsius). The scientists say the accelerating gas levels increase the risk of reaching various "tipping points," leaving nature and society little time to react.

Tony Barboza, "Studies warn of abrupt environmental effects of warming," LA Times, December 03, 2013

Photo: Rim Fire, Stanislaus National Forest, 2013

Q 2.2: So what does this mean we have to do?

A: We must quickly mobilize to phase-out fossil fuels and transition to a renewables-based energy economy, while also maintaining and restoring forest cover. A breakthrough in emissions reductions is necessary if we are to succeed. Importantly, it is not too late to avert the worst climate effects and runaway heat increases if we begin these reductions now. Citizens and policymakers must understand several principle actions now needed for climate stabilization under the 2°C heat threshold:



CO2 emissions reductions of 5% per year on average are now needed for the likelihood of staying below the 2°C heat ceiling.

- Starting now, reduce carbon emissions by about 5 percent each year, until fossil fuel phaseout is complete by mid-century,³ by quickly transitioning from fossil fuels to low carbon energy.
- Price carbon pollution and remove fossil fuel subsidies. To drive broad-based emissions reductions, we must account for the true societal costs of fossil fuels.
- Invest globally in the conversion to a clean, efficient, and resilient energy infrastructure and in forest cover. Transition from our carbon-intensive, inefficient, old system. Assist developing nations to bypass carbon energy systems and to restore their forests.
- The US must lead. The US must embrace the 2°C limit, and lead the global low carbon mobilization. Fossil fuel reductions must begin now in industrialized nations,⁴ and within a few years in developing nations.⁵

Issue 3: I've heard you don't call global warming an environmental issue.

Q 3.1: Why not?

A: Global warming is a humanitarian crisis and a global security issue. Environmentalism is broadly defined as protection and restoration of the natural, non-human world. While climate change is a big threat to the non-human world, it is also the largest and most complex threat that humanity and civilization have ever faced.

As we begin to experience heat waves, prolonged drought, rising seas, and as natural systems begin to crash, we will see horrible effects ripple throughout our interconnected world. When understood this way, it is clear that climate change will directly impact public health, poverty, economics, national security, and food and water security. Environmentalism is seen as a small special interest, within a spectrum of special interests. Global warming transcends environmentalism.

Defined as a humanitarian crisis, we can connect its impacts with people's lives here and now and more readily convey the needed urgency for immediate action.



Oso, Washington mudslide, 2014. Climate change is already disrupting our lives with more frequent floods, mudslides, droughts, heat waves, forest fires, and crop damage.

³ See: "Three salient global mitigation pathways, assessed in light of the IPCC carbon budgets," EcoEquity and the Stockholm Environmental Institute, http://tinyurl.com/salient-pathways; and James Hansen, "Why I must speak out about climate change," TED, February 2012, http://tinyurl.com/Hansen-TED 4 As Kevin Anderson, professor of energy and climate change at the University of Manchester notes, this fundamentally rewrites the chronology of climate change from long-term gradual to urgent and radical: http://policydialogue.org/files/events/Anderson_Reframing_Climate_Change_Presentation.pdf . Others note the "brutal logic" of climate change http://tinyurl.com/brutal-logic.

⁵ Emissions reductions must occur sooner in developed nations, given our historical contribution to the problem and our capacity to innovate and remediate.

Issue 4: Thus far, organizations have failed to substantially shift public consciousness and reduce emissions.

Q 4.1: Why have others failed?

A: Many organizations have worked for years to raise public awareness of the dangers of global warming, frequently through focused protests on issues such as the Keystone pipeline, online petitions, letters to Congress, donations, or social media messages. These approaches have so far failed to move the dial in the direction of averting climate catastrophe while global emissions have continued to rise relentlessly. Specifically, others have not halted the rise in CO2 emissions because:

- They did not communicate that this is much more than an environmental issue (see 3.1).
- They failed to focus on what was really needed.
 Instead they focused on what was possible. However, a system-wide approach—a carbon price—is what is most required. We must begin to include the costs of

- carbon's damage.
- They did not focus on effective and far-reaching policy that the public could support, such as a price on carbon that is fair and rational.
- They neglected to engage the public directly through a broad education effort that conveys the full truth of what is at stake, what little time remains, and what we must do to protect ourselves.
- They did not broadly align grassroots constituencies using similar outreach, recruitment, and organizing tactics as with the successful effort to defeat Proposition 23 in California in 2010⁶ (see 4.4).
- They neglected to directly call upon philanthropy to mobilize its resources to address the challenge in the necessary way, and at the scale and scope necessary to avoid catastrophe.

Q 4.2: How and why is CCBI unique?

A: Specific breakthrough measures must be quickly taken for climate stabilization under the 2°C heat limit, including: (1) We must have peak carbon emissions now, with reductions beginning now in industrialized nations, and within a few years in developing nations; (2) we must reduce emissions several percent a year and quickly transition to low carbon energy; and, (3) the US must lead. The longer we wait, the more the required cuts become steeper and more disruptive.

The best way to achieve this is to put a price on carbon. This is only possible with broad public education and support. Clear evidence of support must be seen before the end of 2015—meaning, citizens must grasp the danger of our carbon path and begin to respond accordingly. To achieve this, the California Climate



Teach-ins and workshops will educate citizens and call for action.

Breakthrough Initiative (CCBI) and the Association for the Tree of LIfe (ATL) are the organizations calling for and catalyzing large-scale media, education, outreach, and grassroots mobilization efforts. The following are key aspects of our unique, multi-pronged strategy:

- Truth and urgency: While many climate organizations explain that global warming is dangerous and requires action, we call for immediate and dramatic action, now. Misinformation is endemic; our culture is failing to grasp the gravity of the threat, and concern remains shallow. Without a grasp of the scope, scale, and urgency of the crisis—including the reductions actually required for climate stabilization—it is impossible to reach consensus for action. Strategies and measures are pursued that are fractured, local, and fall far short of what is necessary.
- Educate and galvanize the public: It is time to initiate an open, truthful discussion about our situation. If citizens do not know what is at stake, and there is no plan to engage them in dialogue about how to change, nothing will be done. The time has come to catalyze action and policy change by alerting and engaging society on a massive scale. A national carbon price will only happen when a significant portion of citizens demand action to address our climate crisis.
- Personal engagement: Face-to-face education, dialogue, and support will be necessary to engage the

public. It is through our associations with others that humans develop understanding and emotional response to a crisis. Therefore, the public must be informed about the climate crisis through engaging workshops with personal teaching and discussion. The curriculum will be riveting, inspiring, and catalyzing to action. Our plans for conversation are extensive—personal meetings with discussion will be available in every community across the US.

- Massive media presence: These efforts must be supported by a broad media exposure, the reach of which is ubiquitous, hard to ignore, and extends to all demographic groups. Every media outlet and means of communication, including news, internet, radio, social media, television, and movies will convey the information. It must become the dominant cultural conversation.
- Grassroots focus: As concern rises, a grassroots
 effort will work in concert with the educational and media
 components to organize and mobilize people. Personal
 outreach efforts such as canvassing, house parties, info
 tables, leafleting, and social media will reach a growing
 segment of citizens. Rallies and simultaneous direct
 actions will further convey the urgency.

- Political engagement: These efforts must be supported by an effective political strategy to achieve national policies that drastically reduce our dependency on fossil fuels.
- Address root causes: The central goal is to achieve a national carbon price and the elimination of fossil fuel subsidies, to reflect the true cost of carbon and to drive broad-based emissions reductions.
- Mobilize influencers: We engage key influencers in the realms of science, faith, business, education, media, philanthropy, health, labor, and activism to further leverage and advance our efforts.
- Philanthropic leadership: Finally, we are uniquely clear that the deep involvement and partnership of philanthropy is required, with sufficient resources to create a massive-scale effort. Philanthropy, with its mission to care for humanity, is the cultural agent to actively fulfill a "Paul Revere" role in shifting the public dialogue through an extensive media warning.



Young and old gather at a weekly "Communities in Climate Action" event at Gandhi Mahal, a Bangladeshi Restaurant in Minneapolis that donates ten percent of their Wednesday night proceeds to the climate movement. On this evening attendees participate in a facilitated "climate conversation" about the future they envision.

Q 4.3: Isn't there another organization that is doing pretty much the same thing?



Climate training, Peaceful Uprising, First Unitarian Church, Salt Lake City, Utah.

A: No. First, CCBI is in the unique position of alerting key influencers and decision-makers, and engaging them in an effort to put a price on carbon in the US. CCBI can help deliver resources to help avert the crisis.

And while many organizations engage in climate education, climate news, and grassroots organizing—nothing is being done on the pervasive scale that we propose, and certainly not as part of a unified and coordinated effort that will be far more effective than the sum of disparate actions. Achieving what we propose will require a diverse alignment of grassroots constituencies, going beyond climate and environmental groups.

CCBI's partner organization, the Association for the Tree of Life is the catalyzing organization to bring these elements together within the multi-pronged effort, as described in Section 4.2. We invite organizations to partner with us in ways that suit their missions.

Q 4.4: How is the effort you envision different from efforts led by existing organizations?

A: Quite simply, we will mobilize the resources—both financial and grassroots—at the scale and scope required. Few national organizations are geared for such movement and coalition building, as is our role in this effort. 350.org has not used a massive outreach strategy at this scale, nor has it focused on a national carbon price. No other group is speaking as clearly and urgently about what we face, nor engaging philanthropy and citizens at the scale and speed required for a breakthrough.

We model our grassroots approach upon California's successful 2010 "No on 23" effort (see photo caption, right).



Successful California Leadership

California's No on Prop 23 campaign models powerful potential for a national grassroots climate victory. Diverse coalitions organized a massive voter outreach and education effort and won by a strong margin. The coalitions overcame challenges such as the lagging economy and powerful fossil fuel interests.

Q 4.5: How will you succeed when others haven't?

A: Our plan calls for a scaled effort far beyond previous efforts—an initiative comparable to a presidential campaign, in order to saturate the culture with the truth, to leave no doubt that we are in a crisis and that we must respond accordingly. It is time for Paul Revere to ride again.

Our education, outreach, and advocacy will take place throughout the US and Canada. Here in the US, we have over 15,000 partner venues ready to host this essential climate conversation now. We have science communication partners ready to utilize the best available educational resources on climate change.⁷

Additionally, we have committed partners who worked to successfully defeat Proposition 23 in California, as well those who conducted a successful nationwide grassroots movement which achieved breakthrough environmental legislation at a massive scale. We have committed partners involved in the integration of climate ethics into faith denominations at the national level.

Finally, we are working with the most acclaimed scientists and energy experts to clearly explain what is at stake and what we must do to address the crisis.

Q 4.6: Why start in California?

A: The question of where a transition to a low-carbon future can take root is a difficult one, due to its political, financial, and technical challenges. Fortunately, California has been unwavering in its commitment to address the issue of climate change, with the only economy-wide cap on carbon emissions in the US. What's more, the state recently led a successful effort to

beat back an attempt to derail its climate efforts at the ballot box, winning a resounding victory.

In particular, the San Francisco Bay Area and southern California have the resources and talent to help cut through the cultural inertia and powerful forces that seek to keep us addicted to fossil fuels and engage the public in the type of movement required to transform our system.

Q 4.7: Why so much emphasis on philanthropy? Isn't it then a top-down effort?

A: There are several reasons for the deep support and engagement of philanthropy:

- A number of foundations have poured massive funding into efforts to confuse the public and to fight change, tipping the balance in their favor.
- More than financial support, the active participation
 of philanthropy is needed. Philanthropy is the crucial
 first responder here, given its cultural credibility,
 legitimacy, and its extensive financial resources. It
 must actively engage scientists, movement leaders,
 key societal leaders, and warn the public. Since
 our elected leaders have largely been silent on the
 looming climate crisis, philanthropy and influencers
 must step into this "Paul Revere" role.
- Philanthropy's mission is to care for humanity, and at its best, it has led in social innovation.

- Large-scale social change efforts need significant funding. In order to execute this effort, the support of substantial financial resources is required.
- This effort was conceived and developed by the grassroots. Funding makes the education, organizing, and mobilizing possible.



The educational curriculum must be engaging, riveting, inspiring, and galvanizing to action.

^{7 &}quot;Climate Change: Evidence and Causes," National Academy of Sciences and Royal Society, February 27, 2014, http://nas-sites.org/americasclimatechoices/events/a-discussion-on-climate-change-evidence-and-causes/, and "What We Know: The Reality, Riaks and Response to Climate Change," American Association for the Advancement of Science, March 2014, http://whatweknow.aaas.org/.

Issue 5: Your plan calls for a massive public awareness effort to basically alarmeducate-motivate. An Inconvenient Truth followed the same model, yet it failed to change the consciousness of working class voters, and its impact on college-educated voters faded after a few years.

Q 5.1: Since citing alarming scientific facts does NOT effectively stir the public, how will you elicit a significant response?

A: There are a couple of issues here. First, An Inconvenient Truth never called for a carbon price, nor did it organize citizens for a collective response once they understood the risks. Our approach is to explain in close personal settings the reality of our current disaster pathway, and then to organize citizens for collective action. To "motivate" is not enough—more accurately, our model is to alarm-educate-motivate-motivite.

Second, scientific facts will stir the public in the right context—that is, with face-to-face personal engagement, delivered by respected facilitators, in easily understood terms, and by connecting the facts with people's own experiences, 8 values, and sense of moral agency.

Realize that the public has had little exposure to accurate scientific facts. Hundreds of millions of dollars are spent to perpetuate climate confusion. Therefore, the presentation of the reality must be an order of magnitude larger, more comprehensive, and saturating. Any realization of a "Pearl Harbor moment" must be created through consistent and sustained effort. Citizens must learn it in a personalized setting, with several sessions of instruction and discussion. Research shows that a majority of Americans can see that they are uninformed about the climate crisis. Seventy-five percent want to know more and 68 percent would welcome a national climate education program.⁹

Also remember that at crucial times, transformative leaders and institutions have shifted the culture's view dramatically, by telling the truth with conviction and eloquence. Currently, with little accurate media coverage or mention by our leaders, the climate crisis is literally out of sight and out of mind. Therefore, philanthropy and influencers must now fill this role (see 4.7).



A well organized "climate doubt and disinformation campaign" measurably eroded the public's concern through TV and radio ads, faux-science conferences, think tanks, news outlets, interviews, books, articles, rallies and social media—creating the sense that the science is unsettled. Ads flood the airwaves promoting the myths of clean coal and drilling for America's energy independence.

Additionally, "elite cues" from leadership have been absent—to the extent that climate was not even discussed during the 2012 presidential election.

⁸ Local impacts of climate change must be included in the curriculum.

⁹ Anthony Leiserowitz, Nicholas Smith, and Jennifer Marlon, Americans' Knowledge of Climate Change, Yale University. New Haven: Yale Project on Climate Change Communication, 2010, www.tinyurl.com/CCKnowledge.

Q 5.2: And, how can people be motivated to take action and to change in the time and at the scale required?

A: First, we must reach far beyond the current choir to validate, motivate, and mobilize the tens of millions who are worried but don't know what to

do. Most people cannot now envision any meaningful response beyond recycling or other small scale, individual actions. Even the most alarmed¹⁰ can see few effective options. They have never been properly organized to collectively demand policies and other systemic changes. The power of effective social movements to catalyze large-scale change must be conveyed, and citizens must be provided with options for taking collective action.

Second, when American society has faced similar challenges requiring all-out effort and cooperation, we have responded rather than given up. Several crucial points provide the plausibility of rapid mobilization:

- The US mobilized nearly overnight for World War II. Just weeks after the Pearl Harbor attack, the US stopped automobile production for almost three years and built planes and tanks instead. We could do the same with wind turbines and solar systems. We can mobilize and demonstrate this same kind of social alignment and mutual cooperation.
- Humans can rise above fear to respond. Many in the climate movement mistakenly believe that people would panic, become paralyzed, or fall into depressive resignation if they understood the looming threat of climate chaos. The widespread notion that people panic in disaster situations is not corroborated by experience. Studies of behavior in disaster situations reveal that humans behave cooperatively—even with extraordinary teamwork and collaboration—when given accurate information and constructive options. 11 So awakening citizens to the danger and providing an effective course of action will most likely result in constructive cooperation and mobilization to avert catastrophe.
- Citizens could be awakened to properly respond when philanthropy catalyzes the process.
 Philanthropy can explain why we must respond immediately and then call for a full societial mobilization to phase out fossil fuels. We must first engage philanthropy to act at scale and to fund the breakthrough media, education, and grassroots efforts, as outlined above.



President Franklin Delanor Roosevelt, December 8, 1941, the day after the Pearl Harbor attack.

"'Happy talk' was not the approach taken by Lincoln confronting slavery, or by Franklin Roosevelt facing the grim realities after Pearl Harbor. Nor was it Winston Churchill's message to the British people at the height of the London blitz. Instead, in these and similar cases, transformative leaders told the truth honestly, with conviction and eloquence."

—David Orr, "Down to the Wire: Confronting Climate Collapse"

• It only takes a tiny minority to catalyze dramatic cultural change. Research finds that transformation requires the active engagement of only 3.5% of citizens. 12 We only need to activate those most concerned about global warming—we do not need to persuade those in denial. Alone we cannot make a difference, but through an organized, committed, and strategic movement comprised of a small minority of the population, positive transformation and policy changes can quickly result.

¹⁰ Anthony Leiserowitz, Edward Maibach, Connie Roser-Renouf and Jay Hmielowski, "Global Warming's Six Americas In November 2011, March 2012 and September 2012" Yale Project on Climate Change Communication, March 2012, http://environment.yale.edu/climate-communication/files/Six-Americas-March-2012.pdf. The most alarmed comprise about 13 percent of the American population, according to the research.

11 A leading text in the field is available to read on line by chapter: Committe on Disaster Research, "Facing Hazards and Disasters," National Acade-

¹¹ A leading text in the field is available to read on line by chapter: Committe on Disaster Research, "Facing Hazards and Disasters," National Acade mies Press, http://www.nap.edu/openbook.php?record_id=11671&page=124.

¹² David Karrigon, "11 Million Americans Can Save the Climate," TruthOut, January 30, 2014, http://www.truth-out.org/speakout/item/21554-11-million-americans-can-save-the-climate.

Issue 6: You call for a price on carbon, which requires an act of Congress.

The US Congress can't get much of anything done-even the seemingly easy stuff.

Q 6.1: How will you get something past Congress when recently about 90% of the American public supported strengthening of gun control laws, yet nothing happened?

A: The two issues are fundamentally different. The scale of the climate crisis is magnitudes greater. Everyone worldwide will be impacted directly by climate change. Major disruptions will cut across every country—impacting poverty, economics, public health, national security, and food and water security. Interest in an issue such as gun control is minor compared to this imminent crisis.

We will make the case in an unmistakably personal and visceral way. The US must mobilize as it did during World War II, with the same speed and immediacy. Another mobilization analogy is the First Earth Day in 1970. It was launched not to "get something through Congress. It educated people "all at once" through teach-ins and then due to its influence, Congress passed a suite of major environmental legislation quickly. Politicians became "environmentalists" out of political expediency.

As with the first Earth Day, we realize we can do nothing without the people. Before we engage with Congress, we must educate and mobilize the public.



Earth Day march, 1970, Cleveland State University

The first Earth Day brought out one in ten Americans to call for reforms. Roughly 1500 colleges and 10,000 schools organized teach-ins. Tens of thousands organized local events such as parades, demonstrations and protests. As the result, Republicans and Democrats together passed a portfolio of landmark environmental policies during the Republican administrations of Richard Nixon and Gerald Ford.



Republican President Nixon and Justice Warren Burger at William Ruckelshaus's swear-in as EPA chief, December 4, 1970.

After the First Earth Day, in that November's elections a "Dirty Dozen" in Congress with terrible environmental records was targeted. Seven of the twelve were voted out, including the powerful Chairman of the House Public Works Committee, George Fallon. Despite furious opposition from special interests, the Senate version of the 1970 Clean Air Act, authored by Senator Edmund Muskie, passed unanimously. The House later adopted it on a voice vote. Later that same year, the Environmental Protection Agency was created. What had been considered politically impossible was quickly achieved. Over the next ten years, 23 environmental laws were signed.

Q 6.2: What is the plan for mustering a Congressional majority for a carbon tax?

A: The policy change can happen despite the political deadlock and the massive influence of the fossil fuel industry. Our political strategies for achieving a carbon price:

- Galvanize and organize broad public support.
 Congress follows the public. Once the public understands what must be done, by when, and why—change can quickly happen. A price on carbon is a natural by-product of public understanding, motivation, and organizing.
- Activate and align the business community to send a clear message about the need for the pricing of global warming pollution and other policy measures.
 Growing numbers of businesses, large and small, are

- increasingly concerned about climate change's risk to their bottom line. 13
- Activate and align faith communities for climate advocacy. Congregations can play pivotal roles in hosting moral conversations and public classes in their social halls, and activating their members.
- Activate and align communities of color for climate advocacy. Latino, African American, and Asian American groups played a pivotal role in the 2010 California's "No on Prop 23" success.¹⁴
- Connect with key leaders and influencers to reach out to key policy makers and to engage further political support by activating their networks.



One hundred fifty people gather as Minnesota Interfaith Power and Light hosts an Earth Day prayer circle in conjunction with a "Clean Energy and Jobs" Rally at the Minnesota State Capitol. Leaders from five different religious traditions joined in solidarity. People of faith are counting on our political leaders to take bold action.

¹³ Andrew Breiner, "Small Business Owners: Climate Action Will Protect Our Livelihoods," ClimateProgress.com, June 25, 2014, http://thinkprogress.org/climate/2014/06/25/3453065/small-business-climate-poll/. 87 percent of small business owners believe climate change could harm their businesses in the future. 65 percent support government regulation of carbon pollution. Josh Israel, "Major Companies Distance Themselves From US Chamber Campaign Against Obama's Climate Plan," June 3, 2014, http://thinkprogress.org/climate/2014/06/03/3444143/member-companies-chamber-climate/. 14 Mark Hertsgaard, "Latinos Are Ready to Fight Climate Change—Are Green Groups Ready for Them?" The Nation, December 24, 2012, www.tinyurl.com/LatinoReadyClimate. Nine-minute film on diversity in "No on 23": Mark Decena, nine-minute film, "Where We Live: The Changing Face of Climate Activism," EDGE Funders Alliance, Solidago Foundation and Kontent Films, 2011, www.wherewelivefilm.org/.

Issue 7: There are already hundreds or thousands of climate change organizations.

Q 7.1: Is it necessary to establish yet another organization with all the associated overhead and infrastructure? Why not just create a new program under the umbrella of an existing organization, to put donors' dollars to maximum effect?

A: We believe donor dollars are best used in addressing the underlying causes, and not just the symptoms, in order to make the needed change. We welcome the opportunity to partner with other organizations that focus on causes (see 4.2) and embrace the principle

stabilization actions we put forward (see 2.2). Does it make sense to put more money into existing efforts that have yet to slow emissions because they are not focused on the central issue and do not engage citizens and resources at the needed scale?

Q 7.2: How can you unite all these different groups?

A: Winning any new push for national carbon legislation will require diverse coalitions of grassroots constituencies, as with California's No on 23. Broad coalitions build power and convey that they represent Americans' concerns.

The effort will be comprised of a coalition of many grassroots and national organizations, coordinated and supported by a coalition staff that continually keeps the movement on message. Participating groups agree to several Principle Actions for climate stabilization (2.2). These principles, along with the overarching grand strategy and national coordination, align and focus the many groups on the central goals, especially the carbon policy.

Without this sort of alignment and entrainment, the effort might disintegrate into a score of competing

cacophonies. Yet local groups do have autonomy in how they fulfill the effort's objectives. The effort is both topdown and bottom-up—operating fully at both the local and national levels. Neither level works without the other.

A good analogy of structure and approach might be President Obama's 2012 campaign. Its direction, coordination, and consistency were promulgated through the appropriate management, advisors, communications, field organizers, volunteer coordinators, and much more. The main point here is that the climate movement—like the Obama presidential campaigns—should have a well-coordinated leadership, disciplined messaging, quick and efficient information flow, relevant departments, closely cooperating local and regional groups, and similar elements of a successful national campaign. These examples and many more demonstrate that it can be done.



Issue 8: I've never heard of CCBI and ATL. Tell me about yourselves.

Q 8.1: Who are you and how can you get this huge effort accomplished?

A: Our team has a track record of delivering results on national movements, climate change campaigns, and signature environmental and clean energy legislation.



Michael C. Mielke (Mike) Executive Director California Climate Breakthrough Initiative

Mike is an expert environmental policy advocate, coalition builder and program manager. Mike has extensive experience in conceptualizing partnerships that engage

the public and key influencers to address some of the most pressing environmental and community development challenges. He is sought after as a speaker and for engagement on top-level policy matters in the areas of climate change, water, corporate sustainability, and the politics of environmental policy.

Mike lives in Silicon Valley, and has worked with the Silicon Valley Leadership Group for the past six years. As Vice President for Environmental Programs and Policy, Mike has helped conceptualize, design and gain passage of laws and has implemented policies and programs in cooperation with leading technology corporations, environmental NGOs and legislators to improve the quality of life and the environment, and has secured necessary resources to help grow the organization.

Mike has also served on the winning "No on 23" ballot campaign steering committees (see 4.4); launched several non-profit start-ups; empowered communities to meet complex development challenges; and engaged in institutional strengthening and capacity building for local, state and national level government, non-governmental, and community-based organizations. His experience encompasses collaboration with business, non-profits, foundations, local and national governments, and bi- and multilateral donor organizations.

Mike has 19 years experience in the developed and developing world, holding jobs in the non-profit, government, private sectors, with consulting firms, the White House Council on Environmental Quality, and the National Estuary Program.

California Climate Breakthrough Initiative

CCBI is focused on alerting key influencers and decision-makers about the perils of the current carbon status quo path and engaging them in an effort to put a price on carbon in the US, as part of a broader campaign to reduce global emissions. CCBI can engage the public, bring urgent awareness and deliver resources to help avert the crisis. CCBI a nonpartisan 501c3 nonprofit organization, and is a project of the Silicon Valley Leadership Group Foundation. More info can be found at: www.ccbi.works.



Paul Kemp, Consultant to CCBI:

Paul Kemp earned his M.S. and Ph.D. in Oceanography (1978) and Coastal Sciences (1986) from Louisiana State University (LSU), and served as 1984 NOAA Knauss Fellow in Senator Ted Kennedy's office.

In the mid-1980's, Kemp was a presenting scientist for teach-ins in congregations, calling for coastal protection, which generated broad public support. In 1989, he co-founded the Coalition to Restore Coastal Louisiana (CRCL) and became its first Executive Director. CRCL achieved a state constitution amendment within two years, and federal legislation the next year. CRCL remains influential today in driving coastal restoration in Louisiana.

In the mid-1990s, Dr. Kemp returned to LSU as professor with the School of the Coast and Environment, later as joint Director of the Natural Systems Modeling Group and Associate of the LSU Hurricane Center. He has served on many policy-oriented boards and commissions. From 2007-2013, Kemp served as a Vice-President of the National Audubon Society, and secured funding and leadership for a Mississippi River Delta restoration initiative. Paul now serves as an independent consultant, as an adjunct professor at LSU, and as a Commissioner of the Southeast Louisiana Flood Protection Authority – East, which oversees over 300 miles of flood defense structures.



Jean Arnold Development Director Association for the Tree of Life

Jean has been a climate and clean energy advocate since 2006. She has raised awareness about energy and climate issues by producing reports, articles, essays, lectures, design of print media,

web development, and through her visual art. She has organized community events, actions, and guest speaker engagements. Prior to her co-founding work with ATL and CCBI, she founded and served as coordinator of Post Carbon Salt Lake in 2007. Jean's focus has shifted from the local to the national level, and towards policy change, system change, and cultural transformation.

Association for the Tree of Life

ATL has created a Strategic Plan for averting climate chaos, with a response that meets the scope, scale, and urgency of the climate crisis. To fulfill the objectives of this Plan, ATL is the fulcrum organization to call for and catalyze the broad-based media, educational, grassroots and political efforts leading to national carbon fee policy. ATL is an independent, nonpartisan 501c3 nonprofit organization. For more info: www.tree-of-life.works

Issue 9: You seem to have a plan and know-how, yet I find this crisis so threatening and depressing.

Q 9.1: What can you tell me before I go stick my head in the sand?

A: Many of those now frightened and lost in resignation will recover when they see the first or second wave of movement and mobilization. Those who are currently discouraged do not daunt us. They have not been provided a vision, means, or way out of this life or death dilemma. Until they can see a plausible response to threats to their lives and families, depression and fear are normal and reasonable responses.

We can win this one; it is a matter of will and mobilization. Affordable renewable energy technology is available to be deployed at scale. The cost of wind energy has plummeted in the US by 43% since 2009. The cost of solar electricity has dropped an average of 20% per year since 2010. On a new-build basis, wind is now competitive with gas and cheaper than coal. Solar is now cheaper than conventional sources in about 15-18% of the electricity market. By no means are we saying this transition will be easy or smooth. However, the cost of inaction far outweighs the cost of action by orders of magnitude.



The transformation from a fossil fuel-based economy to a clean renewables-based economy must be complete by mid-century. Left: ExxonMobile Refinery, Torrance, California. Right: Wind turbines, Colorado.

Q 9.2: Still, what if I cannot conceive of what the world will look like on the other side?

A: This is a normal response, since our energy and economic transformation must be complete by midcentury. Moreover, our culture is not encouraged to envision a positive outcome—news outlets focus on negative developments and movies put forth dystopian and apocalyptic futures. This causes people to suffer from a dismal failure of imagination.

In the face of this, we encourage people to engage in a visioning process for a positive future. It can readily be applied to imagining climate breakthrough and to conceiving of a carbon-free world in 2050 that works for humanity. Far from a Pollyannaish parlor game, visioning is a powerful tool for generating possibility and action. ¹⁵

9.3: OK, OK, what can I do?

A: First, you can sign on to CCBI's endorsement page, sign up for CCBI updates, and help spread the word about the work of CCBI and ATL.

Inform people that the following actions must be taken to combat climate change:

- Starting now, reduce emissions several percent per year.
- Quickly transition from fossil fuels to low carbon energy.
- The US must lead the global low carbon mobilization.

Call for real Climate Breakthrough policies:

- Price greenhouse gas pollution.
- Remove fossil fuel subsidies.
- · Create strong incentives for renewables.
- Invest in the conversion to a clean, efficient, resilient infrastructure.

Use these talking points to write letters to the editor, write op-eds, tweet, and post on Facebook. Discuss these issues with friends, family, teachers, students, colleagues, and through your networks.

Call for, organize, and lead teach-ins:

- Call on your local university or college to host climate teach-ins.
- Ask local climate scientists and climate leaders to lead teach-in sessions.
- Help organize teach-ins at your local university or college.
- Climate scientists, climate leaders, and influential leaders can lead teach-in sessions.

For more information, go to:

www.ccbi.works/act



CREDO and GreenCorps phone bank volunteers for California's 2010 "No on 23" effort.

Contact us to learn more and to get involved:



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