

# THE CLIMATE MOBILIZATION



# **Rising to the Challenge of Our Time, Together**

By Margaret Klein and Ezra Silk

**Climate change presents us with a fundamental choice.** Will we watch passively as our climate and our civilization collapse in the coming decades? Will we consign young people and future generations to lives of hunger, thirst, and violent conflict over dwindling natural resources? Or will we mobilize our entire society and economy to save civilization at wartime speed?

As individuals, these questions may strike us as beyond our purview. The scope of the climate crisis, and the scale of the necessary response, feels overwhelming and out of reach. It is easy, and even comforting, to feel helpless in the face of humanity's mounting and inter-connected environmental, social, and economic catastrophes.

Because our leaders have postponed the inevitable reckoning with the consequences of our unsustainable energy system for so long, we now face an uncomfortable, yet clear-cut moral choice: Either we, as individual Americans, demand in concert that our leaders take the necessary steps to save civilization, or we stay silent, and condemn the young and the unborn to an unspeakable fate.

The broad steps needed to save civilization are as clear as they are seemingly unrealistic. To avoid total catastrophe, the United States must rapidly develop post-carbon energy and agricultural systems, establish a new foreign policy that sets the emergency elimination of global net greenhouse gas emissions as our highest national priority, and deploy a comprehensive system to remove greenhouse gases from the atmosphere until a safe climate is restored.

The necessary scale and speed of these efforts can only be compared to the American home front mobilization during World War II. To triumph over fascism, we rapidly

restructured our society and economy to produce vast quantities of war materiel. We conducted scientific research on a grand scale, and once the war was over; undertook an emergency reconstruction of the international order. In order to triumph over climate change, we must mobilize on this scale once again. All hands must be on deck for an all-out fight against collapse.

But how, in the face of political paralysis and a deteriorating international geopolitics, can we possibly accomplish this?

**The Pledge to Mobilize is our answer to this predicament.** It is a one-page pledge that every American can sign. It is a political platform and social movement strategy that empowers every individual to participate in a heroic and effective fight against climate collapse. It is our chance to take a stand against the great evil of our time.

The Pledge is an unblinking declaration of reality. It is a tool for spreading the frightening truth of climate change, and the hope of the Climate Mobilization, from person to person. It is a means to reclaim our democracy and to save our nation from ruin.

When you sign this pledge, you commit your support to political candidates who have also signed it, on the local, state, and national level. The Pledge calls on the federal government to commence a heroic, WWII-scale social and economic mobilization that reduces our national net greenhouse gas emissions 100 percent by 2025, enlisting tens of millions of Americans in efforts to rapidly overhaul our fossil fuel-dependent energy system. The Pledge also demands a new foreign policy that prioritizes the reduction of global net greenhouse emissions to zero at wartime speed as our foremost national imperative.

In signing, you join forces with other mobilized Americans in this campaign to save civilization. You agree to spread the pledge to people you respect and care about – including friends, family, neighbors, and political candidates.

The Pledge is designed to be a significant event in the lives of those who sign it. One cannot just “take” the Pledge. It must be given by someone who has already taken it. This person vouches for you, affirming that you will spread the pledge with respect, focus, truth, and courage. They also agree to support you in your efforts to mobilize.

Because of this person-to-person structure, the Pledge has the ability to focus dinner table discussions, and the national conversation at large, on the near-term threat of a civilization collapse as well as the massive, concerted effort needed to prevent it. Variations of the Pledge will launch in other countries, providing a bridge between the hyper-local, the national, and the international. The Pledge to Mobilize will empower each of us to reject denial and passivity in favor of effective political and social action. It allows us to rise to the challenge of our time, together.

## Marching Towards Catastrophe

**The climate is changing.** Our planet is in the early stages of a severe warming that, failing a massive human intervention soon, will last for centuries. The warming — .8°C above pre-industrial levels to date — is set to accelerate in the coming decades. The predominant cause is greenhouse gas emissions caused by fossil fuel burning.<sup>1</sup>

Despite decades of warnings from the scientific community, global greenhouse gas emissions are setting new records every year. A worst-case scenario is unfolding before our eyes.

During the 12,000 years in which human agriculture and civilization have developed, the climate has been stable — staying within a 1°C temperature range. But scientific projections suggest that, unless we alter humanity’s greenhouse gas emissions trajectory drastically in the coming years, global average temperatures could increase 4°C above preindustrial levels at some point between 2060 and the turn of the century.<sup>2</sup>

This seemingly small temperature increase would exact a horrific toll. According to Kevin Anderson, Deputy Director of the Tyndall Center for Climate Change Research and an adviser to the British government, an increase of 4°C — which could arrive by the time today’s children are reaching middle age — would cause “mass death” and would be “incompatible with an organized human community.” Anderson projects that only “half a billion” people could survive warming on that scale.<sup>3</sup>

On our current trajectory, the planet is expected to far exceed 4°C of warming. In 2009, James Hansen, the former head of the NASA Goddard Institute of Space Studies, described our predicament in the starkest of terms:

Planet Earth, creation, the world in which civilization developed, the world with climate patterns that we know and stable shorelines, is in imminent peril. The urgency of the situation crystallized only in the past few years...The startling conclusion is that continued exploitation of all fossil fuels on Earth threatens not only the other millions of species on the planet, but also the survival of humanity itself — and the timetable is shorter than we thought.

**The arrangements that we rely on are unraveling.** We have already gone too far. The early effects of climate warming are already destabilizing civilization, even though, due to the inertia of the global climate system, we are only now suffering the consequences of greenhouse gases that were emitted between thirty and fifty years ago. The signs of disastrous climate change are everywhere. Extreme droughts, floods, and wildfires, as well as quickly migrating invasive species and vector-borne diseases, are already damaging agriculture and infrastructure, and creating tens of millions of displaced people.<sup>4</sup> The total number of reported severe weather events has increased nearly five-fold since the 1970s.<sup>5</sup>

These harsh climatic conditions, combined with the end of cheap oil and the growth of corn-based ethanol fuel consumption, have sent food prices skyrocketing. Historic food price spikes in 2008 and 2011 contributed to the successive waves of civil unrest that have swept the globe, toppling governments and unleashing violent sectarian tensions.<sup>6</sup> The Institute for Economics & Peace found a 5 percent decline in its Global Peace Index between 2008 and 2013, with 110 of the countries surveyed becoming less peaceful.<sup>7</sup>

In the estimation of the U.K. government's chief scientist, humans face a "perfect storm" of energy, food and water scarcity crises by 2030.<sup>8</sup> This gathering storm, driven by climate change the explosive growth of populations and resource-intensive economic activity, is homing in on our shoreline: California withers, beset by a historic drought. Miami is inundated by floods. Our cities and croplands are being pummeled by hurricanes, wildfires, blizzards, flash floods and drought on an unprecedented scale.<sup>9</sup>

**America is failing.** In the face of this unfolding catastrophe, the United States government is paralyzed. Our elected representatives live in a trance of denial, narcissism and complacency. Domestically, the U.S. has failed to even end billion-dollar annual subsidies to the big oil companies. American taxpayers are directly funding the destruction of the climate that biologically sustains us. Internationally, the United States has modeled how to avoid action by stalling, shirking responsibility and casting blame on others. In 2001, our country abandoned the Kyoto Protocol – the only binding international treaty on emissions reductions ever passed – providing cover for Canada and Australia to opt out of the treaty, as well. Today, more than 25 years after Hansen's groundbreaking discussion of the greenhouse effect in the Senate chambers, no binding international treaty limits global emissions.<sup>10</sup>

Our leaders have justified their obstruction by contending that the American way of life is not negotiable.<sup>11</sup> But responding vigorously to climate change is our only chance to preserve the best aspects of the American tradition. On the brink of WWII, President Roosevelt enumerated four freedoms that were quintessential to the American way of life: Freedom of speech, freedom of worship, freedom from want, and freedom from fear. Did our parents and grandparents protect these freedoms from fascism, only for us to squander them as we yield to a new dark age of climatic disruption and societal breakdown?

Climate catastrophe poses a clear and present danger to the American experiment. A massive drought lasting from 2006 to 2010 directly contributed to the chaos that has engulfed Syria since 2011.<sup>12</sup> It was the worst drought in Syria's modern history. Impoverished farmers suffering from the drought migrated to urban areas shocked by high food prices and helped to ignite the revolt against Bashar al-Assad. The ensuing civil war destabilized the entire region. Into the breach has stepped ISIS, a brutal group known for persecuting and murdering religious minorities, beheading American journalists, and using dams as weapons of war.<sup>13</sup> The logical endpoint of our current trajectory is tyranny, catastrophic social breakdown and unprecedented human suffering. Freedom and democracy have no future in a collapsed civilization.

**The future is in our hands.** And so the fate of humanity falls to us. Will we continue to passively watch our leaders delay and prevaricate as civilization unravels? Or will we reclaim our fallen democracy and mobilize our society to fight climate change? The decisions we make in the coming months and years will have momentous consequences for the future of human civilization and every other species on this planet. We have reached our hour of decision.

## **The Mobilization Imperative**

**We have been here before.** In the late 1930s, the Axis powers of Japan, Italy, and Germany threatened our freedom, stability, and safety. Americans denied the truth of this threat for years, imagining that we could somehow stay out of the war. But the Pearl Harbor attacks shattered the nation's denial. Isolationism — a bi-partisan phenomenon — collapsed overnight. Suddenly, Americans awoke to the truth that we were in terrible danger and that we had to mobilize for war immediately. Thanks to the visionary leadership of President Franklin Delano Roosevelt, who had warned of a coming international conflagration since 1937, we did so — with stunning success.

Twelve years after World War II, as part of an official U.S. Army history of the war, Elberton Smith described the economic mobilization that allowed the Allies to prevail:

The task of harnessing a nation's economic potential for war has come to be known as "economic mobilization." Its basic purpose is to insure the procurement of finished munitions — the sum total of equipment, supplies, and services required by the armed forces — while at the same time supplying the essential needs of the civilian economy. The demands of modern technological warfare, when suddenly thrust upon a nation lacking the specific equipment for war, are so novel, so complex, and of such magnitude that their fulfillment requires a nationwide industrial and social revolution. Such a revolution does not automatically "occur" when a nation goes to war. It must be planned, directed, and carried out in a manner which will accomplish its objectives with a minimum of hardship and dislocation.<sup>14</sup>

This "industrial and social revolution" that the U.S. underwent after Pearl Harbor was staggering. Conservative business titans<sup>15</sup> joined labor leaders and liberal bureaucrats — after years of bitter acrimony over the New Deal — to redirect and refocus America's industrial might against the Nazis. Factories rapidly converted from producing consumer goods to producing tanks, guns and planes, shattering all historical records for war production. Scientists and universities pumped out research on behalf of the war effort — leading to huge technological and intellectual breakthroughs.<sup>16</sup> Young men sacrificed their lives fighting for their country. Women surged into factories and planted "victory gardens" that supplied 40% of America's vegetables during the war. More than 10% of the

population relocated, often across state lines, in order to find a “war job.”<sup>17</sup> All hands were on deck. All Americans worked toward a common goal.

This is precisely the level of focus, cooperation and planning that we need if we are to counter the destructive force of climate change. Smith’s comments regarding the novelty, complexity, and magnitude of the demands of modern warfare absolutely apply to the challenge posed by the climate crisis. The need for the United States to mount a WWII-level mobilization to protect ourselves from climate change has support from top scientists, environmental analysts<sup>18</sup> and even national politicians.<sup>19</sup>

A Climate Mobilization would allow our country “to adapt to what we can’t avoid, and avoid what we can’t adapt to.”<sup>20</sup> As in World War II, all Americans would contribute. Industry would transform to maximize energy efficiency and produce the hardware needed for our post-carbon energy infrastructure. Universities would research methods to improve existing renewable and post-carbon energy technologies, increase energy efficiency, and maximize the resilience of our energy, transportation and agricultural systems in anticipation of the coming ecological disasters. Farmers would bind massive quantities of carbon into the soil and learn to implement techniques that are more resistant to floods, droughts and invasive species. Existing government agencies, including the military, would shift their focus toward this super-ordinate goal. Citizens would plant trees, reduce energy use at home and take part in community adaptation and mitigation projects. We would grow community gardens, install solar panels and prepare low-lying areas for increased flooding. We would build bike lanes and paint roofs white to diminish the effects of extreme heat waves.

**But how do we get there?** A full-scale mobilization requires both inspired government leadership and the consent, cooperation, and enthusiasm of the population. Before the Pearl Harbor attacks, the vast majority of Americans were staunchly isolationist, imagining that we could avoid the war. The surprise attack at Pearl Harbor decimated much of our naval fleet and fundamentally changed the mood of the country. Isolationism evaporated overnight and Americans threw themselves behind the war effort. The vast majority of Americans were dedicated – even enthusiastic – participants in the WWII home front mobilization.

Various writers have held out hope that a catastrophic natural disaster will be the “Pearl Harbor” of climate change. Yet we have already been struck by Hurricane Katrina and Hurricane Sandy, and ravaged by wildfires in Colorado and momentous droughts across California and the Midwest. No spontaneous awakening has occurred. Indeed, denial and apathy reigns. A 2014 Gallup poll surveying American anxiety about national problems ranked climate change second to last, below such concerns as terrorism, illegal immigration, and drug abuse.<sup>21</sup> Although the government must coordinate the mobilization, the social momentum needed to drive the mobilization onto the agenda will not originate in Washington. Those of us who grasp the extent, immediacy and horror of the threat must build a social movement that wakes America up to the enormity of the climate threat and the necessity of an immediate climate mobilization.

## The Pledge to Mobilize

The Pledge to Mobilize is designed to catalyze the emergency response we need. It plainly describes the crisis we face, as well as the steps we must take, both as individuals and as a society, in order to confront the challenge of our time. It reads:

Climate change is causing immense human suffering and damage to the natural world. It threatens the collapse of civilization within this century. Confronting this crisis is the great moral imperative of our time.

I call on the United States federal government to immediately:

- 1) **Commence a social and economic mobilization to restore a climate that is safe, stable, and supportive of human civilization.** This heroic campaign shall be carried out in the spirit of the American World War II home front mobilization. As in WWII, this mobilization will require hard work and shared sacrifice from all Americans.
- 2) **Reduce our country's net greenhouse gas emissions one hundred percent by 2025** and deploy a national system to remove greenhouse gases from the atmosphere at emergency speed.
- 3) **Enlist tens of millions of Americans** in efforts to rapidly expand our carbon-neutral energy and agricultural systems, conduct groundbreaking research, and implement large-scale adaptation measures.
- 4) **Conduct this mobilization in accordance with the Constitution** and ensure that the essential needs of the civilian economy are met during this time of transition.
- 5) **Establish the following imperatives as our nation's top foreign policy priorities:** A one hundred percent reduction of global net greenhouse gas emissions at wartime speed, and the deployment of an international system that removes greenhouse gases from the atmosphere until a safe climate is restored.

To realize these demands, I will enlist Americans from all walks of life in this campaign to save civilization. I will ally with other mobilized Americans and enter the political arena with tremendous power and strength.

I will:

- I) Vote for candidates — on the local, state, and national level — who have signed the Pledge to Mobilize over those who have not.
- II) Donate time or money exclusively to political candidates who have signed the Pledge.



III) Mobilize my skills, resources, and networks to spread the stark truth of climate change and the hope of the Climate Mobilization to others. When I spread the Pledge, I will do so with respect, focus, truth, and courage.

Thus, I pledge to call forth a WWII-scale mobilization to save civilization from the devastation of climate change.

## How the Pledge Spreads

The Pledge to Mobilize is designed to spread in a new way. An individual cannot just take the Pledge — it can only be given by someone who has already signed it. Since every signer promises to spread the Pledge to others — every Pledge signer becomes a Pledge giver. The giving and taking of the Pledge creates new ways of interacting around climate change. The Pledge signer can play the role of teacher, mentor, missionary, and friend.<sup>22</sup> Those who sign the Pledge approach people they respect and care for to discuss the climate crisis and the Climate Mobilization. The Pledger, as part of their recruiting efforts, can share articles and videos or invite their friend to attend presentations of local Climate Mobilization groups. By spreading the Pledge, you disrupt our culture of silence and willful ignorance.

There are nearly infinite ways to use the Pledge as a tool to catalyze an emergency response to climate change. Pledgers can leverage their unique talents, expertise and relationships. They can host events at their homes, or in the community. Religious people can spread the Pledge in their communities of worship, and climate educators can offer the Pledge after their presentations. Mobilizers can spread the Pledge independently, or create informal Pledge spreading groups. Some Mobilizers will want to bring the Pledge to their community in a more structured way. These individuals can start or join local Climate Mobilization groups. Formal Climate Mobilization groups will offer a weekly public presentation on the climate crisis and the Climate Mobilization. They will also identify prominent and well-respected individuals in their community — politicians, business people, labor leaders, university deans, clergy, etc. — and approach those individuals with the Pledge. If those individuals decide to sign, the local group will publicize this event in local media.

**Signing the Pledge does not preclude the use of other tactics**, including demonstrations, lawsuits, internet memes and other measures. On the contrary, signing the Pledge often serves as a launching pad to further engagement. Pledgers can coordinate actions amongst each other. For example, a Pledge signer could combine political demonstration with direct relief in areas hard-hit by storms; coordinate social media campaigns to pressure journalists to cover climate change with greater seriousness; or plant community victory gardens. A mobilized citizen could persuade their city council to pass a resolution calling for a WWII-scale climate mobilization. Follow-up on the resolution could include local efforts to install renewable energy systems, localize agriculture, and implement a community adaptation plan.

The function of the Climate Mobilization website is to help make every person who signs the Pledge be the most effective advocate that they can be. To this end, we offer a series of frequently asked questions and frequently raised objections, guidelines for effective and ethical Pledge spreading, and discussion forums where Pledge signers can meet, form or join groups, share tips, make plans and provide encouragement. The website also tracks and displays how many people each Mobilizer has recruited, how many people their recruits have recruited, and how many people their recruits have recruited, showing each Mobilizer their cascading impact.

## **Successful Social Movements Show the Way Forward**

In the face of political paralysis, many environmental groups have invoked the Civil Rights movement and resorted to tactics of protest and civil disobedience in opposition to fossil fuel infrastructure projects. Although these admirable and heroic efforts have led to significant victories and captured the imagination of many young people, they have not succeeded in mobilizing the country for immediate action.

Civil disobedience was a powerful tactic because it fought denial of a terrible status quo while *simultaneously demonstrating the way forward*. Before the Civil Rights Movement, the majority of white Americans minimized and ignored the brutality of the Jim Crow South. This consensus of denial was facilitated through racist beliefs, such as the idea that African-Americans were violent and needed to be controlled. When African Americans sat at “whites only” lunch counters, they courageously withstood slurs and violence. These confrontations, which were televised nationally, demonstrated the protestors’ dignity and restraint while highlighting the brutality of segregation, striking repeated blows against the culture of racist denial.<sup>23</sup> Through these acts, African-American protesters also initiated the process of racial integration and equality. White protestors bolstered these efforts by demonstrating a different way of relating to African-Americans – as equals and allies.<sup>24</sup>

Inventor Buckminster Fuller wrote, “You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.” The Civil Rights activists demonstrated the need to make the Jim Crow system obsolete, while enacting the new way of life – integration and equality – that could replace it. White Americans could no longer pretend that race relations did not concern them. They were given a choice between the brutal past and a future that, because of civil disobedience, they could begin to visualize.

So far, neither civil rights-era tactics, nor the popular approach of “climate change education” have offered a clear way forward for the individual or society. When confronted with a huge, complex problem that appears to have no solution, most people feel terror and helplessness, and unconsciously insulate themselves with a variety of defensive techniques, including dissociation, willful ignorance, numbing, repression, denial, and demonization of the messenger.<sup>25</sup> When information about the climate crisis is not paired

with ways that individuals can participate in heroic and effective political action, many of us feel helpless and overwhelmed, and fail to integrate the startling reality of climate change into our everyday lives.

**The Pledge to Mobilize provides a clear, comprehensive way forward** for society and for individual signers. Pledges have become a powerful force in American politics in recent decades, especially within the conservative movement. Grover Norquist has achieved substantial influence over the Republican Party through his “Taxpayer Protection Pledge”, and the Koch brothers have persuaded 169 Congressmen and women, including the entire Republican House leadership, to pledge not to institute a tax on carbon!<sup>26</sup>

Historically, pledge campaigns have spurred rapid social transformation. The pervasive Chinese practice of foot binding was overturned in a generation through the spread of an anti-footbinding pledge among noble families.<sup>27</sup> Pledges can combat denial so effectively because signers publicly pledge their allegiance on behalf of a cause.

## Planning the Mobilization

The Pledge to Mobilize does not specify precisely how the Mobilization will be accomplished. Given that we were designing a tool for a social movement, rather than a governmental policy, we decided not to lock ourselves into inflexible policy prescriptions. This allows us to focus attention on the crucial issue: The need for an emergency response to climate change. We hope to avoid a situation in which people of good faith are pitted against each other over traditionally divisive issues; such as whether the future energy mix should include nuclear power, or whether economic growth is an outdated model. The Climate Mobilization should encompass people with a range of viewpoints, and differences can be explored through ongoing discussion. We stand a chance only if we allow our shared purpose – fighting for humanity’s future – to transcend the divisions that presently distract us.

There is a wealth of partial and comprehensive mobilization and decarbonization plans that we can draw upon in the months and years to come (a non-exhaustive list can be found in Appendix B). As the Pledge to Mobilize spreads, experts across many relevant fields as well as active citizens will take part in mobilization discussions, refining existing plans and offering new ones. When local, state and federal governments, under immense pressure from their constituents, finally declare a climate emergency, extensive action plans will be available to guide them.

Some people may agree that the United States must cut emissions as quickly as possible, but argue that it is poor strategy to advocate for this publicly, as the stark truth of climate change, and the necessary economic and social transformation, will overwhelm and “turn off” most Americans. This, we disagree with. Our culture is mired in denial, silence and willful ignorance.<sup>28</sup> The process of spreading the Pledge will create a sea change in the

public perspective. Successful social movements fundamentally alter how a society understands and, ultimately, governs itself.

There is no question that eliminating America's net greenhouse gas emissions by 2025 is a tremendously ambitious, soaring goal. Current U.S. energy policy calls for our national emissions to be reduced by only 17 percent from 2005 levels by 2020.<sup>29</sup> David Roberts has described humanity as stuck "between the impossible and the unthinkable."<sup>30</sup> A mobilization enlisting tens of millions of Americans to transform the United States energy infrastructure, agriculture, and foreign policy, is our answer to this predicament. As Winston Churchill put it, "It is not enough that we do our best; sometimes we must do what is required."

## **Mobilization Economics**

Some will argue that such reductions in emissions would devastate the economy, but this argument ignores the fact that the American carbon-powered economy is stagnating, in large part due to daunting oil supply constraints related to the steeply decreasing energy return on energy investment for global oil production.<sup>31</sup> The 2008 crisis was exacerbated, and possibly even driven, by the spiking price of oil. Since the financial crash, millions of Americans have suffered from the devastating consequences of layoffs, stagnant wages and foreclosures. This process is almost certain to continue. The Organization for Economic Cooperation and Development has forecast a doubling in the price of crude oil by 2020 — an event that would devastate the world economy if we try to continue our reliance on oil.<sup>32</sup>

A rapid, government-coordinated transition away from fossil fuels offers Americans a chance to actively and creatively transform the economy<sup>33</sup> while maintaining the climatic conditions to support human civilization.

**A well-executed climate mobilization would lead to full employment in America.** Americans enlisted in the mobilization will work together to install renewable energy systems, transition and localize agriculture, construct public transit networks, conduct research, insulate homes, plant forests, manage wetlands and provide assistance to other national energy transitions abroad. The jobs created during the mobilization will boost the prospects of tens of millions of struggling Americans. World War II demonstrates that structuring a massive labor mobilization through a combination of direct hiring and public-private partnerships can lead to widely shared economic security.<sup>34</sup>

But how will we fund this mobilization? The precise answer will be determined by the American public, mobilization planners and political leaders. Defense spending during WWII, which increased from about 3 percent of the gross domestic product in the late '30s to approximately 41 percent at the peak of the war effort,<sup>35</sup> was financed primarily through the sale of war bonds, temporary taxes on excess corporate profits, and income tax increases, especially for top earners.<sup>36</sup> The Climate Mobilization could be financed through

various measures, including mobilization bonds, a carbon tax, a financial transactions tax, Superfund payments or tax hikes on large corporations and high earners.

## The Pledge Strategy

When a society and its governing policies become too deeply estranged from reality, the truth holds tremendous transformational potential. But to transform society, this truth must not merely be known. It must be lived. That was Vaclav Havel’s key insight – a message that guided the people of Czechoslovakia through a bloodless revolution against the Soviet Union. Czechs had long been cynical about the Soviet state, privately believing that the government was corrupt. Still, they outwardly complied with state rituals and ceremonies for years, fearing social isolation and state persecution. It was only after citizens started to live their values outwardly – by refusing to display Soviet propaganda, vote in sham elections or self-censor conversations – that they caused a revolution.<sup>37</sup>

“Living in truth,” as Havel called this strategy, derives its power from humanity’s social nature. We evolved in tribes, and developed brains that are highly attuned to the attitudes, emotions, and appraisals of others. We generally abhor standing apart from the group, especially if we risk being shamed or ostracized.<sup>38</sup> By acting publicly on their political convictions in their day-to-day lives, Czechs implicitly invited others to join them in challenging the state. They drew strength from each other.

The Pledge to Mobilize invites and challenges ordinary citizens to engage meaningfully and publicly with the greatest issue of our time. Civil disobedience brought the issue of civil rights to the forefront of the American consciousness. Every American had to decide where they stood on civil rights, and many activists made their involvement central to their identity. Through the vessel of the pledge, we can accomplish this for climate change. We can impel people to make a conscious choice: Do you stand with human civilization, or do you favor collapsing into deprivation, chaos, and war?

**Nightmarish problems require heroic responses.** Too often climate change is presented as a gargantuan problem with a bizarrely inadequate solution: “Want to prevent the collapse of civilization? Turn off your lights when you leave the room.” This is experienced as inauthentic and can cause people to emotionally disengage. Americans ought to be addressed as citizens, not electricity consumers. To bring our country out of denial, we need to offer a response commensurate with the scale of the problem itself.

The Pledge strategy responds to the current technological and cultural moment, as successful social movements have historically done. Martin Luther made use of the printing press to spread his message.<sup>39</sup> More than four hundred years later, his namesake coordinated civil disobedience that was broadcast on television, bringing the struggle for civil rights into almost every American home.<sup>40</sup>

We are bombarded by information and stimulation from computers, smartphones, video games and hundreds of television channels, making it all too easy to enter a trance-like state and avoid thinking about the climate crisis. The Pledge to Mobilize can break through the high-speed, fragmented media landscape, since it relies on personal appeals within existing relationships. Further, the Climate Mobilization is using the awesome power of the Internet and social media to spread our message.

**The Pledge strategy can be adapted and implemented in every country.** As the Pledge spreads in the United States, it will draw the attention of allies all over the world, who can adapt the Pledge to their own country's unique context. An extraordinary group of Australians is already exploring ways to make the pledge strategy work in their country. Small groups of Canadians, Britons, and South Africans are starting to get on board, as well. We will attempt to translate the Pledge and its supporting documents into as many languages as possible, allowing the strategy to spread far beyond the English-speaking world.

The Climate Mobilization campaign is fostering networks of highly engaged, articulate and organized citizens who will act as a countervailing force to those who stand against the safety of human civilization. As the Pledge spreads virally, political candidates will feel increasing pressure to sign the Pledge and begin to publicly acknowledge the scope of the threat. Municipal and state-level officials who sign the pledge will fiercely advocate a war-like response to the climate crisis, as they simultaneously implement regional adaptation and resilience measures. As politicians, journalists, and pundits begin to sign the pledge, the media discourse will shift from, "Does this candidate believe in climate change?" to "Does this candidate have the courage and strength of character to face the climate crisis and fight back?"

**The Pledge strategy is not dependent on election cycles,** because sitting politicians are encouraged – and, if necessary, pressured – to sign. Mobilizers will call their Representatives to say, "I have supported you for 10 years with my vote, time, and money. But I recently signed the Pledge to Mobilize and I will no longer do so unless you sign it as well." However, elections are the most basic and forceful instrument of democracy. We must focus our strategy on the huge national election two years away. If we elect a Mobilization Government in 2016, then our next President will have eight years to eliminate national net greenhouse gas emissions and build an international coalition to drive global emissions to zero. This gives us two years to build a momentous social movement, to spread the Pledge far and wide, and to place relentless pressure on political candidates to fight for civilization. This will take a tremendous amount of effort, to be sure. But armed with the truth, the Pledge, and the spur of dire necessity, we can transform our culture and reclaim our democracy.

Climate change is an unprecedented challenge. Never before has humanity marched in lockstep towards the destruction of our global civilization. We have the opportunity, and the moral duty, to make a meaningful difference in the course of human history. We must face this growing crisis with courage, dedication and resolve. Let us first mobilize as

individuals who will transform our culture of silence and denial into a culture of active emergency response. Only then can we mobilize as a society to fight climate change, itself.

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The Climate Mobilization logo was designed by [Katharine Woodman-Maynard](#).

The header photo, "[Raising Sustainability On America](#)," was designed by Joseph Durago.

## **Appendix A: Reasoning behind 100% net reductions by 2025.**

Our call for zero net emissions is based on a simple premise: The concentration of greenhouse gases in the atmosphere today is unsafe for humanity. Since it is unsafe, we must first halt net emissions of these heat-trapping gases. Then, we must remove greenhouse gases from the atmosphere until concentrations are stabilized at safe levels.

Since we have already gone too far, we must drive net emissions to zero at wartime speed.

### **Risk, Safety and the 2<sup>o</sup> target**

The international negotiations under the United Nations Framework Convention on Climate Change currently operate on the assumption that global mean temperatures should be stabilized no higher than +2 °C above the pre-industrial level and, until recently, a 50% probability of success was assumed.<sup>41</sup> In the IPCC 5<sup>th</sup> Assessment report, however, data was provided on three probabilities of success: 33% (1 in 3), 50% (1 in 2), and 66% (2 in 3).<sup>42</sup>

These probability assessments are completely out of line with modern safety standards. Over the past 250 years, the conception of industrial safety shifted from an acceptance of an elevated risk, to aspiring to low levels of danger with modest risk of failure (1 in 1000 to 1 in 10,000), to today's view that the target safety standard should be zero harm, the risk of failure should be negligible, and the design process should constantly pursue zero failure objectives. Today, industries, such as the airlines, pursue failure rates well below 1 in 1,000,000.<sup>43</sup>

The current official approach to climate change corresponds with the industrial safety approach prevailing about 200 years ago – that elevated danger must be accepted and that, by 2050, climate conditions will be stabilized well outside the pre-industrial range e.g. at 450 parts per million (ppm) of CO<sub>2</sub> in the air (compared to the pre-industrial level of 280 ppm) with a 50% chance of failing to achieve the temperature stabilization goal of no higher than +2 °C above the pre-industrial level. CO<sub>2</sub> concentrations recently surpassed 400 ppm, far above the levels now considered safe for civilization.

Unfortunately for humanity, 2°C of warming would cause dangerous, irreversible impact and trigger positive feedbacks that further accelerate warming. A temperature increase of only 1.5°C will melt the whole of the land-based permafrost in the Arctic, affecting about 1500 billion tons of stored carbon – 3 times the carbon released to the air so far by fossil fuel burning.<sup>44</sup> A temperature increase of 1.6°C is likely to be enough to melt most of the ice in Greenland.<sup>45</sup> The ice sheet losses from the West Antarctic and Greenland caused by a +1.6°C warming would be enough to cause at least 33 feet of sea level rise.



## Applying Safety Standards to the Climate

If modern industrial safety standards were applied to the earth's climate, then the climate goals and the acceptable risk of failure would have to change dramatically: The target climate conditions would be set within the range that existed during the Holocene era (the 12,000 years before the industrial era) – because these are the conditions known to be safe for civilization and for humanity and the 20 million or so species of life on the planet, and there would need to be a negligible acceptable risk of failure.

When a suitably stringent safety standard is applied to our current situation – in which the climate is already too hot<sup>46</sup> – our response to climate change needs to be driven by five principles:

1. **The warming needs to be stopped at emergency speed**<sup>47</sup>
2. **The earth needs to be cooled urgently**
3. **Net<sup>48</sup> emissions need to be cut by 100% (as there is no carbon budget left)**<sup>49</sup>
4. **The large amount of excess CO<sub>2</sub> in the atmosphere needs to be removed as quickly as possible** (while protecting food supply and species habitats). The earth cannot be cooled naturally without removing excess CO<sub>2</sub> from the atmosphere<sup>50</sup>;
5. **These climate goals can only be achieved fast enough if the economies of the world are restructured at wartime speed.** <sup>51</sup>

## The Pledge Demands a Safe Climate

Climate science tells us how quickly our emissions will cause the earth to warm. It cannot tell us, however, how much risk we should tolerate, or how highly to value human life. That is a personal, ethical, and political decision. The Pledge to Mobilize demands the highest level of safety possible. We do so because we view civilizational collapse, the consequent mass death, and the decimation of the natural world as a fate that must be avoided at all costs. We do so because the risk of these horrors is not an “acceptable level of risk.”

## **Appendix B: Rapid Decarbonization Schemes and Mobilization Plans**

The One Degree War Plan Gilding and Randers

Plan B 4.0, Mobilizing to Save Civilization, Brown

Global Climate Stabilization Studies, Clean Air Task Force

Post Carbon Pathways: Towards a Just and Resilient Post Carbon Future, Wiseman, Edwards and Luckins

The Solutions Project, Jacobson

U.S. Climate Plan, Weber, Lichtash and Dorsey

Governing Rapid Climate Mitigation, Delina and Diesendorf

## Endnotes

- <sup>1</sup> Kocic, Crimp, & Howden, 2014 [A probabilistic analysis of human influence on recent record global mean temperature changes](#), Climate Risk Management, Volume 3, 2014, Pages 1-12.
- <sup>2</sup> Betts et al., The UK Met Office, 2009. [“When could global warming reach 4 degrees Celsius?”](#)
- <sup>3</sup> Manning, 2011. [“Too hot to handle: can we afford a 4 degree rise?”](#) The Sydney Morning Herald.
- <sup>4</sup> Damage to agriculture: Gillis, 2013; US Department of Agriculture, 2012. Damage to infrastructure: McKibben, 2010; US Department of Energy; Civil wars and climate refugees: US Department of Defense; (International Displacement Monitoring Center, 2009); International Organization for Migration, 2013.
- <sup>5</sup> World Meteorological Association, 2014, [“Atlas of mortality and economic losses from weather, water, and climate extremes”](#), pg. 9
- <sup>6</sup> Food prices and unrest. Lagi, Bertrand, and Bar-Yam, 2011.
- <sup>7</sup> The Institute for Economics & Peace, 2013 [“2013 Global Peace Index Report”](#)
- <sup>8</sup> “Perfect storm” of crises. Beddington, 2009.
- <sup>9</sup> [National Climate Assessment](#), 2014
- <sup>10</sup> The 2009 Copenhagen Accord, a non-binding international agreement, commits the United States to a very weak target that would have us reduce emissions 17% below 2005 levels by 2020.
- <sup>11</sup> Rio Summit. Vidal, 2012.
- <sup>12</sup> Light, 2013 [“Drought Helped Spark Syria’s Civil War, is it the first of many climate wars to come?”](#)
- <sup>13</sup> Holthaus, 2014, [“Hot Zone. Is Climate change destabilizing Iraq?”](#)
- <sup>14</sup> [Army and Mobilization](#). Smith, 1957.
- <sup>15</sup> Herman, A. (2012). [Freedom’s forge: How American business produced victory in World War II](#). Random House: New York.
- <sup>16</sup> The Atomic bomb was the most ambitious—if morally suspect—of the these breakthroughs. Though destructive, violent, and morally suspect, the Manhattan Project illustrates the incredible things that are possible when the scientific community focuses on a common problem.

<sup>17</sup> For more on the inspiring history of the mobilization on the home-front during WWII, see [Goodwin](#), 1995.

<sup>18</sup> Indeed, in 2011 the executive directors of the Sierra Club, Greenpeace, the Rainforest Action Network, and Friends of the Earth, among others, signed [a letter](#) to President Obama and Chinese Premier Hu Jintao calling for a “wartime-like” mobilization to reduce global carbon emissions 80 percent by 2020.

<sup>19</sup> A WWII Mobilization is advocated by [Al Gore](#), [Bill McKibben](#), [Lester Brown](#), [Joe Romm](#), [Paul Gilding](#), [David Roberts](#), and many others. [Hillary Clinton](#) alluded to the WWII mobilization in a 2007 campaign speech on climate and energy issues, saying “For this generation of Americans, climate change is our Space Race. It is our home-front mobilization during World War II and it is our response to the Great Depression.” [Bryan Walsh](#) of Time published a cover story in 2008 that called for a WWII-style “[War on Global Warming](#).” There is also a contingent of climate writers and advocates, including [Jill Stein](#) and [Thomas Friedman](#), who prefer the historical metaphor of the New Deal.

<sup>20</sup> [Schneider](#) 2013

<sup>21</sup> [Rifkin](#), 2014. “[Climate Change Not a Top Worry in US](#).” Gallup Politics.

<sup>22</sup> See [Ganz](#), 2010 on the importance of building relationships and encouraging engagement for the success of social movements.

<sup>23</sup> See [Morris](#), 1999 for a thorough discussion of denial-fighting power of civil disobedience and [Bodroghkozy](#), 2012 for the role of television in particular.

<sup>24</sup> See [McAdam](#), 1988 for a vivid demonstration of this process.

<sup>25</sup> For an elaboration of how psychological defenses function on an individual level, see [McWilliams](#), 2011; for how cultures and societies defend against overwhelming information, see [Cohen](#), 2001.

<sup>26</sup> No Climate Tax. [Americans for Prosperity](#).

<sup>27</sup> See [Appiah](#), 2010 for a case history of the anti-foot-binding movement, and an examination of how shame and honor shape social movements.

<sup>28</sup> See [McWilliams](#), 2011 to understand how denial operates among individuals, for how cultures and societies deny see [Cohen](#), 2001. For a discussion of how denial functions specifically in climate change, see [Norgaard](#), 2011.

<sup>29</sup> U.S. 2020 emissions target. [Spross](#), 2014.

<sup>30</sup> [Roberts](#), 2013.

<sup>31</sup> EROI and growth prospects. [Murphy](#), 2013.

<sup>32</sup> Oil price forecast. [Fournier](#), 2013.

<sup>33</sup> Fossil fuel corporations will be encouraged to rapidly shift into producing post-carbon forms of energy and relinquish their efforts to subvert the democratic process. If they refuse to move into the future, the government will serve as employer of last resort for their laid-off employees.

<sup>34</sup> During WWII the government directly hired millions of people—most prominently in the Armed services. However these direct hires were supplied through networks of private enterprise that partnered with the government, often utilizing “cost plus profit” contracts.

<sup>35</sup> Cantrill, 2014 [“United States Defense Department Spending History”](#)

<sup>36</sup> See Goodwin, 1995 or the National WWII museum’s [America Goes to War](#).

<sup>37</sup> See Havel (1978).

<sup>38</sup> For an outstanding elaboration of humanity’s social nature, see E.O. Wilson’s (2013), [“The Social Conquest of Earth.”](#)

<sup>39</sup> For more on Luther’s innovative use of the printing press, see: [Standage](#), 2011.

<sup>40</sup> See [Thomas](#), 2004 and [Bodroghkozy](#), 2012 for the role of television in in the Civil Rights Movement.

## **Endnotes to Appendix A**

<sup>41</sup> The [Copenhagen Accord](#)

<sup>42</sup> IPCC, 2014. [Fifth Assessment Report](#).

<sup>43</sup> Sutton, 2014. [A Review of the History of Safety](#).

<sup>44</sup> Vaks, A., O.S. Gutareva et al. (2013) “Speleothems reveal 500,000-year history of Siberian permafrost”, *Science* 340: 183-186.

<sup>45</sup> Greenland ice sheet melt has an uncertainty range from +0.8 °C to +3.2°C).

<sup>46</sup> Spratt, 2013. [Is climate change already dangerous?](#) Climate Code Red.

<sup>47</sup> Many extreme weather events which have been made dangerously worse by climate changes such as alterations to the Jet Stream - including Superstorm Sandy, Typhoon Haiyan and extraordinary heat waves (eg France in 2003 and Russia in 2010) and floods (eg. Pakistan in 2010) - and poleward shifts in the major atmospheric cells thus causing huge local impacts through shifts in the location of low and high rainfall patterns.

Tang, Q. et al. (2013). “Extreme summer weather in northern mid-latitudes linked to a vanishing cryosphere”, *Nature Climate Change* 4, 45-50.

<sup>48</sup> Net emissions refers to any residual gain in emissions from a technology after total emissions and total withdrawals of greenhouse gases are balanced out. For example it would be possible to have a net zero emissions transport system if cars burned methanol in their engines, provided the methanol was synthesized, for example in fuel cells, out of CO<sub>2</sub> and water and the energy used to drive the synthesis came from renewable energy (eg. wind or solar electricity).

<sup>49</sup> Unless CO<sub>2</sub> is actively taken out of the air and stored (eg. in soils or geological formations) or other cooling methods applied (eg. solar reflection) "the combination of a 2°C warming target with high probability of success (eg. 90% or more) is now unreachable". This means that, with a safety standard that is adequately stringent, there is no carbon budget left for any country. As a consequence the only appropriate emissions target is now a 100% cut for all countries. Raupach, M. R., I.N. Harman and J.G. Canadell (2011) "Global climate goals for temperature, concentrations, emissions and cumulative emissions", Report for the Department of Climate Change and Energy Efficiency. CAWCR Technical Report no. 42. Centre for Australian Weather and Climate Research, Melbourne.

<sup>50</sup> Achieving a net zero emissions economy is not enough to cool the planet as a whole in any meaningful time scale. Many research teams [Meehl et al. (2007), Mathews & Caldeira (2008), Lowe et al. (2009), Solomon et al. (2009), Gillett et al. (2011)] have examined zero CO<sub>2</sub> emissions scenarios and have shown that, due to complex dynamics strongly influenced by the thermal inertia and CO<sub>2</sub> buffering of the oceans, dropping emissions to zero stops the warming trend (provided there are not already very strong positive feedbacks from the natural carbon cycle) but does not lead to a significant fall in the temperature in less than several thousand years.

The global temperature occurring at the time the zero emissions policy is applied is approximately the temperature that is maintained over the long term (if zero emissions is the only climate measure adopted). Given that we are clearly some years off the possibility of fully applying a zero emission strategy globally, the temperature that would be maintained at the point of full deployment of a zero emissions strategy would be a little higher than at present. If the zero emissions policy was fully implemented by 2020 then the temperature at the time might be approximately +1°C and if completed by 2030 the temperature might be about +1.2°C.

The Gillett et al. (2011) study concluded that although zero emissions translates to essentially a stable temperature – for in excess of a thousand years – in the simulation runs different zones of the earth react rather differently. The northern hemisphere cools significantly bringing some relief to the Arctic, but over the 1000 years of the model run heat continues to build up in the Southern Ocean putting stress on the stability of the West Antarctic ice sheet and the sea level also rises over the entire time because of the heat build up in the Southern Ocean. This hemispherically differentiated response suggest that much of the northern hemisphere would benefit from cooling with a zero emissions policy in place, but in the absence of any additional measures, continued heating in the southern hemisphere would cause conditions to continue to deteriorate for humans, ecosystems and species in the oceans and on the land masses.

Gillett, N. et al.. (2011). ‘Ongoing climate change following a complete cessation of carbon dioxide emissions’ Nature Geoscience. pp. 83–87.

Lowe, J.A., Huntingford, C., Raper, S.C.B., Jones, C.D., Liddicoat, S.K. & Gohar, L.K. (2009). ‘How difficult is it to recover from dangerous levels of global warming?’ Environ. Res. Lett. 4 014012 (9pp). 9326/4/1/014012

Mathews, D. & Caldeira, K. (2008). ‘Stabilizing climate requires near-zero emissions’ Geophysical Research Letters Volume 35, Issue 4. doi: 10.1029/2007GL032388

Meehl, G. A. et al. (2007). in IPCC Climate Change 2007: The Physical Science Basis (eds Solomon, S. et al.) 747-845: Cambridge Univ. Press.

Solomon, S et al. (2009). ‘Irreversible climate change due to carbon dioxide emissions’. PNAS.

<sup>51</sup> A [2009 report to WWF](#) calculates that global warming can only be held to a too-high +2°C (if all major economies in the world have, by 2014, geared up all the needed industries to grow very fast by conventional standards to deliver the required emissions cuts by 2050. Given the world's current level of mobilization, the required conditions cannot be met with conventional fast economic reform. The report indicated that if these industrial conditions are not met, more than +2°C of warming can only be avoided if the global economy goes onto a war-footing.