

An Initiative of Empowerment Institute Center for Reinventing the Planet

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Executive Summary

Climate scientists tell us we must achieve by 2030 what humanity is trying to accomplish by 2050 to avoid irreversible ecological tipping points. In other words, we must accelerate time by 3x. To achieve this, we need to change the way we think about change. Business as usual climate solutions are not up to the task. We need a climate moonshot strategy.

The Cool City Challenge invites and supports early adopter cities (initially in California, then US and worldwide) with financing, social change expertise and consulting support to embark on the climate moonshot of our time: becoming a carbon neutral city by 2030. This quest will galvanize and ennoble a city and its citizens with a profoundly inspiring mission for humanity's future.

While the goal is audacious, with city and citizens in the game together new possibilities can be born. A public-private-civic partnership provides the collective intelligence to crack the code on the technical, political, financial and community integration needed to become a carbon neutral city.

Technologically we know this is possible, it is the magnitude and speed of change that is the challenge. Cities are facing what systems theory calls a second order change problem, in which the stresses placed on a system are greater than the system, as currently designed, can handle. What is required is a second-order change solution that increases the performance capacity of the system.

The Cool City Challenge moonshot strategy is a robust second order change climate solution based on three decades of experience that brings the whole system together to meet this challenge. It provides a multi-sector team with the financial resources, tools and consulting support to embark on this profoundly inspiring mission for humanity's future.

You need a community to raise a carbon neutral city. Not just any community, but a carbon literate, empowered and galvanized community where everyone has a stake in its future. The Cool City Challenge creates just such communities.

It starts with Cool Block, a behavior change and community empowerment program consisting of five major topics – carbon reduction, disaster resiliency, water stewardship, neighborhood livability and empowering others – taken up by neighbors living on a block. Actions are supported by local resources provided and curated by the community.

Cool Blocks lead to Cool Neighborhoods, Cool Districts and ultimately a Cool City.

Cool Block has been successfully piloted on 125 blocks with over 2,000 people in five California cities – Los Angeles, San Francisco, Palo Alto, Mountain View and Isla Vista. The Cool Block methodology enabled substantive behavior change and participation on a block. The program achieved an average household carbon reduction of 25 to 32% depending on the city with 25 actions taken. Fifty-five percent of people on the block approached by their neighbor agreed to participate in the program.

CoolBlocksecondorder changes kills include behavior change, community empowerment, and large-scale transformation. With this knowledge embedded in the community, a city can go to the next level – forming the public-private-civic partnerships to drive carbon neutral initiatives around renewable energy, transportation, building retrofits and much more. Each initiative will organize into design teams around five core topics: technology, finance, policy, community engagement and synergy – with the synergy team scanning for cross-pollination opportunities to enable second order change breakthroughs. These second order change innovations are then piloted and evolve through iteration.

Cool Blocks are brought to scale community-wide through the Cool City Challenge which begins fall, 2021. Empowerment Institute is investing \$1 million in three California cities and \$100,000 in three runner-up cities. Cities with a minimum population of 40,000 people are invited to apply for these grants as a public-private-civic collaboration by showing how they can mobilize the participation of the whole community, and then leverage this climate action capacity to become carbon neutral by 2030.

The \$1 million budgets will provide campaign staffing and carbon neutral city seed capital. The \$100,000 budgets allow three cities to start the Cool Block journey and develop as strong candidates for the next round of funding as it becomes available. Further, Empowerment Institute has secured a partner to provide winning cities with \$240 million in low-cost financing for Cool Block participants to do energy efficiency upgrades. Additionally, each city will have access to Cool City Challenge resource partners to support them in accessing green financing, state-of-the-art carbon reduction technologies and simulation and data visualization tools.

In the next phase, the Empowerment Institute will be raising additional capital to scale its climate moonshot model to 50 cities in California, 100 cities in America and 100 cities around the world. These cities will be part of a global learning community to accelerate best practice exchange and leverage financial and technological resources.

Cool City Challenge's carbon neutral city strategy is designed as a game changer by activating a whole system climate solution at scale. When cities start achieving these carbon reduction goals combined with the social and economic benefits, it will galvanize the pent-up global demand for effective climate action. With these tools and sense of agency, humanity will be on the way to reclaiming its future. An empowered humanity is an idea whose time has come!



A Need and Opportunity

The world's cities are responsible for up to 70% of harmful greenhouse gases. They have become the real battleground in the fight against climate change. What goes on in cities, and how they manage their impact on the environment, lies at the core of the problem."

- United Nations Habitat Report

With international climate change legislation struggling to get traction the world is searching for a low-cost, high impact strategy to address climate change while we still have the time to act. Since cities represent 70% of the planet's carbon emissions and citizens' daily lifestyle choices represent 70% of these emissions, empowering cities and their citizens to become carbon neutral provides the world with an unparalleled opportunity to address climate change.

California is the natural candidate for seizing and piloting this opportunity.

It has the most aggressive climate change legislation of any state in America, a country with the largest per capita carbon footprint.

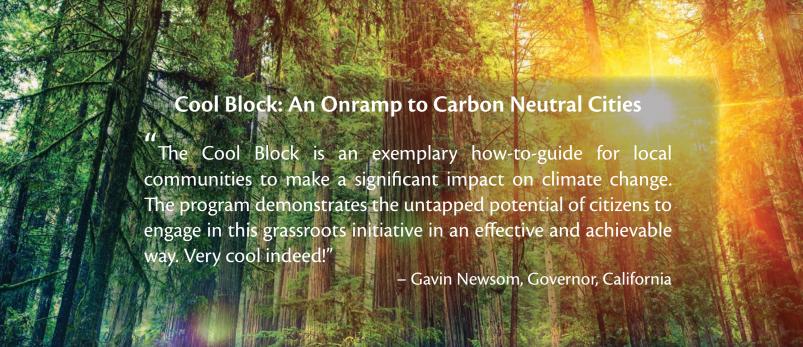
It is the fifth largest economy in the world and an international climate leader.

Over a hundred California cities have developed climate action plans.

It is renowned as an incubator for game changing social innovations and the world is looking to it for a climate change breakthrough.

It is one of the places on the planet most suffering from the devastating effects of climate change with its fires, droughts, and mudslides causing substantial loss of life and property. It needs to lead the way on climate action for its own survival.

Not surprisingly, California has seized this opportunity!



Cool Block has been successfully piloted on 125 blocks with over 2,000 people in five California cities – Los Angeles, San Francisco, Palo Alto, Mountain View and Isla Vista.

It successfully addressed two massive unmet societal needs – a scalable solution to climate change and overcoming the social isolation people feel living in our urbancentric world exacerbated by Covid. Doing the right thing for our children's future on the planet in collaboration with their neighbors proved to be a winning formula.

Specifically, the pilot demonstrated that the Cool Block methodology enables substantive behavior change and participation on a block. The program achieved household carbon reduction of 25 to 32% depending on the city with 25 actions taken, seven of which created more disaster resilient blocks. Through a neighbor-to-neighbor recruitment process forty-five percent chose to participate in the program. Stanford University research found that, "The program increased average scores for each of the program's key performance indicators by an amount that was both substantively and statistically significant. Two of the most notable changes were nearly 40 percent increases in a block's commitment to reducing its carbon footprint as well as sharing tools and resources."

The program consists of five major topics (carbon reduction, disaster resiliency, water stewardship, neighborhood livability and empowering others) divided up over nine biweekly meetings led by different neighbors living on a block (both sides of the street corner to corner) or within a multi-family building. Participants select from a menu of 120 action recipes. Some actions are done as individuals and others are collective and carried out by the team of neighbors that forms on the block. Behavior change is achieved through a combination of action recipes, a peer support system, self-directed

meeting scripts and the guidance of a trained coach who has been through the program. The program is delivered through a web platform that helps households create an action plan, take action and track their progress in each topic and the overall program. Local government and nonprofit resources are integrated into actions to amplify their impact. A feedback system shows each household how their drops are filling the bucket, so they are inspired to sustain their commitment. A city recognition program honors the accomplishment of each household and block.

"I really liked that there were step-by-step, clearly stated action recipes for the program," reports San Francisco Cool Block participant Sharon Wells. "That helped a lot in figuring out what to do, what would make the most difference, set priorities, and do it."

James Keene, Palo Alto City Manager, describes why he is excited by his city's participation in Cool Block. He says, "Cool Block links the climate change challenge facing our planet to the intimate, personal, social scale of the city block. It is rewiring our city and making it stronger. If I can play a little part in making this happen it will be enough for my career."

Transformation Through Social Connection

At the core of this Cool Block social innovation is the simple and profound power of neighbor-to-neighbor connection. The desire to connect with one's neighbors in a meaningful way is a potent activator. And once neighbors come together and become a peer support system it creates the motivation to take action and sustain new behaviors over time.

"What I saw was that people are hungry for community and that's what the Cool Block offers. But it is so much more," states Lorrie Castellano, Palo Alto Block Leader and Coach. "We helped each other go through lowering our carbon footprints as individuals and as a group. And once we learned we'd need each other in an emergency, we prepared our block by stocking food and sharing information about who has a generator, tools, and other things needed to survive."

Summarizes Wells, "We helped rewrite the social blueprint of our neighborhood. We showed how to be a community which makes it easier for others to do the same."

A Climate Moonshot: Carbon Neutral Cities by 2030

Climate scientists tell us we must achieve by 2030 what humanity is trying to accomplish by 2050 to avoid irreversible ecological tipping points. In other words, we must accelerate time by 3X. To achieve this, we need to change the way we think about change. Business as usual climate solutions are not up to the task.

Enter Empowerment Institute's experience in designing second order change solutions capable of accelerating the speed, magnitude and quality of change. We call this <u>Social Change 2.0</u>. Second order change needs to meet climate change to keep our beautiful planet viable for future generations. The Cool City Challenge moonshot strategy is a robust second order change climate solution designed to meet this challenge. It is built around ten components.



MOONSHOT STRATEGY COMPONENTS

- 1. **Proven Track Record:** Achieved significant household carbon reduction and community engagement in a short period of time.
- 2. Whole System Climate Solution: Integration of top-down and bottom-up carbon reduction strategies accelerates the speed and magnitude of change.
- 3. **Demand-Side Activation:** Enabling supply-side climate solutions of policy, technology and market creation to achieve significantly more uptake.
- 4. Tipping Point Science: Leverages small-scale change into large-scale outcomes.
- 5. **Social Change 2.0:** A second order change methodology that enables behavioral change at scale.
- 6. Synergy: Facilitation of public-private-civic sector collaboration.
- 7. **Collective Intelligence:** Empowerment of a community's group genius to enable breakthrough solutions.
- 8. **Cost Effective:** Scaling vountary change achieves significant cost reduction in carbon mitigation relative to other CO2 reduction strategies.
- 9. **Carbon Neutral Economy:** Creation of a new economic base for change and engagement of the business community as active partners.
- 10. City Operating System Upgrade: Enables cities to address the multiple challenges and opportunities of the 21st century.

In one of our Cool Block cities, Isla Vista, in collaboration with University of California, Santa Barbara, local authorities and various community partners, we have created a carbon neutral city incubator to test these components.

Cool City Challenge: Climate Impact at Scale

Cool Blocks will be brought to scale community-wide through the Cool City Challenge. Empowerment Institute will invest \$1 million in three California cities plus \$100,000 in 3 runner-up cities. Cities with a minimum population of 40,000 people will be invited to apply for these grants as a public-private-civic collaboration by showing how they can mobilize the participation of the whole community, and then leverage this climate action capacity to become carbon neutral by 2030.

A key to Cool Blocks scaling is the outreach capacity of the multi-sector campaign team. A primary consideration in reviewing a community's proposal will be its ability to recruit partner organizations to enroll their members as Cool Block leaders.

To apply a community is requested to recruit a minimum of 25 partner organizations who collectively recruit a minimum of 200 Cool Block leaders (Approximately 8 per partner organization). This demonstrates the campaign team's performance capacity and allows the city to hit the ground running when funding is received. The overall goal is 400 Cool Blocks in two years. Empowerment Institute will provide candidates an indepth application guidance document for proposal development plus instructional webinars.

When the three cities are selected, Empowerment Institute will provide deep capacity building support in deploying Cool Block and its carbon neutral city scaling strategy. Additionally, each city will have access to Cool City Challenge resource partners to support them in accessing green financing, state-of-the-art carbon reduction technologies and simulation and data visualization tools.

Grants of \$100,000 to the three runner-up cities will be used to further Cool Block campaigns in their communities. The runner-up cities will also serve as backups should the current winners fall short and as a pipeline for the next funding round. Cities who did not receive a grant, but successfully recruited 25 partner organizations and 200 Cool Block leaders will be provided access to the Cool Block platform and technical support for implementing the program at no cost. Cities will be encouraged to implement the Cool Block program to both further their climate action plan and provide them the experience to be competitive in applying for future funding.

Empowerment Institute will raise additional capital to scale this model to 50 cities in California, 100 cities in America and 100 cities around the world. These cities will be

part of a global learning community to accelerate best practice exchange and leverage financial and technological resources. All cities receiving funding will be requested to teach ten additional cities what they have learned expanding the Cool City Challenge movement reach to 2,500 cities worldwide.

Cool Block Scaling Model

Below is a scaling algorithm for a mid-sized city of 100,000 people based on national averages. For smaller cities 400 blocks will obviously represent a larger percentage of total blocks and the reverse for larger cities. In urban cities, blocks will be more densely populated.

- City population 100,000
- 2.5 people per household 40,000 households
- 20 households per block 1,600 blocks
- 25% of blocks 400 blocks
- 25 partner organizations recruit 16 Cool Block leaders over two years =
 400 Cool Blocks

Multiplier Effect

Empowerment Institute has secured a financing partner to provide participants in the Cool Block initiative with financing for deployment of home improvements, energy efficient systems and solar installations to reduce their carbon footprint.

Our partner Ygrene Energy Fund has committed \$240 million (\$80 million per city) in available financing for energy upgrade projects for the residents of the selected cities. This amount allows 400 blocks, with an average of 10 households per block, to access up to \$20,000 per household in financing for carbon reduction initiatives. This is a non-exclusive arrangement whereby residents can seek alternate sources of financing if desired, but the Ygrene financing is available as an immediate, low-cost option.

This ensures that households committed to reducing their carbon footprint have ample available resources to make carbon reduction upgrades and maximizes the program's climate, social and economic impact. Energy efficiency contractors working with the Cool City Challenge are encouraged to hire workers in an inclusive manner.

A Glimpse into the Future

So what might carbon neutral cities at scale look like? Here is an historical account from 2030 on how California, its cities and its citizens rose to the occasion and changed the world!

By 2025 twenty-two cities had become Cool Cities through achieving the 400-block participation and 25% per household carbon reduction goals. Twelve had become Super Cool Cities with 600-block participation. Nine communities had well acceded the minimum of 800 blocks necessary for becoming Ultra Cool Cities! The cities were motivated by both the carbon reduction and social capital it generated. They recognized this was something their communities needed, and they wanted it. These cities and their citizenry discovered however, that achieving the basic Cool City goals opened the door to so much more. Here are some of the profound changes they created.

They created robust low carbon economies built around the trifecta of energy efficiency retrofitted homes, solar energy and electric vehicles. Many used ride and car sharing services and bikes as their vehicle redirecting the money they would have spent owning a car into comprehensive home retrofits to better take advantage of their solar energy.



The collective actions taken were also quite stunning. So much was possible with their new best buddies being the neighbors on their block. Many blocks used the land in their front or backyards and near the curbs to create community vegetable and herb gardens and plant community fruit trees. They created sustainable water irrigation systems and overall made their block more food and water resilient. They had weekly potlucks to enjoy the bounty and each other.

Contiguous Cool Blocks formed into Cool Neighborhoods of approximately ten Cool Blocks to create community solar gardens (microgrids) providing renewable energy to the entire neighborhood. Because they were so well connected through their Cool Block teams and there was so much carbon literacy, it was rather easy to get people organized to do this.

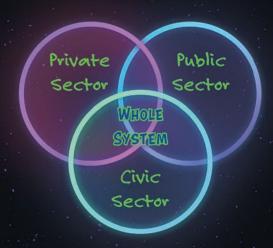
They also established Cool Neighborhood CERT teams (community emergency response teams) to support first responders and vulnerable neighbors in the case of natural disasters. This along with the disaster resiliency of each block provided a lot of comfort to the neighborhood. Food, water, energy and disaster resiliency became the new norm in these Cool Neighborhoods.

It didn't stop there. The sense of agency people were experiencing began to spread beyond their immediate blocks and neighborhoods to the larger community. In forming Cool Block teams and learning how to make their block a better place to live, a new ethos emerged that translated very naturally into also making their community a better place to live. A renaissance of civic engagement and citizenship was unleashed that became unstoppable. Block after block looked around to see what was needed, put their Cool Block skillset into action and started transforming their community. Those in need of a helping hand got it. Those social and environmental issues that were endemic in the community now had a lot of people putting their shoulders to the wheel and solving problem after problem.

Community service was now the coin of the realm. It was not just because these communities were now more organized and had more skills. This was also a response to the divisiveness that had been making their communities less hospitable. It had finally reached a tipping point and they used Cool Blocks to seize the moment. It was a breath of fresh air to observe this new community spirit take hold.

The city governments soon realized their role needed to evolve from purely service delivery to helping facilitate all this latent talent that was bubbling up from the community to do

good. They trained staff to become community empowerment facilitators to coordinate public-private-civic partnerships between government agencies, local businesses, nonprofits and the Cool Block volunteers who wished to tackle specific challenges. The activation of the community's synergy potential was enabling the city and its citizens to achieve social, environmental and economic outcomes they never imagined possible. They were in the middle of a major reinvention process which they began calling Community 2.0.



Whole system design enables the collective intellegence of the system to be realized.

But all this was just the warmup act. They would need every ounce of civic, public and private capacity and social cohesiveness for the lift ahead – becoming a carbon neutral city by 2030. This goal was not way in the future, so no one had to think about it now. It was on their watch and the world needed them to act now! As each city went through the process of dramatically accelerating their climate action plan goals and timeline, it became very clear why Cool Blocks was a pre-requisite.

You need a community to raise a carbon neutral city. Not just any community, but a carbon literate, empowered and galvanized community where everyone has a stake in its future. A community with distributed leadership throughout the neighborhoods and the agency and empowerment tools to make transformative change happen on a large scale. A community with the kind of can-do attitude that comes from accomplishing something unprecedented and realizing it has the right stuff to take on an even bigger challenge.

With an inspiring and audacious goal, a precise due date, and community buy-in, people rolled up their sleeves and went to work. The talent in the community was primed

and came out of the woodwork in droves. High school and college students were very involved as they had more time and felt the greatest threat to their future from climate change. They were far and away the most enthusiastic which was contagious to everyone else. They were integrated into all the community organizing aspects of the program including recruiting block leaders and supporting the teams in utilizing local resources, including themselves, to help amplify the program's impact.

Young social entrepreneurs, many who grew out of the first-hand knowledge they acquired doing the community organizing and developing local resources, designed green businesses to meet the burgeoning demand for the low carbon goods and services necessary to create a carbon neutral city. Existing businesses were also rapidly expanding to fill these new niches. Local business associations such as the Chamber of Commerce and new ones stepped forward to help raise capital for the infrastructure required of a carbon neutral city. The local nonprofits took on pieces of the carbon neutral city puzzle based on their areas of expertise and also greatly benefitted from providing services to support the booming low carbon economy.

The state with its very progressive climate policy and enlightened political leadership provided their muscle to help with the heavy lift these cities were taking on. Raising a carbon neutral city not only needed a community, but it also needed a state. The state political leadership realized for this upwelling of civic inventiveness to realize its full potential, it needed to bring its unique resources to the table.

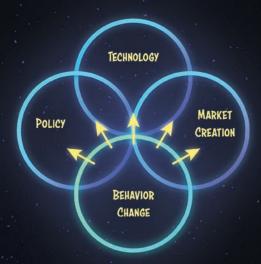
It did this by investing a portion of its annual cap-and-trade revenues to support these cities in growing the Cool Block program and building carbon neutral infrastructure. It mobilized and invested in its world-renowned state university brain trust to provide mentorship to each participating city in solving its unique technical requirements of becoming carbon neutral. It also provided generous tax incentives to cities that took on this challenge.



The cities in their new role as community empowerment facilitators coordinated this amazing diversity of talent and resources, but that was only the half of it. The need for serious climate action had reached a tipping point because of the many climate-related disasters occurring in or around their communities. The reality had finally sunk in that climate change was no longer a future, but a present danger to everyone's life and property. Nodding to its importance by creating long-term climate action plans was no

longer acceptable. Kicking the can down the road hoping the next generation of city leadership would deal with the complicated political and financial challenges of creating a carbon neutral city was now morally unacceptable to them and the electorate. If you were going to be a political leader, you needed to lead, and they did!

The quest to become a carbon neutral city ennobled the cities political leadership, who in turn empowered the city staff, who in turn helped facilitate community-wide civic engagement in this concerted and inspiring mission. While the goal was still daunting, with the political will now in play, the cities and their citizens were in the game. They needed to be because no city on the planet had cracked the code on how to integrate the complex technical, political, financial and community engagement puzzle pieces necessary to become a carbon neutral city. Technologically it was possible, this was known. It was the magnitude, speed and quality of change that was the challenge.



We need to combine top-down and bottom-up climate solutions to create a breakthrough.

Bottom-up demand-side behavior change activates the whole system.

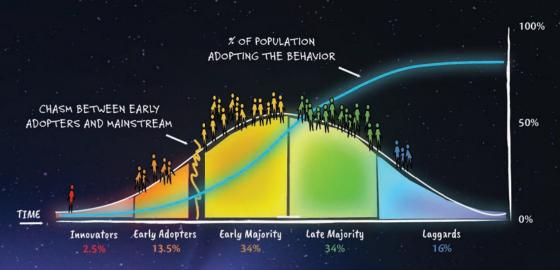
This was a second order change problem that would require second order change thinking and tools to rapidly transform multiple social systems to higher levels of performance and social value. The Cool Block program was designed as a second order change climate solution. This DNA was encoded in each block. What was needed was to decode how these blocks achieved their extraordinary results on a micro block-level and extrapolate it to the macro city-level.

These second order change codes included how to empower a group of people to achieve large goals in a short timeframe. Transform diverse content into a structured, easy to use, self-managed process. Build the capacity of a disparate group of people in

the skills of cooperation, collaboration and mutual accountability. Develop teamwork so that everyone worked together effectively and efficiently. Design solutions that could be sustained through iteration over time. And more. It was all there. The community knew this stuff, not just intellectually but experientially. They put all their knowledge into play and watched transformation happen. It was a wondrous sight to behold.

This second order change knowledge was embedded at each level of scale. Each city participating in the Cool City Challenge was organized into peer support teams around five core topics: technology, finance, policy, community engagement and synergy. The synergy team scanned for cross-pollination opportunities to enable second order change breakthroughs. Each team used a structured meeting guide and had the support of a coach to help it achieve its goals. The overall initiative had a campaign director to help solve problems and keep everyone on track and motivated. This same structure was replicated at a regional and state level with each culling emerging best practices and circling them back down.

These knowledge exchanges were potent as each city stood on the shoulders of every other city. This synergized brainpower enabled multiple breakthroughs that were able to rapidly cascade from city to city. It was awesome to witness the release of such vast amounts of social creativity, collective intelligence and group genius. Creating the impossible could only become possible if people worked together in better and smarter ways. And they did!



The science of tipping points shows us how only 15% of people need to shift for large scale change to occur.

The new "cool" in California was not just becoming carbon neutral; it was becoming a more intelligent and connected state. This quality of connection and collective intelligence in service to carbon neutrality came to be called "California Cool." Everyone working together at their best to save the planet was 21st century cool. California was the social laboratory to show us how to do this. This was its destiny and it stepped up and met it!

By 2030 there were 38 carbon neutral cities in California. The Carbon Neutral City Fund had awarded \$25 million in prizes to the most outstanding breakthrough solutions all of which included mechanisms for rapid transfer to other cities and to three cities in each population range who achieved carbon neutrality. The state's political leadership, emboldened by its pioneering cities, upped its climate action ante. A carbon neutral state by 2045 was no longer good enough given the ever-encroaching impacts of climate change; they would accelerate this timeline and become carbon neutral by 2040.

But this was not a California thing anymore; knowledge of this daring social experiment had spread around America and the planet. Delegations from cities across America and around the world came to learn how these California cities had achieved this extraordinary goal. There was much to teach, and each carbon neutral city took their responsibility seriously and became a "teaching city." They were supported financially in doing this by the state, which took their climate leadership responsibility to the world very seriously.

The psychological barrier counterpart to the four-minute mile of a carbon neutral city had been broken many times over. The financing mechanisms were now in place and funding was flowing generously into the local economies. Carbon neutral cities had opened up the multi trillion-dollar market everyone knew was there when humanity fully stepped up to tackle climate change.

And California? Well, it had done its job. It knew it still had a lot of work ahead as the fifth largest economy creating the first carbon neutral state in the world. Another day, another grand challenge. But at this moment it and the world could breathe a little easier by seeing a path forward for humankind on our beautiful home.

Summary of Key Tasks

EMPOWERMENT INSTITUTE

- 1. Develop Cool City tools and mobilization strategy.
- 2. Recruit and support three pilot cities, three runner-up cities and other cities that met the 200 Cool Block leader threshold.
- 3. Facilitate a visioning retreat with the three winning cities campaign leadership team and strategic partners to create a multi-year vision customized to the unique needs and opportunities of each city.
- 4. Based on each community's vision assist the campaign leadership team to develop a detailed multi-year strategic plan for program implementation including social learning goals.
- 5. Provide a capacity building training for the three winning cities campaign leadership team and strategic partners in Empowerment Institute's behavior change, community engagement and second order change methodologies.
- 6. Transform the current Cool Block web platform into an app.
- 7. Build the Cool City Challenge data management, results tracking and visualization platform.
- 8. Provide on-going consultation, coaching and yearly multi-city retreats for the campaign leadership teams.
- 9. Develop strategic partnerships to assist the campaigns with technology, financing, and communication resources.
- 10. Raise additional financing to scale this model throughout California, America and the world.

LOCAL CAMPAIGN LEADERSHIP TEAM

The staffing required to manage the Cool Block portion of the campaign is estimated to be either two or three full-time people depending on volunteer support.

- 1. Recruit the campaign director and program manager(s).
- 2. Develop the campaign strategic plan including detailed Cool Block team launches to achieve 400 completed Cool Blocks in two years.
- 3. Train community partner organizations to help support the Cool Block leaders they recruited.
- 4. Organize a launch event with partner organizations to introduce the campaign to the community.
- 5. Support community partner organizations to stay on track with their Cool Block team formation goals.
- 6. Recruit and support the carbon neutral city design teams around finance, technology, policy, community engagement and synergy to create the carbon neutral city part of the campaign strategic plan.
- 7. Support the carbon neutral city design teams to stay on track with their respective parts of the plan.
- 8. Attend regular consultation, coaching meetings and periodic retreats with Empowerment Institute and resource partners.
- 9. Attend regular community of practice meetings with other participating cities.

10. Implement and iterate the campaign strategic plan based on feedback.

About Empowerment Institute Center for Reinventing the Planet

Empowerment Institute's Center for Reinventing the Planet is the world's foremost expert in empowerment and second order change. Over the past thirty years it has empowered millions of people worldwide to reduce their environmental footprint and hundreds of cities to become more sustainable. Since 2006, it has applied its behavior change methodology to empower tens of thousands of households to create low carbon lifestyles. It has participated in eight research studies on its behavior change methodology with one academic study describing it as "unsurpassed in changing behavior."

Empowerment Institute has won many awards including its Cool City Challenge initiative winning the prestigious NASA global competition as "the most outstanding solution in addressing human impact on the planet's sustainability." It had to meet the following criteria: "be game-changing, visionary and scalable; have an integrated strategy that addressed social, economic, environmental, policy and cultural issues; be regionally specific yet globally applicable; and backed up by a solid plan and the capability to move the solution forward."

Empowerment Institute is the architect of the Cool City Challenge and responsible for its overall implementation. This includes the selection of the three California pilot cities and building their capacity in deploying and scaling the Cool Block and carbon neutral city methodologies; and supporting the 3 runner-up cities with the Cool Block portion of the campaign. Finally, it is responsible for raising additional financing for scaling the Cool City Challenge across California, America and the world.



Cool City Challenge Team

PROJECT LEADERSHIP



David Gershon

David has overall leadership responsibility for Cool City Challenge. He is co-founder and CEO of Empowerment Institute and directs its Center for Reinventing the Planet. David has spent the past forty years designing and implementing second order change solutions round many critical planetary issues. He has spent the

past three decades applying this expertise to climate change worldwide and the past ten years in California. He is author of twelve books, including the award-winning Social Change 2.0: A Blueprint for Reinventing Our World and the best-selling Empowerment: The Art of Creating Your Life as You Want It. Based on his four decades of transformative social change experience, he has architected a global grand strategy called "Reinventing the Planet." Cool City Challenge is a part of this larger strategy.



Miranda Clendening

Miranda is Director of Operations for Empowerment Institute's Center for Reinventing the Planet. She is in charge of operations for the Cool City Challenge. Her skillset incudes non-profit leadership, whole system community design, partnership development, technology integration, and large-scale event

management. As former Executive Director for Unify she brought tens of millions of people together around the world in multiple unitive events. She is passionate about second order change climate and regeneration initiatives.





Jim Keene

Jim is helping design the outreach strategy to cities and local government and providing guidance on capital infrastructure financing for Cool City Challenge. As Palo Alto City Manager, he helped it become the world's first city to achieve 100 percent carbon neutral electricity and carbon neutral natural gas earning it the Platinum Level Beacon Award for climate change leadership. Jim is a national leader in open government and innovation and served as President of the Alliance for Innovation. He has also served as Western Director for International City/County Management Association and as a Board Member of Institute for Local Government.



Stacey Lawson

Stacey is helping design the financing and scaling strategies for Cool City Challenge. She is Vice Chair of Ygrene Energy Fund, an innovative clean energy finance company which has partnered with over 500 cities and counties to deploy over \$2 billion in financing to home and business owners for renewable energy,

energy efficiency and climate resiliency projects. In her various board, leadership and philanthropic roles, Stacey has been an advocate for climate solutions, the clean energy economy and climate justice across California and the nation. She lives in San Rafael, California.



Kerim Baran

Kerim is helping design the financing, clean tech and social media strategies for Cool City Challenge. Kerim is the founder of SolarAcademy, a social learning platform for the solar industry. Prior to SolarAcademy, Kerim was the Co-founder and VP of Strategy at CivicSolar, a leading national solar equipment

distributor. He has also founded and ran the leading Turkish social network. Kerim serves as an investor, advisor, and strategist to various early-stage clean energy and tech companies. He lives in San Diego, California.





Sandra Slater

Sandra, as Cool Block Northern California Director, is responsible for recruiting, training and coaching cities participating in Cool City Challenge in this region. She is also Program Manager for Cool Block in Palo Alto, responsible for recruiting, training and coaching Cool Block leaders and developing strategic partnerships with

local community-based organizations. She serves on the City of Palo Alto's Sustainability/

Carbon Action Plan Advisory Committee and is actively engaged in many sustainability initiatives in the City and beyond. Prior to this Sandra founded a design consulting firm specializing in green building techniques. She lives in Palo Alto, California.



Robin Elander

Robin, as Cool Block Southern California Director, is responsible for recruiting, training and coaching cities participating in Cool City Challenge in this region. She is also Program Manager for Cool Block in Isla Vista, CA responsible for recruiting, training and coaching Cool Block leaders and developing strategic partnerships

with local community-based organizations. Robin is the Director of Global Good Impact, a Santa Barbara-based company dedicated to empowering individuals and building stronger communities. She has over 15 years of experience organizing initiatives to foster a more connected community. She lives in Santa Barbara, California.



Sue Lebeck

Sue is the Cool Block Platform Director responsible for design and management of the Cool Block platform through which individuals engage in the program. She is responsible for onboarding and supporting Cool City Challenge cities in use of the platform including customization around local resources. A

smart city innovation specialist, Sue integrates technology, sustainability, psychology, media and collaboration to create high performance solutions. Formerly, Sue founded InnovatingSMART, a media initiative which celebrates and supports sustainability-driven innovators. She lives in San Francisco, California.



Mo Lovegreen

Mo is responsible for recruiting university partners to support Cool City Challenge cities through engaging students in outreach and faculty in research. Mo is Director of Campus Sustainability at University of California, Santa Barbara (UCSB) and has an extensive network of colleagues throughout California universities

and colleges. She is on the Society of College and University Planning taskforce for institutionalizing sustainability and multiple statewide sustainability initiatives. Mo leads UCSB's initiative to be carbon neutral by 2025 and is a member of the Carbon Neutral Isla Vista team. She lives in Santa Barbara, California.

TECHNOLOGY SUPPORT



Carlen Young

Carlen is Chief Technology Officer for Empowerment Institute Center for Reinventing the Planet. He is responsible for designing and managing the technology to support the scaling and knowledge exchange for Cool City Challenge. Carlen is passionate about community psychology, empowerment and second order

change solutions. He applies these passions to increase personal agency and planetary well-being through designing social impact web and app platforms. As a psychology researcher with the University of California, Santa Cruz, Carlen spent a decade researching community building strategies and tools.



Joel Mills

Joel will bring city simulation and visualizing technology, called "Digital Twins," to help cities and citizens pragmatically envision the environmental, economic and social impacts of the Cool Block program at various levels of scale. As CEO of Augment City, he utilizes simulation and complex data visualization tools to help

cities create more effective solutions based on seeing how the whole system interacts. Trained as an industrial designer, Joel is passionate about using elegant technology and human centered design to improve quality of life for people. He has worked with the UN smart cities program to disseminate these tools worldwide.

Timeline of Major Activities and Payment Schedule

Pre-Campaign
June 2021 to December 31, 2021

June 1, 2021

Cool City Challenge launches (https://coolcity.earth).

June 1, 2021 to September 6, 2021

Candidate cities fill out application.

September 7, 2021

Applications Due

September 8 to September 22, 2021

Applications Reviewed

September 23, 2021

Finalists Announced

September 24 to October 3, 2021

Finalists make changes to their proposals based on reviewers' feedback.

October 4 to October 11, 2021

Finalists make oral presentations.

October 15

3 winning cities and 3 runner-up cities announced.

October 16 to December 31, 2021

El visioning and capacity building of campaign leadership teams and team planning.

October 16, 2021 to December 31, 2022

Cool Block Campaign payment 1, \$200,000 paid in 3 installments.

COOL BLOCK IMPLEMENTATION JANUARY 1, 2022 TO DECEMBER 31, 2023

January 1 to December 31, 2022

Implementation of 200 Cool Block teams and growth into Cool Neighborhoods; development of carbon neutral city moonshot framework.

January 1, 2023 to December 31, 2023

Cool Block Campaign payment 2, \$200,000 paid in 3 installments.

January 1 to December 31, 2023

Implementation of 200 more Cool Block teams and growth into Cool Neighborhoods and Cool Districts; continued buildout of carbon neutral city moonshot framework.

January 1, 2024 to December 31, 2024

Cool Block Campaign payment 3, \$100,000 paid in 3 installments.

CARBON NEUTRAL CITY MOONSHOT FRAMEWORK IMPLEMENTATION
JANUARY 1, 2024 TO DECEMBER 31, 2026

January 1, 2024 to December 31, 2026

Continued growth of Cool Blocks into Cool Neighborhoods and Cool Districts; implementation of carbon neutral city moonshot framework with support from Empowerment Institute, and \$500,000 moonshot grant.

January 1, 2027 up to December 31, 2030

Campaign leadership team operates independently with consultation support by EI as requested.

FUTURE COOL CITY CHALLENGE FUNDING ROUNDS

Based on available funding, there will be three future Cool City Challenge solicitations following the same timeline and payment schedule above. They represent 250 future cities at a total cost of \$500 million. Each city in which we invest in return is requested to teach a minimum of 10 more cities what they have learned. This will allow us to impact 2,500 additional cities. There will also be a \$25 million Carbon Neutral City Prize Fund to support moonshot innovation breakthroughs and incentives for achieving carbon neutrality by 2030.

January 1, 2023 to December 31, 2027 (\$100M)

Cool City Challenge Round 2: 50 cities - 25 California, 25 US

January 1, 2024 to December 31, 2028 (\$200M)

Cool City Challenge Round 3: 100 cities - 25 California, 50 US, 25 world

January 1, 2025 to December 31, 2029 (\$200M)

Cool City Challenge Round 4: 100 cities - 25 US, 75 world

Budget

CITIES MULTI-YEAR PROJECT MANAGEMENT

Campaign Staffing: \$1,500,000 (\$500,000 per city for 3 cities to achieve the 400 Cool Block minimum goal and manage the carbon neutral city campaign.)

Carbon Neutral City Seed Capital: \$1,500,000 (\$500,000 per city for 3 cities activated upon achieving Cool City status of 400 or more Cool Blocks and an accepted carbon neutral city scaling proposal.)

Cool City Runner Up Grants: \$300,000 (Grants of \$100,000 to 3 cities to further a Cool Block campaign, serve as backups for current winners should they fall short, and as a pipeline for the next funding round.)

Total: \$3,300,000

COOL CITY CHALLENGE MULTI-YEAR PROJECT MANAGEMENT

Tasks will be managed by Empowerment Institute team members or consultants.

Project Management: \$2,100,000 (Includes visioning, capacity building, consulting, coaching and off-site retreats for three winning cities, support of runner up and other qualified cities, resource partnership development, Cool Block platform upgrades and local program customization, training and marketing videos, live stream events, social media, communication/public relations, carbon neutral technology and green financing research, fundraising, and overall project management.)

Technology: \$400,000 (Cool Block app, Cool City Challenge data management platform and tracking system, and simulation/visualization tools for three cities.

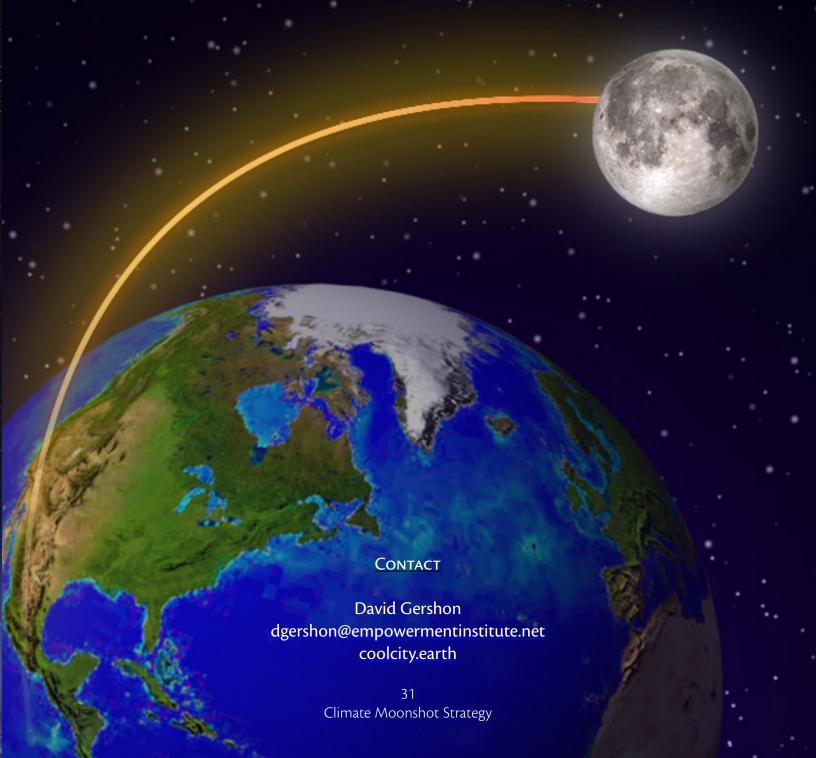
Events, Retreats, Travel and Lodging: \$200,000 (For community engagement events, capacity building events and off-site retreats.)

Total: \$2,700,000

Total Project Budget: \$6,000,000

Conclusion

Cool City Challenge's carbon neutral city strategy is designed as a game changer by activating a whole system climate solution at scale. When cities start achieving these carbon reduction goals combined with the social and economic benefits, it will galvanize the pent-up global demand for effective climate action. With these tools and sense of agency, humanity will be on the way to reclaiming its future. An empowered humanity is an idea whose time has come!



Addendum 1: Cool City Challenge Application

What follows is a summary of the seven application actions each of which includes a resource guide to support implementation.

ACTION 1 RECRUIT AND EMPOWER CLIMATE MOONSHOT TEAM

PURPOSE

Climate moonshot team leader recruits and empowers a cross-sector moonshot team to implement the application phase of the project.

ACTION STEPS

- 1. Moonshot team leader creates a personal leadership vision for initiating this climate moonshot in their city.
- 2. Moonshot team leader creates a strategy to recruit the climate moonshot team members in the public, private and civic sectors.
- 3. Moonshot team leader guides team through a visioning and developmental process.
- 4. Moonshot team creates an implementation plan.
- Moonshot team submits team leader personal vision, team purpose statement, team members with bios and fiscal agent for receiving funds as part of the Cool City Challenge application.

ACTION 2 RECRUIT COMMUNITY PARTNER ORGANIZATIONS

PURPOSE

Climate moonshot team recruits a minimum of 25 community organizations to partner in implementing the Cool City Challenge by inviting their members to be Cool Block leaders.

ACTION STEPS

1. Moonshot team creates list of potential community partner organizations in the

- public, private and civic sectors.
- 2. Moonshot team develops recruitment strategies.
- 3. Moonshot team members recruit agreed upon partner organizations.
- 4. Moonshot team members test recruitment strategies and iterate based on feedback.
- 5. Moonshot team submits a list of the partner organizations with signed agreements and letters of support as part of the Cool City Challenge application.

ACTION 3 EMPOWER COMMUNITY PARTNERS TO RECRUIT COOL BLOCK LEADERS

PURPOSE

Climate moonshot team empowers the twenty-five community partner organizations to recruit 200 Cool Block leaders (8 per partner) for Year 1 of the campaign.

ACTION STEPS

- 1. Moonshot team members help community partners develop their Cool Block leader outreach plans.
- 2. Community partner and moonshot team member lead a Cool Block information meeting for partner organization.
- 3. Community partner supports committed Cool Block leaders to fill out and submit online application.
- 4. Moonshot team confirms partner organization block leader applications have been submitted as part of Cool City Challenge application.

ACTION 4 CREATE CARBON NEUTRAL CITY MOONSHOT STRATEGY

PURPOSE

Climate moonshot team creates their carbon neutral city moonshot strategy.

ACTION STEPS

- 1. Moonshot team develops two-year implementation strategy to achieve a minimum of 400 Cool Blocks (Phase 1) with budget.
- 2. Moonshot team, building on the Cool Block foundation, develops multi-year carbon neutral city by 2030 implementation strategy (Phase 2) with investment plan for \$500,000 grant.
- 3. Moonshot team integrates their City's climate action plan policies into their carbon neutral city strategy.
- 4. Moonshot team integrates phase 1 and 2 strategies to create their carbon neutral city moonshot strategy with timeline and key performance indicators.
- 5. Moonshot team submits their carbon neutral city moonshot strategy as part of the Cool City Challenge application.

ACTION 5 Why Your City Can Achieve a Carbon Neutral City Moonshot

PURPOSE

Climate moonshot team builds the case for why their city has the right stuff to succeed with this climate moonshot goal.

ACTION STEPS

- 1. Appetite of their city for bold and visionary climate action and how they will activate it.
- 2. Cultural, organizational or social assets of their city and how they will access and integrate them into their strategy.
- 3. Prior experience their city has in cross-sectoral collaboration and how they will build upon this experience to further their strategy.
- 4. Any helpful community resources (i.e., corporate financial and volunteer support, university research, high school and university student volunteer support, foundation support) and how they will harness these resources to further their strategy.
- 5. What in their city will need to be transformed for their climate moonshot strategy to succeed and how they will do this?
- 6. Moonshot team submits their success strategy as part of Cool City Challenge application.

ACTION 6 EXPAND MOONSHOT LEADERSHIP TEAM

PURPOSE

Climate moonshot team expands leadership to implement their moonshot strategy.

ACTION STEPS

- 1. Moonshot team identify and recruit potential campaign director and program manager candidates.
- Moonshot team identify and recruit potential chairs for the five carbon neutral city design team positions (policy, technology, finance, community engagement and synergy).
- 3. Moonshot team members decide their next steps, if selected: continue on as the moonshot steering committee, recruit other members and/or serve in staff or design team roles.
- 4. Moonshot team request candidates fill out the online application for the different moonshot leadership positions and provide their resumes.
- 5. Moonshot team submit names of leadership candidates as part of their Cool City Challenge application.

ACTION 7 SUBMIT APPLICATION

PURPOSE

Moonshot team reviews and submits the Cool City Challenge application form by September 7, 2021.

ACTION STEPS

- 1. Moonshot team compiles Action 1 deliverables: climate moonshot team leader vision, team purpose statement, team members and fiscal agent.
- 2. Moonshot team compiles Action 2 deliverables: letters of support and signed agreements from 25 or more community partner organizations.
- 3. Moonshot team compiles Action 3 deliverable: confirmation of the number of

- cool block leader online applications submitted.
- 4. Moonshot team compiles Action 4 deliverable: carbon neutral city moonshot strategy.
- 5. Moonshot team compiles Action 5 deliverable: city moonshot success strategy.
- 6. Moonshot team compiles Action 6 deliverable: applications for moonshot leadership team positions.
- 7. Moonshot team submits application. Congratulations!

Addendum 2: Further Information

Citizen Empowerment

- Cool Block: Deeper Dive video https://rtp.earth/deeperdive
- Cool Block: How the Program Works video https://rtp.earth/coolblock-program
- Cool Block: Pay it Forward video https://rtp.earth/pay-it-forward
- Cool Block: Neighbors Helping Neighbors video https://rtp.earth/NHN

Community Empowerment

 Cool City Challenge video. This is an older version; an updated version is being created: https://rtp.earth/cool-city-challenge_____

Carbon Neutral City Strategy

University of California, Santa Barbara: Creating a Carbon Neutral City,
 Talk by David Gershon video – https://rtp.earth/ucsb-talk

Behavior Change Platform and Research

- Cool Block program platform: https://coolblock.org
- Empowerment Institute Behavior Change Research: https://rtp.earth/behavior-change

CONTACT

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