CLIMATE MAYORS GREEN AND EQUITABLE RECOVERY

CLIMATEMAYORS.ORG

LETTER FROM CLIMATE MAYORS CHAIR AND CO-CHAIRS

WE ARE AT A PIVOTAL MOMENT IN OUR NATION'S HISTORY.

We face one of the greatest opportunities our generation has ever seen both for sustainable and equitable economic growth and for the reduction of greenhouse gases – and we must seize it.

Climate Mayors – a bipartisan network of over 470 U.S. mayors – is playing a leading role to preserve our environment, create well-paying green jobs, invest in clean air, clean water, and clean energy, and uphold the goals of the Paris Agreement at the local level. This commitment remains steadfast even in these challenging times, and we will continue to prioritize policies and programs that help build a better, more sustainable future.

Cities across America have long demonstrated that economic growth and environmental stewardship go hand in hand. Now, our federal government can show the world that investments in a zero-carbon economy are investments in the future of our workforce, the well-being of generations, and the resilience of our infrastructure and public spaces. This moment demands that we accelerate our efforts to drive ambitious, systemic change.

Cities throughout the United States are under tremendous pressure. In the face of the immediate crises – as well as the omnipresent threat of climate change – we encourage policymakers to look to local governments and communities to find meaningful solutions to these shared challenges. If fully funded, effectively implemented, and flexible enough to be adapted locally, the policies highlighted in this report will have a lasting impact on our ability to meet the scope and scale of the challenges before us.

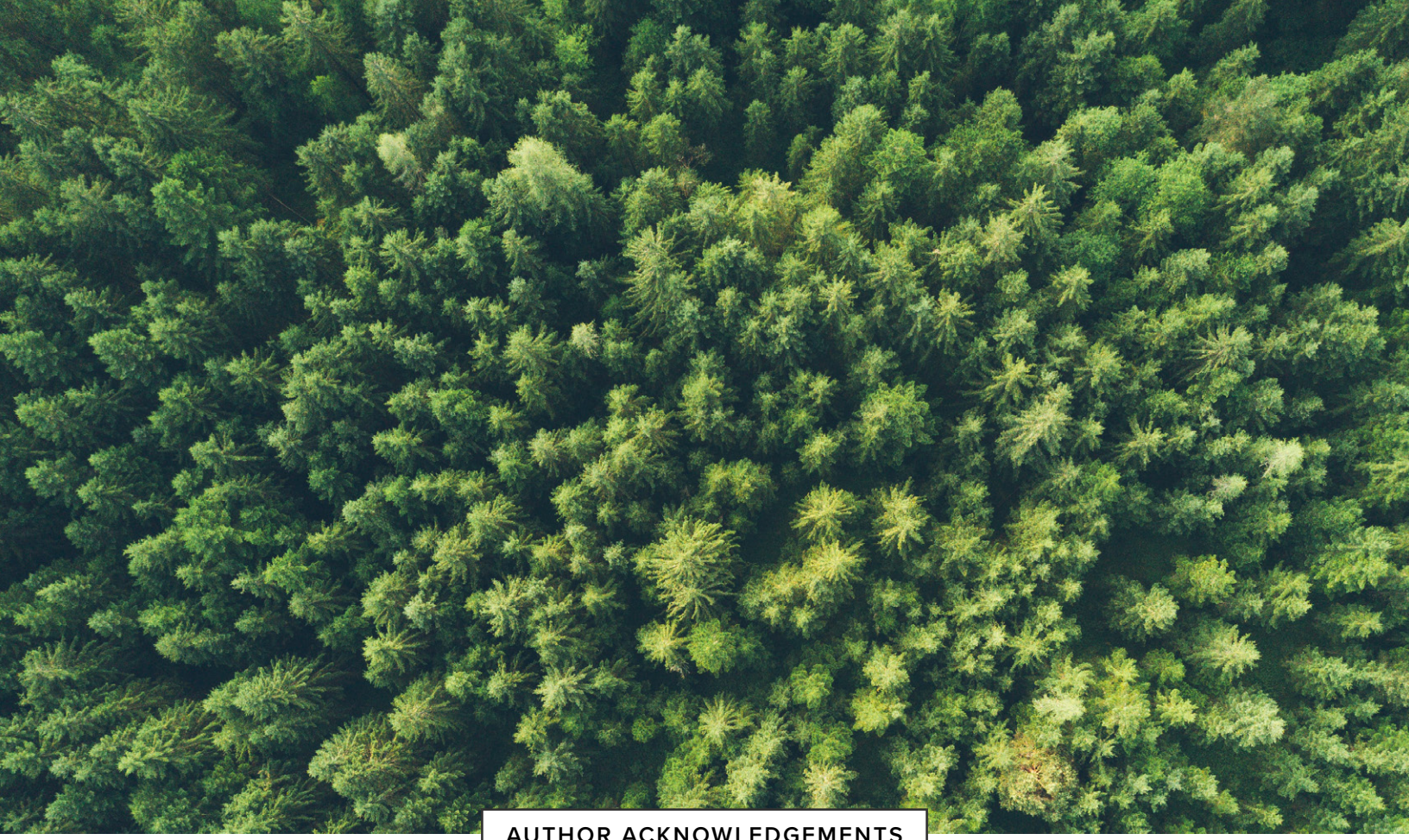
This report highlights key policy priorities and local success stories that are contributing to a green and equitable recovery and have a demonstrated track record of creating jobs and building resilience. We would like to thank RMI for authoring the report, and Bloomberg Philanthropies for their long-standing support of Climate Mayors.

Respectfully,

MAYOR SYLVESTER TURNER
Chair | City of Houston, TX

MAYOR SATYA RHODES-CONWAY
Co-Chair | City of Madison, WI

MAYOR KATE GALLEGO
Co-Chair | City of Phoenix, AZ



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INTRODUCTION

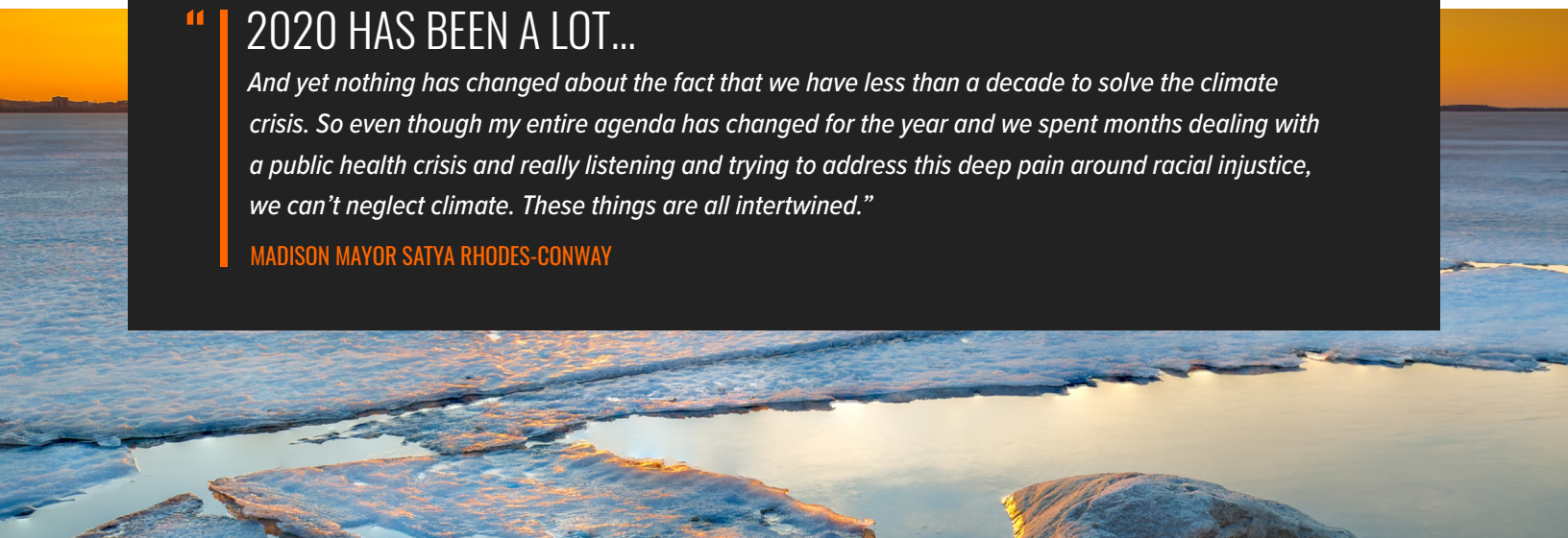
When Climate Mayors was founded in 2014, membership included 40 cities. As more and more communities across the country have recognized the effects of climate-related or climate-exacerbated disasters—including hurricanes, flooding, saltwater intrusion, drought, and wildfires—Climate Mayors has grown quickly. We now stand at 476 mayors in 48 states, representing over 74 million Americans.

Climate Mayors is part of a larger national movement. After the previous Administration announced its intent to withdraw from the Paris Agreement in 2017, Climate Mayors, along with other U.S. cities, states, businesses, universities, and non-profits, joined together to form We Are Still In (WASI – now America Is All In). According to 2019 analysis done by America's Pledge, WASI, and other coalitions of non-federal tactors committed to climate action represent almost 70% of the nation's GDP, 65% of the population, and more than 50% of its emissions. Since then, this "bottom-up" coalition has continued to grow, and through its climate leadership the U.S. has stayed on a path of progress. But to meet the scale of the challenge, federal leadership is essential. Ambitious city, state, and business action combined with federal action can put America on a path to cut emissions by at least half from 2005 levels by 2030, which is needed to stay below 1.5°C of global warming. Scientists have been clear that this next decade will be decisive.

But the climate crisis is not occurring in a vacuum. Since early 2020, we have managed the global public health emergency of Covid-19, accompanied by a profound economic crisis, and a national reckoning with racial injustice. To explore these complicated and compounding issues, Climate Mayors launched the National Dialogue on Green and Equitable Recovery, a virtual series that featured conversations with local government leaders in the Southeast, Texas, Great Lakes, and Ohio Valley. The common themes from these regional conversations were then discussed during a national event with Climate Mayors leadership in November.

During the panel discussions, we shared why we remain focused on climate action amid these multiple crises, and we spotlighted successful city-led programs and projects that address climate change while simultaneously delivering on other vital resilience and equity outcomes. With increased federal support, local successes could be amplified, expanded, or replicated quickly across the country. This report summarizes the key messages from the National Dialogue series, and highlights projects well suited for a green and equitable recovery across the mobility, buildings, electric power, and natural systems sectors.

> ### 2020 HAS BEEN A LOT...
>
> *And yet nothing has changed about the fact that we have less than a decade to solve the climate crisis. So even though my entire agenda has changed for the year and we spent months dealing with a public health crisis and really listening and trying to address this deep pain around racial injustice, we can't neglect climate. These things are all intertwined."*
>
> MADISON MAYOR SATYA RHODES-CONWAY



GUIDING PRINCIPLES TO A GREEN RECOVERY

In the Climate Mayors letter to congressional leadership sent in July, and throughout the National Dialogue series, mayors consistently brought up three guiding principles for a green recovery:

Build for a Better Future: Returning to the pre-Covid-19 status quo will not help us meet the challenges of a world increasingly destabilized by climate change. We must increase our resolve and ambition to both mitigate global warming and enhance the climate resilience of America's communities.

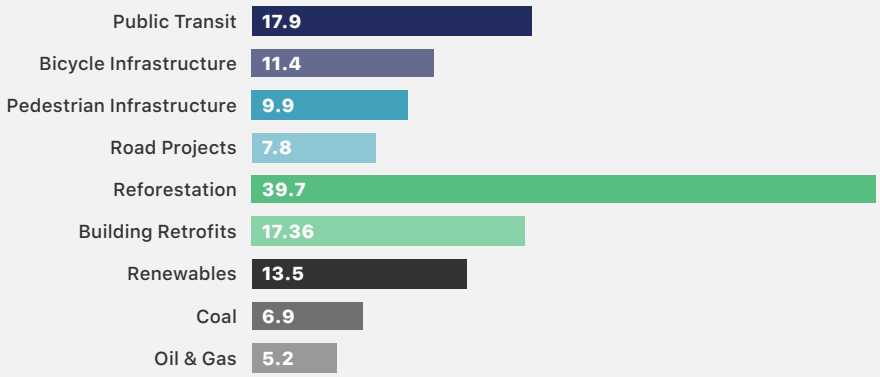
Lead with Equity: Federal investments in our municipalities must prioritize historically disadvantaged and frontline communities—including people of color and low-income households—who are disproportionately hurt by both the effects of climate change and by Covid-19. These communities have long suffered from pollution, environmental degradation, and economic injustice—and are now being hit hardest by the health and economic consequences of the pandemic.

Prioritize Multiple Benefits: In addition to helping us mitigate and adapt to climate change, the best investments create high-quality jobs that strengthen social cohesion, improve health outcomes in our cities and towns, and can withstand future economic downturns.

SUSTAINABLE INFRASTRUCTURE CREATES JOBS THAT SUPPORT A JUST TRANSITION

Investments in climate action will create quality jobs. Investing in infrastructure that directly supports decarbonization and equity goals (e.g., public transit and renewables) produces more jobs than infrastructure investments that do not (e.g., road expansions and fossil fuel production).

EXHIBIT 01 | DIRECT, INDIRECT, AND INDUCED JOBS PER $1M INVESTED IN DIFFERENT INFRASTRUCTURE PROJECTS[1]



It is also important to emphasize the quality of the jobs we are creating and prioritize the necessary workforce training and creation of talent development pipelines to support long-term, well-paying careers in the clean economy.

[1]Figures were pulled from differed sources so the methodologies might have notable differences. Public transit comes from American Public Transit Association, bicycling, pedestrian, and road projects comes from Political Economy Research Institute, reforestation, energy efficiency, renewables, coal, and oil and gas comes from ScienceDirect.

As we accelerate the nation's transition to a clean energy economy, we need to ensure that our fossil fuel workers—who have served as our nation's energy and economic backbone—are supported through this transition. We must directly invest in communities currently reliant on coal, oil, and gas jobs, and provide meaningful support, sustainable funding, and workforce training programs, as well as practical guidance to ensure these workers secure a central role in a decarbonized economy.

That said, transition plans are not one-size-fits-all, and local government leaders are best positioned to work with community-based leaders to design a plan that meets our unique needs. For instance, during the Ohio Valley panel, our mayors discussed how the Midwest is well positioned to be the nation's leader in electric vehicle manufacturing since it already serves as the core of vehicle manufacturing in the United States. These mayors have since called on the new administration to create a Marshall Plan for Middle America to support the transition away from fossil fuels.

> "IF YOU WANT TO TURN A MINE WORKER INTO AN ENVIRONMENTALIST, PUT A PAYCHECK IN THEIR HAND."
>
> PITTSBURGH MAYOR WILLIAM PEDUTO

THE ROLE OF CITIES, STATES, AND THE FEDERAL GOVERNMENT

Cities are regional economic engines, hubs of innovation and job creation, and have continued to prioritize urgent climate action in order to remain resilient and competitive in a global economy. Cities have existing programs in place, and the infrastructure to support them, and therefore will be able to leverage additional federal funding to expand their efforts quickly and efficiently.

As the World Resources Institute's (WRI) New Climate Federalism report highlights, each government entity has a unique role to play in a clean and equitable future. The federal government can use its considerable financial and technical resources to act as a catalyst for additional local action by providing funding and capacity building. Mayors have the best assessment of what their constituents need, and therefore are well positioned to implement a tailored approach to policies and programs to ensure resources reach the most vulnerable communities. Cities can also pass local laws that can amplify the impact of federal funding. In this report, Climate Mayors will highlight key priorities for a clean and equitable recovery in the mobility, building, renewable, and natural systems sectors, and how the federal government can be partners in moving these priorities forward.

TRANSIT AND MOBILITY

To date, federal transportation continues to support carbon-intensive highway expansions and new roads that induce transportation emissions, increase vehicle dependence, create fewer jobs, and deliver fewer benefits per dollar than public transit projects—all of which fail low-income and historically marginalized communities. The Fixing America's Surface Transportation (FAST) Act has been extended for a year. As Congress considers future extensions, it should ensure that more transportation funds are directed to local governments, and that mobility solutions and spending should prioritize public transit, active transportation modes, electric vehicle (EV) infrastructure deployment, and improving existing roads. This will result in safer mobility, less local pollution, and better access to economic opportunity and essential services.

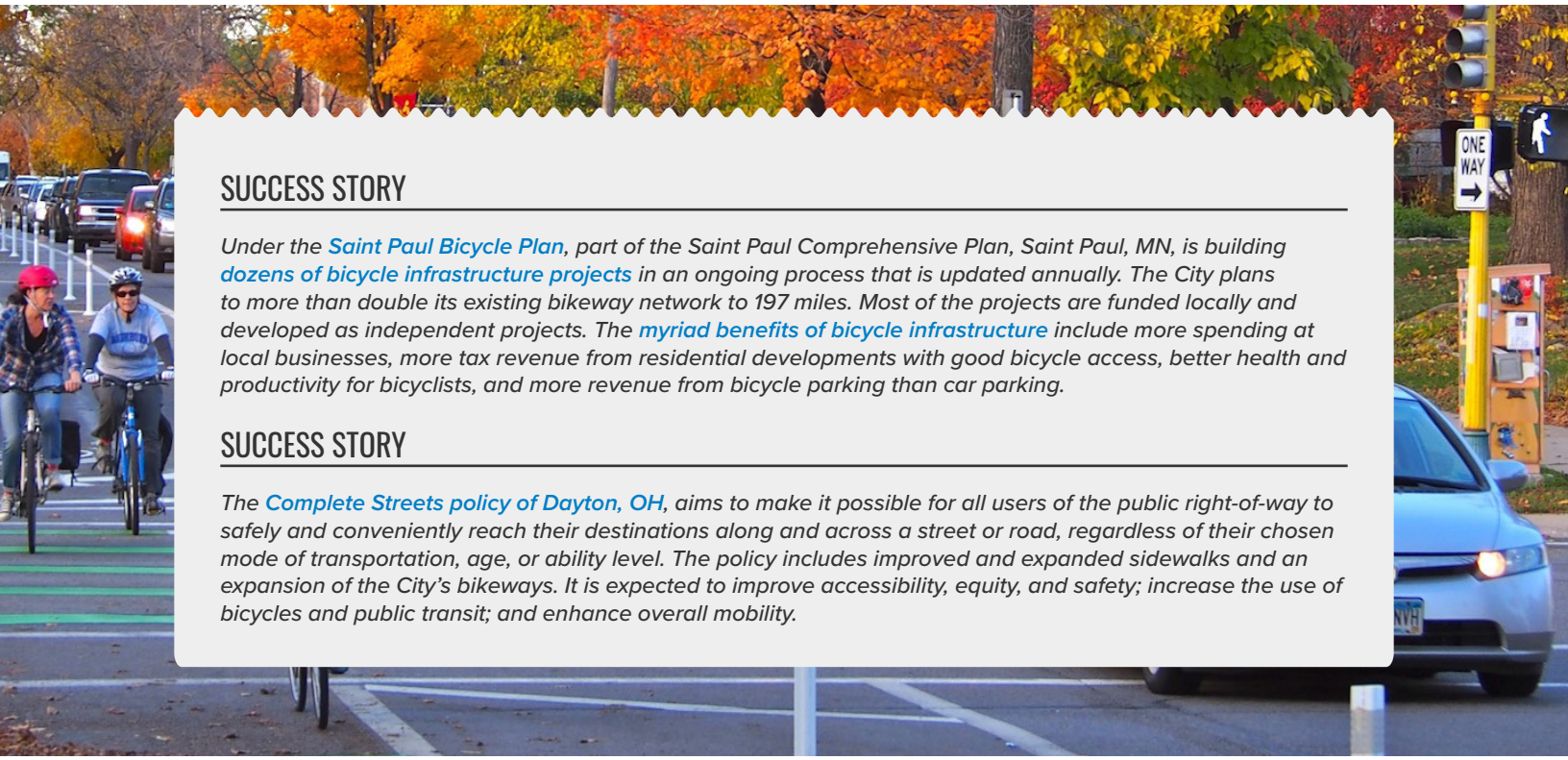
We should prioritize programs which support clean, sustainable transit to meet the needs of essential workers and help transit agencies recover from their current budget crisis. The outbreak of Covid-19 resulted in a precipitous decline in public transit ridership that is ridership that is struggling to return to pre-pandemic levels to return to pre-pandemic levels. Under normal circumstances, ridership numbers are directly tied to frequency, which in turn is directly connected to the space we allocate to buses or trains. Reallocating and dedicating traffic lanes for buses or light rail will enable congestion-free commuting for high volumes of passengers post-pandemic.

To support public transit where it is needed most, the federal and state constraints on how transit funding is spent need to be relaxed. Federal funding for transit is largely limited to capital expenditures, which only covers about 50% of overall project costs and does little to maintain or enhance service quality. To improve transit service and access in low-income communities, states and the federal government should prioritize funding for operations. Finally, funding should be allocated to support innovative partnerships that increase low-income access to other modes, (where transit could be sub-optimal for various reasons), such as car-sharing, micro-mobility such as scooters and other lightweight vehicles, and on-demand services.

SUCCESS STORY

*Supported by a **$10.8 million grant** from the U.S. Department of Transportation's Better Utilizing Investments to Leverage Development (BUILD) Grants program, Youngstown, OH, is **investing $31 million in its Smart2** multi-faceted transportation infrastructure project, designed to connect all of the major downtown economic players with a central transportation hub. The project is expected to improve pedestrian safety and result in more than $250 million in economic development over the next decade.*

We should improve the viability of walking, biking, and micro-mobility in our communities. Protected lanes for these uses will dramatically improve the convenience, safety, and speed of bicycles, e-bikes, scooters, and walking as true commuting options. These types of projects not only create more jobs than road-only projects, they also generate more local economic activity since a higher percentage of the materials can be purchased in-state. Most cities across the country suffer from a significant undersupply of sidewalks, which are arguably the most overlooked and effective mobility solution—particularly for disadvantaged and transit-dependent communities.



SUCCESS STORY

Under the Saint Paul Bicycle Plan, part of the Saint Paul Comprehensive Plan, Saint Paul, MN, is building dozens of bicycle infrastructure projects in an ongoing process that is updated annually. The City plans to more than double its existing bikeway network to 197 miles. Most of the projects are funded locally and developed as independent projects. The myriad benefits of bicycle infrastructure include more spending at local businesses, more tax revenue from residential developments with good bicycle access, better health and productivity for bicyclists, and more revenue from bicycle parking than car parking.

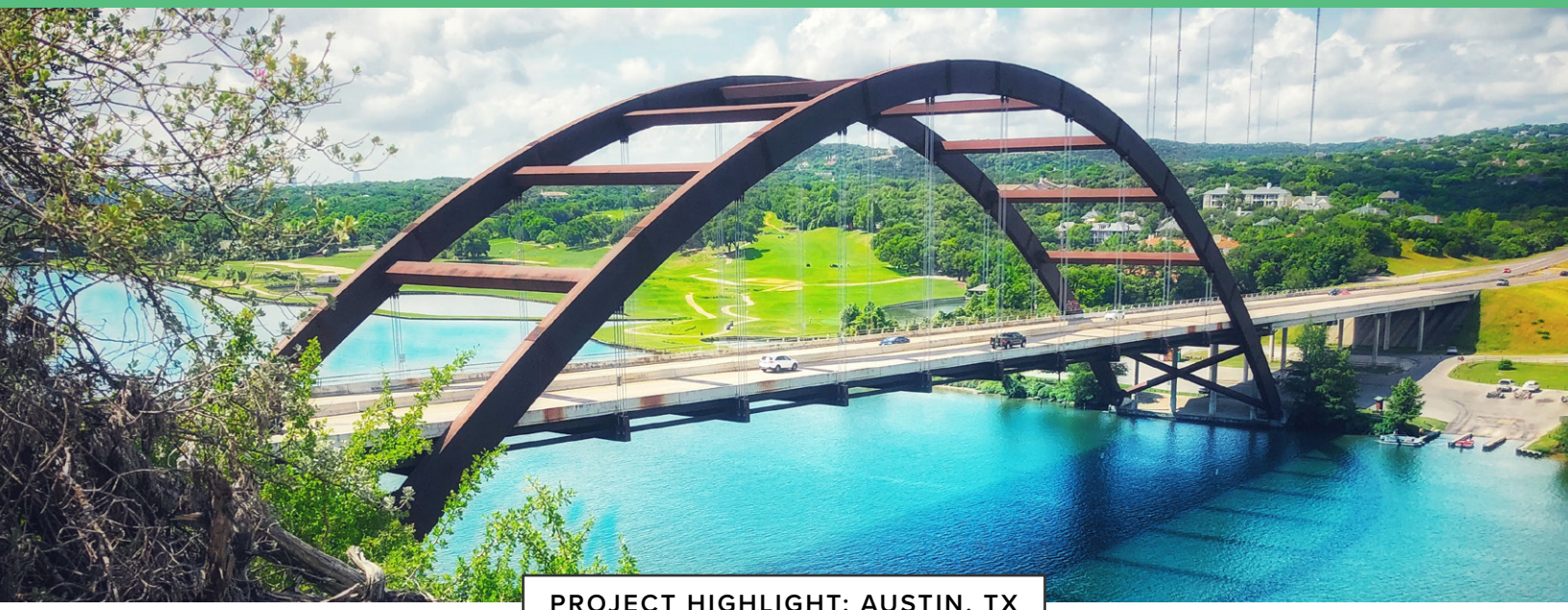
SUCCESS STORY

The Complete Streets policy of Dayton, OH, aims to make it possible for all users of the public right-of-way to safely and conveniently reach their destinations along and across a street or road, regardless of their chosen mode of transportation, age, or ability level. The policy includes improved and expanded sidewalks and an expansion of the City's bikeways. It is expected to improve accessibility, equity, and safety; increase the use of bicycles and public transit; and enhance overall mobility.

We should commit to a "fix it first" policy to prioritize existing transportation infrastructure for repairs, upgrades, and hardening for enhanced resilience. Potholes are one of the most common complaints we get from our constituents. Currently, infrastructure spending prioritizes building new roads over fixing existing roads—a solution that effectively subsidizes sprawl and typically fails to alleviate congestion.

We should accelerate EV adoption. Cities across the country have a near-term opportunity to "walk the talk" on vehicle electrification by converting municipal fleets to EVs. Currently, over 250 cities, counties, transit agencies, port authorities, and colleges and universities have committed to purchasing over 4,000 EVs through the Climate Mayors EV Purchasing Collaborative. Many of our mayors have expressed particular interest in building American leadership in this automotive industry of the future.

In addition to fleet conversion, every city in America can facilitate the deployment of charging infrastructure by streamlining permitting processes, establishing EV-ready building codes, and working with utilities on the planning and deployment of charging networks. In the following section, we highlight the City of Austin, which has implemented a best-in-class example of municipal fleet electrification.



PROJECT HIGHLIGHT: AUSTIN, TX

During the Climate Leadership in Texas panel, Austin Mayor Steve Adler discussed the importance of decarbonizing the transportation sector and increasing access. Since 2011, Austin has had the fastest population growth in America layered onto a city that was designed around roads and private automobiles. That growth came at the cost of congestion and air pollution, giving Austin the third-most congested roadways in Texas.

To combat this, the City launched a comprehensive suite of initiatives built around transportation electrification and reducing vehicle miles traveled (VMT). To ensure people who lived in disadvantaged communities could benefit from these mobility strategies and avoid gentrification and displacement, Austin also implemented strategies such as density bonuses and rent relief programs. According to Mayor Adler, these initiatives enhance the quality of life for all Austin residents and give the City an edge in attracting top talent among jobseekers who care about urban livability and the climate.

In November 2020, Austin passed two significant transportation ballot measures. Proposition A will dedicate 8.75 cents of the operations and maintenance portion of the tax rate to create a $7 billion fund for a city-wide light-rail and high-frequency bus network. Proposition B is a $470 million tax-supported bond that will expand bikeways, sidewalk infrastructure, and other transportation safety measures. Together, these initiatives will dramatically increase access to safe, convenient, and high-quality mobility options.

Austin also realized the importance of leading by example and developed a fleet electrification plan that is expected to save the City $3.5 million and 12,000 metric tons of CO2 over 10 years. So far, the City has realized about 50% more savings than it had modeled in its plan. Austin now has 220 EVs, on its way to meeting an interim goal of 330, which should be achieved in 2021. CapMetro, Austin's public transit bus system, is also gradually electrifying its fleet. Twelve electric buses are in service now, and an additional 30 are in the planning phase.

To build the charging infrastructure required to support electric vehicle penetration, Austin Energy, the City's municipal utility, created Plug-in EVerywhere, which offers EV drivers access to its public network of 1,000 level 2 charging ports under a subscription plan that gives them unlimited charging on the network for about $4 per month. Austin Energy piloted a program that provides unlimited home and public charging, as long as charging at home is done outside of peak hours. Finally, Austin Energy has deployed 30 DC fast chargers (DCFC) located near major transit routes in Austin. Fast charging is an essential part of an EV charging ecosystem, enabling ride-sharing services, connecting metropolitan areas for quick refueling, and offering a faster way to top up larger EV batteries.

BUILDINGS

In order to reach our climate goals, buildings need to swiftly move toward becoming highly efficient, grid-interactive, and all-electric. These efforts must target America's existing commercial and residential building stock as much or more than new buildings. **Two-thirds of the buildings standing today will still be around in 2050**, necessitating deep retrofits that significantly reduce energy use, increase efficiency, and elevate the quality of life for those inside and out.

It is vital that the people we serve can live and work in environments that are safe from health risks and disaster. People are spending more time in their homes due to Covid-19, and work from home and other habits may persist for months and years to come. It is therefore important that the built environment is safe, sustainable, and resilient. Prioritizing increased efficiency, as well as "futureproofing" our buildings to better withstand disasters like floods, wildfires, and extreme cold, will pay huge dividends for our communities and create meaningful jobs.

We should support expanding the market to deliver healthy, zero-carbon buildings. We can support private sector building upgrades through workforce development training, all-electric new construction building codes, energy benchmarking, performance-based standards, and developing incentives and technical assistance offerings above and beyond what the local utility may offer. Federal support to help fund and finance these types of projects is critical. Programs like the Weatherization Assistance Program (WAP) and Low Income Home Energy Assistance Program (LIHEAP) **will reduce energy costs, improve health, and increase resilience**, especially in low-and moderate-income communities.

We should develop new, efficient, all-electric affordable housing that serves the most vulnerable in our communities. The federal government has an important role to play in addressing the affordable housing crisis by placing more federal funding in the Low-Income Housing Tax Credit (LIHTC), which subsidizes the acquisition, construction, and rehabilitation of affordable rental housing. Electrification and efficiency requirements could be placed on this funding, or any local funding used to support affordable housing, to ensure new affordable housing is built right the first time, to minimize both health risk and energy burden. As mayors, we play a key role in supporting these types of efficiency standards since we understand our local building typology and climate.

Additionally, we can help ensure new affordable housing prioritizes location efficiency and minimizes exposure to disaster risk (i.e., building this housing close to economic opportunity and essential services rather than on the wildland-urban interface or in flood zones). There is also a unique opportunity to create "naturally occurring" affordable housing by revitalizing abandoned properties. These abandoned properties are often focal points for crime, urban decay, and environmental degradation, so revitalizing them not only creates new properties, but also improves the safety and health of the city.

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> NO MATTER HOW LARGE AND GLOBAL ISSUES SUCH AS CLIMATE CHANGE MAY BE *as Mayors we understand and can often see first-hand the impact they have at our local levels, and witness the detrimental effects on people we know in our communities."*
>
> COLUMBIA MAYOR STEPHEN K. BENJAMIN

SUCCESS STORY

*Boston, MA, recently announced **$30 million** in funding to support new or renovated affordable housing, and required that all new affordable housing construction funded by the City must meet carbon-neutral performance standards. To support this requirement, Boston released its first zero-carbon affordable housing design standards, tailored to the City's climate, building portfolio, density, and resilience goals.*

SUCCESS STORY

*Orlando, FL, has been implementing an ecosystem of policies and programs to improve the health and performance of our buildings, including: required annual energy and water benchmarking, energy audits, and transparency for commercial and multifamily buildings, mandatory LEED Silver for all new city-owned or funded construction projects, a Green Building Property Tax Incentive Program for new developers, and clean energy financing to help residents and businesses to invest in clean energy for their buildings. The City also partnered with their municipal utility to transform **58 previously vacant apartment homes** into a showcase for affordable, sustainable, and supportive housing for homeless families. These new properties included energy and water efficiency improvements as well as solar PV on the rooftop. At the ribbon cutting, Mayor Buddy Dyer, spoke about how this previously abandoned property "is now a symbol of hope, combining stable and sustainable housing for homeless families, with an emphasis on those who are veterans and low-income households."*

We should continue to lead by example through investing in municipal efficiency and electrification upgrades. Municipal building operations are entirely under city government control, so it is within our power to pursue these upgrades. These efforts also enable cities to increase capacity and expertise with new and innovative technologies that we can share with other cities and businesses as they pursue similar efficiency upgrades.

SUCCESS STORY

*Columbia, SC, received **$1.4M of funding** through the American Recovery and Reinvestment Act (ARRA) Energy Efficiency and Conservation Block Grant (EECBG). This funding was used for lighting upgrades in 46 municipal buildings, saving the City $131,000 annually on energy and maintenance costs.*

PROJECT HIGHLIGHT: CINCINNATI, OH

During the Green and Equitable Recovery in the Ohio Valley panel, Cincinnati Mayor John Cranley highlighted the City's use of federal funding provided during the 2008 recession to improve energy efficiency throughout the community. The Greater Cincinnati Energy Alliance used its EECBGs to encourage energy efficiency upgrades in residential and commercial buildings. The funding was effective in part because it went directly to Cincinnati without having to be allocated by the state. The project involved 1,461 residential building upgrades and 23 commercial building upgrades, resulting in $1.9 million in annual energy savings. Federal funding at the local level enabled the City to do community outreach through door-to-door canvassing and forge partnerships with local nonprofits, churches, and other civic organizations.

In addition to providing direct incentives towards energy assessments and project costs, the grant was used to set up a revolving loan fund and loan loss reserves. Doing so ensured the efficiency funding was self-sustaining. The Greater Cincinnati Energy Alliance continued the revolving loan fund for 12 years, well beyond the initial grant period. The grant also targeted workforce development and created the building performance training center at Cincinnati Technical and Community College's Workforce Development Center. Over the three-year grant period they trained 115 workers.

This grant laid the foundation for the Green Cincinnati Plan, which, among other actions, includes plans to reduce energy burdens by 10% - Cincinnati's low income population currently has the 9th highest energy burden in the United States - by providing funding for upgrades in existing multifamily properties. The Energy Equity Program is particularly helpful at resolving the split incentive issue for low-income households. This program offers a free energy assessment and a 1:1 match grant of up to $5,000 for homeowners to put towards energy efficiency upgrades.

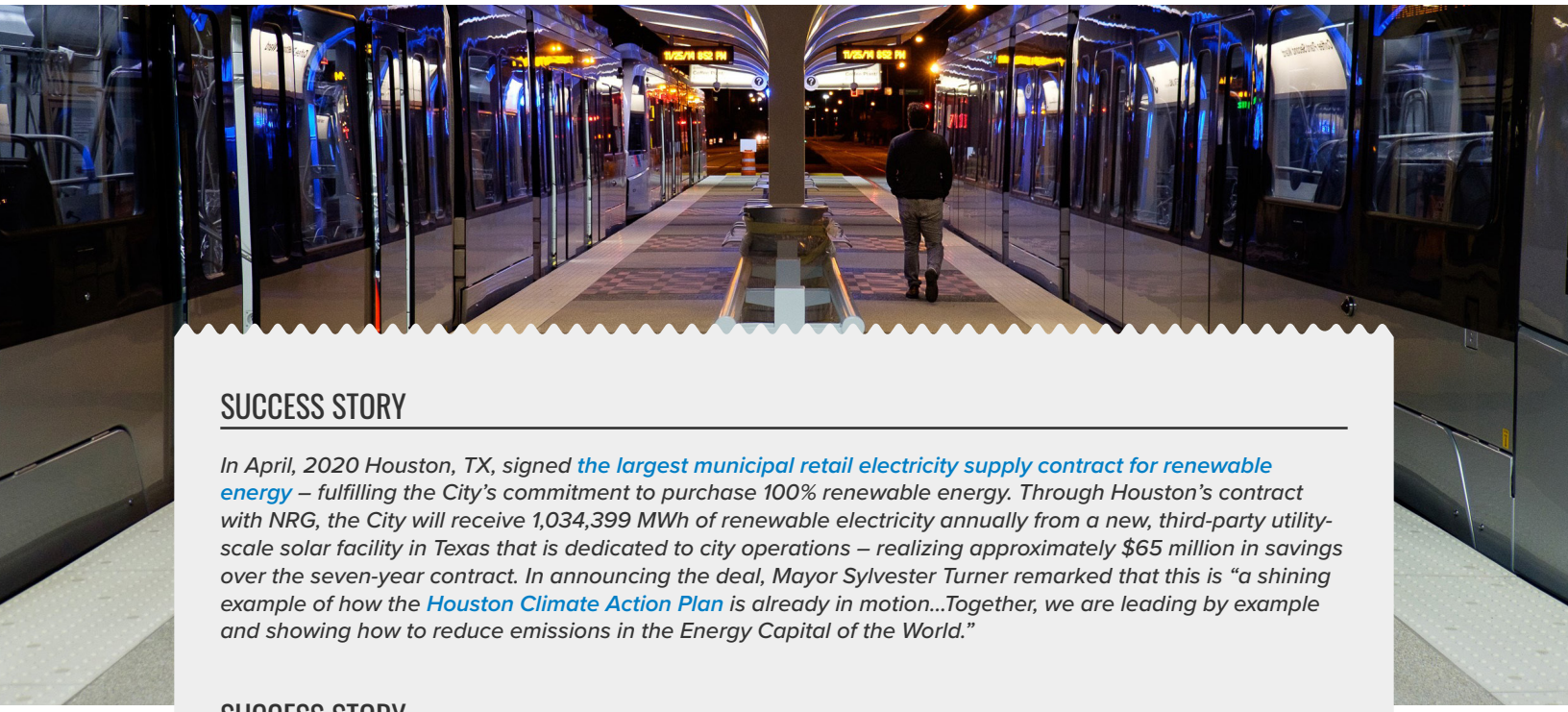
Cincinnati also incentivizes revitalizing vacant buildings into efficient, low-income residences through its LEED tax abatement program and Property Assessed Clean Energy (PACE) financing. The Cincinnati Development Fund also uses a revolving loan fund to revitalize these properties—helping both low-income residents and the City's bottom line. Benefits include tax revenue from the new properties once abatement expires, an increase in income tax revenues, and infill development that relieves the City of expenses to maintain vacant lots.

RENEWABLES

In order to achieve clean electricity by 2035, we need to accelerate the transition to renewable energy. A clean electricity system improves public health, safety, and Americans' quality of life both by reducing emissions and ambient air pollution. This pollution often crosses state boundaries, making it a state, regional, and national concern, and disproportionately affects vulnerable communities and communities of color. The climate crisis cannot be separated from the ongoing effort to achieve health, economic, and racial justice.

We are taking concrete steps to accelerate the transition to renewable energy, and many cities have already committed to achieving 100% renewable energy goals. By pursuing multifaceted strategies to further accelerate local decarbonization efforts within our communities, we can grow a green economy and workforce, and enable all our residents to share in the benefits of renewable energy. As mayors, we must be at the forefront of deploying projects in our cities and engaging with utilities and regulators to create a cleaner grid to build a better, more equitable future.

We should explore large-scale renewable energy procurement through power purchase agreements (PPAs) and other utility-scale solutions. As the cost of renewables continues to rapidly decline, power purchase agreements often result in lower cost energy, in addition to reducing the city's emissions. Over the past five years, the large-scale municipal renewables procurement market has grown rapidly, creating thousands of new jobs along the way.



SUCCESS STORY

In April, 2020 Houston, TX, signed the largest municipal retail electricity supply contract for renewable energy – fulfilling the City's commitment to purchase 100% renewable energy. Through Houston's contract with NRG, the City will receive 1,034,399 MWh of renewable electricity annually from a new, third-party utility-scale solar facility in Texas that is dedicated to city operations – realizing approximately $65 million in savings over the seven-year contract. In announcing the deal, Mayor Sylvester Turner remarked that this is "a shining example of how the Houston Climate Action Plan is already in motion...Together, we are leading by example and showing how to reduce emissions in the Energy Capital of the World."

SUCCESS STORY

In November 2019, Cincinnati, OH, signed a 100 MW solar deal to provide local renewable energy to all city facilities and city residents through the Cincinnati Electric Aggregation Program. Cincinnati procured 65 MW of renewable energy for their CCA program from the same solar farm that they procured 35 MW for their municipal load, reducing the cost of both procurements through economies of scale. In addition to reducing emissions, the project will create local jobs by relying on a workforce hiring program through Cincinnati State and IBEW Local 212.

We should facilitate brownfield-to-brightfield projects. Brownfields (contaminated land or closed landfills) are often the result of environmental injustice, a drag on the economic development of surrounding communities, and have few other viable uses than solar developments (or brightfields). Turning brownfields into solar farms presents a number of benefits beyond increasing local generation of renewable energy, from economic revitalization to increased energy resilience and local green job creation.

SUCCESS STORY

On January 13, 2021, Houston, TX, approved a lease agreement with Sunnyside Energy, LLC to advance the Sunnyside Solar Project – an innovative public-private partnership to convert a 240-acre closed landfill in the Sunnyside neighborhood into the largest brownfield solar installation in the nation. Closed and abandoned in 1970, the landfill has contributed to the stagnation of the neighborhood's economy and presented serious health and safety concerns for children, families, and residents for decades. The project – expected to generate enough clean energy to power 5,000 homes, offset 120 million pounds of carbon per year, and bring an estimated $70 million in private investment to the community – is a perfect example of how brownfield-to-brightfield projects can combat the climate crisis while creating jobs and addressing decades of environmental injustice.

We should collaborate with our respective utilities, grid operators, and regulators to equitably decarbonize the grid. As more cities commit to ambitious climate and energy goals, it is increasingly clear that utilities, regional transmission organizations (RTOs) and independent system operators (ISOs), and regulators must be part of the solution as well. During the Great Lakes panel discussion, Mayor Satya Rhodes-Conway from the City of Madison, WI stressed that while utilities need to set their own climate goals, cities "also need to keep pushing for utilities to be aligned with city carbon goals." Even where it is not possible to directly procure renewables, Climate Mayors can push utilities for new renewable energy products such as "green tariff" subscriptions and can renegotiate their electric franchise agreements to consider more equitable and sustainable energy solutions. Beyond their borders, cities can engage in their utility's integrated resource planning (IRP) and regional transmission planning processes to shape the grid of the future.

SUCCESS STORY

Pittsburgh, PA is one of the nine local governments that form the PJM Cities and Communities Coalition. Launched in 2019, the coalition seeks to influence PJM RTO policies using their collective voice. In July 2019, the coalition submitted a joint letter to the PJM Board of Managers seeking consistency with climate science and city goals and policies that open markets to zero-emission energy sources. They also wrote a statement on the benefits of reducing barriers to energy storage that was recently cited in a docket before FERC.

SUCCESS STORY

In late 2019, San Antonio released its Climate Action and Adaptation Plan, which highlights the need for a less carbon-intensive grid mix and increased partnership between the City and its municipal utility, CPS Energy. Ensuring alignment with the City's municipal utility is critical to long-term, community-wide decarbonization. One year later, CPS Energy released a request for proposals seeking to add up to 900 MW of solar, 50 MW of energy storage, and 500 MW of flexible energy technology solutions. This is on top of more than 1,600 MW of solar and wind already deployed.

We should lead by example by deploying rooftop solar on viable municipal buildings. While on-site solar typically cannot offset all the electricity used by municipalities, it is a tangible, visible way to demonstrate progress while creating local jobs. This is ideally combined with building retrofits to improve efficiency, reduce energy bills, and reduce building energy needs. We can also deploy rooftop solar and storage with islanding capabilities to build resilience into our municipal facilities and better serve our community members during natural disasters.

SUCCESS STORY

Madison, WI, launched its "GreenPower" solar workforce training program to train and hire workers locally from underrepresented populations. The program has installed 1 MW of solar on city facilities as of October 2020. After 2020, Mayor Rhodes-Conway intends to ramp up the program and to be adding 1 MW annually by 2022 to support their municipal goal of 100% renewable energy by 2030.

We should lower rooftop solar costs for our residents by running "solarize" programs and streamlining our permitting process. Solarize programs enable community members to tap into discounted solar through bulk procurement from a vetted and community-selected installer in one streamlined process. Solarize programs allow participants to own the solar on their roofs, as opposed community solar which supports a portion of a larger solar installation nearby. Solarize campaigns can also be tailored to accelerate solar adoption in communities of color and low-income communities by being community-led, multi-lingual, and focused on energy-burdened households.

While solarize campaigns can lower solar costs for those involved in that campaign, streamlining permitting processes can reduce solar soft costs for anyone interested in installing rooftop solar. Between inefficiencies in permitting and approvals and the risks associated with in-person inspections due to the Covid-19 pandemic, there is a greater need than ever before to automate and streamline solar permitting processes and standardize virtual inspections. Cities will be able to adopt NREL's SolarAPP (Solar Automated Permit Processing) program as it moves out of its pilot phase and becomes more widely available. This will not only reduce soft costs, but also reduce city staff time, and creates a more resilient process.

SUCCESS STORY

New Orleans, LA, kicked off the Solar for All NOLA program in early 2020 to provide free solar evaluations for city residents, encouraging solar and energy efficiency upgrades and driving energy bill savings. Led by the Greater New Orleans Housing Authority, the year-long campaign is focused on reducing the energy burden on lower income residents in the community by offering solar options for no money down, no credit requirement solar leases, or traditional financing for eligible homeowners looking to purchase their system.

SUCCESS STORY

Austin Energy, the municipal utility of the City of Austin, TX streamlined its solar permitting for small solar arrays under 50 kW, reducing wait time and consumer costs. Austin Energy customers can submit their Distributed Generation Planning Application online to initiate their solar request, and contractors can register with the City's "Austin Build + Connect" (AB+C) portal to submit project documents, schedule inspections, view permits, and process certain payments. Austin Energy has also released Covid-19 guidance for solar inspectors and contractors to reduce physical interactions.

PROJECT HIGHLIGHT: LOS ANGELES, CA

In 2019, the Los Angeles Department of Water and Power (LADWP), a municipal utility, signed a power purchase agreement with developer 8minute Solar Energy for a combined 400 MW of solar power and 1,200 MWh of energy storage. The solar plus storage system will be able to continue supplying power to up to 1 million LADWP customers, even when the sun isn't shining. The Eland Solar and Storage Center, a complex of solar panels and lithium-ion batteries, is being built in the Mojave Desert of eastern Kern County, about two hours north of Los Angeles, and will be operational by the end of 2023.

As part of Mayor Eric Garcetti's Green New Deal, the Eland project will help Los Angeles meet 6-7% of its annual electricity needs, on its way to 55% renewable energy by 2025, 80% renewable energy by 2036, and 100% renewable energy by 2045.

Notably, the combined solar and energy storage system will deliver electricity at 3.3 cents per kWh – a record low energy price for this type of contract and cheaper than electricity from natural gas - reducing customer utility bills. The combined solar and battery storage system not only allows homes to take advantage of solar power after the sun goes down, but also allows the project to capture an increased tax credit and be even more cost effective. Mayor Garcetti highlighted that transitioning to clean energy can save constituents money while creating new, clean jobs. The project is expected to create 700 jobs over the 14-month construction period and employ 40 long-term operations and maintenance personnel when in service.

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NATURE-BASED SOLUTIONS

As the effects of climate change continue to impact cities, mayors are investing in urban greening initiatives that produce multiple benefits in mitigating carbon emissions and adapting to the new normal of a warming planet. Already, mayors must contend with an increasingly catastrophic and costly set of natural disasters and, as our cities grow, we are embracing efforts to enhance and expand our cities' natural ecosystems, greenspaces, and tree canopy to improve livability while increasing resilience.

Urban greening is growing in prominence as a serious tool for mitigating the impacts of climate change. Enhancing natural systems sequesters carbon, improves air quality, reduces the heat-island effect, mitigates flooding, and reduces potential for landslides. Investments in "green infrastructure" can often offset the need for more costly investments in "gray infrastructure." In addition to creating and expanding urban greenspace and fortifying our coastal and waterfront communities with living shoreline and other adaptive strategies, we also must seize the opportunity to maintain and expand connectivity for inland communities.

We should expand tree canopy. Trees play a critical role in managing a multitude of climate impacts—in particular flooding and the urban heat island effect. Further, street trees contribute to an increase in walking and pedestrian safety. We should prioritize tree planting programs in areas of greatest need, such as flood-prone and underserved neighborhoods with disproportionately higher heat islands. Fortunately, trees are great investments for cities—every $1 invested in tree planting produces two-to five-times its investment in benefits ranging from clean air, increased property value, lower energy costs, and improved water quality.

We should increase accessibility to high-quality parks. City parks contribute greatly to the environmental, social, and public health of a city. They directly reduce the urban heat island effects in their neighborhoods, provide additional stormwater management support, and contribute to carbon sequestration. They also contribute to improved social cohesion by providing a space for recreation, exercise, and discourse, which is particularly critical in our current health crisis.

SUCCESS STORY

Orlando, FL has developed more than 700 plots at community gardens that provide education opportunities and focal points for community events. They have participated and been certified as an NWF Wildlife Habitat community, expanding no-mow-zones at City parks and transitioning to using organic pest management solutions in their operations. In partnership with Arbor Day Foundation, the City has also launched a free tree give-away program, Energy-Saving Trees, that uses their online platform to allow residents to order native trees each season. Since 2017, the City has given out over 11,000 trees, in addition to thousands of street-trees planted in City right-of-way. In addition, the City also developed 1650-acre park that includes man-made wetlands designed to provide advanced treatment for reclaimed water. This park is also used for recreational purposes including bird watching, nature hikes, an environmental education center, and more.

We should employ the use of green infrastructure projects for stormwater management. Because traditional stormwater management investments can be costly to cities with decreasing budgets, green infrastructure projects, such as green roofs and permeable pavement captures and filters storm runoff, are increasing in prominence.

SUCCESS STORY

Madison, WI, has recently experienced unprecedented levels of rainfall and flooding. To combat what appears to be a growing trend, the City recently launched a pilot project that provides reimbursement to residents who install green infrastructure on their private property. Additionally, the pilot focuses on projects within the public right of way adjacent to residents' property. Projects include rain gardens, rock cribs, rain barrels, stormwater terraces, and permeable pavement.

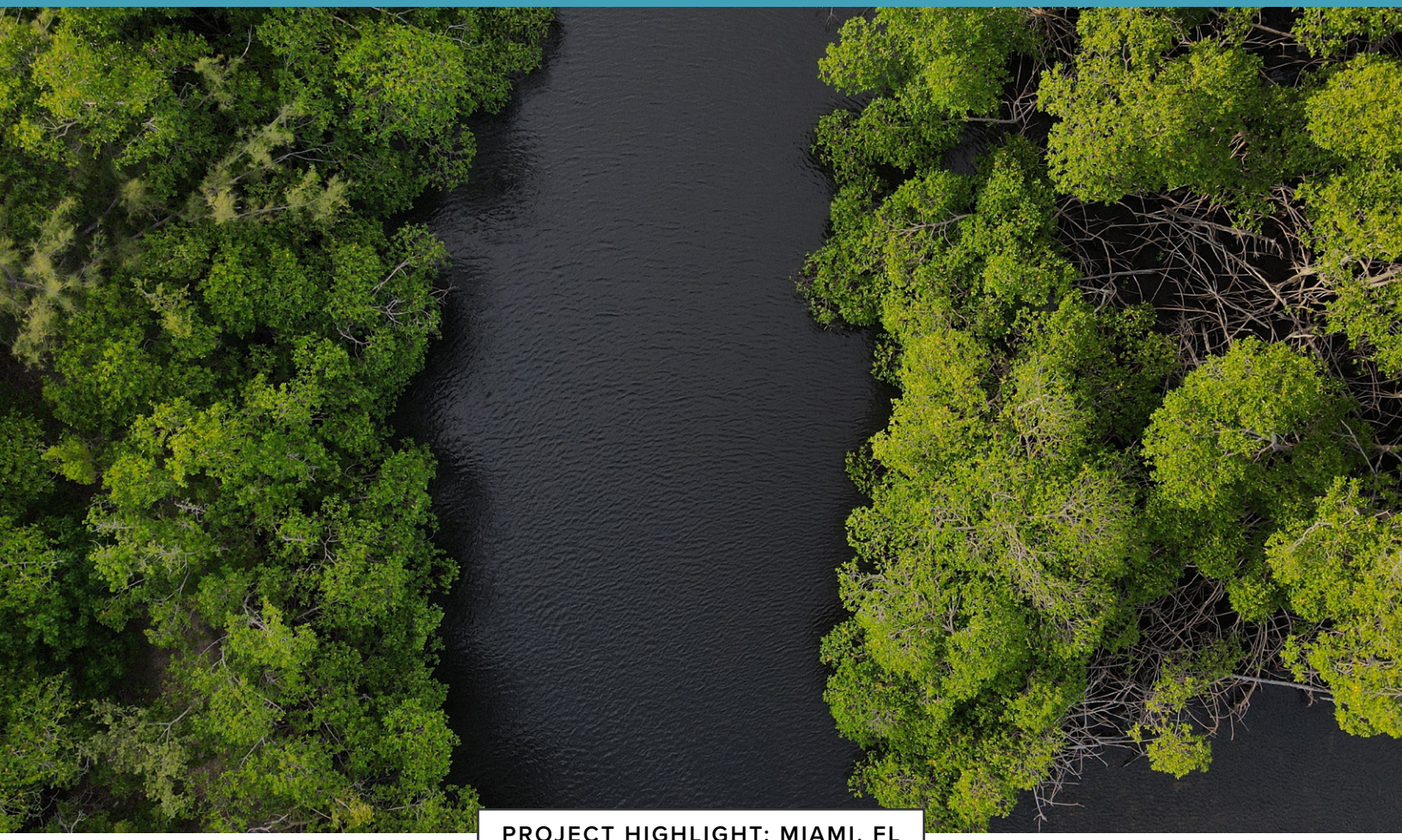
Cities in hurricane- and flood-prone regions should focus on restoring wetlands to mitigate damage. Urban and coastal wetlands are critical sources of carbon-capture and flood-mitigation. In addition to mitigating climate change as a carbon sink, they serve as natural sponges for reducing catastrophic flooding. But the benefits of wetlands are not limited to coastal communities. Many cities across the country have urban wetlands—creeks, streams, and rivers—that can serve similar functions.

SUCCESS STORY

To protect itself from future hurricanes, New Orleans, LA, is employing a mix of stormwater infrastructure projects, including a massive wetlands restoration project. The City of New Orleans and regional partners have designated a 4,420-acre portion of the Golden Triangle—marshland southeast and adjacent to the City—to serve as a protective wetland buffer between the coast and the surge barrier.

SUCCESS STORY

Following recommendations from a study commissioned by the City after Hurricane Harvey, Houston, TX, created a green stormwater infrastructure (GSI) tax abatement program and updated an existing LEED tax abatement program to encourage the implementation of green stormwater infrastructure in private development. This program aims to break barriers to implementation of green stormwater infrastructure, while developing partnerships with the private sector, to encourage a holistic and integrated storm water system at all scales. Green stormwater infrastructure presents multiple co-benefits including flood and urban heat island mitigation, and air and water quality improvements, as well as beautification and quality of life benefits.



PROJECT HIGHLIGHT: MIAMI, FL

During the Climate Leadership in the Southeast panel, Miami Mayor Francis Suarez spoke about the importance of keeping Miami around for future generations to enjoy. As the Mayor said, "with the sea-level rise and hurricanes, [Miami] has a series of threats that are existential to us and can basically push us out of our homes." To combat these issues, projects to build resilience are funded by the Miami Forever Bond, a $400 Million General Obligation Bond (GOB) approved by voters in 2017. The Bond dedicates $192 million to mitigate future sea level rise, $100 million toward affordable housing, $78 million for parks and cultural facilities, $23 million for road improvements and $7 million for public safety. The bond made available a critical source of funds for initiatives for both mitigating and adapting to the consequences of climate change. Bond spending is evaluated using safety, modernization, wellness and quality, economic return, and equity as the guiding themes.

Because of its unique vulnerability to extreme sea-level rise, hurricanes, and rising temperatures, the City of Miami is investing in a combination of gray and green infrastructure projects. In addition to storm drains and pumps, the City is creating a living shoreline demonstration project on two sites to measure the performance of green infrastructure. The Morningside Park project, Brickell Bay Drive project, and Jose Marti Park project all use swales, trees, and other natural features to take advantage of natural drainage whenever possible. Miami already has 15.5 miles of swales that capture stormwater and allow natural percolation. As part of the revised standards being developed in the Stormwater Master Plan, Miami will include bioswale design in future projects. Through these projects and others, the City intends to create sponge-like areas for stormwater retention and increase plantings of native greenery, natural buffers, and tree canopy.

CONCLUSION

FEDERAL FINANCING AND FUNDING WOULD ACCELERATE GREEN AND EQUITABLE RECOVERY

The success stories of Climate Mayors across the country demonstrate that environmental stewardship, fiscal responsibility, and economic growth are not mutually exclusive. But city budgets are under enormous strain as a result of lost tax and fee revenue, combined with emergency spending related to Covid-19. Simultaneously, cities are facing the devasting effects of climate change and cannot wait to implement needed programs while they recoup the losses of the past year. Direct, flexible funding to cities is crucial as we pursue a sustainable economic recovery.

The federal government can provide critical help in funding and financing investments and projects. A range of federal funding programs were created in the past decade to accelerate the deployment of green and equitable infrastructure. Offering new integrated programs and expanding the scope of successful existing programs could enable more equitable, sustainable, resilient, and innovative projects that can further leverage federal dollars. Funding that goes directly to cities is preferred over funding that goes through states. Doing so improves efficiency of the process and increases the speed of project delivery, thereby accelerating the corresponding economic and environmental benefits.

Greater flexibility and streamlining of programs that are already familiar will reduce barriers for cities with limited capacity, especially while recovering from the ongoing pandemic. The Community Development Block Grant (CDBG) program offers a subprogram for disaster recovery (CDBG-DR) which is an excellent example of the U.S. Department of Housing and Urban Development taking a familiar program and increasing its scope. This approach could be applied to other popular federal programs, including, but not limited to:

US DOE: Energy Efficiency and Conservation Block Grant to include energy storage;

US DOT: BUILD Transportation Discretionary Grant to include integrated electric fleet, electrified transit, and charging solutions;

USDA: Community Facilities program to include microgrids, on-site renewable energy, electrification retrofits, and urban greening;

US EPA: Brownfields grant and loan programs to include brightfields deployment and interconnection;

US DOE: WAP and HHS: LIHEAP to prioritize upgrades that promote beneficial electrification.

Projects involving new and cutting-edge clean technologies often have trouble accessing financing because they require non-traditional financing structures; these projects need lower risk profiles (longer loan terms or reduced interest rates) to appeal to investors. Green banks can accelerate deployment of new technology and business models by blending concessional capital with private investment to bring down the overall cost of capital and mitigate downside risks to private investors. A national green investment bank, initially capitalized with public funds, could address project risk, cost effectiveness, and technical difficulties associated with these types of projects. To support local economic development more directly, the national climate bank could provide seed capitalization for local green banks either at the state or city level. To reduce this risk, a green bank could provide loan guarantees or loan loss reserves, create bundles of small projects to diversify investment, and standardize new types of transactions as they become ubiquitous, resulting in faster and less labor-intensive transactions. The goal of a green bank is to leverage those public funds to attract comparatively large amounts of private capital to invest in green infrastructure projects, thus creating jobs and building a resilient economy.

MAXIMIZING PARTNERSHIPS TO ENABLE AND ACCELERATE ACTION

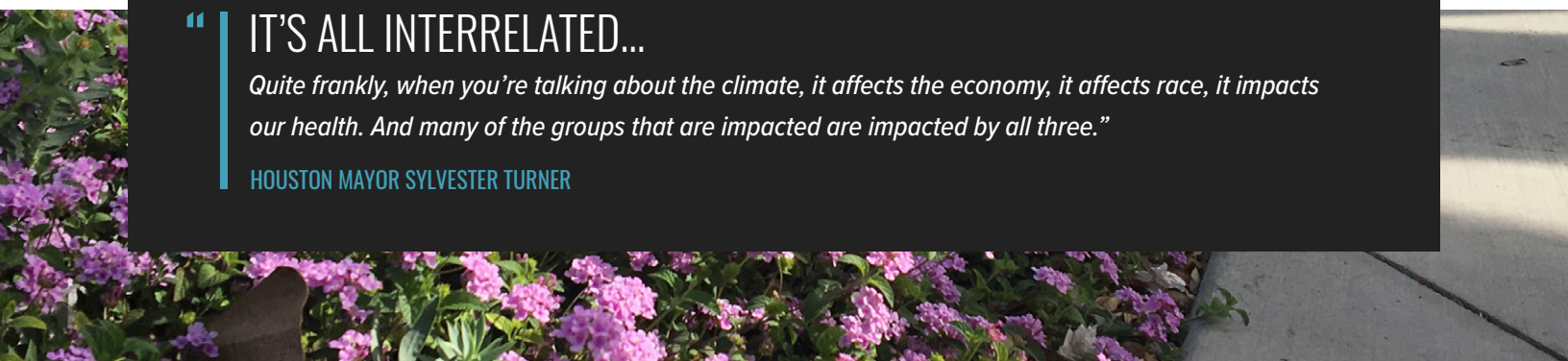
The Climate Mayors National Dialogue on Green and Equitable Recovery exemplifies mayors' commitments to a sustainable and just recovery but also emphasizes the real need for federal funding and support to effectively meet the scope and scale of the challenge. In July 2020, Climate Mayors sent a letter to Congressional leaders urging them to advance a green and equitable recovery, highlighting critical areas to focus federal funding to best support cities and towns across the nation.

In this report, we call on the Biden-Harris Administration and Congressional leaders to support the green and equitable projects that have a demonstrated track record of success in creating jobs, building resilience, and supporting equity in any future relief and recovery or infrastructure package. Additional specifics about the types of clean infrastructure projects that should be prioritized can be found in Coming Back Stronger: A City-Driven Infrastructure Agenda for a Cleaner, More Resilient, More Equitable America. This report includes clean infrastructure ideas for buildings, mobility, power, broadband, water, and natural systems.

Climate Mayors, and other leaders within the America Is All In coalition, have set ambitious targets that can get the United States well on the way to where we need to be. However, federal commitment is essential to fully meet this moment and put the U.S. on a path to limit warming to 1.5°C. Federal action will be most impactful if taken in collaboration with non-federal leaders including Climate Mayors, the U.S. Climate Alliance, We Mean Business, America Is All In, and others, given the ambitious leadership already undertaken by non-federal actors to date.

Building back a green economy led by local governments and supported by the federal government is a critical first step in achieving our climate goals, while ensuring a just, equitable, and sustainable economic recovery that is resilient for generations to come.

> "
>
> ### IT'S ALL INTERRELATED...
>
> *Quite frankly, when you're talking about the climate, it affects the economy, it affects race, it impacts our health. And many of the groups that are impacted are impacted by all three."*
>
> HOUSTON MAYOR SYLVESTER TURNER



ABOUT US

ABOUT CLIMATE MAYORS

Representing over 74 million Americans from 48 states, Climate Mayors is a peer-to-peer network of 474 U.S. city mayors who have committed to fighting climate change. Originally founded in 2014, the network's ranks swelled to almost 400 mayors in response to the U.S. withdrawal from the Paris Agreement. Climate Mayors commit to taking ambitious action to meet each of their cities' current climate goals, while working together towards achieving our national Paris targets.

For more information, please visit **www.climatemayors.org**.

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