Non-Party stakeholders’ inputs for the Talanoa Dialogue

WHERE ARE WE

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The bipartisan U.S. Climate Alliance formed in response to the President’s decision to withdraw from the Paris Agreement. Over the course of its first year, we have grown to 17 states and territories, representing a wide diversity of people, places, and economic activity. We are home to 40 percent of the U.S. population and account for nearly $9 trillion in combined economic activity—enough to be the world’s third largest country. The U.S. Climate Alliance remains committed to the Paris Agreement and to meeting our share of the U.S. Nationally Determined Contribution—a 26-28 percent reduction in greenhouse gas (GHG) emissions below 2005 levels by 2025—while continuing to grow our economies. The climate challenge demands an urgent and ambitious response. We call on other states and territories to join us, on local and business leaders to work with us, and on the community of nations to take every measure necessary to meet and strive to exceed their Nationally Determined Contributions.

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<th>Progress on the Commitments</th>
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Alliance states are at the forefront of implementing market-based programs to reduce carbon emissions cost-effectively. Our residents are reaping the benefits of these, and many other policies and regulations, through cleaner air, more clean energy jobs, lower energy bills, and more resilient communities. For example, California’s multi-sector cap-and-trade program took effect in early 2012 with its economy continuing to grow while also reducing emissions - between 2015-16, California’s Gross Domestic Product (GDP) grew 3 percent while the carbon intensity of its economy declined by 6 percent.¹ Seven Alliance states participate in the Regional Greenhouse Gas Initiative (RGGI) program in the Northeast, which establishes carbon pollution caps for regional power plants and invests in new clean energy opportunities, with two more states advancing similar programs. A recent analysis finds that RGGI states have reduced their power plant CO2 emissions by more than 50 percent since the program started nine years ago while likely generating billions of dollars of net economic value between 2015-17 alone.²

In the power sector, Alliance states have attracted nearly $110 billion in renewable energy investment since 2011, with wind, solar, geothermal and biomass generating capacity growing 5-fold over the last decade (Figure 1).³ This is largely due to the renewable portfolio standards (RPS) and state-wide renewable energy goals currently in place in all of the Alliance states.⁴ These renewable sources are bringing air quality benefits to our local communities: between 2007 and 2015, the expansion of wind and solar energy in our states collectively reduced both sulfur dioxide (SO₂) and nitrogen oxide (NOx) emissions by over 100,000 tons, resulting in $16.7 billion in public health benefits.⁵ Alliance states stood
together in opposing the U.S. Environmental Protection Agency’s (EPA) proposal to repeal the Clean Power Plan, which would have led to cleaner and more efficient power generation nationwide.

FIGURE 1: Rapid expansion of renewable energy
Gigawatts of non-hydro renewable electricity generation capacity in Alliance states

Alliance states are also U.S. leaders in deploying technology to store these clean energy sources. We are already home to 11 gigawatts of utility-scale energy storage capacity, which is half of all utility-scale capacity and nearly all (95 percent) of the distributed energy storage installed in the United States today. And we are not stopping there. Four Alliance states have energy storage mandates, and these mandates are bearing fruit: 96 percent of all utility-scale storage projects planned for installation over the next five years are in Alliance states.

Alliance states lead the country in instituting aggressive energy efficiency programs and policies. Alliance states make up the top ten ranked states for energy efficiency policy, and nearly every member state has energy efficiency standards or goals in place, which has helped drive in-state investment and cost savings for our residents and businesses. In fact, we generated $3.8 billion in new investment in utility-driven energy efficiency improvements in 2016, a 60 percent jump from 2010. These investments reduced the amount of electricity that households and businesses had to buy in 2016 by more than 13 billion kilowatt hours. This is equivalent to the electricity used by 1,450,000 homes for one year, and more than double the rate of energy savings of non-member states. Not only did this save consumers in our states over $1.3 billion in 2016, but efficiency programs in Alliance states have put over 1 million people to work, representing nearly half of all energy efficiency jobs in the U.S. in 2017. What’s more, Alliance states are home to over half of all LEED-certified green buildings (54 percent, as of mid-2018), which not only save our residents energy and water but also create healthier environments in which to work and live.

Combustion of fossil fuels to power passenger vehicles makes up the largest source of emissions within the transportation sector. Alliance states continue to lead the nation in reducing passenger vehicle emissions by implementing policies and programs that advance the deployment of zero emission vehicles. For example, the majority of U.S. Climate Alliance states are members of the Zero Emission Vehicle
(ZEV) Task Force, which is taking coordinated action to ensure the successful implementation of their state ZEV programs. Together, these states have a collective goal of putting as many as 3.9 million ZEVs on the road by 2025—an 8-fold increase from today’s levels. Other Alliance states, like Washington and Colorado, also have goals to get more low emission vehicles on the road. Additionally, California recently expanded its target to get 5 million ZEVs on the road by 2030. In order to make these goals reality, Alliance states are the vanguard of a growing wave of investment in electric vehicle charging across the United States, with announced investments totaling nearly $1.5 billion. Twelve Alliance states are leading the nation with more than 15 percent of the advanced charging infrastructure necessary to support this influx of electric vehicles by 2025 already in place, which will make it even easier to use an electric vehicle for both short- and long-term travel.

U.S. Climate Alliance states are already home to some of the cleanest cars on the road today, thanks in part to the ten Alliance states that offer consumers financial incentives that make it easier to purchase plug-in hybrid or electric vehicles. Altogether, Alliance states account for nearly 80 percent of all battery electric, plug-in hybrid, and fuel cell vehicles sold nationwide last year. Three out of four ZEVs on the road today are in Alliance states, with Alliance vehicles reducing U.S. oil dependence by roughly 20 million barrels each year, supporting America’s energy independence and security.

Through the Clean Air Act, California has been able to lead the country in pushing for cleaner cars and trucks. Eleven Alliance states have also adopted California’s motor vehicle emission standards, with Colorado announcing in June 2018 that it will take steps to adopt the more stringent standards. Starting in model year 2012, California’s GHG emission standards were harmonized with a national program so that consumers across the country could benefit from cleaner and more efficient vehicles—protecting the health of American families and saving them money at the pump. Current GHG and fuel economy standards require new passenger cars and trucks to achieve, on average, 54.5 miles-per-gallon equivalent by 2025. These more efficient vehicles would save consumers $3,400 to $5,000 over the car’s lifetime, after taking into account higher vehicle costs. Together, Alliance states oppose recent efforts by the EPA and National Highway Traffic Safety Administration (NHTSA) to weaken the nation’s clean car standards. In the wake of EPA and NHTSA’s proposal to weaken this program, the majority of Alliance states have joined with 20 total jurisdictions—representing more than 43 percent of the U.S. automobile market and 44 percent of the U.S. population—to mount legal challenges against federal efforts to weaken the nation’s single vehicle GHG emission and fuel economy standard.

Short-lived climate pollutants (SLCPs), such as black carbon, methane, tropospheric atmospheric ozone, and HFCs, act as powerful greenhouse gases. For example, just one pound of HFC-134a warms the planet as much as 1,400 pounds of carbon dioxide. California and New York have developed comprehensive plans to reduce emissions of potent SLCPs by as much as 50 percent by 2030. Leading states like Colorado and Massachusetts have put regulations in place to cut methane from oil and gas production and natural gas pipelines. Over 100 projects are either operational or under development to reduce methane emissions on dairy and swine farms in California, North Carolina, and other U.S. Climate Alliance states. These projects represent hundreds of millions of dollars of investment in farms and surrounding communities to convert manure into renewable energy, transportation fuel, or compost. U.S. Climate Alliance states are also stepping up with state-level rules and programs to backstop against federal efforts to unwind reasonable regulations to reduce methane from oil and gas and
landfills, HFCs, and black carbon from woodstoves. Through local and state efforts to improve air quality and cut diesel pollution, states are slashing black carbon and saving thousands of lives each year.\textsuperscript{28}

Alliance states are leading the way in protecting and improving our \textbf{natural and working lands}, pursuing a wide range of actions and measures that support land conservation, improve ecosystem health, and sequester carbon. Forests in Alliance states are especially productive and valuable in storing carbon. Home to a quarter of U.S. forests by land area, Alliance states store 35 percent of total U.S. forest carbon, offsetting 16 percent of Alliance states’ emissions in 2016.\textsuperscript{29} Alliance states have programs in place to support the rural economies, wildlife habitat, and water infrastructure that depend on healthy forests, which provide water resources to cities, towns, and farms. There are nearly 450,000 farms in Alliance states that produce the full range of U.S. crops, yielding 30 percent of all U.S. agricultural products by value.\textsuperscript{30} Investment in our urban forests is also paying off through improved air and water quality, reduced energy use and carbon sequestration, delivering $6.7 billion in value each year.\textsuperscript{31}

\textbf{Improving the resilience} of our communities, infrastructure, and natural resources has long been a priority in Alliance states. In 2017 alone, extreme weather and climate-related events cost the United States over $300 billion in damages, following a trend of increasingly severe hurricanes, extreme precipitation events, droughts, wildfires and heat waves. Of the top 20 costliest hurricanes to land on U.S. soil, all but three occurred since 2000, taking a significant toll on local economies. Our state governments are ground-zero for resilience activities across our states as we convene local and private interests, pool and mobilize resources and expertise across state agencies, and integrate the most up-to-date climate data into our natural and built infrastructure investments and planning. All of our states have conducted state impact assessments, and the vast majority has a climate resilience plan in place or under development. As a result of our ongoing efforts to protect our communities and reduce future costs from extreme weather and climate variability, the majority of Alliance states score better than the national average in EPA’s Climate Resilience Screening Index.\textsuperscript{32}

\textbf{Quantitative Impact}

A core commitment of the Alliance is to deliver greenhouse gas (GHG) emissions reductions consistent with the goals of the Paris Agreement and the U.S. pledge to reduce net emissions by 26-28 percent below 2005 levels by 2025. Alliance states have already made impressive progress toward achieving this goal. Independent analysis from the Rhodium Group finds that between 2005 and 2016, Alliance states collectively reduced net GHG emissions by 14 percent, compared with 11 percent for the rest of the nation. In all major sectors of the economy, Alliance states have outpaced all other states, with GHG emission reductions from the power sector hitting 30 percent below 2005 levels, and emissions from industry and buildings dropping 15 percent in the same time frame. Efforts to support cleaner cars and trucks in Alliance states, like zero-emission vehicle incentives and mandates, have reduced transportation emissions at three times the rate of the rest of the U.S.

Our states are driving these reductions at the same time as we are growing our economies faster than the rest of the country. Between 2005 and 2016, the combined economic output of Alliance states grew by 16 percent while the rest of the country grew by only 14 percent (Figure 2).
Independent analysis finds that Alliance states will continue to lead the nation in reducing GHG emissions in the years ahead. Based on climate and clean energy policies already in place across Alliance states, we are projected to achieve a combined 18-25 percent reduction in GHG emissions below 2005 levels by 2025 (Figure 3). This range reflects a higher projection of our future GHG emissions from last year, with a significant portion being the direct result of attempts to dismantle federal climate policies. Since the release of our report last year, the Clean Power Plan has been repealed, and many other federal policies are now in jeopardy. This includes rules that would phase-down emissions of super-pollutants used in air-conditioning and refrigeration, fuel economy standards for passenger vehicles, and methane standards for oil and gas activities and landfills. Despite Alliance states advancing our clean energy and climate policies, the scale of proposed federal rollbacks is threatening state efforts to meet our share of the U.S. climate target for 2025. At the same time, U.S. Climate Alliance membership has grown, both in diversity and the share of national emissions the Alliance is working to drive down. We also continue to make methodological updates to improve the accuracy and transparency of our efforts, which has uncovered even steeper growth in hydrofluorocarbon (HFC) emissions and less carbon sequestration from land use and forests than previous national estimates, shedding light on the need to prioritize immediate action in these sectors. With these findings, we now are even more resolved to accelerate our efforts to help fill the federal gap on climate leadership.
FIGURE 3 U.S. Climate Alliance progress under today’s policies
Net GHG emissions from Alliance states, million metric tons carbon dioxide (CO₂) equivalent

SOURCE: Rhodium Group’s U.S. Climate Service
NOTES: GHG emissions estimates reflect emissions from power generated within state boundaries. Uncertainty in CO₂ sequestration from forests and other lands are derived from U.S. Environmental Protection Agency (EPA) and U.S. Department of Agriculture (USDA) estimates. Federal rollbacks include federal Corporate Average Fuel Economy (CAFE) standards, EPA’s Bureau of Land Management (BLM) methane standards for oil & gas activities and landfills, and EPA's Significant New Alternatives Policy (SNAP) Rule 20 and the Kigali Amendment for phase-down of hydrofluorocarbons (HFCs). For more information see the Technical Appendix. Emissions from Puerto Rico include only CO₂ associated with fossil fuel consumption.
WHERE DO WE WANT TO GO?

| Vision for the Future |

Even though the U.S. Climate Alliance continues to reduce our GHG emissions faster than the rest of the country, we know there is more to be done, especially in the face of federal rollbacks. Looking ahead, we aim to accelerate the implementation of effective climate action to meet our share of the Paris Agreement’s emission reduction goals of 26-28% emission reduction below 2005 level, all while continuing to grow our economies and create jobs for Americans.

| New Commitments and Pledges |

On June 1, 2018 – the one-year anniversary of the formation of the U.S. Climate Alliance – we announced a new wave of initiatives to scale up climate action. Three months later, at the Global Climate Action Summit, we committed to additional concrete actions:

Short-Lived Climate Pollutants

SLCPs are potent climate forcers and harmful air pollutants that have an outsized impact on climate change in the near-term. In the absence of regulatory certainty at the federal level, the Alliance is launching an SLCP Challenge to Action Roadmap that calls on partners to support Alliance states as we collectively reduce our SLCPs emissions by as much as 40–50 percent by 2030. We also commit to develop and implement state-specific strategies reflective of our authority and ability to accomplish the goals.

Natural and Working Lands

The natural systems upon which we depend are essential to life and critical for reducing the impacts of climate change on our communities. These systems are also under threat from destructive human activity and climate change. To protect the communities, economies, and ecosystems that depend on them, we will manage forests, farms, rangelands, and wetlands, to be both economically productive and resilient carbon sinks. We launched a Natural and Working Lands Challenge that commits our states to advance programs, policies and incentives to reduce GHG emissions from land and enhance resilient carbon sequestration. Over the next two years, the Alliance will bring resources to bear on improving GHG inventory methods and identify best practices for land conservation, restoration, and management such that land-based pathways can be integrated into state GHG mitigation plans by 2020.

Transportation

The transportation sector is the largest source of GHG emissions across our states. Alliance states are supporting innovation across the sector to provide our residents access to the best technologies, grow our economies and create jobs – all while drastically reducing emissions. Because of this, we are working to mobilize billions of dollars in ZEV infrastructure and vehicle deployment and moving towards a vision of zero-carbon mobility across all transportation modes. We will collectively deploy $1.4 billion in settlement funds for ZEVs and other clean transportation projects while expanding our networks of ZEV
charging stations. We also will lead by example and work towards converting our state fleets to ZEVs. The U.S. Climate Alliance is developing a playbook of case studies and model policies to help all states achieve this vision.

**Product Energy Efficiency Standards**

Over the last three decades, energy efficiency standards have saved consumers billions of dollars while providing the most cost-effective opportunity to avoid constructing costly new power generation. Going forward, the U.S. Climate Alliance will explore state-level efficiency standards for a range of consumer and commercial appliances. Coordinated U.S. Climate Alliance state action could reduce GHG emissions by 5.5 million tons by 2025 while saving ratepayers nearly $4 billion in the same timeframe. Working together, we also have the potential to transform the U.S. market for this set of products, providing stability to manufacturers and ensuring all Americans have access to money-saving products.

**Solar Soft Costs**

We recognize that solar power is a vital component of a sustainable energy system and represents a major economic and job creation engine. Unfortunately, federal import tariffs on solar panels and cells enacted by the federal government in early 2018 are likely to halt these benefits. The Solar Energy Industries Association estimates that tariffs will cause the loss of roughly 23,000 American jobs this year alone, including solar panel installer jobs, which is the fastest-growing employment category in the country. As a first step toward offsetting the impacts of these tariffs, we will release the U.S. Climate Alliance Solar Guidebook, which identifies best practices and hands-on tools for states to reduce solar energy system costs and streamline regulatory processes and work together on the implementation of the guidebook’s recommendations.

**Grid Modernization**

U.S. Climate Alliance states are leaders in deploying clean energy and innovative distributed energy resources, and states are moving boldly to modernize and strengthen their electric grids. However, withstanding the impacts of a changing climate and further accelerating emissions reductions requires new strategies. That is why we are helping to support the Non-Wires Solutions Playbook, a groundbreaking implementation resource for regulators and utilities to support the deployment of clean distributed energy resources instead of traditional utility investments. By implementing innovative alternatives to traditional utility investments, U.S. Climate Alliance states will reduce emissions, save money for consumers, and modernize their electric grids.

**Resilience**

There is increasing urgency for states to support efforts to build climate change resiliency, enhance local decision-making and to protect communities, residents, and resources from climate-change driven extreme weather, wildfire, drought, sea level rise and other impacts. In August 2017, the federal government disbanded a Federal Advisory Committee designed to help shape the U.S. National Climate Assessment process and ensure it provides information needed to support climate action, including at state and local levels. In January 2018, the group reconvened with support from New York Governor Cuomo as the Independent Advisory Committee (IAC), pledging to deliver recommendations to states in
the U.S. Climate Alliance, among others. The IAC will issue a complete report this fall. The U.S. Climate Alliance will continue supporting independent climate science and working with the IAC to support the availability of climate information to policymakers. To expand this work across Alliance states, we will work with partners to provide direct planning assistance and resilience building strategies to our communities.

To deliver on these commitments, we will continue working together through strategic partnerships. This includes continuing to build out the U.S. Climate Alliance Clearinghouse, which aims to aggregate climate tools, data, and information for use by policymakers and the public. It also includes working with Canada and Mexico through the North American Climate Leadership Dialogue and engaging with other initiatives to ensure that we are taking smart, coordinated action to grow our clean energy economies and continue to reduce our GHG emissions consistent with the goals of the Paris Agreement.

2 http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_april_2018.pdf
3 https://www.eia.gov/electricity/annual/ and https://atb.nrel.gov/
4 http://www.dsireusa.org/resources/detailed-summary-maps/
5 Rhodium Group analysis based on https://www.nature.com/articles/nenergy2017134
7 https://www.eia.gov/electricity/data/eia860M/ and https://www.eia.gov/electricity/data/eia861m/
8 http://database.aceee.org/state-scorecard-rank
9 Rhodium Group analysis based on https://www.usgbc.org/advocacy/state-market-brief
10 https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator
11 https://www.usenergyjobs.org/
12 Rhodium Group analysis based on https://www.usgbc.org/advocacy/state-market-brief
14 See https://www.transportpolicy.net/standard/us-section-177-states/ for the full list of existing Section 177 states. Note that in June, 2018, Colorado Governor John Hickenlooper signed an executive order that commits the state to adopting low emission vehicle (LEV) standards similar to the California LEV program. See: https://www.colorado.gov/governor/news/gov-hickenlooper-signs-executive-order-calling-state-adopt-low-emissions-vehicle-standards
15 https://nepis.epa.gov/Exe/ZyPDF.cgi/P100EZ7C.PDF?Dockey=P100EZ7C.PDF
30 https://www.agcensus.usda.gov/Publications/2012/Full_Report/Census_by_State/
32 https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100SSN6.txt