DOHA 2012: COP18
United Nations Climate Change Conference

Launch of the Arctic Climate Action Registry website on www.climate.org

Vision 20/30:
Update on the Global Sustainable Energy Islands Initiative

Winter Edition: COP18 - Doha, Qatar
A MESSAGE FROM THE PRESIDENT

Climate Protection in the Wake of Hurricane Sandy & the US Election

Commentary by John C. Topping, Jr.

There have been mounting signs, particularly in the Arctic, that the climate system seems to be veering past the capacity of humanity to adapt. Sea ice in the Arctic Ocean is thinning at a rapid clip and mid-range projections point to a disappearance of summer sea ice as soon as 2020. Melting of the Greenland Ice Sheet has been accelerating, contributing to global sea level rise that will increasingly threaten not only small island nations, but also cities such as Miami, New Orleans, London and Shanghai. In recent months, evidence has emerged that the warming underway may be contributing to a destabilization of methane hydrates, which could accelerate warming further.

Despite these alarm bells from the Arctic and some extreme weather events in the US and across the globe, there has been a huge disconnect in the political system. Climate negotiations have slogged along at a snail’s pace, while climate change remained virtually unmentioned in the US Presidential campaign.

Just as there are tipping points in the climate system, there are political tipping points that can shake policymakers to act. Hurricane Sandy, whose devastation came just a week before the US Presidential election, seems to have had just that effect. The potential for such a super storm affecting the world’s financial center has been recognized for many years, as indicated in a prescient analysis by Alexis Sloan Nussbaum in 2006 that is posted on climate.org. The large-scale damage, wide geographic scope of Hurricane Sandy, and the necessity for a multi-faceted emergency response seem to have catalyzed a change in US public opinion. A Rasmussen Poll taken the day before the Presidential election showed 68 % of likely US voters thought that climate change was “a serious problem.”

President Obama in his victory statement declared “We want our children to live in an America that isn’t burdened by debt; that isn’t weakened by inequality; that isn’t threatened by the destructive power of a warming planet.” Generally there is hope among US environmental advocates that a reelected President Obama will give increased priority to climate protection over the next few years. Some, including the Washington Post Editorial Staff, have advanced the idea of a modest carbon tax as a revenue-generating alternative to tax rate hikes as part of a bipartisan deal to avert going over a fiscal cliff.

A more modest strategy, but just as consequential an initiative in terms of reducing radiative forcing, is being advanced to the Obama Administration by a variety of environmental groups including the Southern Alliance for Clean Energy and the Climate Institute. It proposes aggressive reductions of short-lived climate forcers by plugging methane leaks, reducing emissions of HFCs, and instituting more stringent controls on black carbon emissions, especially from the transport sector. Significant progress could be made if the Administration promoted both these largely domestic actions and the panoply of recommendations for moderating Arctic warming put forward by the Arctic Council with major input from the US EPA. Building on the very innovative focus of Mexico’s robust new climate law that integrates black carbon reduction into climate mitigation, the US might also develop a North America-wide strategy for key emissions reductions.

Leaders in the environmental, science and business communities also need to act to moderate the climate crisis before climate disruption is the new norm. As one example, the Arctic Climate Action Registry (ACAR), although still in a startup phase, is being developed as a mechanism to promote near-term reductions in emissions of black carbon, methane, and tropospheric ozone forming compounds that together are significantly increasing Arctic warming. As another example, the islands clean energy transformation effort now embodied in Vision 20/30 (see separate article) can be melded with an effort to make island infrastructure more resilient to storm surges, severe winds, and heavy rains that are becoming more threatening.

Climate mitigation and adaptation policies also need to address the combined emissions from growing, harvesting, distributing and consuming the food we eat, which are estimated to be responsible for as much as a third to half of the radiative forcing contributing to climate change. Food security, livelihoods of small farmers, and a more stable climate can be simultaneously advanced by recognizing these interconnections, as described in D. Bornstein’s article. Ultimately the success of the needed international climate mitigation strategy will require moving beyond from the tens of thousands of government officials and NGO leaders now focused on climate negotiations, to the many tens of millions of potential climate problem solvers.
COP 18 (formally the 18th session of the Conference of the Parties to the UNFCCC and the 8th session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol) opens on November 26 soon after both a leadership transition in China, currently the world’s leading greenhouse emitter, and the reelection of Barack Obama in the US, historically the largest greenhouse emitter. The COP in Doha, Qatar, that concludes on December 7 also comes near the end of a year marked by many extreme weather events, including Super Storm Sandy that wreaked havoc in the US.

The preoccupation of the world’s two superpowers and leading greenhouse emitters with domestic politics and economic concerns in the runup to COP has had an effect of pressing a Pause Button on climate negotiations and reducing expectations from the COP below the unrealistically high levels of previous COPs such as COP 15 in Copenhagen in 2009. Still, despite some very foreboding signs of upheaval in the climate system, especially in the Arctic, there are some auspicious signs of progress toward a more sustainable world environment that may complement whatever progress occurs through the UNFCCC COP process. These include a heightened interest in gas and oil based economies in the Middle East in developing more energy diversified economies and even becoming major investors and innovators in low and non-carbon energy systems and a revolution in oil and gas extraction technologies. Other promising developments include heightened interest, to limit emissions of black carbon, and other short-lived climate forcers such as tropospheric ozone forming compounds and methane. An emerging Life Cycle Assessment Standard being advanced under the US ANSI process lays the groundwork for incentivizing reductions of short-lived climate forcers and promoting a near term focus on Arctic Regional Warming, likely the greatest source of climate disruption over the next generation. Meanwhile, some of the largest US environmental groups are presssing the newly reelected Obama Administration to require stringent measures to limit natural gas leaks from the US gas extraction and supply system. Given the high radiative forcing potential of methane, such steps are necessary to ensure that the rapid transition of the US power system from coal to gas yields significant benefits to the climate.

The Doha COP can highlight one of the most environmentally beneficial rivalries ever, as two Gulf petro-powers, the host country, Qatar, and the United Arab Emirates (UAE) vie for a green mantle. By providing the venue for the COP and moving to become a clean energy investor, Qatar has laid down its claim. Abu Dhabi, the emirate that produces the bulk of the UAE’s oil and gas, is seeking to build Masdar City as a zero net carbon city that will be the headquarters of many clean energy development and finance firms. This may even broaden further if the comments in Brazil this October by Saudi Prince Turki Al Faisal Al Saud, Founder of the King Faisal Foundation and director of Saudi Arabia’s intelligence service, become national policy. Prince Turki spoke of Saudi Arabia’s plans to become 100% powered by solar power or other forms of renewable energy. Ultimately it may be that much of the thrust of climate mitigation efforts will move to arenas such as the G-20 gatherings and private sector innovation, with the COPs providing an opportunity for networking that may facilitate such particular interests as Small Island State Energy Development and Enhancement of Coastal Resiliency and Development of Private Public Partnerships. Once President Obama has navigated past his fiscal cliff and his new Chinese counterpart, Xi Jinping, characterized by former Ambassador Jon Huntsman as having “reform in his DNA” has settled in, the leaders of the two superpowers could build a collaboration that might also extend to climate protection, providing new impetus to both the UNFCCC process and the growing multitude of private and public sector energy transformation efforts in countries around the world.
At the historic Rio+20 Conference in Brazil, in June 2012, the Climate Institute launched the VISION 20/30 – Partnership for Island Economies, which is a collaborative initiative being organized in partnership with the Carbon War Room, United Nations Foundation, UNIDO, OAS, IRENA, REEEP and others, and builds on the Institute’s Global Sustainable Energy Islands Initiative (GSEII), which was launched in 2000 at the Climate Change Conference in Denmark, COP7. Through the GSEII (www.gseii.org), the Climate Institute and its partners have carried out development and implementation of sustainable energy policies and programs in about a dozen Small Island Developing States (SIDS) in the Caribbean and the Pacific regions.

VISION 20/30 is the continuation of this effort, an outreach campaign and a coordination mechanism to scale up international support for SIDS, and also invites island territories that may not be independent nations to join this network. It is a vision for independence of small islands from fossil energy, and is a commitment to the UN Secretary General’s Sustainable Energy for All Initiative (SE4ALL). Sustainable Energy for Island Economies has been identified as one of the High Impact Opportunity of the SE4ALL initiative.

VISION 20/30 calls on the world leaders, the donors and all aid agencies; international and regional organizations to join forces and support the SIDS and participating island economies in their efforts to achieve energy independence by utilizing renewable energy and energy efficient technologies (to the extent feasible and economically viable). Some of the island economies are spending up to 40% of their foreign exchange on importing fossil fuels. By transformation of their energy sector these resources could be utilized to enhance sustainable development and climate adaptation. This initiative seeks to form mini-partnerships around pilot nations that may be fast tracked to achieve energy independence by 2020, which it is hoped would lead to the energy transformation of most of the SIDS by 2030.

A panel of implementation agencies and partners of VISION 20/30 initiative presented their programs to support sustainable energy in the island economies. This panel was moderated by Ms. Melinda Kimble of the United Nations Foundation, and included presentations by David Payton of the United Nations Development Program (UNDP), Elizabeth Press of the International Renewable Energy Agency (IRENA), Martin Hiller, Director General of the Renewable Energy and Energy Efficiency Partnership (REEEP), Pradeep Monga of the United Nations Industrial Development Organization (UNIDO), and Nasir Khattak, Chief Operating Officer of the Climate Institute.

Vision 20/30 encourages the island leaders to step up their efforts, and at the same time organizes the regional and multilateral organizations, the private sector, financial institutions and other stakeholders who are willing to support them. Climate Institute invites additional partners who may share this vision and can help achieve the goal of achieving energy independence.

If successful, such a global program would showcase a number of successful examples of sustainable energy islands spread across the globe. The implementation models of policies and technologies will not only benefit the SIDS but also the island economies and isolated communities. The cost of making such an ambitious and global initiative possible is well worth it, because it has the potential to make a high impact in promoting a global clean energy revolution. The world needs such transformational programs to tackle the global issues of energy supply and climate change.
The Tickell Climate Awareness Program has been steadily growing since the first theatre, Parque Estatal Flor del Bosque, Mexico opened in 2009. The innovative and interactive network named for Sir Crispin Tickell, the Climate Institute’s Chairman and an environmental hero in Mexico and UK, now consists of 14 theatres in Mexico and several partners across the US. The latest member of the network - The Wild Center, situated in the Adirondacks, New York State, offers the public an experience which incorporates nature, environmental education, and the magnificent Science on a Sphere from NOAA, which is also the feature piece in all 14 of Mexico’s climate theatres.

The success of the network is emphasised through its links of climate science research, large-scale climate education and tools to empower the citizenry to understand global climate change and implement climate solutions.

At the forefront of this somewhat daunting challenge, is the Center for Environmental Leadership Training (CELT), based at the prestigious Dartmouth College in Hanover, NH. The rapidly growing team of students and international virtual interns are working on several key projects to promote climate awareness and create problem solvers of us all. Most recently, the launch of the ‘Smart Solutions Blog’ on the (www.climate.org) website has been a great success, with contributions from an array of conscientious climate thinkers from across the globe. In addition, a wide selection of educational games on Climate Change, Public Health and Energy Solutions are available on the website in English, Spanish, French, Portuguese and Chinese, with plans for Russian, Italian and Polish in the near future. The diverse group of students also aim to create an Arctic Mitigation climate game in the coming months, allowing individuals of all ages, cultures and backgrounds to become actively involved in an interactive method of climate education.

The Tickell Network of partners and Climate and Earth Science Theaters, when fully developed, has the potential to serve as a global link for climate policy dialogue and conferencing, scientific exchange, collaboration between educational institutions, and education of the general public.

Complete List of Tickell Network Partners

UNITED STATES:
- Center for Environmental Leadership Training, Dartmouth College, USA
- The Wild Center, The Adirondacks, NY, USA
- National Aeronautical & Space Administration (NASA)
- National Oceanic & Atmospheric Administration (NOAA)

MEXICO:
- Parque Estatal Flor del Bosque, State of Puebla
- Museo Nacional de Historia, Mexico City
- Cuernavaca, State of Morelos
- Case de la Tierra, Veracruz, State of Veracruz
- Acapulco, State of Guerrero, Mexico
- Chilpancingo, State of Guerrero
- Planetario de Morelia, State of Michoacan
- Metepec, State of Mexico
- Atzomulco, State of Mexico
- Texcoco, State of Mexico
- Valle de Bravo, State of Mexico
- Villahermosa, State of Tabasco
- Oaxaca, State of Oaxaca
- House of the Earth, Chetumal, Quintana Roo
Climate change in the Arctic region has progressed rapidly. The change in regional mean temperature, or temperature "anomaly," is already an average of +2.5 to 2.9°C since preindustrial times. This warming has caused major impacts, including melting of the perennial Arctic sea ice, now projected to completely disappear during the summer months within just a decade or two.

The Arctic Climate Action Registry (ACAR) is a new initiative dedicated to raising awareness about the rapid onset of Arctic climate change and its global consequences, and actively stimulating mitigation projects that can slow the pace of this change.

ACAR is a project of the Climate Institute, in partnership with the American Carbon Registry, a leading carbon offset standard and registry, and SCS Global Services, an internationally recognized third-party verifier and life cycle practitioner, and initiator of the ACAR concept, whom will be acting as independent verifier of Arctic Climate Offset projects during the pilot phase.

As daunting as the challenge of climate change is, there are many opportunities to tackle warming in the Arctic region through active mitigation efforts. These efforts involve reducing emissions of three major contributors to Arctic warming – methane, black carbon, and tropospheric ozone. By focusing on these climate pollutants, ACAR seeks to make a demonstrable difference and point the way toward further efforts that can alter the trajectory of climate change worldwide.

The significance of these emissions is emphasized by NASA and other experts, which indicated that 50% to 70% of the change in the Arctic regional mean temperature (RMT) – i.e., the temperature "anomaly" – is due to these three specific emissions, all of which are far more potent than carbon dioxide in terms of their regional radiative forcing:

1) **Methane (CH₄)** persists longer in the atmosphere at upper latitudes, resulting in increased atmospheric concentrations in the Arctic that are about 14% higher than the global average. In addition, methane hydrates that have been trapped for millenia under permafrost and frozen seabed sediments are now being released as the region warms. If a significant amount of the 5,000 billion tons of methane hydrates currently trapped were to be released, global warming would effectively double.

2) **Black carbon (BC)** found in soot, has a direct warming effect because it absorbs solar radiation and traps this heat in the atmosphere. This warming effect is further exacerbated when black carbon particles deposit on ice and snow. Not only is the albedo of these white surfaces reduced, thereby increasing the effective radiative forcing of black carbon by 30%, but the enhanced melting exposes darker surfaces, leading to a feedback loop involving further absorption of solar radiation.

3) **Tropospheric Ozone (O₃)** is created when nitrogen oxide (NOx) and volatile organic compounds (VOCs) react in the presence of sunlight. Tropospheric ozone has an atmospheric lifetime of 22-45 days. During static air conditions in spring and summer, tropospheric ozone accumulates and covers large portions of the Arctic region. The current Arctic radiative forcing from tropospheric ozone is estimated to account for as much as 30% of the total warming.

Ultimately, it is anticipated that ACAR can have a demonstrable impact on Arctic mitigation efforts, reducing emissions, and subsequent temperatures in this region. Please visit the new web pages for more information on [www.climate.org/programs/acar](http://www.climate.org/programs/acar).
Large-scale industrial agriculture’s reliance on chemical inputs is associated with greenhouse gas emissions, contributing to climate change. At the same time, the 2008 global food crisis, in which high food prices triggered riots in over three dozen countries, has led to increased attention toward agriculture on the international agenda. One impact of the 2008 food crisis is a growing realization of the danger of reliance on outside markets for food. Yet many of the new investments in domestic agricultural development in Africa mark an expansion of the chemical-intensive agriculture that is in part an explanation for the rise in greenhouse gas emissions. Indeed, not only do these new agriculture initiatives pose a threat to climate change, but they will fail to benefit the poorest farmers, thereby continuing the food crisis.

One indicator of the continued adherence to conventional-style agriculture is the great fanfare that greeted the World Bank’s 2008 World Development Report on agriculture (focused on the need to improve yields) compared with the near silence that accompanied the release of the International Assessment of Agricultural Knowledge, Science and Technology for Development (which called for a fundamental transition). Development programs, such as the U.S. Agency for International Development’s “Feed the Future” initiative and the “Alliance for a Green Revolution in Africa,” are putting an explicit emphasis on smallholder farmers through the dissemination of higher-yielding seed varieties and chemical inputs. But there are several problems with this approach. First, many of these technologies are unaffordable for the poorest farmers. Farmers could become more vulnerable despite higher yields if they have to go into debt to purchase seeds and inputs. Second, the targeting of small farmers fails to take into account the wider economic context in which they are operating. Given that large-scale farmers overwhelmingly benefit from new technologies, they are likely to outcompete the poorest farmers on markets. Development programs that fail to confront the social structure underlying agriculture—and that continue to be guided simply by technology transfer—will only widen the disparity that has driven today’s food crisis.

The other concerning trend since 2008 is the escalation of large-scale land acquisitions, or “land grabs”—another extension of chemical-intensive agriculture into the developing world. Asian and Middle Eastern countries are buying up large tracts of African farmland to secure food supplies for their own populations, and the U.S. and Europe are doing so mainly for biofuel production. While biofuels may provide an alternative to fossil fuels, displacing poor farmers from their land is not the right path to a new energy economy. Land grabs are evidence that integration of African agricultural land into the global economy is still a dominant paradigm, even if many agricultural development programs are embracing domestic production. They are based on the assumption that the injection of capital into land will automatically generate food security and employment for local people. But this view comes to be accepted only by treating displacement of local people as a “negative externality” that can somehow be mitigated. However, it is actually becoming more and more difficult to offset negative impacts on local people.

High global food prices are rendering it impossible to guarantee that displaced people will even be able to afford food from outside markets. In fact, the acceleration of land grabs portends an eerily similar fate as that which befell Africa in the 1980s. Once countries were forced by the international financial institutions (IFIs) to adjust their agriculture toward export—to generate the capital to pay off debts—they became susceptible to price volatility on global markets. The 2008 food crisis was a repudiation of such a shift to export production. It seems, then, that by pushing for the liberalization of African land markets that enables land grabs, the IFIs are setting up African countries for the same devastating blow they were dealt in 2008. Land grabs are being justified by fallacious notions that African land is underutilized, the very same narrative that drove European colonial expansion there. So if land grabs go unchallenged, might we see a situation where these land acquisitions become accepted as Africa’s “natural” comparative advantage, just as we saw with colonial-era exports?
CLIMATE INSTITUTE CHIEF SCIENTIST

In August, Chief Scientist for Climate Change Programs Mike MacCracken was on the Diane Rehm show, which is nationally syndicated on NPR. He was there to offer comments on the recently released results of Berkeley Professor Richard Muller that essentially replicated the time histories of global warming calculated in the compilations of observations by NOAA, NASA, and the UK’s Hadley Centre, inspiring him to switch from being a climate skeptic to a climate change supporter.

Later in August he served as the science advisor for former VP Al Gore at the two-day North American Climate Reality Leadership Corps Training session held for a thousand participants in San Francisco. In addition to helping with the formal Q and A part of the program, Mike answered question after question from the participants in the hallway outside the formal part of the program.

During the fall, he was involved in several development efforts. First, he helped develop the program for an Arctic-focused symposium and workshop at the 2013 National NCSE Conference: Disasters And Environment: Science, Preparedness, and Resilience to be held in Washington DC in January. Second, with CI intern Ashwin Kumar, he developed a contest seeking ideas for geoengineering that is hosted by the MIT CoLab. And third, he served as a reviewer for an important World Bank report on the dire state of the world if the global average temperature reaches 4ºC above preindustrial levels. Finally, he chairs the panel charged with revising the climate component of the draft ANSI life cycle standard in response to reviewer comments.

FIELD GUIDE TO THE WATER’S EDGE

On May 1, 2012 National Geographic published Field Guide to the Water’s Edge, by Climate Institute Board member, Stephen Leatherman, and longtime USA Today Weather reporter, Jack Williams. A member of the Climate Institute Board since 1987 and Chairman from 1988 to 1990, Steve Leatherman is widely known as one of the world’s foremost experts on sea level rise and coastal protection. He is a Chair Professor and Director of the Laboratory for Coastal Protection at Florida International University, the Miami-based institution whose International Hurricane Research Center he built to a world class reputation. In recognition of the fact that glacial melting in the Arctic has profound implications for coastal areas around the planet, Steve is a member of the Steering Committee for ACAR.

JOHN NOEL & SACE PULL ENVIRONMENTAL GROUPS TOGETHER

For over two decades John H. Noel, a member of the Climate Institute Board since 1994, and also a member of the Steering Committee for ACAR, has led efforts to promote environmental action in his home State of Tennessee and the US Southeast. John and his wife, Melinda Welton, a highly regarded ornithologist, have traveled widely to both polar regions to seek out evidence of climate change that may be underway.

As President of the Southern Alliance for Clean Energy (SACE), a group that has already succeeded in moving the Tennessee Valley Authority (TVA) toward much more sustainable energy practices, John has moved SACE to have both their region and national US environmental groups place much greater emphasis in their climate strategies on reduction of short-lived climate forcers. The upshot of these efforts was a meeting convened by SACE October 1 at the New York Offices of Environmental Defense Fund (EDF), pulling together environmental groups active on short-lived climate forcers to develop recommendations for the Green Group.

Fred Krupp, president of Environmental Defense Fund (EDF) hosted this meeting that included representatives of EDF, SACE (among them John Noel, Steve Smith and Anne Blair), Natural Resources Defense Council, Clean Air Task Force, Earth Justice, and Climate Institute (represented by Institute President John Topping and Linda Schade, Executive Director of the Black Carbon Reduction Council). This meeting and subsequent group interactions have resulted in recommendations for near term measures to reduce emissions of methane, halofluorocarbons and black carbon.
REMEmBERING JOHN S. HOFFMAN:
- A FRIEND WHO MADE A DIFFERENCE -

An obituary October 16 in The New York Times about John Hoffman, notes a few of the remarkable accomplishments in John’s 62 years. These include his role in spearheading the US EPA risk assessment of chlorofluorocarbons that did much to lay the groundwork for the signing in September 1987 of the Montreal Protocol to protect the stratospheric ozone layer. The Times chronicles John’s subsequent achievements catalyzing voluntary energy efficiency innovations. Energy Star, John Hoffman’s brainchild, has “helped prevent 210 million metric tons of greenhouse gas emissions – equivalent to the emissions from 41 million vehicles – and reduced utility bills by $23 billion.” Before the launch of Energy Star, John had already become a pioneer in energy efficiency through the Green Lights Program that ultimately catalyzed a transformation worldwide in lighting efficiency.

For some of us John’s imprint was even more personal and life changing. Thirty years ago soon after going to work for EPA policy and budget Chief Joe Cannon, who had supported a small greenhouse effect team led by John Hoffman I met this remarkable individual who combined analytical brilliance, an entrepreneurial insight rarely found in government, and an unmatched ability to inspire his team to do the seemingly impossible. In March 1983 a conference John and Jim Titus organized on sea level rise implications for the US placed the climate issue in the US news media with prominent coverage in the Christian Science Monitor. Can We Delay A Greenhouse Warming?, an analysis by John’s team in the policy office, received front page coverage in The New York Times and sparked a flurry of media interest in the fall of 1983. Soon after that Joe Cannon, who had moved to head EPA’s Office of Air and Radia-

tional rationale for the Montreal Protocol; it also provided the resources for two EPA reports whose studies provided an impetus for the formation of the IPCC and helped make the 1992 Framework Convention on Climate Change much more robust - The Potential Effects Of Global Climate Change On The United States and Policy Options for Stabilizing Global Climate.

A few years later Dan Power and I sat down with John, who agreed to support the Institute’s activity in promoting energy efficiency at the city and state level. Besides engaging Dan Power in clean energy again two decades after he had made his mark there as a young Air Force Officer, this project attracted two other very creative individuals - Doug Gatlin, who has gone on at the Green Buildings Council to spearhead the LEED Program, and Jack Werner, a driving force behind the formation of such groups as the National Association of State Energy Officials and the Interstate Renewable Energy Council. Perhaps the most profound effect from a personal standpoint came in 2005, when Dan Power, Joe Cannon and I, all Climate Institute Co – Founders, each attracted to the climate issue by John Hoffman, decided that we were going to move past raising public awareness to reducing emissions through a tidal and ocean energy firm, Oceana Energy Company. I suspect there are many more like us, drawn into the climate protection field by John Hoffman, who are trying to speed a clean energy transformation soon enough to avert the climate disruption John fought so hard to prevent. Lucinda, John’s cherished wife, and Alla, his beloved daughter, we in the climate community share in your sense of loss. If there is any solace it is that Alla’s father as much as any human in the last generation acted decisively to ensure that his daughter and her contemporaries would have a climate they could thrive in. John C Topping, Jr.
Founded in 1986, the Climate Institute was the first non-profit organization established primarily to address climate change issues. Working with an extensive network of experts, the Institute has served as a bridge between the scientific community and policy-makers and has become a respected facilitator of dialogue to move the world toward more effective cooperation on climate change responses.

The Climate Institute’s mission is to …

**CATALYZE** innovative and practical policy solutions toward climate stabilization and educate the general public of the gravity of climate change impacts.

**ENHANCE** the resilience of humanity and natural systems to respond to global climate change impacts especially among vulnerable groups (e.g. Native American tribes and Small Islands).

**WORK** internationally as a bridge between policy-makers, scientists and environmental institutions.