COURTER Provoking Thought and Encouring Dialogue on World Affairs

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Global Climate Change Paris Lights the Way

.5 DEGREES

INSIDE: Climate Change – After Paris, What Next? Science and Numbers of Climate Risk A Teacher's Lessons from Peru and Brazil Peaceful Tools in the Responsibility to Protect

P R P

Connecting... By Joseph McNamara, Editor

"The difference between the right words and the almost right words is like the difference between lightning and a lightning bug." —Mark Twain



To the faithful readers of *Courier* as well as those who are newly discovering the fascination of its pages, it is a privilege to address you as this legacy publication's new editor. Serving as editor is also a true bonus of my additional responsibilities as director of communications for the Stanley Foundation.

Through the years, almost 60 of them, the Stanley Foundation has relentlessly pursued the challenges of bringing together world policymakers and citizen leaders to work together to address and better manage critical issues facing the world's populations—issues such as nuclear security, genocide prevention and human protection, climate change, and others.

Through the years, well more than 30 of them, I have professionally witnessed the power of communications. I have seen the power of connecting with target audiences with the right words for the right reasons, to inform and inspire, to make perception and reality one. I have also seen the futility of words that are only almost right, that basically connect with no one. And finally, sadly, I have also witnessed and fought the tragedy of truth being trampled and distorted, along with the rights of those who would have benefitted from it.

The Stanley Foundation enters 2016 continuing its legacy of hard work and dedication to make a positive difference

on the world stage of critical issues. We move forward with expanded resources, including communications, and with increasing resolve to face growing urgencies. I am proud to join this talented, dedicated team and to help give greater voice and focus not only to the work being done to produce better outcomes of the world's urgent issues but also to the valiant people around the world who collaborate to do it.

Recently, the eyes of the world were drawn to the global climate conference in Paris (COP21), as 195 nations gathered to reach agreement and commitment on specific actions to improve the world's climate over the next 20 to 30 years. Much was written and spoken about the conference, flooding communications channels with information and messages. One key message that emerged was the importance and scale of climate change action being driven by nongovernmental organizations: the nonstate and substate actors, cities, regions, groundswell coalitions, businesses, investors, and more around the world.

It is a message that is close to home for the Stanley Foundation, as we have continuously increased our participation in groundswell climate change action the past 18 months leading up to and during COP21. Importantly, we will continue to play an active role in climate change going forward, including timely communications to support the progress of our collaborative actions.

There is no shortage of critical issues facing the world and its people, and there is little calm in the glut of communications surrounding them. To make a real difference in both will be a huge challenge—one that we at the Stanley Foundation accept. So glad to be with you for this journey.

COURIER

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Cover photo: "From Paris—the City of Light—a new light now shines bright for the future of our planet and the future of the human family." —United Nations Secretary-General Ban Ki-moon. (Photo by Chesnot/Getty Images)



The world noticed Paris COP21, and the next generation will be watching to see how meaningful it becomes. (Flickr/www.stefanoborghi.com)

No Time to Rest

After the Paris Climate Agreement,

What Next?

By Monica Araya



uring the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21), the world's governments delivered a new global climate agreement. It marks a historical moment because for the first time, all countries will make commitments to greenhouse gas emissions reductions and adaptation measures for global warming.

Four building blocks underpin the Paris package: the Paris agreement, the registration of national contributions or commitment by the states (Intended Nationally Determined Contributions, or INDCs)—the financing package of money for decarbonization and adaptation, and the Solutions Agenda—the announcement of pledges and initiatives by cities, provinces, and companies.

The Paris summit alone cannot solve climate change. It is therefore important to insist on leaving behind the success-or-failure framing that often dominates the media. In practice, much of the world's attention goes to the first crop of national contributions covering the period 2020 to 2030. Some assessments show that while the INDCs are a breakthrough, they do not yet put the world on the global average temperature trajectory that will be needed by the end of this century.

So it is crucial to explore ways to improve the national commitments as well as the voluntary pledges by nonstate actors. The Paris agreement will need to contain a clear mechanism to upgrade national commitments, for example, every five years. Developing countries are increasingly aware of their vulnerability to climate impacts, and they have insisted on the urgency of the adaptation plans contained in the INDCs. Nearly 90 percent of the INDCs included this dimension. Addressing "loss and damage"—the point where adaptation might be too hard or no longer be possible is very important for highly vulnerable countries, but no consensus had been reached going into the negotiations.

Building a Constituency to Support Reforms

Implementing climate plans necessarily calls for governmental choices such as selecting renewable energy sources instead of fossil fuels, pushing for electric public transportation and car pooling, choosing climate-smart agriculture over pollution control approaches, having stricter land planning, and instituting building codes that help cities adapt to climate impacts.

Because these changes generate opposition from incumbents, decision makers are more likely to push forward if a clear constituency supports reforms. Moreover, citizen engagement and monitoring of pledges is also needed to ensure implementation in practice. That is why one of the key tasks for implementation beginning in 2016 is to empower organizations and support efforts to "translate" the Paris agreement into citizen language in order to increase the understanding of the global agreement and how it connects to people's lives.

Governments will need to send policy signals such as pathways to achieving commitments for 2030 and beyond for crucial sectors (for example, energy pathways,



The plenary delegates to COP21 react to the climate agreement announcement December 12, 2015. (Arnaud BOUISSOU/www.devel oppement-durable.gouv.fr)

transportation pathways, and agriculture pathways). They will have to have stronger mechanisms for monitoring progress and a more sophisticated approach to assessing the costs and benefits of the measures to be taken. Those policy signals need to be complemented with information about the opportunities for private investments, job creation, and savings in oil imports. This is important because of the tendency in national debates to focus on the costs of actions. After Paris, the shift has to be about the costs of inaction and benefits of early action.

Citizens Want to Be Part of Climate Decisions

Citizens care about climate change. On June 6, 2015, World Wide Views (a public Internet site for citizen dialog developed by the Danish Board of Technology, including the Ministry of Ecology) cosponsored the largest citizen consultation to date on climate change and the UN climate negotiations, reaching about 10,000 citizens worldwide and including 97 debates in 76 countries. Some key messages that emerged are that citizens:

- See climate actions as an opportunity to improve life quality (66 percent).
- Think their country should take measures even if other countries do not (79 percent).
- Consider that education—programs on climate change for the broader public—is one of the relevant instruments to help reduce emissions (78 percent).

Because two-thirds of global emissions come from developing countries, defining strategies to involve citizens in implementing the Paris pledges will require innovation in these countries. In some countries, like Chile, Peru, and Mexico, some citizen consultation was put in place to define the national pledge for Paris. However, more citizen involvement in more countries will be needed. The public must be persuaded that there will be concrete benefits associated with making cleaner energy choices (for example, cleaner air). In 2015, US President Barack Obama provided a good example. He explained to the American public how the Clean Power Plan was linked to health by leading to the prevention of up to 3,600 premature deaths, 90,000 asthma attacks in children, and 1,700 nonfatal heart attacks in 2030. He also released a video to explain to citizens why the plan was a good idea.

Citizen concern about air pollution is on the rise in most developing countries. Citizens consume more but they are also demanding cleaner choices, and this could be a game changer for the Paris package. In Latin America, for example, two different polls, one by the government of Chile and one conducted by the United Nations Development Programme in Costa Rica, revealed that tackling air pollution was the top environmental priority in both countries, followed by waste management. An Inter-American Development Bank poll of 5,000 citizens in Bogotá, Colombia; Buenos Aires, Argentina; Lima, Peru; Mexico City; and São Paulo, Brazil, also revealed that they want a better quality of life, more transparency in city government, and more participation in decision making.

This poll, along with those from Chile and Costa Rica, show that citizens understand that climate change will affect them. They want governments to do more, not less, to protect their health and the climate. If Paris has shown one thing, it is that climate change is no longer just an environmental issue. It is an economic, social, and political issue too.

The battle over climate change science has been won the evidence is overwhelming—and in the debate on the economics of climate change, there is growing evidence that climate action does not hurt economies and in fact has benefits. The new challenge will be winning the hearts and minds of people, and after Paris, this should be one of the top priorities for every country starting in 2016.

Monica Araya has worked on development and environmental issues and politics for over 20 years and collaborates regularly with leaders in civil society, government, and business with a focus on climate action and advocacy. She is the founding director of Costa Rica Limpia, a citizen platform that promotes clean development and democracy. She founded Nivela in early 2014, developing the concept for the organization for about two years.

Resource

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Results of the World Wide Views dialogue are available at *climateandenergy. wwviews.org*.



In the pristine Flint Hills of Kansas, a major coal-fired power plant looms on the horizon. Although its CO_2 emissions cannot be seen, scientific measurements produce the numbers that tell the tale...all over the world. (Patrick Emerson/Flickr)

COP21 Aftermath

The Science of Climate Risk—By the Numbers

By Ann Gardiner

urrounding the recent 21st Conference of the Parties to the United Nations Framework Convention on Climate Change in Paris (COP21), all eyes were on the policymakers and what agreement was reached on action for climate change. Underlying the political discussions, however, is a complex sea of critical numbers that quantify the story of climate risk and the need for change.

Temperature change is driven by the concentration of greenhouse gases in the atmosphere, the most important of which is carbon dioxide (CO₂). According to a 2015 study by the US National Oceanic and Atmospheric Administration, in 2014, the mean CO₂ concentration was 399 parts per million (ppm), and during the early part of 2015, concentrations of above 400 ppm were measured. This compares to concentrations in 1850 of 280 ppm, from glacial ice core readings, according to *Climate Change 2014: Synthesis Report*, by the Intergovernmental Panel on Climate Change.

Climate Change 2014 concludes that greenhouse gas concentrations (CO₂ equivalent, or CO₂e) in 2100 need to be below 450 ppm for warming to likely remain below 2°C. (CO₂e is a standard to express the impact of each different greenhouse gas in terms of the amount of CO₂ that would create the same amount of warming. The 450 ppm is for total concentration of the basket of greenhouse gases. The target is 2°C relative to preindustrial levels. A "likely" chance is defined as greater than 66 percent.)

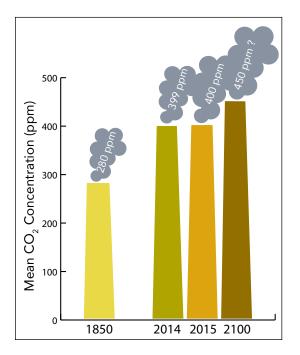
Target Numbers

Although the concentration of greenhouse gases in the atmosphere is the driving force for temperature change, it is less useful as a measure for how to take action. The most crucial number is the limit on the greenhouse gas emissions globally to give the world a reasonable chance of limiting temperature rise to a target of 2°C. Scenarios

of global emissions are constructed to indicate tons of greenhouse gas that can be emitted globally per year that result in concentrations around 450 ppm in 2100. The least-cost scenarios say that to be likely to reach 2°C, the world could emit between 38 and 44 gigatons of carbon dioxide equivalent (GtCO2e) in 2030, but emissions must reduce further after that. In 2013, global emissions were 52.7 GtCO₂e.

Measuring Progress

So now we know what we are aiming for, but how are we doing? If we continue with the current policies, global emissions are projected to be between 58 and 61 GtCO₂e in 2030, according to Climate Action Tracker. (Climate Action Tracker is an independent scientific analysis produced by four research organizations tracking climate action and global efforts toward the globally agreed aim of holding warming below 2°C, since.) However, governments around the world are already pledging further action through what are called Intended Nationally Determined Contributions (INDCs). The aggregate effect of the pledges to October 1, 2015, is to reduce the expected emissions in 2030 to between 53 and 59 GtCO₂e. This still leaves a gap to the target emissions of 11 to 22 GtCO₂e but brings the relative rate of growth in emissions down significantly. If the INDC pathway is followed, there is a 92 percent probability of exceeding 2°C but a likely chance of remaining below 3°C this century.



It is clear that there is still a ways to go to achieve our goal. The good news is that there are opportunities to reduce emissions already identified to fill the gap. A report from the Global Commission on the Economy and the Climate identified ten key economic opportunities that could close up to 96 percent of the gap. During COP21, there were also discussions on how and when INDCs should be revised to strengthen action. As well as government action, a range of nongovernmental actors are taking actions on

their own behalf. These range from individual cities, companies, and investors to co-operative initiatives involving many different actors. This groundswell of action is delivering emission reductions in the short term and can also contribute to increasing the ambition of governments. Existing initiatives are expected to deliver reductions between 2.5 and 3.3 GtCO₂e by 2020, and 5.5 GtCO₂e by 2030. There will be some overlap between these reductions and those pledged by governments, but how much is uncertain.

The Money

The final type of critical number is, of course, money. At COP16 in Cancun, Mexico, developed countries committed to mobilizing \$100 billion per year by 2020 to address the needs of developing countries. In their 2015 report *Climate Finance in 2013–14 and the USD 100 Billion Goal*, the Organisation for Economic Co-operation and Development and the Climate Policy Initiative estimated that in 2014, the aggregate volume of public and private climate finance mobilized by developed countries for developing countries reached \$61.8 billion. Most of that money is from public sources, either bilaterally or through multilateral banks such as the World Bank.

What do these numbers tell us when taken together? They tell us not only that further action is needed to reduce emissions but by how much. They also show that there is potential for this to happen and to deliver economic benefits. Finally, we can also see that significant money is being mobilized to do this.

Ann Gardiner is managing consultant UK at Ecofys. She has 25 years experience in delivering consultancy to a wide spectrum of customers. For more than 15 years, she has specialized in energy policy analysis and support.

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Lessons for the Teacher

Explorer Award Recipient Enriches Her Curriculum From Trip to Peru and Brazil By Leslie Bennett

Winter 2015

chose to travel to the South American countries of Peru and Brazil for my Catherine Miller Explorer Award from the Stanley Foundation. My goal was to experience native cultures of the continent—both ancient and current—and investigate how they are alike or different from North American native cultures. Through this journey, I learned how history and geographic landscapes contribute to the identity of a region and shape the people who live there today.

Leslie Bennett is an exceptional Muscatine elementary school teacher and winner of the 2015 Stanley Foundation Catherine Miller Explorer Award. She chose for her award travel a trip to Peru and Brazil, and tells firsthand the lessons of the world she learned from her trip and that she will now pass on to her students.

It was interesting to learn how different cultures evolved based on their geographic locations. For instance, the Andean people had very different cultures, traditions, and holidays than the people of the Amazon because of the Andeans' Quechuan heritage.

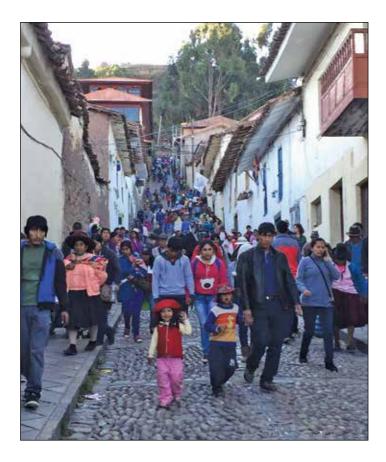
Although I thought I had done my research prior to my arrival, I learned more than I thought possible from the people who live there. It was so interesting to talk to people from the area and learn through their firsthand experiences, stories, and traditions. This was so much more powerful than simply reading about a faraway culture.

I learned quite a bit about the Quechuan culture, in particular, what many of us mistakenly refer to as the Incan people. I learned that "Incan" refers only to the kings and royalty of the Quechuan society. It is interesting that this culture is making a comeback and has really reclaimed the Sacred Valley of Peru. The Quechuan flag flies proudly next to the flag of the city of Cuzco at every corner and church. This seems quite different than the situation of Native American cultures in North America. After some contemplation, I can only guess that this resurgence of the Quechuan culture is a result of the fact that most Quechuan people were forced into slavery in the gold mines after the invasion of the Spanish, rather than exterminated.

In addition, this trip taught me that it is vital that we continue to promote efforts to preserve heritage sites around the world. A variety of climates and geographical structures impact how different groups of people live. The ancient ruins of Machu Picchu and the surrounding valley offer preserved stories of the Quechuans' everyday lives in the mountains. Meanwhile, the people of the Amazon River basin are continually affected by deforestation from trade,



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mining, logging, and agriculture. The Guarani of Brazil and Argentina also continually struggle with the deforestation of their lands, therefore threatening their culture. Luckily, portions of the Guarani's land have been preserved within the national parks surrounding Iguassu Falls.

Farming Along the Amazon

One of my favorite experiences was my visit to an Amazonian farm. Directly along the river is the farm of a man named Manuel. He lives alone and farms the three hectares (over seven acres) himself. A tour of the farm showed several fruit trees—orange, starfruit, avocado, coconut, papaya, and banana—as well as cocoa and coffee plants and much more. All of his produce supplies the locals with a variety of food. It was a valuable experience to see how this small, local farm compares to many of the large, sponsored/co-op farms in the United States and gave me some perspective on how an average person lives and works in this region.

Furthermore, my visit gave me a perspective I could have gained only by traveling to developing countries. It made me thankful for government services that I would normally take for granted, such as trash removal and animal shelters. Trash litters the streets in mountainous heaps—especially outside the city centers—and stray pets wander the streets of the cities in enormous numbers. On a walk, I was surprised to see that the back courtyard of a prestigious private school in the center of beautiful Cuzco was littered with discarded desks, now overgrown with vines.

There were cultural differences with schools as well. I found it interesting that many students in Cuzco go to school in shifts so they can help their parents with work in family-owned shops. Students came and went at all times during the day and night in various colors of uniforms. My hotel was across the street from the historic Colegio San Francisco de Borja, and I even heard the school band rehearsing at about 1 a.m. one night. It was interesting that the color of the students' uniforms indicated which shifts the students attended.

Surprisingly, I also learned a lot from my fellow travelers. I traveled with people from all over the world: India, Scotland, Argentina, Australia, Canada, Hong Kong, Bulgaria, and America. It was interesting traveling with people from so many countries. We shared stories and got to know one another quite well. Although I was visiting South America, I feel that I learned so much about many other cultures through my travel companions.



It is important for all people to have the opportunity to travel to places where people live lives so different from our own. It gives us perspective and appreciation for all walks of life. As a teacher, it taught me to be more understanding of students and the growing number of cultures that are represented in our schools everyday. I hope to bring these cultural differences and similarities to the students of Muscatine, Iowa, and help to foster in them the same appreciation and empathy for others from different cultures that I now have. I want to help students see the bigger picture and how we are only one piece of a larger, global puzzle.



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—Alex Bellamy, professor of peace and conflict studies and director of the Asia Pacific Centre for the Responsibility to Protect at the University of Queensland, Australia.

Resource

The policy analysis entitled The First Response: Peaceful Means in the Third Pillar of the Responsibility to Protect is available at www.stanleyfoundation.org.