



BSR Conference 2009

Reset Economy. Reset World.

Climate Action Initiative

Breakout Session Summary

Wednesday, October 21, 2009 | 1:45-4 p.m.

Speakers

- » **Tom Cummings**, Founder and Chairman, Executive Learning Partnership (ELP)
- » **Michael Goodman**, Principal, Innovation Associates Organizational Learning
- » **Andreas Merkel**, Director, Global Initiatives, Climate Works

Highlights

- » Despite growing awareness and action on climate change, greenhouse gas (GHG) emissions are getting out of control, and we are on track to experience warming of 4°C or more in the next few decades, which is dangerous to humans.
- » To avert this situation, a global political agreement to stabilize warming at no more than 2°C is needed, and a strong commitment by the United States is the linchpin.
- » This 2°C limit translates to a maximum of 450 parts per million (PPM) of atmospheric GHG emissions, which requires reducing emissions by at least 17 Gigatons (Gt).
- » We have a roadmap to reach safe levels, and business offers one of the strongest levers to catalyze change. Companies should exercise leadership by telling policymakers and the public that they support such targets and will profitably embrace a new industrial revolution.

Memorable Quotes

"We have lived in a wonderful sweet spot of +/- 1° C of temperature change for about 10,000 years."—Tom Cummings, ELP

"We need more big names making big statements; a '2 degree' statement would be huge."
—Andreas Merkel, Climate Works

"It's all about the U.S."—Andreas Merkel, Climate Works

Overview

Cummings began by outlining current climate trends, saying that "we have lived in a wonderful sweet spot of +/- 1°C of temperature change for about 10,000 years"—until now. He explained that we know this partly because ice core samples contain air bubbles that hold old samples of past atmosphere. He also noted that "climate change" is a better term than "global warming" because there may be warming in some places and cooling in others.

Next, Cummings and Goodman facilitated mock global climate policy negotiations, where 50 attendees role-played making climate commitments on the behalf of three different groups: industrialized nations, least developed nations, and developing countries expecting strong economic growth. Their commitments were then translated into expected climate change outcomes using the [C-ROADS](#) climate change simulator developed at the Massachusetts Institute of Technology. This simulation model is 100 percent open-access and updated regularly with new scientific findings.

The three groups were told that the business as usual (BAU) path—which is what would happen without effective policy—would reach around 600 PPM by 2050 and would result in at least 4°C



of global warming by that time. The ultimate goal is to avert dangerous climate change by limiting global warming to 2°C, which would require holding GHG emissions to no more than 450 PPM globally. Many scientists, however, now call for an even greater cap at 350 PPM.

The first round yielded commitments that produced an expected change of 3.75°C, with sea level rising at least 90 percent of BAU. The second round commitments yielded only slight improvements. These results implied that dangerous climate change would not be avoided with the commitments made. Merkel remarked that the mock negotiations were representative of where we are today and uncannily similar to the negotiations playing out in real life.

Merkel then showed that stabilization requires an 80 percent reduction of 2005 levels by 2050, and that currently there are around 46 Gt of GHG in the atmosphere. The BAU trajectory predicts that we will reach around 70 Gt by 2050. In order to hold warming to no more than 2°C, we would need to reduce emissions by at least 17 Gt. Merkel explained that this would require strong action outside of developed countries, where reduction opportunities are limited to around 5 Gt.

Merkel outlined an approach for achieving 17 Gt reductions using the McKinsey study known as the "[Cost Curve of Greenhouse Gas Abatement](#)," which consists of the following:

- » Developed countries need to reduce emissions by 5 Gt domestically, with the United States needing to reduce their emissions by 1.8-2.0 Gt. This can be done by focusing on the right part of the graph and costing less than 60 Euros/ton.
- » Developing countries need to reduce emissions by 3 Gt, which they can do at negative cost by focusing on the left part of the graph, which Merkel calls "unilateral territory." They must do this on their own to demonstrate their commitment and credibility. They also must register their emissions and commit to Nationally Appropriate Mitigation Actions Registry ("NAMAS") plans.
- » Developing countries must reduce an additional 9 Gt of emissions with incremental cost financing from developed countries. These activities are found in the middle part of the graph. Developed countries can assist with these reductions through market mechanisms or by writing a check.

As for where we are today, Merkel said that developing countries are likely to accept the 3 Gt and 9 Gt reductions; the question is how developed countries will react. What really matters at this point is the United States, since the reductions needed by the country are so large. Also, commitments by so many other countries will depend on U.S. leadership.

Business, said Merkel, can and should make the case to policymakers that climate policy is not about burden sharing; instead, it's about a new industrial revolution. Companies should argue for science-based targets, in particular, the "2°C-450 PPM-17Gt" framework. Merkel said that companies loathe making statements that matter, and tend not to recognize the concrete commitments needed. Finally, he said, even a "2°C" commitment by business would be huge, and that "we need more big names making big statements."

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