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Climate Change Rescue in U.S. Makes Steyer Converge With Paulson

By Edward Robinson - Oct 1, 2013
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Billionaire Tom Steyer recalls a dinner at the U.S. Treasury in Washington with two senior department officials and six money managers. It was August 2012, and the meal was part of an effort by the agency to keep up with what the financial community was worrying about. The diners discussed China's slowdown, Federal Reserve policy and other trends affecting the U.S. economy.

Steyer says they were overlooking the biggest game changer of all. He told the group the country would have to overhaul its energy policy to address greenhouse gas emissions, Bloomberg Markets magazine will report in its November issue. His fellow guests were skeptical.

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"It's like I was saying that what's going to make a difference in the economy is unicorns," says Steyer, 56, the founder of Farallon Capital Management LLC, a San Francisco hedge-fund firm with about \$20 billion in assets. He declines to name the other people present because the meeting was off the record but says they control a lot of money. "I thought to myself: These guys need to be made aware of the risks here."

So in December, Steyer ended his 26-year career as a hedge-fund manager and set out to make an economic case for addressing climate change. He wasn't the only person from the financial world to have this idea: Henry Paulson, Treasury secretary from 2006 to 2009 and a longtime conservationist, and Michael Bloomberg, the outgoing mayor of New York, which had suffered the costliest hurricane damage in

its history, were also plotting how to reframe the issue.

Catalyst for Action

The three men agreed to join forces to persuade investors, policy makers and the public that the consequences of unchecked carbon emissions would eventually blow away whatever short-term costs are involved in curbing the pollution.

They're funding and co-chairing a study to calculate just how much economic risk American industries and communities face as a warming atmosphere generates more storms, droughts, floods and extreme heat. Robert Rubin, who served as Treasury secretary from 1995 to 1999, and former Secretary of State George Shultz have signed on as advisers.

"Climate change is every bit as big a risk to our economy as it is to the environment," says Paulson, 67, who was chairman and chief executive officer of [Goldman Sachs \(GS\)](#) Group Inc. before he went to Washington. "With any complex issue, we can never know with certainty what the timing and the impact will be, but we know from the data that the climate risk is very real. If we quantify its economic impact, I think that will be a catalyst for action."

3-Million-Year High

The costs of a warming atmosphere are already mounting as the planet undergoes a geophysical shift so profound it will alter coastlines, rainfall cycles and the productivity of arable land.

Carbon dioxide, the principal gas heating up the atmosphere, hit a 3-million-year high in May, according to data collected at the National Oceanic and Atmospheric Administration monitoring station on the island of [Hawaii](#).

The average global temperature has increased 0.8 degree Celsius (1.4 degrees Fahrenheit) since 1850, according to the 2007 report of the United Nations Intergovernmental Panel on Climate Change. The decade from 2001 to 2010 was the warmest on every continent since modern measurements began 160 years ago.

While new data show that the Earth's temperature since 1998 has increased less than half the pace of the longer-term averages since 1951, human activity is the dominant cause of warming since the mid-20th century, according to the IPCC's Fifth Assessment released on Sept. 27. The organization said the summer melting of ice sheets and glaciers in Antarctica and Greenland was accelerating, which makes risks

related to rising sea levels worse.

Losing Harvests

Warmer seas and a jump in airborne water vapor are fueling more violent weather: Last year, 900 disasters, including [Hurricane Sandy](#), which pummeled New York and New Jersey, caused insured losses worldwide of \$65 billion, according to Munich Re, the German reinsurance giant. That's more than double the 30-year average of \$29 billion.

Farmers, meanwhile, are struggling to cope with drastic disturbances of weather patterns they've counted on for generations. In the Mekong River delta, the heart of [Vietnam's](#) agriculture and aquaculture, rice growers and shrimp farmers are losing harvests as precipitation becomes less predictable and a rising sea inundates their fields. The World Bank says Vietnam may lose more than 12 percent of its crop production to saltwater intrusion by 2040.

As freakish weather traumatizes society and rings up economic losses, adaptation is now taking on as much urgency as prevention, former Vice President Al Gore says.

Catastrophic Impacts

"There are some changes that will continue to unfold no matter what we do," says Gore, who won a Nobel Peace Prize in 2007 for alerting the world to the perils of global warming. "We have an obligation to pay attention to people who live in areas where the sea level is already rising and to farmers who are suffering the impacts of droughts and erratic weather. But the truly catastrophic impacts can still be avoided."

As the climate story shifts into a new phase, the key players aren't just heads of state or the environmentalists and oil industry lobbyists who have long clashed on this issue. They're agronomists like Jerry Hatfield in [Iowa](#), who's developing new soil management and tillage practices to help corn withstand drought.

And entrepreneurs who see money to be made. This past summer, Christian Bonfils, co-founder of Nordic Bulk Carriers A/S, a Danish shipping operator, sent two vessels carrying iron ore from Murmansk, [Russia](#), to [Shanghai](#) through the virtually ice-free Northern Sea Route along the coast of Siberia. The newly opened route shaved 18 days off the voyage and saved \$600,000 in fuel, compared with a trip via the Suez Canal, he says.

Lucrative Possibility

“The last time a new shipping route opened that wasn’t a canal must have been hundreds of years ago, so we thought this might be a very lucrative possibility,” Bonfils says.

Mining, shipping and energy interests may plow more than \$100 billion into the melting Arctic region in the next decade, according to a report released in April by Lloyd’s of London.

In the face of these developments, Paulson and Steyer say they worry that policy makers and the public alike are beginning to accept the idea that climate change is inevitable. Their push comes four years after a UN climate change conference in Copenhagen ended in disarray and a measure to regulate greenhouse gases stalled in the U.S. Senate.

The economic study they’re funding, which they’ve dubbed Risky Business, will be published in late 2014. They say it’s just one piece of a larger strategy to reboot the issue as a global priority.

Huge Step Backward

Paulson is focusing his influence on China, a country that has fascinated him since he visited as an investment banker at the dawn of its economic boom in the early 1990s. Through the Paulson Institute, a research and advocacy group at the University of Chicago, he has advised Chinese political and business leaders on energy efficient cities, protecting wetlands and forests, and using more-sustainable transportation systems.

Meanwhile, Steyer, who’s donated \$65 million to set up renewable energy research centers at Stanford and Yale universities, has raised almost \$2 million for his political action committee. It’s backing candidates across the country who oppose approval of the Keystone XL pipeline, which would ship crude from Canada’s oil sands to refineries on the Gulf of Mexico. At a cocktail party fundraiser Steyer hosted at his San Francisco home in April, he told President Barack Obama the pipeline would be a huge step backward in the fight to curb greenhouse gas emissions. The president has yet to make a final decision on the project.

Can’t Run the Risk

And Bloomberg, 71, whose 12-year mayoralty ends on Jan. 1, has championed a \$20 billion plan to construct sea barriers, enhance

wetlands and take other steps to safeguard New York from superstorms like Hurricane Sandy, which killed 117 people and caused \$50 billion in total losses in the Caribbean and the U.S.

“Whether you believe climate change is real or not is beside the point,” Bloomberg said on June 11, when he announced the plan. “The bottom line is, we can’t run the risk.” Bloomberg is the founder and majority owner of Bloomberg LP, which is the parent of Bloomberg News.

Steyer and company have their critics. James Valvo, director of policy at Americans for Prosperity, a Washington advocacy group that opposes regulating greenhouse gas emissions, says that while laying out the costs of global warming may be a fresh approach, the effort may be outdated as industries and governments focus their resources on adaptation rather than mitigation.

Complicated Issue

“They’ll have to prove that it’s more economical to fix climate change than to live with it,” says Valvo, whose group is financed by Charles and David Koch, the billionaire brothers who head Koch Industries Inc., the commodities conglomerate based in Wichita, Kansas.

The plan to measure economic impacts only in the U.S. is flawed, Valvo says, because climate change is caused by global emissions and affects every country on the planet. Demand for coal, the dirtiest power source, will jump about 17 percent worldwide over the next four years, according to the International Energy Agency, as China and India burn more of the fuel.

“Climate change is the most complicated issue there is because of the extraterritorial impacts,” Valvo says. “It’s not like dealing with acid rain or smog.” The U.S. Environmental Protection Agency and state agencies were able to address those two air-quality problems by regulating local pollution sources.

Deep Conflicts

Nicholas Stern, chair of the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science, counters that making a fiscal case for regulating carbon may be the best way to break through the resistance on the issue. That’s imperative, he says, with scientists predicting the atmosphere may warm another 5 degrees by 2100.

“We are already seeing what can happen with a 0.8 degree increase in temperature, and we are looking at a high probability of a 3-degree

to 5-degree increase, which would cause major changes in rivers, a collapse of the monsoon cycle in Asia, and trigger deep conflicts," says Stern, whose institute is supported by fund manager Jeremy Grantham. "This is a staggering creation of risk, and an analysis of this risk is fundamental."

Reserved Republican

Stern, a former chief economist at the World Bank, led a review for the U.K. government in 2006 that concluded a 5-degree rise in temperature by the end of the century could totally choke off global economic growth. Paulson and Steyer each consulted Stern separately last spring as they formulated their thinking on the issue.

Paulson and Steyer make an odd couple. The former cabinet official, who worked under President George W. Bush through the height of the financial crisis, is a reserved Republican. He returned to his family farm in Illinois after leaving government. Steyer is a gregarious Democratic Party fund-raiser who used to live with his family in San Francisco's Haight-Ashbury neighborhood, the cradle of the counterculture in the 1960s.

They have two things in common. One is Goldman Sachs. Steyer began his career at the investment bank in the early 1980s on the risk arbitrage desk run by Rubin, who went on to become the firm's co-chairman, from 1990 to 1992. The other is a conviction that Americans will get serious about climate change if they understand how much it's going to cost.

Jobs Versus the Environment

In June 2009, a bill that would have regulated carbon pollution and set up a national cap-and-trade system passed the House of Representatives and went to the Senate. After the American Petroleum Institute and coal industry lobbyists argued that such legislation would raise energy costs and spur unemployment, the Senate's Democratic leadership failed to bring the bill to a vote.

"The big boys made this about jobs versus the environment, and the environment loses that argument every time," Steyer says. "We need to get rid of this idea that going the way we are, with the status quo, is a smart economic thing to do." That's Steyer's goal in funding a detailed risk analysis.

"The next time lobbyists go from Senate office to Senate office saying this is how many jobs you're going to lose in your state, we'll have an intellectual response: 'Bulls---. That's bulls---,'" he says.

Apocalyptic Future

The Risky Business project will be directed by a 10-member interdisciplinary team of economists and climatologists. It will divide the U.S. into eight regions and present findings for each part of the country as a range of probabilities, similar to an insurer's actuarial table.

Rather than prescribing solutions, the researchers aim to provide state and municipal policy makers, business leaders and investors with a data-rich framework they can use to understand the climate risks they face.

"This cannot be a liberal narrative about an apocalyptic future," says Kate Gordon, director of the energy and climate program at Next Generation, a nonprofit Steyer co-founded in San Francisco. "People have to feel they can do something about climate change that's grounded in what they know and where they live," says Gordon, who's helping to direct the study.

The Risky Business analysis will draw on climate models used by the IPCC and the National Climate Assessment, a U.S. government effort that combines information from 13 agencies to create region-by-region predictions of the effects of global warming.

Stressed-out Crops

The Great Plains, stretching from Montana to Texas, likely will experience more heat waves and more extreme swings in precipitation, for example, and droughts will put pressure on diminishing water supplies, according to the assessment.

The U.S. Department of Agriculture forecasts that over the next few decades, these changes will reduce harvests and may force cattle producers to set up air-conditioned shelters for their herds, meaning the cost of staples such as meat and milk will probably go up.

The kind of volatile weather anticipated in the National Climate Assessment is already being seen in the corn belt, agronomist Hatfield says. In 2010, Iowa endured its wettest summer on record and its warmest nighttime temperatures, he says. Corn went from pollination to maturity in 35 days instead of 50, which was bad news for farmers as stressed-out crops yielded a poor harvest. In 2012, Iowa was gripped by the worst drought since 1934 only to experience river flooding in March, topped off with a sudden dry spell.

Capture Every Drop

"This is outside our normal thinking in terms of what our climate looks like," says Hatfield, the laboratory director of the National

Laboratory for Agriculture and the Environment in Ames, Iowa, which is part of the USDA.

Hatfield is developing ways for farmers to adapt. An upbeat man with salt-and-pepper hair, he notes that in the broader discussion of climate, soil is often forgotten. But it's one element we can actually manage, he says. "We're never going to make it rain, but what we can do is capture every drop of water and make it available to the plant."

Hatfield has urged farmers to stop plowing before they plant and instead blanket the soil with corn husks, leaves and other leftovers from last year's harvest. Microbes feed on this organic matter and enrich the crops with nutrients. Soil cultivated in this manner loses less moisture through evaporation.

Hatfield has found corn plants can send roots 2.2 meters (7.2 feet) into the earth instead of 1.2 meters, tapping deeper groundwater. For every 2 to 3 percent increase of organic matter in the soil, its capacity to hold water jumps 25 percent, Hatfield says, and that boosts yields, even in dry years. About 20 percent of the growers in Iowa have adopted Hatfield's water-conscious method of tillage.

Going to be Surprised

Forecasting exactly how much of an impact the warming will have on the \$300 billion-a-year U.S. agriculture industry is a challenging exercise, says John Reilly, an economics professor at the Massachusetts Institute of Technology. The problem is that most climate models are too generalized to predict how changes in rainfall will affect particular crops in specific areas or how rising temperatures will affect the spread of pests and insects.

"Everyone is trying to put together a quantification of what this all means, but our tools lack the precision we need," Reilly says. "All the modeling we do tends to smooth out the fact that there's a high probability that we're going to be surprised."

Sense of Hopelessness

That's the problem the Risky Business study will have to solve if it's to be at all effective. Yet Paulson says he has a far bigger worry. "The biggest problem we're dealing with is a sense of hopelessness," he says. "But I'm saying we're the first generation with the knowledge and the ability to do something: We don't need new science, and we have great technology. We need the will to act now so we don't leave our children and grandchildren with a catastrophic burden."

Along with Steyer and Bloomberg, Paulson is betting that as climate change, once a distant possibility, becomes altogether real, our economic self-interest will be the thing that finally provokes a popular call for action. That will almost certainly have to be making carbon dioxide emissions expensive by either taxing or regulating the gas on a global basis, Steyer says.

Yet it's striking that 53 years after the U.S. government's station on Hawaii first recorded an increase of carbon dioxide in the Earth's atmosphere, we're still trying to figure out how to think about climate change, let alone solve it.

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