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Food Chain Reaction crisis simulation ends with global carbon tax

4-5 Minuten

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On Monday and Tuesday, 65 international policymakers, academics, business and thought leaders gathered at the World Wildlife Fund's headquarters in Washington DC to game out how the world would respond to a future food crisis.

The game took the players from the year 2020 to 2030. As it was projected, the decade brought two major food crises, with prices approaching 400 percent of the long term average; a raft of climate-related extreme weather events; governments toppling in Pakistan and Ukraine; and famine

and refugee crises in Bangladesh, Myanmar, Chad and Sudan.



Climate, hunger, civil unrest and spiking food prices came together at the Food Chain Reaction game in Washington DC this week. Cooperation mostly won the day. Along with WWF, the Center for American Progress and the Center for Naval Analyses, Cargill was one of [Food Chain Reaction's](#) organizers. The company was represented in the game by Corporate Vice President Joe Stone.

“I can’t tell you the number of discussions where people came up to me from other parts of the world, saying ‘we appreciate Cargill’s role in [sustainability](#),’ or ‘Cargill is so important in solutions for [feeding the world](#).’ Sometimes, when you’re inside Cargill, you don’t appreciate that enough, but when you hear from other people how much they’re depending on us to help figure this out, it just increases our responsibility,” said Stone.

Unintended consequences

Over two days, the players – divided into teams for Africa,

Brazil, China, the EU, India, the U.S., international business and investors, and multilateral institutions – crafted their policy responses as delegations engaged in intensive negotiations.

Cooperation mostly won the day over the short term individual advantage. Teams pledged to build international information networks and early warning systems on hunger and crops together, invest jointly in smart agricultural technology and build up global food stocks as a buffer against climate shocks.

In the face of a steep price spike with looming global food shortages in 2022, the EU at one point suspended its environmental rules for agriculture and introduced a tax on meat. Both measures were quickly reversed in 2025, as harvests went back to normal and tensions eased in the hypothetical universe.

The most eye-catching result, however, was a deal between the U.S., the EU, India and China, standing in for the top 20 greenhouse gas emitters, to institute a global carbon tax and cap CO₂ emissions in 2030.

“We’ve learned that a carbon tax is a possibility in years ahead,” acknowledged Stone. “But before we can consider moving ahead with a measure like that, we must study it and understand it much better. We have to avoid sudden market distortions and unforeseen consequences.”

Stone said he was impressed with the complexity of the

game and the second and third order consequences of some of the decisions that were taken. “Take the meat tax Europe wanted to impose, and think through that. What meat are you going to tax – does that mean poultry and beef or aquaculture as well? Where do you levy the tax, where does the money go, what are the unintended consequences?”

‘Not just putting out fires’

The game was built over the course of months, with maximal realism in mind. The scenario was extrapolated from events that have actually occurred in the real world, such as the food crisis of 2008-2009 or the recent string of hottest years and months on record.

Cargill economist Tim Bodin, who helped design the game and sat on the judges’ panel that evaluated the team’s moves, said he was surprised by the degree of cooperation. “Most people started out with a short-term perspective, but transitioned to long-term measure pretty quickly – they started working to strengthen resiliency instead of just putting out fires.”

The realism of the exercise exceeded expectations, said former U.S. Senate majority leader Tom Daschle, who acted as a mentor to the players. “It’s much closer to the real world than you’d think. The people who play here are very committed and serious.”