

Quantifying global supply chain risks due to climate change

February 26 2014, by Joyce Coffee

Climate indicators and country risk ratings developed by the University of Notre Dame Global Adaptation Index (ND-GAIN) will be instrumental in a new partnership announced Tuesday (Feb. 25) whose goal is to develop the Climate Change Risk Management (CCRM) application.

This application, which will enable large corporations to quickly map and quantify global [supply chain](#) risks due to climate change, leverages climate indicators and country risk ratings developed by ND-GAIN, the world's leading research index showing which countries are best prepared to deal with climate disruption and other global shifts. Four Twenty Seven, a climate consultancy based in the San Francisco Bay area, has partnered with supply chain assessment experts from Climate Earth Inc. to develop the enterprise-quality application. The announcement was made at the Climate Leadership Conference in San Diego.

The 2014 World Economic Forum called climate change an "economically disruptive force," and climate-related risks have risen on the agenda of global corporations in the past years. In Davos, Switzerland, in February, Jim Yong Kim, president of the World Bank, called on corporate leaders to take action: "Be the first mover. Use smart due diligence. ... It's simple self-interest. Every company, investor and bank that screens new and existing investments for climate risk is simply being pragmatic." Business giants Coca-Cola Co. and Nike were recently featured in the New York Times as taking proactive measures to assess

and prepare for climate-related disruptions in their supply chain.

This new CCRM application is the first in the industry to provide comprehensive mapping and modeling of climate change risk for every commodity across the entire supply chain. Typically implemented in 90 days or fewer, the CCRM application models all the goods and services that are hidden deep in a company's supply chain and provides a quantitative assessment of the carbon, energy and water footprint associated with making its products and running its business. It also maps the country of origin from these goods and services, and provides users with an assessment of the exposure to the physical impacts of climate change.

"Companies need better tools to understand and act on climate risks. This application is a first foray into delivering climate intelligence to corporate leaders to support business resilience," said Emilie Mazzacurati, managing director of Four Twenty Seven.

"We are delighted to be partnering with the expert consultants at Four Twenty Seven, and to have the opportunity to integrate ND-GAIN data into our core supply chain modeling system. Together we offer a powerful and innovative solution to help companies better understand and manage the rapidly growing risk of supply chain disruption due to climate change," said Chris Erickson, a veteran Fortune 500 leader and president and CEO of Climate Earth.

"Corporate leaders are seeing more and more physical risks from [climate change](#) impacting their value chains," said Joyce Coffee, managing director of the Notre Dame Global Adaptation Index. "Embedding the Notre Dame Global Adaptation Index, a free and open source platform, in CCRM will help decision-makers better understand their future risks and opportunities, thereby unlocking corporate adaptation solutions that save lives and improve livelihoods while strengthening market

positions."

Four Twenty Seven LLC provides innovative tools and services to organizations seeking to understand climate impacts, assess risks to their operations or their stakeholders, and increase their resilience by developing and implementing [climate](#) adaptation measures.

Climate Earth's Platform for Integrated Management provides a solution for systematically informing strategy and managing sustainable enterprise by linking an organization's financial transaction data to environmental impact data in an enterprise-quality and scalable database.

Using 17 years of data, and measuring 50 variables, ND-GAIN ranks more than 175 countries annually based on how vulnerable they are to droughts, superstorms and other natural disasters and, uniquely, how ready they are to successfully implement adaptation solutions.

Provided by University of Notre Dame

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