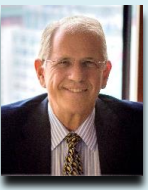


What Environmental Market Experts Say About CarbonSim

(April 9, 2019)



Over the last 30 years, emissions trading has proven itself as an environmental compliance program that makes the right thing easy and the wrong thing hard. **CarbonSim** is a fabulous tool that synthesizes those years of learning into one interactive experience that teaches the principles of emissions trading, demystifies how to develop and implement a carbon portfolio management strategy, and demonstrates that results are driven by design. Highly recommended for advocates, industry practitioners, and policymakers. - **Dan Dudek, Vice President, Asia - EDF**

Though very useful as a policy instrument emissions trading can be challenging to understand. A well-designed ETS simulation tool can provide stakeholders with step-by-step learning experience that demonstrates how markets function and the connection between program design and environmental and economic outcomes. This sort of tool is extremely useful for jurisdictions that are in the early stages of introducing this policy instrument. **CarbonSim** is just such a tool. It has been used by, and proven valuable to, numerous Chinese policy-makers, operators, and decision-makers in covered enterprises, and other market participants. - **Qian Guoqiang, Deputy General Manager, SinoCarbon**



CarbonSim brings to life the core elements of an emissions trading system. Stakeholders come to understand that the choices they make have a direct effect on the environmental and economic outcome. - **Eduardo Piquero, Manager, Director - Mexico Carbon Platform, Mexico Stock Exchange**

The Santiago CarbonSim exercise was excellent. Participants holding a range of views were able to collaborate and participate in an experiential learning process that demonstrated how emissions markets work and can be designed to serve the interests of diverse stakeholders.

- **Juan Pedro Searle Solar, Head of Climate Change Unit in the Ministry of Energy of Chile**



I have come to appreciate how **CarbonSim** serves to improve the quality of ETS stakeholder discussions, increases industry's understanding of ETS mechanics, and illustrates how ETS design choices impact outcomes. These reasons were central to SEMARNAT's decision to select EDF as a partner and **CarbonSim** for Mexico's carbon market exercise. - **Juan Carlos Arredondo Brun, Former Director General for Climate Change Policies and Former Acting Deputy Minister at SEMARNAT**

CarbonSim is a great tool to provide practical knowledge for industries and decision makers on how carbon trading and ETS works. It can change people's attitude from "ETS is a burden for business" to "Business can make a profit from this system if they make a right decision, mitigate first and sell later".

- **Sumon Sumetchoengprachya, Director, Carbon Business Office, Thailand Greenhouse Gas Management Organization**



The ETS simulation game, **CarbonSim**, was a very successful part of our recent workshop on ETS trading strategies for KETS entities. The opportunity to practice with a realistic trading simulation was invaluable and fun for the participants, helping them to gain experience in compliance strategies including abatement, auctioning and trading. - **Alistair Ritchie, Team Leader, European Commission project 'Implementation of the Korean Emissions Trading System**

It's important for those of us working on carbon markets to have sense of how they work on trading desks. CarbonSim provides that and more, all while being tactile, competitive, and lots of fun. We are working with EDF to bring this tool to practitioners in Asia – with exciting results.

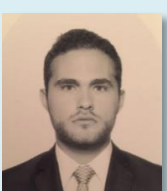
- **Jackson Ewing, Senior Fellow, Nicholas Institute for Environmental Policy Solutions at Duke University**



CarbonSim provides the private sector with a practical way to understand the component parts and dynamics of a carbon market. It underscores the importance of ETS design and why it is critical to participate in the development phase of a carbon market. - **Carolina Rodriguez Gonzalez, Environmental Coordinator, LafargeHolcim, and winner of the first Mexican carbon market simulation**

Before playing **CarbonSim** I thought I knew a lot about cap and trade policy. Having played CarbonSim, I now have a deeper understanding of a businessman who has dual financial and regulatory obligations. I learned that compliance timelines and market forces necessitate a dynamic strategy along the way. And it is clear that environmental and economic outcomes are a function of program design. Furthermore, I learned that cap and trade requires skills that many business lack. Building a deeper appreciation of these nontrivial challenges gives me the experience I need to be more effective in my advocacy.

- **Jamie Fine, Director, Energy Research & Sr. Economist, Clean Energy - EDF**



CarbonSim is a very useful tool that has given us an introduction to trading in carbon markets. It is user-friendly tool and has helped us to understand how these markets operate in real life, since you need to implement abatements projects or buy allowances in the primary or secondary market in order to reduce emissions in order to stay within a cap. In my personal opinion, this software has been of great help. As the result of the simulation exercises I have gained knowledge that allows me to speak with colleagues from the European Union that trade in real life and understand perfectly the carbon trading-related topics. Also, I think it will be very helpful for emerging markets like my country, Mexico, in the establishment of the preliminary rules for a carbon market. With the knowledge I acquired during the simulations, I can now participate in industrial sector dialogues with the government intended to establish rules that can accomplish the NDC goals and also maintain competitiveness within the sector. Finally, within my own company, I can now we start thinking about the optimum carbon strategy – for example, if we should implement abatements or buy allowances in auctions or the exchange market in order to be cost efficient and profitable.

- **Gustavo Alberto Martinez Camacho, Chief of Finance and Strategic Planning of the Chemical Division - Cydsa**

CarbonSim immediately shifted my students from passively reading about climate change to experiencing the real life choices of carbon market participants. They didn't just learn about mitigation options; they felt the tensions of balancing short-term and long-term priorities, anticipating others' actions, making profits, and considering alternative futures. Working in teams with peers, CarbonSim stimulated important learning conversations, and created excitement about the potential for carbon markets. Simulations like CarbonSim are powerful tools that bring complex concepts to life for students.

- **Dan Vermeer, Executive Director, Center for Energy, Development, and the Global Environment and Associate Professor of the Practice, Duke Fuqua School of Business**



CarbonSim is wonderfully fun and very informative. It has undeniable teaching qualities that make it an incredible tool for the classroom. -- **Vero Bourg-Meyer, Program Director for Clean Energy and Conservation Finance at Yale Center for Business and the Environment**

I loved participating in the **CarbonSim** demonstration because it allowed to me to put myself in the shoes of a business and understand the business decisions that drive participation and financial success in an ETS. The software took an abstract concept I had read about and made it concrete. I enjoyed debating with my colleagues and felt invested in the environmental decisions that policy makers ask companies to make.

- **Lindi von Mutius, Chief of Staff - Sierra Club**



CarbonSim is extraordinary. I spent a lot of time understanding the California cap-and-trade program (I've actually read a large portion of the regulations). This training demonstrated what little I actually know! It is one thing for us to understand and advocate for policies, but quite different for us to see a market in action. That is what this training does. I learned a lot in the process. I highly encourage you to make the time to participate in a **CarbonSim** session. - **Robert Parkhurst, Former EDF Director, Agriculture Greenhouse Gas Markets**

CarbonSim is a very useful tool. It would have been a godsend to have had it in Europe when we were trying to convince stakeholders of the merits and modalities of trading. - **Frank J. Convery, EDF Chief Economist Emeritus**



No matter how much you have thought about cap-and-trade in theory, the **CarbonSim** provides a greater understanding of how a carbon market works in practice, including the market dynamics and operational decisions facing a regulated company. - **Ruben Lubowski, Chief Natural Resource Economist - EDF**