

Capacity- Building with En-ROADS for Assessing Policies for Climate Change Mitigation and Projecting Greenhouse Gas Emissions (GHG)

Andrew Jones

(via skype)

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5to Taller del Grupo Regional América Latina y el Caribe de la Alianza para Transparencia en el Acuerdo de Paris, organizado por GIZ

Buenos Aires, Argentina, 14 de septiembre del 2018

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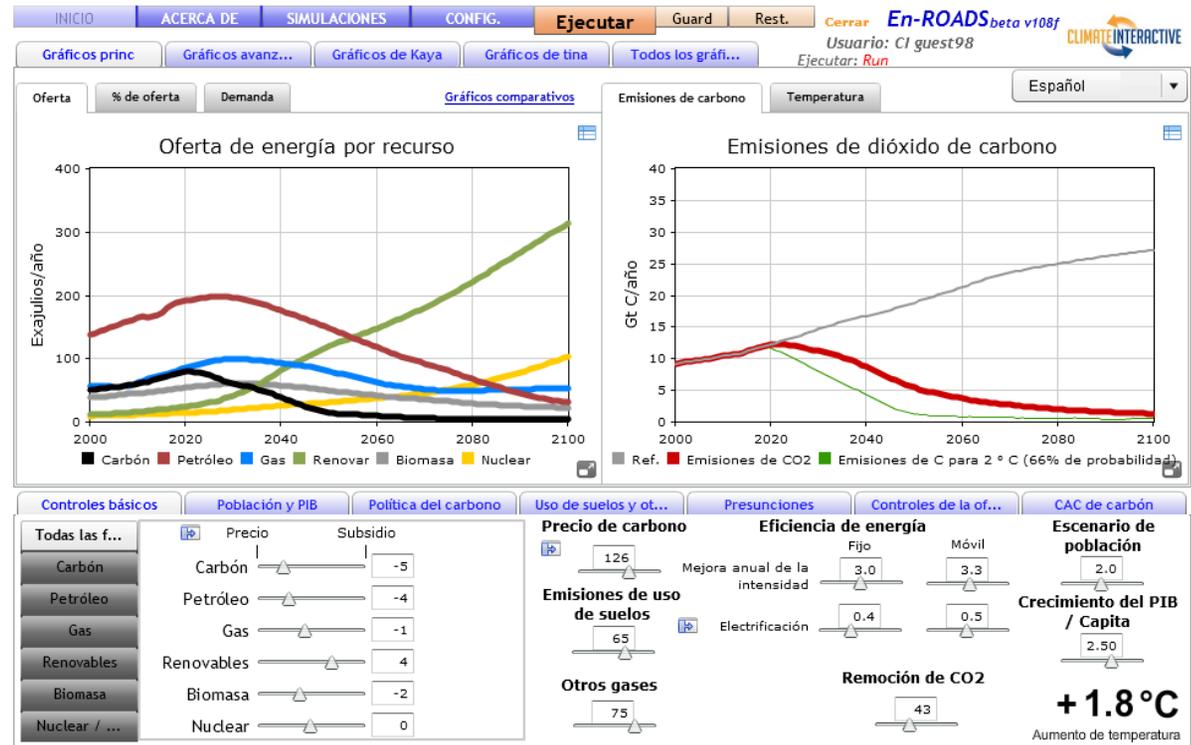


2nd round of En-ROADS intervention, 14th September 2018



Better understanding energy, land, and economic transition with En-ROADS

En-ROADS helps decision-makers understand better the high-leverage policies and investments that lead to climate success, exploring carbon prices, energy efficiency, consumption, oil subsidies, electrification, methane from cattle, and other factors.



Handout with policy levers, accompanying En-ROADS

What changes do you think are necessary and feasible to address climate change?

Population and Economic Growth Lower BAU Higher Population growth <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> GDP per capita <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			Carbon Price None \$20 \$100 Carbon Price <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Starting Year <input type="text"/>			Other Greenhouse Gases Big Small No decrease decrease change Other GHGs <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> e.g., methane, N ₂ O, and F-gases			Carbon Dioxide Removal None Modest Major Ocean fertilization <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Direct air capture <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Biochar <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Bioenergy CCS <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Ag. soil sequestration <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Starting Year <input type="text"/>		
Energy Efficiency No Small Big change increase increase Mobile <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> e.g., transport and cars Stationary <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> e.g., buildings, industry, residential			Electrification No Big change increase Year <input type="checkbox"/> <input type="checkbox"/> <input type="text"/> <input type="checkbox"/> <input type="checkbox"/> <input type="text"/>			Energy Supply Less No More change Coal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Oil <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Gas <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Solar & Wind <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Biofuels <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> New Zero C <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> e.g., thorium fiss. Nuclear <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> CCS <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			(Imagined)		
Forests Big Small No decrease decrease change Deforestation <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> No Small Big change increase increase Afforestation <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>											

Further Information: En-ROADS

You can play with the En-ROADS simulator yourself:

<https://www.climateinteractive.org/tools/en-roads/>

En-ROADS is available in English, Spanish, and Portuguese

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CLIMATE INTERACTIVE Tools for a thriving future

YOU ARE HERE: HOME / TOOLS / EN-ROADS / USE EN-ROADS / EN-ROADS SIMULATION

En-ROADS Simulation

Inicio ACERCA DE SIMULACIONES CONFIG. Ejecutar Guard. Rest. Cerrar En-ROADS beta v10f Usuario: CI guest98 Ejecutar Run

Oferta % de oferta Demanda Gráficos comparativos Emisiones de carbono Temperatura Español

Oferta de energía por recurso

Emisiones de dióxido de carbono

Controles básicos Población y PIB Política del carbono Uso de suelos y otros Presunciones Controles de la oferta CAC de carbono

Todas las f... Precio Subsidio

Carbón	Carbón	-5
Petróleo	Petróleo	-4
Gas	Gas	-1
Renovables	Renovables	4
Biomasa	Biomasa	-2
Nuclear / ...	Nuclear	0

Precio de carbono 126 Mejora anual de la intensidad Fijo 3,0 Móvil 3,3

Emisiones de uso de suelos 65 Electrificación 0,4 0,5

Otros gases 75 Remoción de CO2 43

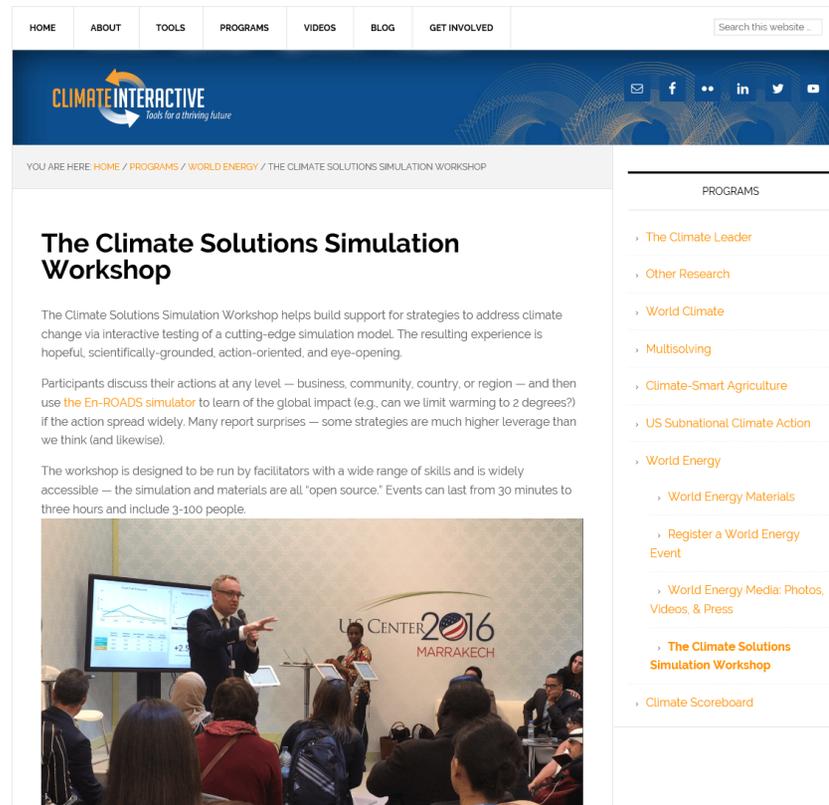
Escenario de población 2,0 Crecimiento del PIB / Capita 2,50

+1.8°C
Aumento de temperatura

Further Information: Climate Solutions Simulation Workshop

You can read a description of the workshop:

<https://www.climateinteractive.org/programs/world-energy/the-climate-solutions-simulation-workshop/>



The screenshot shows the website's navigation menu with links for HOME, ABOUT, TOOLS, PROGRAMS, VIDEOS, BLOG, and GET INVOLVED. A search bar is located in the top right corner. The main header features the Climate Interactive logo with the tagline "tools for a thriving future" and social media icons for Facebook, LinkedIn, and Twitter. Below the header, a breadcrumb trail reads: "YOU ARE HERE: HOME / PROGRAMS / WORLD ENERGY / THE CLIMATE SOLUTIONS SIMULATION WORKSHOP".

The Climate Solutions Simulation Workshop

The Climate Solutions Simulation Workshop helps build support for strategies to address climate change via interactive testing of a cutting-edge simulation model. The resulting experience is hopeful, scientifically-grounded, action-oriented, and eye-opening.

Participants discuss their actions at any level — business, community, country, or region — and then use the [En-ROADS simulator](#) to learn of the global impact (e.g., can we limit warming to 2 degrees?) if the action spread widely. Many report surprises — some strategies are much higher leverage than we think (and likewise).

The workshop is designed to be run by facilitators with a wide range of skills and is widely accessible — the simulation and materials are all "open source." Events can last from 30 minutes to three hours and include 3-100 people.



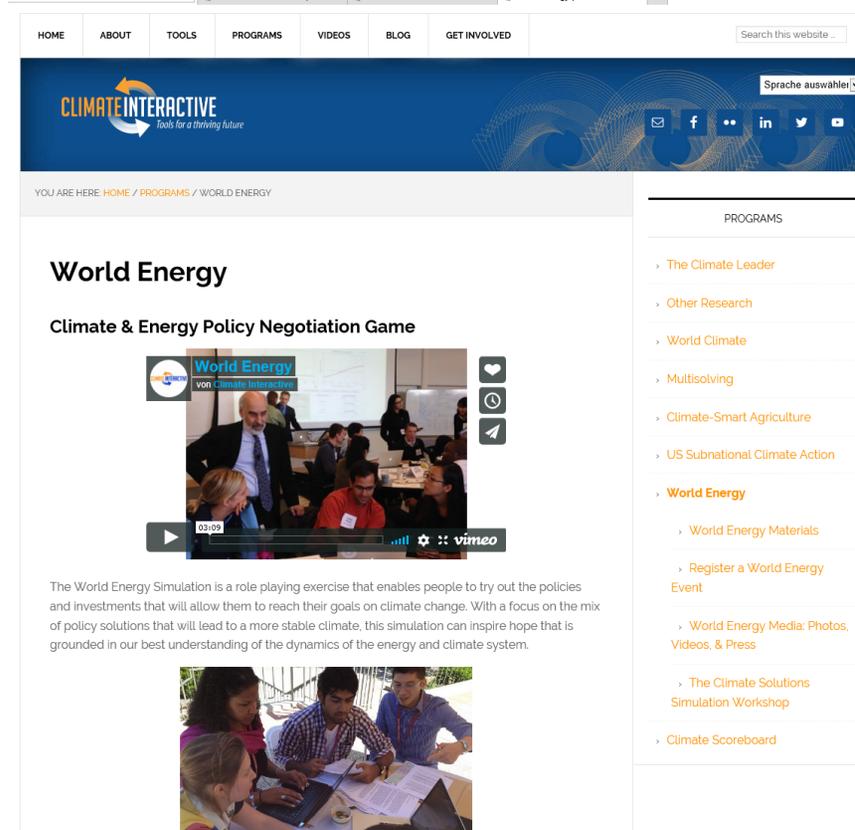
PROGRAMS

- › [The Climate Leader](#)
- › [Other Research](#)
- › [World Climate](#)
- › [Multisolving](#)
- › [Climate-Smart Agriculture](#)
- › [US Subnational Climate Action](#)
- › [World Energy](#)
 - › [World Energy Materials](#)
 - › [Register a World Energy Event](#)
 - › [World Energy Media: Photos, Videos, & Press](#)
 - › [The Climate Solutions Simulation Workshop](#)
 - › [Climate Scoreboard](#)

Further Information: World Energy – Simulation-Based Roleplay

We have developed a “role-play” around the En-ROADS version of the workshop:

<https://www.climateinteractive.org/programs/world-energy/>



The screenshot displays the website for Climate Interactive, specifically the 'World Energy' program page. The navigation bar includes links for HOME, ABOUT, TOOLS, PROGRAMS, VIDEOS, BLOG, and GET INVOLVED, along with a search bar and a language selection dropdown. The main content area features a video player for 'World Energy' by Climate Interactive, with a description: 'The World Energy Simulation is a role playing exercise that enables people to try out the policies and investments that will allow them to reach their goals on climate change. With a focus on the mix of policy solutions that will lead to a more stable climate, this simulation can inspire hope that is grounded in our best understanding of the dynamics of the energy and climate system.' Below the video is a photo of participants in a workshop. A right-hand sidebar lists various programs, with 'World Energy' highlighted and expanded to show sub-items like 'World Energy Materials', 'Register a World Energy Event', 'World Energy Media: Photos, Videos, & Press', 'The Climate Solutions Simulation Workshop', and 'Climate Scoreboard'.

Climate Interactive: About and Contact

- Climate Interactive is a not-for-profit organization based in Washington DC. Our team helps people see what works to address climate change and related issues like energy, health, food security, and disaster risk reduction. Our easy-to-use, tangible, scientifically-grounded tools as well as our programs for engagement help people see for themselves what options exist today to shape the future they want to see.
- We create simulation models and interactive tools, such as the C-ROADS climate policy simulator, the En-ROADS energy policy and investment simulator, and the Climate Pathways mobile app.
- We help organizations and governments improve their strategies, such as mapping how policymakers can improve health and jumpstart the economy while also reducing climate change and modeling ways to improve food security and adapt to climate change with climate-smart agriculture.
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- <https://www.climateinteractive.org/>

