

RAMÓN BUENO

rbueno@alum.mit.edu
www.linkedin.com/in/buenoramon
Skype: bueno.ramon

Tel: +1 (617) 939-7024
1 Fitchburg St., B550. Somerville, MA 02143

SUMMARY

Since 2007 I have specialized in the modeling and analysis of the economics of climate change impacts and mitigation. I engage with groups in modeling, analysis and discussions that explore, connect and communicate these and their implications within an overall sustainability strategy. Development resilient to projected climate changes depends on a comprehensive transformation toward low-carbon energy and resource use patterns and the systems infrastructure, policies and practices that enable it, along with flexible adaptation planning sensitive to socioeconomic vulnerabilities.

Experienced in consulting studies and models specializing in the analysis of the economics of climate change impacts and emissions. More than 20 years' experience designing, building and using analysis models and information systems for a wide range of multi-disciplinary applications, from business intelligence to public policy. Creating tools to match and support —and sometimes discover— analysis of their essential elements has given me a keen understanding of the modeling challenge: being “flexibly appropriate” in balancing complexity vs. simplicity with the resources available for the task at hand, to formulate and answer the relevant questions.

Fluently bilingual in English and (native) Spanish, with good inter-personal skills, I am experienced presenting results in high-quality written documents and have given presentations and radio interviews in both languages in the United States and the Caribbean/Latin American region. I work well in teams — the right fit can be highly productive.

EXPERIENCE

Climate Change & Development Specialist, *Independent Consultant* (mid 2013 – current)

Nov 2014-Feb 2016: Consulting researcher/analyst and contributing author for **Union of Concerned Scientists** (UCS) report on coastal “climate equity hotspots” along the Gulf and Atlantic coasts of the U.S. that face heightened vulnerability to climate impacts due to joint climate and socioeconomic risk factors, where additional attention and resources are required. s
“Surviving and Thriving in the Face of Rising Seas: Building Resilience in Communities on the Front Lines of Climate Change” (2015). Editor and assistant translator of Spanish version of executive summary: “Sobrevivir y prosperar ante el crecimiento de los mares: Creando resiliencia en las comunidades de primera línea frente al cambio climático” (plus blog posting in Spanish)

Recent Articles (LinkedIn):

“Puerto Rican Lens to a More Sustainable Climate Future” (December 2016)
“Why the Paris Climate Agreement Still Falls Short – Even Before Trump and COP22” (December 2016)
“COP22, Hurricane Matthew, and Beyond” (November 2016)

Independent research / contributions

- Took 15-hour workshop “Measuring Socioeconomic Vulnerability: Customized Indicators for Better Public Policies” at MIT’s Dept. of Urban Studies & Planning (January 2017)
- Advisory Group member to Somerville, MA climate change vulnerability assessment (CCVA) project
- Exploratory contacts and discussions with Cuban academics and researchers in several cities (Havana, Cienfuegos, Santa Clara), focusing on climate change and energy (efficiency, renewables)
- Volunteer assistance to Boston area professionals and academics on climate change-related educational and participatory processes.

Climate Economics Group (CEG) at Stockholm Environment Institute–U.S. Center, Somerville, MA. *Staff scientist*, 2008-2013; CEG earlier at Tufts University’s **Global Development and Environment Institute**, Somerville, MA. *Research fellow, Climate Economics*, 2007-08

Developed/programmed the Climate and Regional Economics of Development (CRED) model in GAMS/ Excel, a 16-region integrated assessment model with a central focus on the global distribution of climate damages and climate policy costs (see <http://sei-us.org/publications/id/463>); modified/extended the well-known Dynamic Integrated Climate Change (DICE) model to explore catastrophic risks and uncertainty; developed the Consumption-based Emissions Inventory (CBEI) model, implemented for Oregon, King County (Oregon), California, and San Francisco County (CA); conducted regional studies of the cost of climate inaction, especially the Caribbean (see publications); review of Mexico greenhouse gas mitigation studies. Basic introduction to [LEAP](#) (Long range Energy Alternatives Planning System) model for energy policy analysis and climate change mitigation assessment.

Comverse Inc./CSG Systems Inc./Lucent Technologies/Kenan Systems Corporation/Consultants for Management Decisions Inc. (same evolving organization), Cambridge, MA

Strategic information/decision support/business intelligence systems, software developer/architect, internal consultant, 1985-2007

Previous:

Metcalf & Eddy Inc., Boston and Wakefield, MA
Senior programmer and analyst
Massachusetts Institute of Technology, Cambridge, MA
Multi-regional planning staff, Department of Urban Studies and Planning
Draper Laboratories, Cambridge, MA
Software analyst, space shuttle navigation
Intermetrics Inc., Cambridge, MA
Software performance analyst, space shuttle navigation system

EDUCATION

Massachusetts Institute of Technology

Mid-Career Acceleration Program Certificate

Master of Science (systems modeling and optimization)

Bachelor of Science (aeronautics and astronautics)

VOLUNTEER / OTHER ACTIVITIES

- Member, Brickbottom Artists Building, Condominium Board of Trustees (Somerville, MA; served 2007 - 2013)
- Member, Board of Directors of Cuban-American Research & Education Fund (CACREF). Served several years in late 1980s to mid 1990s, with a term as board president. Non-profit promoting humanitarian agenda for divided Cuban-American families via improved relations between the United States and Cuba.

TECHNICAL SKILLS

High-level modeling experience, in-depth in Excel, General Algebraic Modeling System (GAMS), and multi-dimensional / business intelligence applications; some experience with IMPLAN data and Stata data analysis; plus MS Word, Powerpoint.

PRESENTATIONS

“Cambio climático y el Caribe: ¿Costosa inacción o nueva oportunidad/visión?” keynote lecture at *Conferencias Caribeñas* series, Instituto de Estudios del Caribe, University of Puerto Rico, November 4, 2014; “Conversatorio: “El rostro humano del cambio climático,” with Dr. Rafael Méndez Tejeda, UPR-Carolina, November 3, 2014.

“Sustainable Caribbean: Climate-Energy Challenge Oil vs. Renewable Energy,” at 5th CIEMADeS International Conference *Sustainable Development: Linking Industry & Environment*, May 18, 2012. Universidad del Turabo, Puerto Rico.

“CRED: Climate and regional economics of development,” *Workshop on Climate Change Economics Modeling*, Instituto Nacional de Ecología, Mexico April 17-19, 2012.

“El Caribe, Puerto Rico y el Cambio Climático: el Costo de la Inacción,” *Enfrentando el Cambio Climático, II Cumbre*, Universidad de Puerto Rico, Carolina, April 29, 2010.

PUBLICATIONS

Journal Articles / Working Papers:

“[Epstein-Zin utility in DICE: Is risk aversion irrelevant to climate policy?](#)” (2012). Frank Ackerman, Elizabeth A. Stanton, and Ramón Bueno. *Environmental and Resource Economics*, March 2013. DOI 10.1007/s10640-013-9645-z.

“[CRED: A new model of climate and development](#)” (2013). Frank Ackerman, Elizabeth A. Stanton and Ramón Bueno. *Ecological Economics* Volume 85, January 2013, pp. 166-176 (posted *in press* online in 2011); Also published as UN Department of Economic and Social Affairs (DESA) 2010 working paper No. 96.

“[Fat Tails, Exponents, Extreme Uncertainty: Simulating Catastrophe in DICE](#)” (2010). Frank Ackerman, Elizabeth A. Stanton and Ramón Bueno. *Ecological Economics* 69:9, pp. 1657-1665 (or, [earlier version](#)).

Working Papers and White Papers:

[“Climate policy and development: an economic analysis”](#) (2012). Frank Ackerman, Elizabeth A. Stanton and Ramón Bueno. Working paper. Submitted September 2012 for consideration for publication in *Climate and Development*.

[“Reason, Empathy, and Fair Play: The Climate Policy Gap”](#) (2012). Elizabeth A. Stanton, Frank Ackerman, and Ramón Bueno. SEI Working Paper 2012-02. Also published as UN Department of Economic and Social Affairs [\(DESA\) 2012 working paper No.113](#), and as [SEI Discussion Brief](#).

[“Estimating Regions’ Relative Vulnerability to Climate Damages in the CRED Model”](#) (2012).

Elizabeth A. Stanton, Jeffrey Cegan, Ramón Bueno and Frank Ackerman. SEI Working Paper WP-US-1103.

[“CRED v.1.4 Technical Report”](#) (2012), [“CRED v.1.3 Technical Report”](#) (2011). Frank Ackerman, Elizabeth A. Stanton, and Ramón Bueno. SEI Technical Reports.

[“Comparing climate strategies: Economic optimization versus equitable burden-sharing”](#) (2011).

Frank Ackerman, Ramón Bueno, Sivan Kartha and Eric Kemp-Benedict. SEI Working Paper WP-US-1104.

[“Use of McKinsey abatement cost curves for climate economics modeling”](#) (2011). Frank Ackerman and Ramón Bueno. SEI Working Paper WP-US-1102.

[“Casting DICE for 350 ppm”](#) (2011). Ramón Bueno and Elizabeth A. Stanton. SEI Working Paper WP-US-1101.

Reports and Policy Studies:

[Greenhouse Gas Emissions in King County: An Updated Geographic-plus Inventory, a Consumption-based Inventory, and an Ongoing Tracking Framework](#) (Forthcoming) Peter Erickson, Michael Lazarus, Elizabeth A. Stanton, Chelsea Chandler, Ramón Bueno, Frank Ackerman, Charles Munitz, and Jeff Cegan. Prepared for King County, Washington.

[Consumption-Based Greenhouse Gas Emissions Inventory for Oregon – 2005: Technical Report](#) (2011). Elizabeth A. Stanton, Ramón Bueno, Frank Ackerman, Peter Erickson, Roel Hammerschlag, and Jeff Cegan. Prepared for the State of Oregon Department of Environmental Quality.

[Consumption-Based Emissions Inventory for San Francisco: Technical Report](#) (2011). Elizabeth A. Stanton, Ramón Bueno, Jeffrey Cegan, and Charles Munitz. Prepared for the City of San Francisco, California.

[King County Community Greenhouse Gas Emissions Inventory – Consumption Methodology: Technical Report](#) (2011). Elizabeth A. Stanton, Ramón Bueno, Jeffrey Cegan, and Charles Munitz. Prepared for King County, Washington.

[Real People, Real Impacts: The Climate Impact Equity Lens](#) (2011). Elizabeth A. Stanton, Ramón Bueno and Marion Davis. A Stockholm Environment Institute Report; and case study: [SEI-CIEL for the Caribbean: The Climate Impact Equity](#) (and [SEI-CIEL para el Caribe: La Lente sobre la Equidad del Impacto Climático](#), tr. R.Bueno). Elizabeth A. Stanton, Ramón Bueno, Marion Davis. January 2012.

[The CIEL Backgrounder: Understanding the Climate Impact Equity Lens](#) (2011). Elizabeth A. Stanton and Ramón Bueno. A Stockholm Environment Institute Report.

[The Caribbean and Climate Change: The Costs of Inaction](#) (2008). Ramón Bueno, Cornelia Herzfeld, Elizabeth A. Stanton and Frank Ackerman. Report commissioned by the Environmental Defense Fund. I translated the Spanish edition, [El Caribe y el Cambio Climático: Los Costos de la Inacción](#).