Eric Scheier

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Profile Distributed energy innovator and macro energy systems scientist unlocking the value of sustainability for everyone

Skills Energy Modeling · Risk · Environmental Commodities · Machine Learning · Scientific Software · Research & Development

Industry

I am a clean energy quant working to democratize access to distributed energy resources during the energy transition

Innovator *in the* **Solar Energy Innovators Program (SEIP)** Mar 2022 - Oct 2022

Evaluated the relationship between distributed energy resource adoption and home energy burdens among United States distribution and generation utilities using agent-based models and behavioral research as part of an experimental fellowship program of the US Department of Energy.

Quantitative Analyst *at* **ENEL Energy & Commodity Management; Risk & Strategy** Jul 2021 - Apr 2022

Developed SQL queries, Excel/VBA tools, PowerBI dashboards, and RMarkdown/Jupyter notebooks to manage risk in the ERCOT, CAISO, PJM, SPP, MISO, NYISO, NEPOOL, and Alberta power and environmental markets for solar, storage, and wind assets. Aggregated prices from DART to long-term forwards for daily mark-to-market via an ETRM and presented weekly weather and REC forecasts to the executive team and traders.

Principal Consultant *at* **CleanTechPulse** Apr 2014 - Oct 2018

Collaborated with DER service providers to develop solutions such as a business model for off-grid solar deployment in Rwanda, a machine learning algorithm to estimate the operational prowess of solar installers in California, and a DER program for religious groups in North Carolina.

Quantitative Systems Developer *at* **Altfund** Oct 2014 - Oct 2018

Created a software-as-a-service portfolio management platform and an open-source algorithmic trading toolkit for digital assets in R and Python.

Portfolio Analyst *at* **Sol Systems** May 2013 - Apr 2016

Forecasted supply, demand, and prices in US SREC markets using capacity expansion models to support solar project development and operations.

Sustainability Reporting Intern *at* **UNC Energy Services** Apr 2011 - Dec 2011

Assembled the campus's comprehensive sustainability report of green campus projects and AASHE Sustainable Campus Index compliance report.

Academia

I am a member of the following professional research organizations: INFORMS, USAEE, BECC, APPAM

Master of Science *in* **Ecology** *at the* **University of North Carolina - Chapel Hill (UNC)** Aug 2019 - May 2021

Worked with the Sustainable and Resilient Energy Group as Noah Kittner's first graduate student advisee to propose a new energy poverty metric based on net energy analysis and prosumerism. Received sponsorship from University entrepreneurship programs to commercialize this work.

+ E. Scheier, N. Kittner. A measurement strategy to address disparities across household energy burdens. *Nature Communications* **13**, 288 (2022).

Teaching Assistant *in the* **Environment, Ecology, and Energy Program (E3P)** Jan 2020 - May 2021

Held office hours and facilitated assignments for undergraduate courses about the fundamentals of energy economics and sustainability.

Bachelor of Science *in* **Environmental Science and Economics** *at* **UNC** Jun 2010 - May 2014

Focused on energy and sustainability with minors in mathematics and entrepreneurship. Field research experience included surveying local businesses' willingness to pay for clean energy in Cambridge, England, and assessing the life cycle impacts of a Thai island microgrid.

+ Cameron Smith, John Burrows, Eric Scheier, Amberli Young, Jessica Smith, Tiffany Young, Shabbir H. Gheewala. Comparative Life Cycle Assessment of a Thai Island's diesel/PV/wind hybrid microgrid. *Renewable Energy* **80**, 85 (2015).

Service

I am a dedicated public servant with over a decade of hands-on experience in renewable energy public finance

Oct 2018 - Present — **Chair of Emergi** — *Southeastern United States*

Worked with a co-founder to combine sustainability science, behavioral research, and quantitative finance best practices into a clean energy product that helps members go green, make money, and grow their communities using solar energy and other DERs.

Dec 2020 - Feb 2022 — **Member** *of* **Orange County Commission for the Environment** — *Orange County, North Carolina*

Appointed adviser to the Board of County Commissioners on the deployment of $500k/year climate tax and related matters.

May 2020- May 2021: — **Director** *of* **Sustainability and Transportation** — *UNC Graduate and Professional Student Government*

Coordinated graduate student transportation programs and directed sustainable investment of student fees during unprecedented times.

Jul 2019: — **Holder** *of* **Series 65 (Uniform Investment Adviser Law Exam)** — *Financial Industry Regulatory Authority*

Qualified to provide general investment advice to clients, oversee their accounts, and provide advisory services to external parties.

Jan 2019: — **Graduate** *of* **Smart Contract Developer Program** — *ConsenSys Academy*

Implemented foundational smart contract concepts and best practices by creating and deploying a dApp for project finance use-cases.

Sep 2015 - Dec 2015: — **Fellow** *of* **Clean Energy Leadership Institute (CELI)** — *Washington, DC*

Trained on the fundamentals of key market principles and clean-energy leadership development with top clean-energy experts.

Aug 2010 - May 2014: — **Member** *of* **Renewable Energy Special Projects Committee (RESPC)** — *UNC*

Managed a $250k/year green grant pipeline and helped permanently renew the committee's funding through a local ballot initiative.