

ZACHARY DANIEL GAEDDERT

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Citizenship: United Kingdom, United States

[LinkedIn](#) | [GitHub Data Science Portfolio](#)

Experience

Emitwise **January 2021 – Present**
Carbon Accountant **London, United Kingdom**

- Data science lead within Carbon Accounting team. Drawing from broad professional/academic experience in energy and climate policy to develop and enhance GHG accounting methodology in startup environment.
- Building client-facing input-output models in Excel (e.g., to calculate downstream emissions for clients' sold products), automating internal processes with R, and developing geospatial analysis tool in software product.
- Building strong relationships with customers in heavily client-facing role. Independently leading weekly check-ins with three clients and regularly presenting own research/methodology in formal deliveries.

New York State Energy Research & Development Authority (NYSERDA) **May 2020 – December 2021**
Intern, Building Electrification (part-time during Master's) **New York, NY**

- Spearheaded development of baseline heating and cooling market characterization. Used R and Excel to import, clean, manipulate, and visualize high volume of census, survey, and audit data that will inform the Building Electrification and Efficiency Model (BEEM), part of the \$230m [NYS Clean Heat Plan](#).
- Independently developed innovation scenario analysis for BEEM, including key assumptions, inputs, data collection from engineers, and sensitivity analyses.
- Presented data-driven market research on weekly interagency calls with New York's Department of Public Service (DPS), including directors of both organizations, assessing impact of state's regulatory framework on heat pump deployment. Research facilitated key changes in existing incentive structures.

Wood Mackenzie Power & Renewables **January 2021 – June 2021**
Student Consultant (part-time during Master's) **New York, NY**

- Co-authored WoodMac's [Lessons Learned from V2X Projects of Electric Bus Fleets](#) report. Led research and project management for transit bus use case – using London as a case study, research involved technical interviews and data collection from senior stakeholders at SSE, UKPN, and Origami.

Vivid Economics **June 2018 – December 2019**
Analyst, Energy & Industry **London, United Kingdom**

- Co-authored and published reports with the [International Renewable Energy Agency](#) (IRENA), [World Wildlife Fund](#) (WWF), and the [Inter-American Development Bank](#) (IDB).
- Engaged extensively with clients to drive project methodology. For example, independently designed methodology for conducting lifecycle assessments for major European industry body of an energy-intensive sector on a project that client used to lobby to the European Commission to impact regulatory outcomes.

Education

Columbia University, School of International and Public Affairs **December 2021**
New York, NY

- Master of Public Administration (MPA), Energy and Environment | Data Science.
- Final GPA: 3.89
- Previous semester coursework: Renewable Energy Project Finance Modeling (A), Infrastructure Cost-Benefit Analysis (A), Carbon Pricing (A), Applied Econometrics (A).

University of St Andrews **June 2016**
Fife, Scotland

- BA (Honours) International Relations with Modern Languages (Russian and Persian).
- First-class honours ([GPA equivalent \$\approx\$ 3.8](#)) with distinction in spoken Russian and Persian.

Additional Information

- Data Science: Strong skills in R (interactive app building/reactive coding – see ShinyApps [here](#) and [here](#), advanced geospatial analysis, basic data automation). Basic knowledge of Python and JavaScript.
- Advanced Microsoft Excel (strong VBA, macros, financial modeling, database management, pivot tables).
- Fluent Russian speaker with official Russian State certification of professional working fluency. Basic working knowledge of Spanish and Persian
- Avid traveler (have visited every former Soviet Country), dog lover, and football (soccer) enthusiast.