

# ZACHARY DANIEL GAEDDERT

zdg2105@columbia.edu | +44 7736 084 636

Citizenship: United Kingdom, United States

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

## Experience

---

### Emitwise

#### Carbon Accounting Lead

London, United Kingdom

September 2021 – Present

- Client lead on carbon accounting strategy for three multinational manufacturing companies. Working closely with Chief Sustainability Officers and other relevant representatives from companies to shape strategy and methodology to calculate carbon intensity across the entire value chain in line with pending legislation.
- 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.

#### Carbon Accounting Analyst

January 2021 – September 2021

- 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.

### New York State Energy Research & Development Authority (NYSERDA)

New York, NY

#### Intern, Building Electrification (part-time during Master's)

May 2020 – December 2021

- 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](#).
- 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

New York, NY

#### Student Consultant (part-time during Master's)

January 2021 – June 2021

- 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 (now McKinsey & Company)

London, United Kingdom

#### Analyst, Energy & Industry

June 2019 – December 2019

- 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

- Master of Public Administration (MPA), Energy and Environment | Data Science. New York, NY
- Final GPA: 3.89
- Final 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

- BA (Honours) International Relations with Modern Languages (Russian and Persian). Fife, Scotland
- First-class honours ([GPA equivalent ≈ 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.
- Avid traveler (have visited every former Soviet Country), dog lover, and football (soccer) enthusiast.