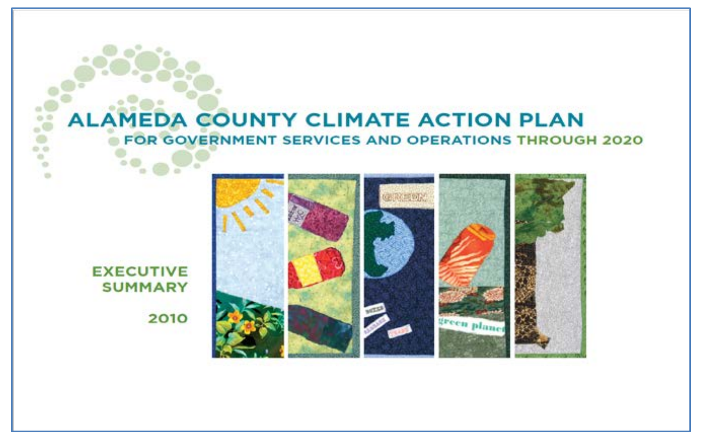
Environmentally Responsible Investing

County of Alameda

Climate Corps 17-18

Aligning Money and Values

Alameda County Climate Action: Investigating Investment Impact



One of the measures recommended in the Board-adopted Climate Action Plan for Government Services and Operations directs the County to review its investments in fossil fuel companies. I took on the challenge of investigating how much of the County's pension fund is invested in fossil fuel companies.

The State of California has divested from non-domestic thermal coal holdings, and the City of New York has created a task force to identify and divest from $5 billion of holdings in all fossil fuel extraction companies.

While the Alameda County Employees' Retirement Association (ACERA) has a history of banning investments in tobacco companies, its investment committee has only recently started to explore environmental investing criteria. This, combined with the fact that ACERA has received national recognition for its financial prudence, created an opportunity for a fossil fuel equity analysis to inform the committee.

Richmond Refinery | Photo Credit: Nick Fullerton, Flickr

Designing a Process to Assess Fossil Fuel Equity in Pension Investment Portfolio

In order to make a recommendation to ACERA's Board of Trustees regarding how to shift away from fossil fuel holdings and towards investment in emerging renewable energy and sustainability companies, we needed to know how much of ACERA's portfolio included fossil fuel company equity. This diagram shows the development process behind the assessment.

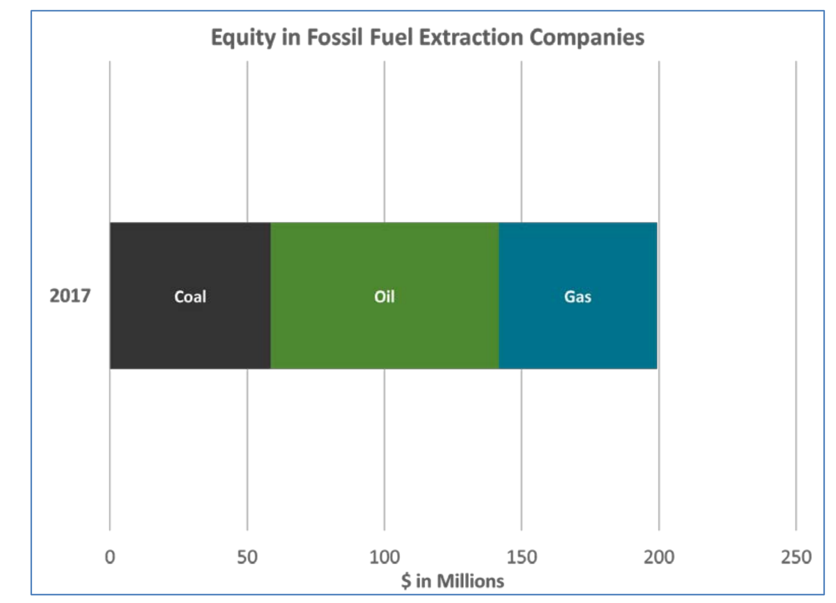
Raw Data → Cleaned Data → Text Match Algorithm → Fair-Share Analysis → Summary Statistics → Data Visualization

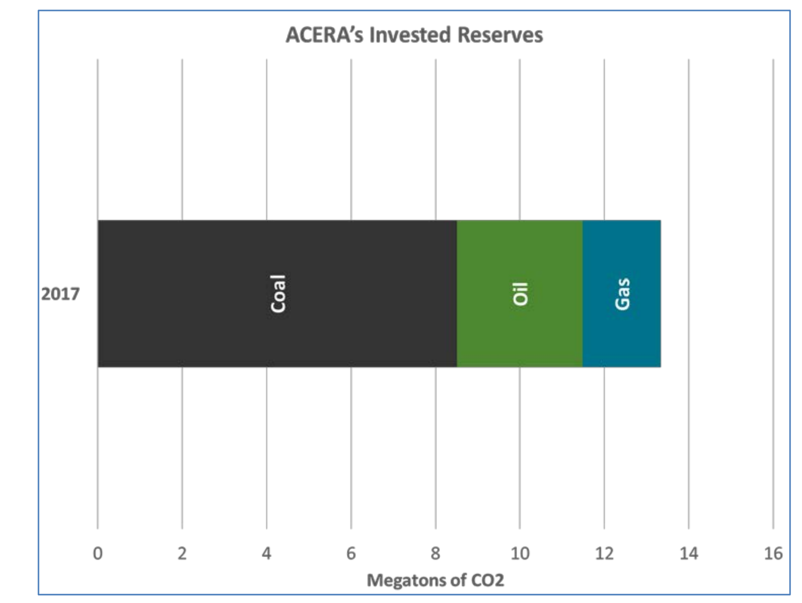
ACERA's Fossil Fuel Investments

Assessment of Individual Equity Holdings from 2014 to 2017

Most equity **dollars** were invested in oil and gas, yet most embedded **emissions** came from coal.

As of December 2017, 4% of ACERA's individual equity holdings, **$200M**, were invested in fossil fuel company stocks. This means ACERA owned **13.5 metric tons CO_2e** in fossil fuel reserves.





Open Source, Self-Service Assessment

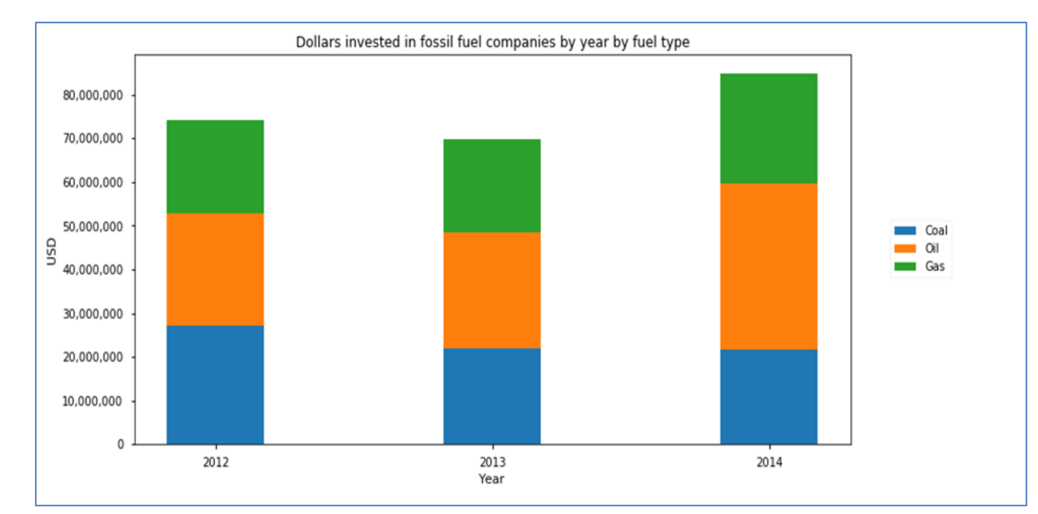
Through this process, I developed software to be available to any other fund which wishes to assess its own fossil fuel investments: https://github.com/jimmycdunn/fossil-fuel-equity-finder

Open Source Advantages

→ Removes cost barrier for usage
→ Other developers can create personalized versions

Self-Service Advantages

→ Users knows own context better than consultants
→ Interactive visualizations give users ability to generate their own meaningful insights from their data



Example chart generated by my Fossil Fuel Equity Finder tool

Jimmy Dunn

After managing UC Berkeley's The Green Initiative Fund and consulting on contractual hospital revenue risk, I decided to join Climate Corps to marry my passion for environmental justice and my skillset in quantitative analysis. I will be pursuing a Masters in Data Science at UC Berkeley to continue working at this intersection.

Acknowledgements

Thank you to my co-fellows for their curiosity and resolve: Pallavi Sherikar, Sam Hill-Cristol, Kev Horng, Catherine Willett, and Camyle Allen. Thanks to the Python developer community for making the open source packages that enabled my work. Thanks to the Alameda County Sustainability team and my supervisor Emily Sadigh.

sei STRATEGIC ENERGY INNOVATIONS