

Corporate Investment vs Environmental

Proposal for CS3200

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Significance:

Climate change is a global challenge. We see an unprecedented opportunity for our clients to apply sustainable finance to make a global impact as changes occur. Total issuance of sustainable debt including green, social and sustainable bonds has surpassed one trillion dollars. Renewable Energy now accounts for a third of global power capacity. And environmentally conscious Millennials inherit more than fifty trillion dollars in the incoming decades.

For this project, we aim to investigate the correlation between specific corporate investments into energy consumption and pollution and their financial returns coupled with their impact on the socioeconomic status of the regions they are in. This correlation would help inform investors interested in sustainable investing of which companies are good investments for them based on their specific criterias for sustainability as well as the financial performance of the companies. Our goal is to develop an app that facilitates sustainable investing by providing data-driven insights on companies' environmental, social and governance initiatives. We want to be able to highlight the fact that young investors can make investment decisions that both align with their environmental values and make good returns in the long-term, pointing out trends that indicate an increased significance in a sustainable future.

Technologies:

We will be using Python for the development of the database and for the development of the app, MySQL for data storage and search/analysis of our database, GitHub for codesharing and program storage, Figma as our app planner/designer, MySQL Workbench for the ER diagrams and SQL scripts.

Data Sources:

Financial Data:

FRED - Federal Reserve Bank data on Finance and Economics (large)

OECD - Economics Database (large)

Investment Breakdown, shows the investment breakdown of 4 companies (by databricks)

<https://financialmodelingprep.com/> - historical financial data api

Top 17 Finance Database

data.world - financial data sets

Aswath Damodaran - finance professor with his own data sets on corporate finance in NYU

Socioeconomic Data:

Smoking Data in States - assigns grades to states based on usage of cigarettes

PSID - Institute for Social Research

IPUMS - Census and Survey Data

ANES - National Election Studies

USA data collections - Government Data

Census Data - census data from US

<https://databank.worldbank.org/source/environment-social-and-governance?preview=on> - environment-social-and-governance data

ESG/Sustainability Data:

National Energy Data, gives the energy usage for various parts of the US (from eia.gov)

ESG International Data, gives the ESG data of various Countries (from world bank)

United States CO2 Levels, gives the CO2 levels of various US locations (from ourworldindata)

National Energy Data, gives the energy usage for various parts of the US (from eia.gov)

<https://rapidapi.com/esg.enterprise.app/api/esg-environmental-social-governance-data> - ESG score API

<https://www.msci.com> - more esg

<https://database.globalreporting.org> - sustainability disclosure database

<https://ourworldindata.org/co2/country/united-states?country=~USA> - United States: CO2 Country Profile

General:

[AWS Search for Data Collections](#) - search for data stored on AWS server

[100+ Interesting Datasets](#)