









CDO Playbook Summary: 2021

Prepared by: Angel Rodriguez and Ariunbold Batjargal

@Angelprenuer & @abu_617

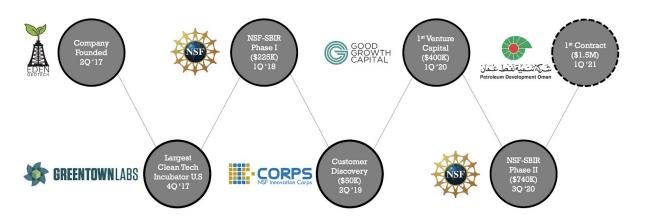
Mission and History

Mission

Eden Geotech is developing innovative geotechnical solutions for a sustainable energy future. The company mission is to help lead the transition from hydrocarbon fuel toward renewable forms of power. We are developing a business portfolio of proprietary technologies for petroleum, geothermal, and water desalination industries in the U.S and abroad as well as predictive data systems that help energy producers better understand their customers and their unique individual needs.

Company History

Eden Geotech is a Boston-based energy startup. The company is headquartered at Greentown Labs, the largest clean technology startup incubator in the United States. To date, Eden has been supported by the United States National Science Foundation (NSF) and the MiSK Foundation (Saudi Arabia).



Eden Geotech Roadmap (2017 - 2021)

Technology Portfolio

Electro-hydraulic Fracturing

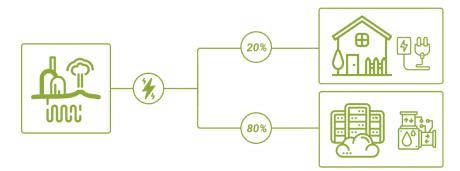
Whereas traditional hydraulic fracturing is expensive, environmentally hazardous and requires an abundant amount of water, Eden's **Electro-hydraulic Fracturing** technology provides a faster, safer and more cost-effective solution to reservoir stimulation. When compared to traditional methods, Eden's technology is especially advantageous in its higher recovery rate of fracturing fluids and reduced water use and groundwater contamination.

Wireless Power

Eden's **Wireless Power** technology provides a simple, yet reliable alternative to the current downhole power delivery methods: wired completion and lithium batteries. By utilizing piezoelectric devices, Wireless Power can harvest **vibrational energy** and convert it into electricity that can power downhole sensors and other technologies. Compared to the current methods, this is a more cost-effective and reliable solution that can be integrated into current well completion designs with minimum interference. This technology will also directly increase the capacity of data analytics to maximize oversight for oil & gas producers.

Geothermal Integration

Eden's technology portfolio also includes **geothermal technology** capable of harnessing the Earth's subsurface heat into clean electricity renewable resources. When this power is integrated into water desalination production and advanced computation, our geothermal technology can increase output from renewable sources and decrease dependence on fossil fuels.



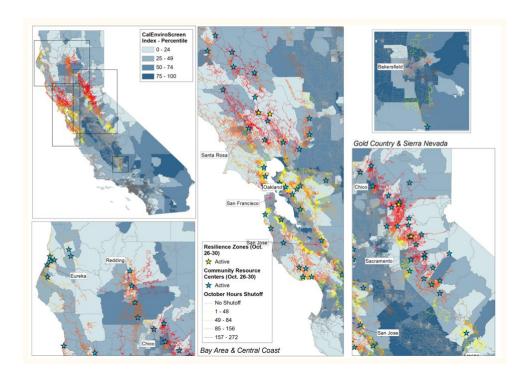
Science Policy Research

Overview

How will we use the data to measure social benefits linked to geothermal energy and impacts on public health and economic recovery for serviceable communities?

Data tracking algorithm to map energy insecurity in California under COVID-19, and make the case for a government-backed geothermal project.

As a direct result of climate change and the COVID-19 pandemic, there is an increasing demand for energy innovation. In areas like California where, in August of 2020, rolling blackouts left hundreds of thousands of households without power. The limited amount of publicly available data surrounding these shut-off events prevent researchers from accurately measuring its true impact, whose findings directly impact **COVID-19 and economic recovery** through **energy security** policies. Eden's solution will involve adequate research undertaken to inform scientific policy and the importance of government support for the business case for more tax-benefits and RECS toward geothermal projects.



Stolongo, Marissa, Cecilia Bolon, and Shalanda H Baker. "California Power Shutoffs: Deficiencies in Data and Reporting."