

OPEN DATA FACT SHEET

ENERGY & CLIMATE

This fact sheet is based on data from the Open Data Impact Map, a public database of organizations that use open data from around the world. 110 energy & climate-related organizations were assessed to develop these findings. To learn more, visit: <http://OpenDataImpactMap.org/energy>

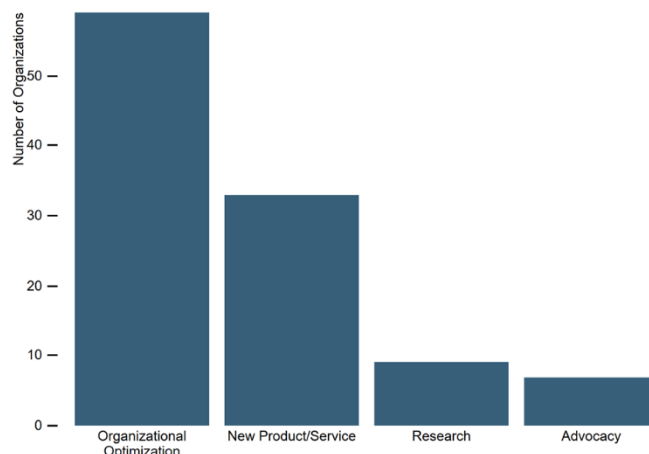
Open data is being used in this sector for environmental and energy use monitoring, to guide decisions on where and how to invest in energy infrastructure, and to assess the impact of climate change. The types of data most used in this sector include environmental, energy, and geospatial.

HOW ORGANIZATIONS USE OPEN DATA

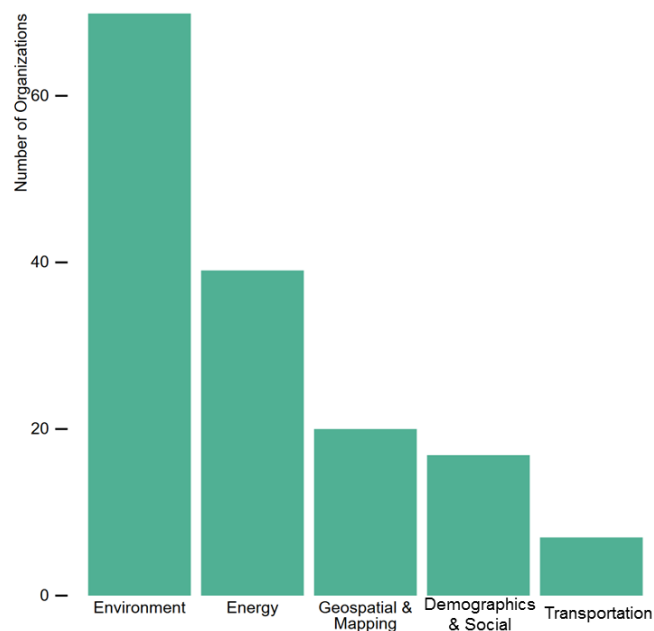
Around the world, organizations are utilizing open data to create and deliver energy solutions and monitor and develop approaches to climate change. They:

- Use environmental and climatic data to determine how meteorological conditions will impact wind, solar, and hydro power projects and combine it with population and energy consumption data to inform the location of energy infrastructure and investments
- Analyze weather, population and energy data to forecast energy consumption and production
- Optimize scheduling by predicting power output for each source of energy based on weather and energy production and consumption data, reducing the overall costs of integrating renewable energy sources onto the grid
- Utilize environmental and ecological information, land use, demographic and social data, to predict the social, economic and environmental impact of shifts in climatic conditions
- Use energy consumption data to help consumers manage existing power sources more efficiently and increase efficiency for industrial, commercial and residential buildings
- Incorporate open data in their research and advocacy work and publish analysis and recommendations

TOP APPLICATIONS OF OPEN DATA FOR THE SECTOR



TOP 5 DATA TYPES USED FOR THE SECTOR



USE CASES

Green Patrol

Advocates for environmental protection through regional investigations and civil society accountability measures

URL: <http://greenpatrol.ru/ru>

Country: Russia

Impact: Holds environmental violators accountable through an open platform

Data Used: Environmental data from regional data portals and Russia's Ministry of Natural Resources and Environment, including main air pollutants and surface water bodies, environmental protection expenditures; mortality and population data from the Russian Federal State Statistics Service

Haezoom

An online platform that calculates potential energy savings from installing solar panels on a user's residence

URL: <http://www.haezoom.com/>

Country: South Korea

Impact: Reduces asymmetric information between small solar panel brokers and consumers.

Data Used: Building, solar radiation, air temperature data from Korea's Ministry of Land, Infrastructure, and Transportation, Ministry of Environment, National Academy of Sciences, and Korea Meteorological Administration