

Project REDI: Renewable Energy Data Investigations

Principal Investigator: Carla McAuliffe

Funders: [National Science Foundation](#) and the [Massachusetts Technology Collaborative](#)

Project REDI is a collaborative project under development by TERC and KidWind, supported by the Massachusetts Technology Collaborative (MTC) and the National Science Foundation. Project REDI is developing a set of data-based inquiry investigations in which students analyze energy output and environmental variables from existing renewable energy installations. They compare and correlate data on solar irradiation, wind speed, and energy output. Curriculum modules use renewable energy data that can be downloaded from online services. One module is focused on wind energy while the other is focused on solar energy. In the wind energy module, students use online data sources to explore the science of wind energy development and wind turbine energy production. In the solar energy module, students use online data sources to explore the influence of time of day, season, location, weather, and sun position on solar panel energy production.