

NATIONAL RENEWABLE ENERGY LABORATORY



The National Renewable Energy Laboratory (NREL) is the nation's leading National Laboratory for research and development in renewable energy and energy efficiency technologies. NREL's mission is to develop renewable energy and energy efficiency technologies and practices, advance related science and engineering, and transfer knowledge and innovations to address the nation's energy and environmental goals. NREL's research programs include basic energy research, photovoltaics, wind energy, building technologies, biomass power, biofuel, fuels utilization, solar industrial technologies, solar thermal electric, hydrogen, geothermal power, superconductivity, economic and policy analysis of renewable technologies, international development of renewable energy, and advanced vehicle technologies. *Research and Development*, *Discover*, *Scientific American* and *Popular Science* magazines have ranked many of NREL's research achievements among the nation's most significant technical innovations. NREL was recognized as one of the "Scientific American 50" for their contribution to science and technology. NREL was selected for their work in increasing the efficiency of photovoltaic solar cells. NREL's research into multi-junction solar cells has led the way to more efficient cells, offering the potential of cheaper electricity from the sun. Multi-junction solar cells use multiple layers of semiconductor material to absorb light and convert it into electricity more efficiently than single-junction cells. The cost of electricity from photovoltaic panels that convert sunlight directly into power has dropped from several dollars per kilowatt-hour, to 20-25 cents a kilowatt-hour today. NREL's 300-acre campus is nestled at the foot of South Table Mountain in Golden, Colorado.