GLOBAL GRAND CHALLENGE: Optimizing use of Critical Resources: Water, Energy, and Environment

OUR CRITICAL RESOURCES

WATER • ENERGY • ENVIRONMENT are linked in science and in solutions: CSU is providing solutions to the interlinked challenges.

Despite substantial progress in air quality improvement, approximately 75 million people in the U.S lived in counties that had pollution levels above the primary National Ambient Air Quality Standards in 2013. (Source: USEPA)

OVER 160 FACULTY MEMBERS work to develop large-scale energy solutions in diverse areas such as:

- Batteries
- Engines
- Combustion
- Advanced biofuels
- Oil and gas tech
- Photovoltaics
- Energy materials
- Smart grids
- Energy policy
- Energy use behavior
- Tech for the developing world

Conduct multidisciplinary research to improve the environmental sustainability of biofuels – improving greenhouse gas reductions, lowering water requirements, and enhancing economics.

MORE THAN 40 CSU FACULTY MEMBERS

1.9 BILLION gallons of produced water come from oil and gas operations each day.

CSU’s Center for Energy Water Sustainability is working with industry to treat and beneficially reuse this critical resource.

BETWEEN 1980 – 2013

- U.S. POPULATION GREW BY 39 PERCENT
- ENERGY CONSUMPTION increased 25 percent
- IN TOTAL EMISSIONS of the 6 principal air pollutants 62% DROP
- GDP 145% increase

0.95% INCREASE } vehicle miles traveled

Thank you to our valuable funding partners who help make research at CSU possible. If you are interested in getting involved visit supporting.colostate.edu.

Colorado State University
Vice President for Research