GLOBAL GRAND CHALLENGES

WAYS TO THINK ABOUT HOW CSU IS 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

BETWEEN 1980 ↔ 2013

U.S. POPULATION GREW BY 39 PERCENT

ENERGY CONSUMPTION increased 25 percent

GDP 145% increase

IN TOTAL EMISSIONS of the 6 principal air pollutants

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

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

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.