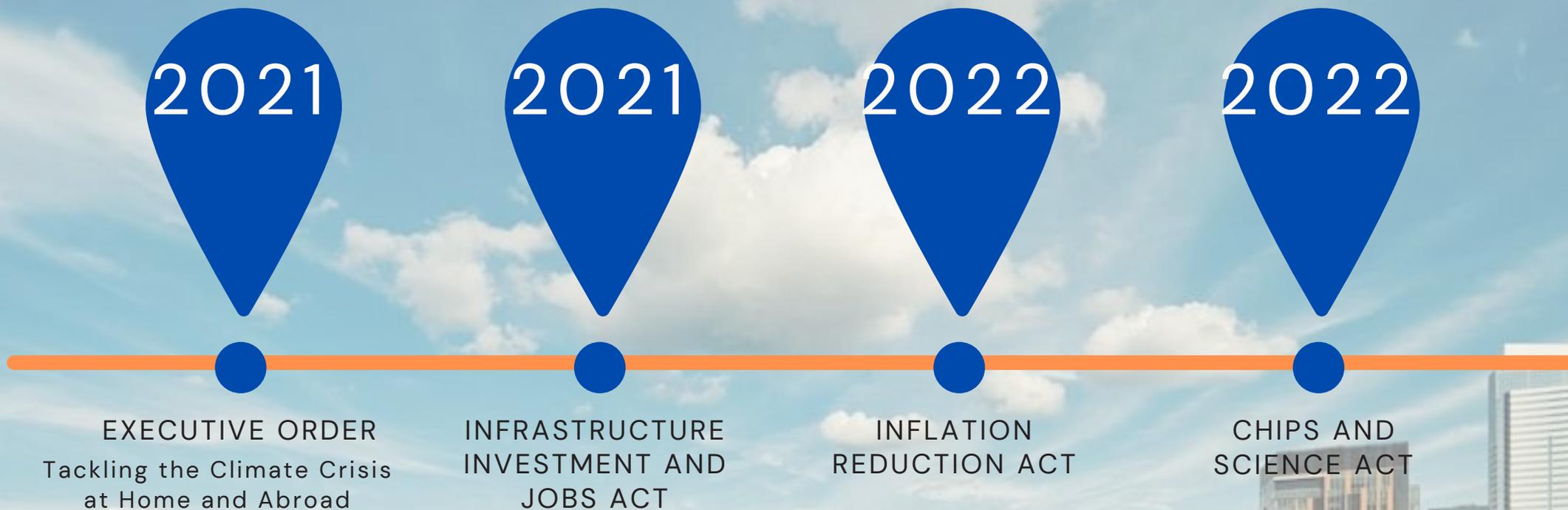


Climate and Energy Technologies

Dr. Anna Sberegaeva

Associate Director for Science and Technology Planning
and Coordination,
Program Coordination Office

Policy Landscape

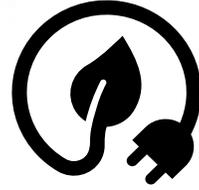


Climate at NIST



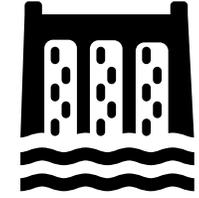
Climate Monitoring and Measurements

- Traceability of GHG measurements
- GHG measurement technology
- Ensuring climate data quality and standardization



Decarbonization of the Economy

- Built environment
- Energy infrastructure
- CDR, CCUS
- Manufacturing



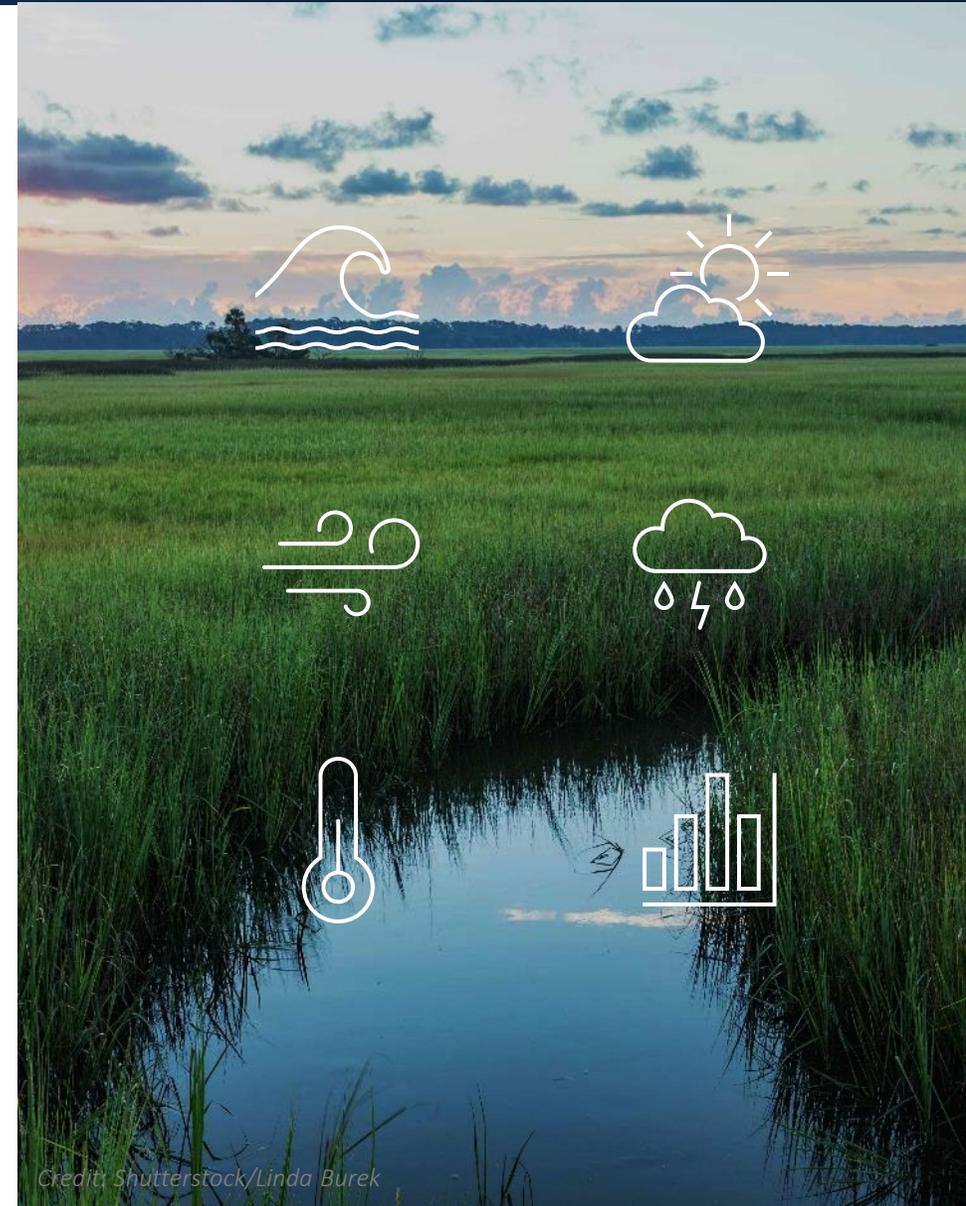
Adaptation and Resilience

- Disaster and failure studies
- Wildland-Urban Interface fires
- Community resilience
- Connected systems resilience

New Center of Excellence in Climate Measurements



- **Concept:** integrate data from physical, biological, and social sciences and establish national standards and measurements for tracking the climate
- **Intended Impact:** develop reliable tools for modeling, forecasting, and measuring climate impacts on specific communities. Convener, leader, and a hub.



Climate Planning for Community Resilience Workshops



Sea Level Rise and Coastal Storm Surge



Rainfall and Inland Urban Flooding



Wildfire and Urban Planning

Goal: To identify leading practices for incorporating climate projections in community resilience planning.

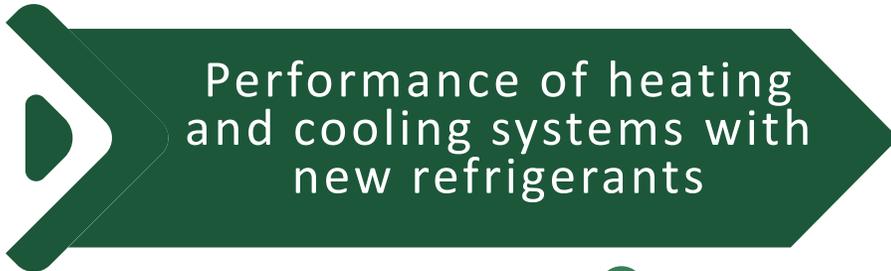
Understanding performance of refrigerants with low global warming potential



Fundamental refrigerant properties



Heat transfer performance in heat pump components



Performance of heating and cooling systems with new refrigerants



Assessment of installed safety of flammable refrigerants

Thank you
www.nist.gov/climate