

# Infrastructure Bill and Beyond

**Pace Energy and Climate Center**

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# Pace Energy and Climate Center

- Multi-disciplinary—economists, engineers, lawyers
- 32+ years in the New York and Northeast:
  - Intervene in electric and gas utility rate cases
  - Provide expert witness testimony in NY and across US
  - Engage in REV proceedings
  - Policy and reg analysis for state and federal agencies
  - Co-convene the Clean Energy Organizations Collaborative with the Alliance for Clean Energy NY
  - Energy Efficiency for All NY member
- Law student internship program with a focus on preparing practice-ready energy lawyers

# Challenging Times

- Congress divided and polarized – inaction
- Climate – tipping point imminent or past while
- Resources – national debt tripled since 2000 and
- Economic fundamentals – monetary policy
- Inflation – supply chain disruptions

# Energy Act of 2020

- **\$35 billion in energy investment**
- **Nuclear:** Accelerate the development of advanced nuclear reactors and fusion energy program, limits on Russian uranium imports
- **Grid Modernization:** accelerate modernization of the electric grid.
- **Renewables:** Streamline permitting on federal land and extended/expanded tax credits for geothermal, hydro, wind, solar
- **Rare earth minerals:** domestic supply chains
- **Energy storage:** smart grid and transmission coordination
- **Carbon Capture and Storage:** DOE commercialization programs and R&D funding, including extending 45Q tax credit
- **Energy efficiency:** programs for schools, federal buildings, industry; Weatherization Assistance, Federal Energy Management Program.
- **Natural Gas:** Pipes/pipeline safety
- **RD&DCA:** Reauthorize ARPA-E, DOE Loan Guarantee Program streamlining

# Infrastructure Bill

- Transmission expansion/resilience - \$73 billion
- Public Transit, Amtrak/rail, electric buses, EV charging
- Western water shortage
- Roads
- Bridges
- Ports, waterways
- Water pipes and water
- High-speed broadband internet

# Reconciliation - Human Infrastructure

- Indexing gas tax to inflation
- Reversing Trump corporate tax cuts
- Lowering Medicare eligibility to 60 + dental + vision
- Child allowances
- Free community college
- Drug prices
- Immigration - legalizing status of "Dreamers"
- Tax credits for environmental actions

# Consensus on Transmission

- Grid weaknesses, including cyber attack
- 700 GW renewables queue with high attrition
- Pays for itself
  - 1.2 to 2.9 benefit-to-cost ratio (NREL 2020)
- Cuts cost of decarbonizing in half
  - 46% reduction in 100% renewables (MIT 2021)

# Consensus Essential New Tech

- Nuclear
- Carbon capture and storage
- Hydrogen economy
- Smart grid, decarbonized power, storage

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