In December 2020, Congress passed, and the President signed, the $1.4 trillion fiscal 2021 appropriations bill — which earmarked substantial funding for clean energy R&D. This bill’s passage during a moment of historic partisan conflict is a potent signal of the virtue of what we have dubbed “quiet climate policy” — namely, its potential to simultaneously reduce the political polarization of climate change and advance critical efforts to decarbonize the US economy.

Historically, the US government has accelerated decarbonization through strategic investments in technology and infrastructure. Decarbonization of the American economy has depended upon the increasing affordability and scalability of low-carbon technologies enabled by decades of sustained, technology-specific research, development, demonstration, and deployment efforts made by the federal and state governments.

Like the popular, enduring policy regimes that have driven innovation in low-carbon technologies for decades, the policies and investments we propose below have the potential to drive real and disruptive technological transitions that build and lock-in lower-carbon energy, transportation, and agricultural systems.

**ENERGY**

**ENERGY INNOVATION** | Invest approx $68 billion | Gain 600,000+ jobs

*Invest in nuclear, geothermal, carbon removal, and energy storage*

- $10 billion in incentives for deployment of 6 GW of small modular advanced nuclear reactor capacity and $6.7 billion authorized by the Nuclear Energy Renewal Act for advanced nuclear innovation: 42,000 jobs
- $165 million over 5 years for geothermal innovation through AEIA: 3,500+ jobs
- $8.1-10.5 billion over the next 1-2 decades for carbon removal innovation: 50,000+ jobs
- $270 million per year through 2024 for grid scale energy storage through the Better Energy Storage Technology Act: 3,000+ jobs
- $40 billion in DOE loan authorizations to support early-stage clean energy companies: 580,000+ jobs

**GRID MODERNIZATION** | Invest 80 billion | Gain 1.5 million jobs

*Invest in buildup of national “supergrid to accelerate renewable energy deployment and enable more expansive electrification of economic sectors by:*

- Designating federal funding for transmission expansion in the Power Marketing Administrations (PMAs)
- Establishing a tax credit for the construction of regionally significant transmission projects
- Reforming and strengthening federal backstop siting authority for projects in transmission corridors
- Alleviating regulatory burdens on transmission projects

**ENERGY EFFICIENCY** | Invest $1.4 billion | Gain 28,000 jobs

$350 million for each of the fiscal years 2020 through 2024 for federal efficiency programs through the Weatherization Enhancement and Local Energy Efficiency Investment and Accountability Act of 2019

**CLEAN ENERGY SUBSIDY REFORM** | Invest. $55.5 billion | Gain 700,000 jobs

Extend wind and solar tax credits through 2022 and introduce new credits for nascent clean energy technologies — geothermal, advanced nuclear, offshore wind, etc.
TRANSPORTATION

EV CHARGING INFRASTRUCTURE  I  Invest $4.9 billion  I  Gain 65,000 jobs

Supercharge growth of electric vehicle market by investing in nationwide EV charging infrastructure
• $2.6 billion to deploy highway EV Infrastructure: 33,800 jobs
• $1.33 billion to deploy urban, suburban, and workplace EV infrastructure: 17,000 jobs
• $1.06 billion for EV infrastructure innovation and general policy to enable EV infrastructure deployment: 14,000 jobs

REINVEST IN PORTS AND AIRPORTS  I  Invest $20.62 billion  I  Gain 113,000 jobs

Repair and modernize ailing port and airport infrastructure
• $9.37 billion, with $9.3 billion from already-collected revenue for port infrastructure and harbor maintenance: 66,000 jobs
• $1 billion to repair and improve airport infrastructure: 28,000 jobs
• $10.25 billion through joint policies for port and airport infrastructure, like the Transportation Infrastructure Finance and Innovation Act: 19,000 jobs

AGRICULTURE

AGRICULTURAL INNOVATION  I  Invest approx. $10 billion  I  Gain 150,000+ jobs

Invest in basic and applied research efforts and early-stage startups through the COVID-19 pandemic and beyond
• $300 million for ongoing publicly funded R&D to cover COVID-related costs: 3,600+ jobs
• $9.4 billion to cover the agricultural R&D facility maintenance backlog: 145,600+ jobs
• $190 million for new interagency research initiatives: 3,700+ jobs
• $400 million for mission-driven research at the Agriculture Advanced Research and Development Authority: 4,900+ jobs
• $74 million to incentivize private sector R&D through the Foundation for Food and Agriculture Research and the Small Business Innovation Research program: 650+ jobs
• $13.3 million for federal loan guarantees to emerging agricultural industries: 2,200+ jobs

AGRICULTURAL CONSERVATION PROGRAMS  I  Invest $6.35 billion  I  Gain 98,000 jobs

Double Environmental Quality Incentives Program (EQIP) funding and maintain Conservation Stewardship Program (CSP) funding through 2023 — and create a one-time farm machinery rebate system

SUSTAINABLE US DAIRY SECTOR  I  Invest approx. $768 million per year  I  Save up to 50,000 jobs per year  I  Gain 1,000 permanent and temporary jobs per year

• $2.6 million per year to promote dairy exports, in addition to supply management program costs: protect up to around 50,000 jobs per year
• $525.3 million for dairy farm diversification in addition to debt reduction costs
• $240+ million annually, averaged over 10 years for incentivizing better manure management practices, in addition to R&D funding federal assistance for states creating clean fuel standards: Approximately 1,000 temporary/permanent jobs per year