

Coalition for Smarter Buildings

Recommendations in Support of Infrastructure Programs By Federal, State & Local Governments

9 August 2021

EXECUTIVE SUMMARY

Introduction: The commercial adoption of smarter building technology is a vital component to achieve the Biden Administration goals of reducing the U.S. carbon climate impact by 52% by 2030, improve the energy grid infrastructure capacity and resiliency, all while creating good, family-supporting jobs across the country.¹ 98% of commercial buildings in the U.S. lack any grid-enabled efficient energy management system. Smarter building technology comprises the systems that connect large commercial buildings to the energy grid, are outfitted with sensors, artificial intelligence, and analytics to maximize efficient energy consumption that saves owners money, reduces carbon emissions, and prolongs lifespan of expensive utilities like heating, cooling and water systems. U.S. firms are the global pioneers in this proven technology, most of which are small businesses where innovation created this industry.

Action Required to Achieve Smarter Buildings Policy Goals: Legislation or regulatory action required for implementation of federal and state smarter buildings decarbonization goals in three areas:

1. **CREATION OF SMARTER BUILDING STANDARDS & IMPLEMENTATION**

The Coalition proposes the urgent creation of a number of guidance documents and to convert existing and proven smarter building technologies and know-how into a form that can be deployed rapidly and scalably by public and private building owners and managers, and installed and maintained by a new smarter building workforce. This would include all federal owned and managed buildings. The guidance would include:

- Adoption of standardized analytics and promote system interoperability framework
- Reform financial and accounting rules to incentivize commercial adoption
- Revise federal and state procurement practices to require grid-connected and analytics-based technology for all new, retrofit and modernized buildings.

2. **CREATION OF ONE MILLION SMARTER BUILDING JOBS**

The deployment of smarter building technologies requires a workforce capable of designing, implementing, and maintaining information systems able to monitor and manage energy efficiency, occupant health, and performance.

- Create the Smart Building Corps (as part of the existing Climate Corps), offer training scholarships, subsidize apprenticeships, and work alongside labor and industry to promote smart building jobs.
- Invest in identifying, setting up and expanding, and developing broader curricula for smart building training programs across the country, based at community colleges, higher ed institutions, and union and industry training centers.

3. **CREATION OF ONE MILLION SMARTER BUILDINGS**

Federal and state spending can stimulate significant adoption of smarter buildings through direct investment, incentives, mandated “smarter” performance requirements, operations, and M&V. Additionally, tax credits or deductions should be adopted to further incentivize the acquisition of smart building solutions such as grid-interactive efficient technologies. At minimum rules should require:

- All commercial buildings > a certain size be Grid-Interactive.
- All federal/state owned buildings to have energy monitoring systems.
- Analytics in all federally funded Energy Service Performance Contracts).

¹ See, for example, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/17/fact-sheet-biden-administration-accelerates-efforts-to-create-jobs-making-american-buildings-more-affordable-cleaner-and-resilient/>