

NEMA Policy Priorities: Moving Quickly to the Next Normal June 2020

The National Electrical Manufacturers Association (NEMA) represents nearly 325 electrical and medical imaging manufacturers that make the equipment that powers U.S. buildings, hospitals, electric utilities, industrial facilities, and transportation infrastructure. We support congressional action on **infrastructure legislation** to help the country recover from the COVID-19 pandemic and get our economy moving again.

NEMA recommendations focus on high-value-added sectors and segments of our industries and the economy overall. We believe that when U.S. companies succeed, both domestically and in overseas markets, it helps U.S. employment, so public policy should focus on attracting businesses to the U.S and fostering open trade. Successfully moving the U.S. economy into the post-pandemic Next Normal period means moving to the extent possible beyond short-term proposals and into a long-term investment the benefit the country in measurable ways.

Buildings and Lighting

COVID-19 has accelerated remote working, with nearly half of Americans now teleworking. Office building occupancy will likely be even lower than pre-COVID. Buildings must be re-configured, re-optimized, and re-purposed to reduce costs, save energy, and adapt to new uses (e.g. urban-core housing, convertibility to medical facilities). For new buildings, construction needs to account for lower occupancies, more flexibility, and healthier indoor space.

Modern building and lighting technologies can manage energy use and improve occupant productivity and wellbeing, even as building occupancies change. They also can assist in rapid conversions and accommodation of additional IT and health equipment. Congress should enact legislation to accomplish the following:

- Require DOE to establish a competitive grant program to award funding for energy improvements in public school facilities. Qualifying improvements include measures that reduce school energy costs, increase building resiliency, and improve student and teacher health (See Section 314 of the CLEAN Future Act).
- Require DOE to award grants to eligible entities to demonstrate advanced and innovative technology-based solutions that will accomplish one or more of the following criteria: increasing and improving the energy efficiency of water, wastewater, and water reuse systems; supporting implementation of innovative processes or the installation of advanced automated systems to provide real-time data on energy and water; or improving energy and water conservation quality and predictive maintenance through use of internet-connected technologies (See Section 324 of the CLEAN Future Act).

- Direct DOE to establish a program to implement smart building technology and demonstrate the costs and benefits of smart buildings. The section should be amended to require DOE to work with GSA Proving Ground so as to make use of existing research on smart buildings and not to duplicate efforts. (See Section 1005 of the American Energy Innovation Act).
- Establish a pilot program under which DOE shall provide technical assistance to cities and communities to promote smart city or community technologies.
- Amend section 304 of EPCA to direct DOE to encourage and support the adoption of, and full compliance with, building energy codes by states, tribes, and local governments. (See Section 301 of the CLEAN Future Act) In addition, the current text should be amended to include life safety building codes.
- Competitive grant programs for energy efficiency upgrades for public buildings and nonprofits. (See Sections 312 and 326 of CLEAN Future Act)
- Require the federal government to become more efficient by installing energy-efficient technologies across the federal building stock. Including updating the DOE energy code to ASHRAE Standard 90.1-2019.
- Funding for ESPCs and UESCs to spread the benefits more broadly. (See Section 1033 of the American Energy Innovation Act)
- Amend Section 912 of the Energy Policy Act of 2005 to broaden support for research, development, demonstration, and commercial application activities related to advanced solid-state lighting technologies based on light emitting diodes of all colors
- Support research, development, demonstration, and commercial application activities for the adoption of energy efficient germicidal UV-based systems for air and surface disinfection of existing infrastructure and new construction.

Electric Utilities

Fortunately, the electrical grid has not let us down in this crisis and will be essential to restarting America. But it is increasingly in need of modernizing to meet the needs of the 21st century. Electrical outages cost the U.S. economy \$80–\$100 billion **per year**, money a recovering economy will need. Investing in and streamlining the processes of building a modern 21st Century electric grid with improved reliability and efficiency makes sound economic sense. Congress should enact legislation to accomplish the following:

- Establish programs to promote grid resiliency and the development of microgrids, grid-scale energy storage, and other modern electric grid technologies.
- Establish a competitive grant program to enhance energy security through electricity infrastructure hardening and enhanced resilience and reliability. (See Section 232 of the CLEAN Future Act)
- Congress should find ways to reduce the time it takes to build and upgrade the nations transmission and distribution infrastructure.

- Direct the Secretary of Energy to establish a program to ensure that large power transformers and other critical electric grid equipment can be replaced in response to an event that damages and/or disables such equipment. (See Section 238 of the CLEAN Future Act)

Industrial

The industrial sector accounts for about a third of all energy consumed in the United States, and according to the U.S. Energy Information Administration industrial energy consumption is expected to increase through 2050. NEMA Members make the products that make industrial processes more cost- and energy-efficient, enabling manufacturing and other industrial jobs to remain in the United States, and for new jobs to move here. To promote a strong and efficient industrial sector, Congress should enact legislation to accomplish the following:

- Create new rebate programs to incentivize the installation and retrofit of energy-efficient motor-drive systems and transformers. (See Sections 513 and 1043 of the CLEAN Future Act)
- Direct DOE to develop a national plan for smart manufacturing technology development and deployment to improve manufacturing sector productivity and energy efficiency. (See Section 512 of the CLEAN Future Act)
- Amend the Energy Independence and Security Act of 2007 to require the Secretary to establish a program focused on crosscutting industrial emissions reduction technologies. (See Section 1603 of the American Energy Innovation Act)
- Modernize water infrastructure with advanced metering infrastructure, resilience, energy-efficient motors/drives for pumps, and advanced control systems.

Transportation

The transportation sector—including light-, medium-, and heavy-duty vehicles, rail, air, and other modes of transportation—is electrifying but can do so faster. The infrastructure needed to support vehicles is also changing, becoming smarter and more connected to improve safety and reduce congestion. A connected, electric, and increasingly autonomous transportation sector will require new rules, regulations, and policies. Congress should enact legislation to accomplish the following:

- Fund research and development of advanced vehicle technologies, include electric vehicle batteries and vehicle-to-infrastructure connectivity technologies including:
 - [Advanced Transportation and Congestion Management Technologies Deployment Program grants](#) –Increase Federal funding up to \$500 mil. per year and allow up to 80% of the cost of the project, except 100% of the cost of the project for safety critical connected vehicle technologies.
 - [Moving FIRST Act](#) (S.1939 | H.R.3388) to establish the Strengthening Mobility and Revolutionizing Transportation (SMART) Challenge Grant Program to

- promote technological innovation (e.g., autonomous vehicles, electric vehicles, and roadway electrification) in transportation systems.
- [Mobility on Demand \(MOD\)](#) programs that enable an innovative, user-focused approach to emerging mobility services, integrated transit networks and operations, real-time data, connected travelers, and cooperative Intelligent Transportation Systems (ITS).
- Establish a research and development program for advanced technologies for medium- to heavy-duty commercial, vocational, recreational, and transit vehicles. (See Sections 1706-1708 of the American Innovation Act)
- Establish a smart LED street lighting adoption program within the Department of Energy.
- Require the federal government fleet of vehicles to electrify over time by setting specific targets and dates.
- Require DOE to establish or update model building codes for integrating electric vehicle supply equipment into multi-family buildings. (See Section 435 of the CLEAN Future Act)
- Provide federal funds for the build out of EV charging stations power and distribution network and the required infrastructure to support existing local, state, and regional buildout plans.
- Amend Subtitle D, SEC. 1401. (Grants for Charging and Fueling Infrastructure) of the S.2302 - America's Transportation Infrastructure Act of 2019. Currently, the language requires eligible entities to include in their grant applications a description of how they have considered EV infrastructure that can be responsive to technological advancements. The amended language should read:
 - (IV) appropriate distribution of infrastructure and software-managed infrastructure to avoid redundancy, identify under-utilized stations, and fill charging or fueling gaps;
 - (iv) infrastructure installation incorporates technology advancements, such as accommodating autonomous vehicles, solar and battery charging options, and future charging methods.
- Provide additional funds to electrify airports and maritime ports.
- Provide grants to cities and counties for emergency responder vehicle traffic signal preemption technology.
- Provide grants to ports to install the latest technologies to enhance screening, security, and transportation efficiency at our nation's ports.

Medical Imaging Technology

The Medical Imaging & Technology Alliance (MITA), a division of the National Electrical Manufacturers Association (NEMA), is the leading organization and collective voice of medical imaging equipment, radiopharmaceutical manufacturers, innovators and product developers. MITA represents companies whose sales make up more than 90 percent of the global market for advanced imaging technologies. MITA recommends that Congress undertake the following:

- Increase the R&D tax credit for innovative technologies such as Artificial Intelligence, and other medical technologies to encourage innovation and the creation of new jobs.
- Reform regulatory approval and reimbursement frameworks that are predictable, transparent, and fair to all industry and patient participants.
- Authorize direct financial support, grants, and interest-free loans and other mechanisms for health care providers of imaging services, from small physician practices to complete hospital systems, to ensure they can remain afloat.
- Delay the implementation of the Centers for Medicare and Medicaid Services' (CMS) final Medicare Physician Fee Schedule (MPFS) rule for CY 2020.
- Support the "Medicare Diagnostic Radiopharmaceutical Payment Equity Act of 2019" (H.R. 3772), which would safeguard access to the most appropriate diagnostic radiopharmaceuticals and encourage innovation and development of additional imaging drugs that will be used in the future to improve patient care.

Rebuilding/Reshoring U.S. Manufacturing

Congress should consider ways to incentivize manufacturing to return production to the United States where it makes sense to do so, and to help U.S. businesses be more competitive in the global market (e.g. Industry 4.0 ideas). In addition to the ability to export, NEMA Members have a presence in the U.S. to serve this market and Congress should consider ways to expand existing markets and technology leadership. Therefore, NEMA recommends Congress enact legislation as follows:

- Modify the existing 48C Advanced Energy Project Credit to encourage companies to continue operating existing advanced energy projects and maintain the jobs associated with those projects. Congress should ensure that awards do not favor one industry over the other, and instead should consider separate pools of funding for industries.
- Provide a temporary window in which accumulated R&D tax credit "carryforwards" and credits earned in 2019, 2020, and 2021 would be treated as estimated tax payments that are refundable to the taxpayer. In addition, increase the benefit by doubling the R&D tax credit for continuing activities to encourage maintaining jobs as well as production of new competitiveness-enhancing Intellectual Property.

- Temporarily allow these credits to offset 100% of the taxpayer’s income tax liability for 2018, 2019, 2020, and 2021. Under existing law, these credits are only allowed to offset 75% of a taxpayer’s tax liability.
- Enact limited liability protections for critical employers that restart operations in response to federal and/or state directives.
- Require the Secretary of Energy to expand the scope of technologies covered by DOE Industrial Assessment Centers to include smart manufacturing technologies and practices and to equip the Center directors with the necessary training and tools to provide technical assistance. (See Section 1613 of the American Energy Innovation Act)
- Provide financial assistance to States to establish programs to support the implementation of smart manufacturing technologies. However, funding should have a direct pathway to manufacturers for a defined set of technologies that have proven operational and cost benefits. (See Section 1615 of the American Energy Innovation Act)
- Create a new tax credit to support the onshoring of manufacturing activities, such as moving operations to the U.S. or investing in capital equipment, to support the purchase of property, facilities and more.
- Provide tax incentives to help companies recruit and train the skilled workforce needed to expand modern manufacturing in the U.S. Such as the Employee Retention Tax Credit that modifies the “significant decline in gross receipts” requirement to allow partial credit, phased in for a decline in gross receipts between 10% and 50% compared to the same calendar quarter of the previous year.
- Change the definition of “Qualified Wages” for large “Eligible Employers” (>=100 Employees) to match the definition for small “Eligible Employers” (<100 employees).

If you have any questions about NEMA or MITA priorities, please contact Phil Squair, NEMA Vice President, Government Relations, at Philip.squair@nema.org or Patrick Hope, MITA Executive Director, at Patrick.hope@nema.org.