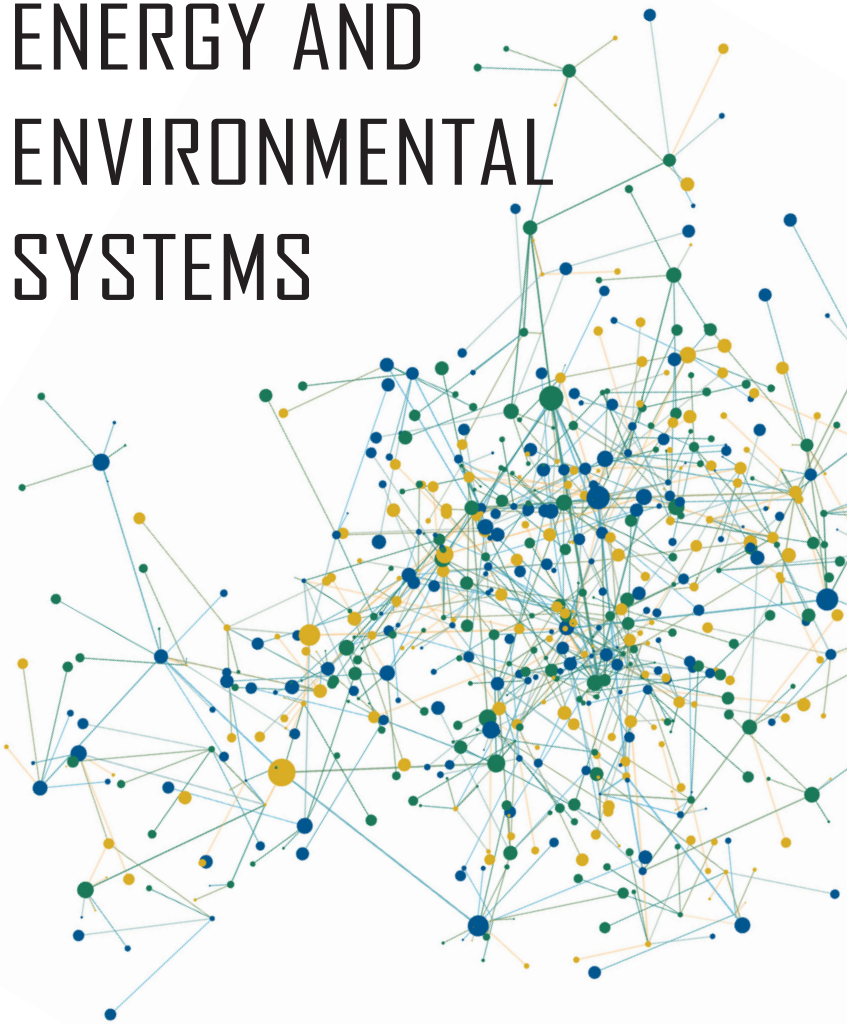
BOARD ON ENERGY AND ENVIRONMENTAL SYSTEMS



The National Academies of SCIENCES ENGINEERING MEDICINE

ABOUT BEES

The Board on Energy and Environmental Systems (BEES) provides independent advice on science and technology policy related to energy and the environment. BEES organizes studies, workshops, symposia, and expert meetings on topics such as advanced vehicle technologies, renewable energy, energy efficiency, and the resilience of the electric grid. Our studies guide regulatory activities and government research programs and our events bring together experts from academia, government, industry, and non-governmental organizations to discuss key issues in energy policy. We also seek to inform and educate the public about the latest energy technologies and policies. Our past and current sponsors include the U.S. Department of Energy, Department of Transportation, and the Department of Homeland Security. Sign up for updates about BEES activities at **nas.edu/bees**.

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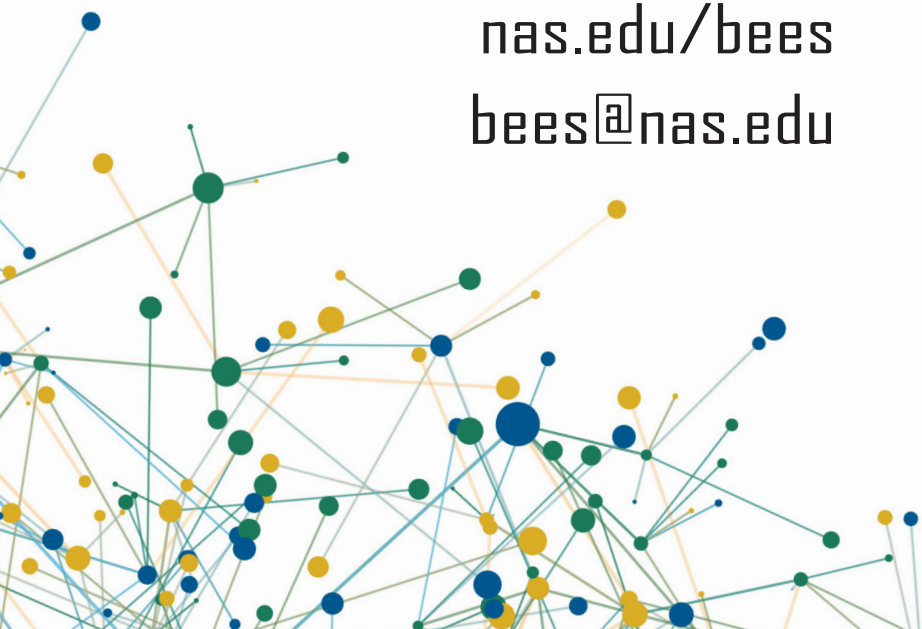


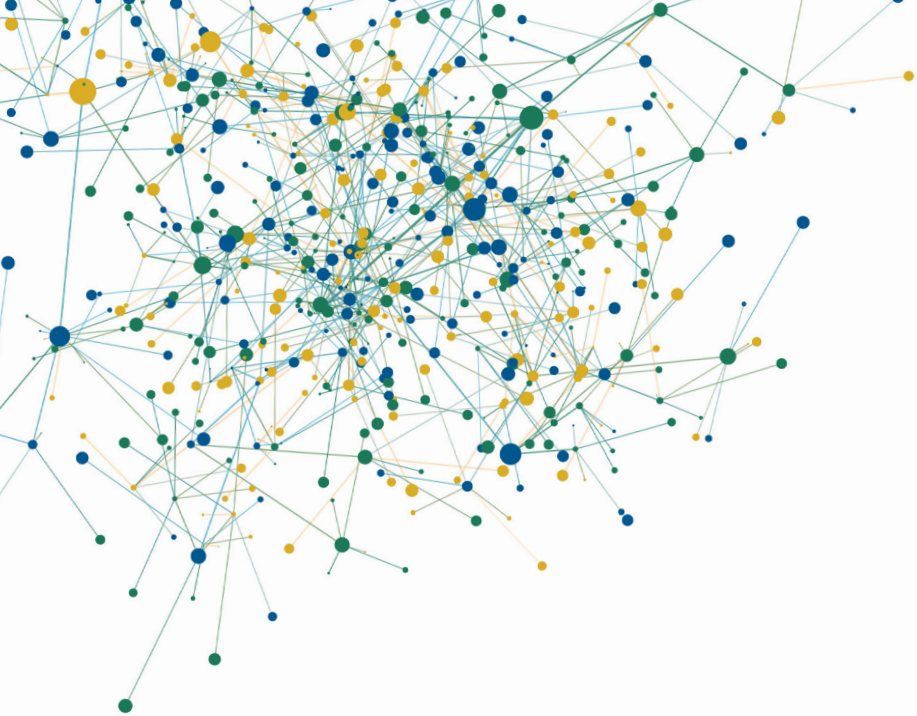
ABOUT THE NATIONAL ACADEMIES

The National Academies of Sciences, Engineering, and Medicine are private, nonprofit institutions that provide expert advice on some of the most pressing challenges facing the nation and the world. Our work helps shape sound policies, inform public opinion, and advance the pursuit of science, engineering, and medicine. The National Academies do not receive direct appropriations from the federal government, although many of their activities are mandated and funded by Congress and federal agencies. Work done by the National Academies extends well beyond fulfilling federal government requests, however. Foundations, state governments, the private sector, and philanthropy from individuals enable them to address critical issues on behalf of the nation.

OUR PRODUCTS

BEES facilitates independent, objective, and knowledgeable advice from: members of the National Academies; other leaders of the science, engineering and medical communities; and distinguished associates from the academic, private, and public sectors.

ACTIVITY	BASIC FEATURES	TYPICAL SCHEDULE	PRODUCTS
In-Depth/Consensus Studies	Provide a means to resolve complex questions by enlisting the foremost experts in a given area to gather information and provide consensus recommendations	6-36 months, depending on scope	Peer reviewed reports containing conclusions, findings, and recommendations
Workshops	Provide a means for sponsors and participants to gather information, share ideas, and discuss issues	4-12 months	Publication summarizing the proceedings of the workshop; webcast and video recording (optional)
Roundtables, Forums, Colloquia, and Meetings of Experts	Provide a means for representatives of government, industry, and academia to gather periodically to discuss specific topics	Varies, depending on the number of meetings requested	No written products are generated, benefits are generated from participation; webcast and video recording (optional)

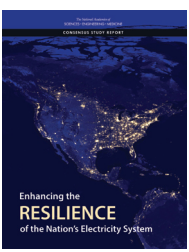


MAKING AN IMPACT

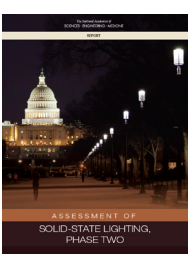
Medium- and heavy-duty vehicles such as local delivery trucks and freight trucks comprise only 7% of all the vehicles in the US fleet, but consume more than 25% of petroleum in the transportation sector. As part of an effort to reduce the environmental impact of these vehicles and save fuel, the National Highway Traffic Safety Administration (NHTSA) asked BEES to convene a committee of experts to analyze current and future vehicle technologies and their potential impact on emissions and fuel consumption, review available methods to measure and regulate emissions and fuel use, and estimate the costs associated with new regulations. The resulting BEES report was instrumental in helping develop the first U.S. greenhouse gas and fuel consumption standards for medium- and heavy-duty vehicles. Our network of experts and rigorous review process will continue to serve as a key resource for future regulatory programs targeting vehicles of all sizes. Download the full report at **nap.edu/18736**.

FEATURED PUBLICATIONS

Electricity Use in Rural and Islanded Communities summarizes a BEES workshop that brought together scientists and stakeholders to explore opportunities for reducing electricity use and improving the reliability of electricity systems in rural and remote communities. Download the complete proceedings at **nap.edu/23539**.

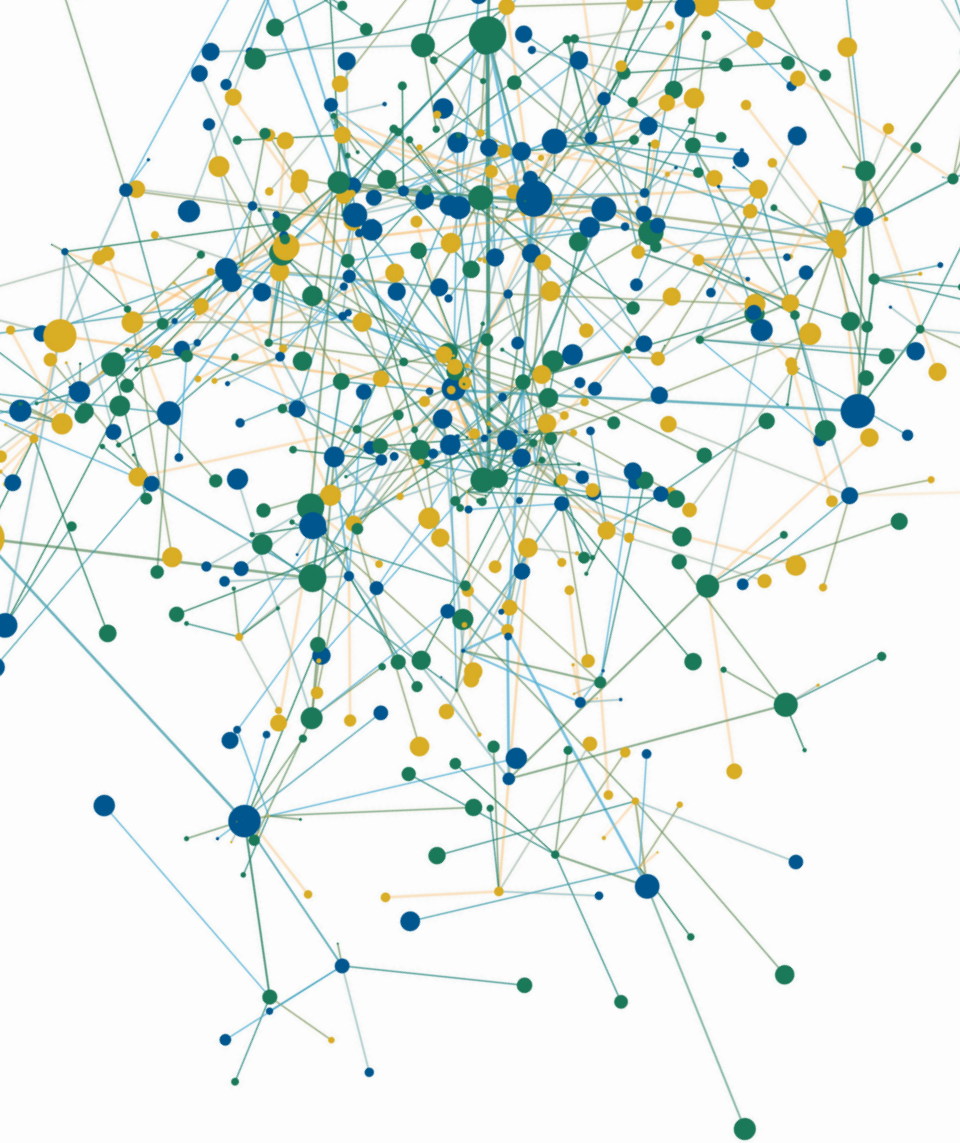


Enhancing the Resilience of the Nation's Electricity System identifies technologies and policies that should be implemented on the federal, state, and local levels to improve the how the U.S. electric grid prepares for and recovers from large-scale long-duration outages. Download the full report and watch the webinar at **nap.edu/24836**.



Assessment of Solid State Lighting is part of a series of reports that review the technological advances and barriers for developing advanced energy-efficient lighting. Download the full report at **nap.edu/24619**.

Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles reviews the technical benefits and costs of implementing the next generation of fuel reduction technologies for light-duty vehicles. Download the full report at **nap.edu/21744.**



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The nation turns to the National Academies of Sciences, Engineering, and Medicine for independent, objective advice on issues that affect people's lives worldwide.

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