Silas,
We are pleased to offer the newest installment of EPRI's Energy Systems and Climate Analysis (ESCA) newsletter, highlighting our new analysis with NRDC on how **electric vehicle efficiency improvements can impact infrastructure buildout**. We are also excited to share:

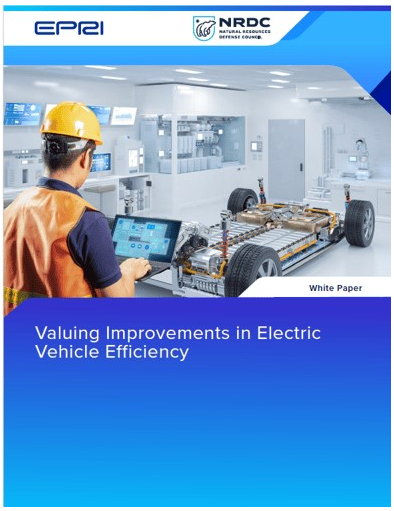
- New report on cost and resource requirements for **low-carbon ammonia**
- Our newest series of back-pocket insights explores the **role of emerging technologies** in energy system resource planning
- John Bistline's interview about the **Inflation Reduction Act** on NPR
- An invitation to the **GHG accounting** supplemental project

All of ESCA's publicly available work, and past announcements, can be found on the ESCA website.

Research Highlights

Electric Vehicle Efficiency Improvements Can Greatly Reduce Infrastructure Buildout and Energy Usage

A new study by the Natural Resources Defense Council (NRDC) and EPRI used EPRI's U.S. Regional Economy, Greenhouse Gas, and Energy (US-REGEN) model explores the fundamental role that future vehicle efficiency improvements—additional and complementary to electrification— could have substantial benefits.



According to the study, by 2050, continued advances in EV efficiencies could:

- Reduce electricity consumption per mile in half;
- Lower electricity demand by hundreds of terawatt-hours annually and decrease associated grid buildout, reducing peak demand by nearly 300 gigawatts; and,
- Provide consumer energy cost savings of more than $200 billion annually if accomplished without raising vehicle costs.

For more information, please contact Geoff Blanford at GBlanford@epri.com

READ REPORT

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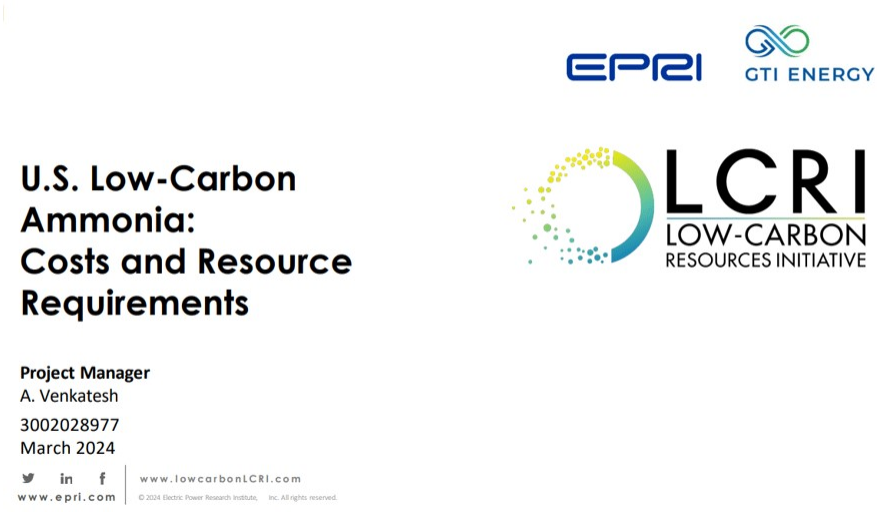
New Cost and Resource Requirements for Low-Carbon Ammonia



Low-carbon ammonia has the potential to serve as a critical component of a future decarbonized energy system. While low-carbon ammonia synthesis has been considered cost-prohibitive in the past, recent US Inflation Reduction Act (IRA) incentives for clean energy and hydrogen production have the potential to reduce production costs. In this study, we evaluated the levelized costs (with and without IRA incentives) and resource requirements of producing blue and green ammonia in the US, in the 2030 timeframe. We found that low-carbon ammonia production costs with IRA credits may be comparable to historic grey ammonia prices in select regions in the US. We also found that resource requirements vary by region, dependent on the availability and cost of wind resources or gas.

For more information, please contact Aranya Venkatesh at AVenkatesh@epri.com

READ REPORT

Insights on the Role of Emerging Technologies in Energy System Resource Planning

ESCA's Back Pocket Insights are designed to be accessible and informative resources. These concise two-page summaries distill complex research into key takeaways, making them perfect for engaging a wide range of stakeholders. The latest series explores the role of emerging technologies in energy system resource planning. We encourage you to check out these publicly available reports and share the insights with your network, including those new to the topics.

HYDROGEN

STORAGE

CARBON CAPTURE AND STORAGE

ADVANCED NUCLEAR REACTORS

For more information, please contact Romey James at RJames@epri.com

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Make Sense of the IRA, with John Bistline on NPR Marketplace

In case you missed it, John Bistline spoke with NPR Marketplace's Kai Ryssdal about the ongoing debate on its effect on clean energy adoption and how the market environment has changed since the IRA was passed.

LISTEN HERE

Interested in Greenhouse Gas Emissions Accounting?

Special Topics in Greenhouse Gas Emissions Accounting is a new supplemental project that includes deep dives into select GHG emissions accounting topics that are particularly relevant to electric and gas utilities (i.e. value chain mitigation). It also includes a one-day workshop on the application of financial "materiality" in corporate GHG emissions accounting inventories and EPRI expert engagement in ongoing technical working groups and forums that may impact future GHG emissions accounting approaches.

All are welcome to participate! For more information, please contact Arin Kaye at AKaye@epri.com

Member Center

The ESCA Group conducts its research as part of EPRI Programs 178 (*Resource Planning for Electric Power Systems*) and 201 (*Energy, Environmental, and Climate Policy Analysis*). Examples of recent program-specific research includes:

- Assessing Future Load: Modeling the Factors Driving Future Electricity Demand (3002029620) - Program 178
- Assessing the Impacts of Dark Doldrums Events on Electricity Resource Portfolios
- (3002029146) - Program 178

- Capacity Accreditation: Key Principles, Evolution, and Philosophy (3002027010) - Program 178
- Synthesis of Insights from EPRI-Curated P201-E 2023 Expert Speaker Series on Global Change, Climate Risk, and Target Setting (3002026640) - Program 201

For more information about these programs, please contact Nidhi Santen (P178) or John Bistline (P201).
Thank you for your continued interest in our work. If you have any questions, please email eea@epri.com.
Best,
EPRI Energy Systems and Climate Analysis Group