Electric Transportation Benefits Customers, Communities, and the Environment

From EVs to public transit, commercial fleets, and more, electric transportation is transforming America’s communities while benefiting the environment.

Expanding the use of electricity in transportation saves money, improves the environment, and enhances quality of life for everyone. Electrifying transportation benefits all customers by increasing and optimizing the use of the energy grid, and enhancing the integration of renewable energy resources. In addition to electric vehicles (EVs), electrification is taking hold in public transit, delivery vehicles, ride-sharing applications, ports and airports, and more.

Electric companies are partnering with many stakeholders to support the growth of EVs and to provide the needed charging infrastructure in cities and communities across the country.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Details</th>
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<tbody>
<tr>
<td>1.2 million+</td>
<td>As of August 2019, there are more than 1.2 million EVs on U.S. roads.</td>
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<tr>
<td>2 million+</td>
<td>By 2021, more than 2 million EVs are expected to be on U.S. roads.</td>
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<tr>
<td>18.7 million</td>
<td>By 2030, 18.7 million passenger EVs will be on U.S. roads.</td>
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The Benefits of Electric Transportation

Greater EV Efficiency Saves Money
EVs, electric buses, and other electrified equipment—ranging from delivery fleets to port and airport handling equipment—have lower fuel and maintenance costs than traditional equivalents. EV drivers spend the equivalent of about $1.20 per gallon, based on average residential electric rates.

Electrifying Transportation Reduces Emissions
The electric power industry has reduced carbon dioxide emissions 27 percent below 2005 levels as of 2018, nearly the lowest level in three decades, while the transportation sector is now the leading source of emissions nationally. More than one-third of the nation’s electricity comes from carbon-free sources (nuclear energy and hydropower and other renewables). Since 2005, the percentage of renewable sources in the energy mix has quadrupled, and, over the past five years, more than half of new electricity generation capacity was wind and solar. Powered by electricity, EVs have zero tailpipe emissions, which leverages the benefits of clean energy deployment in the electric power sector.

Driving Economic Growth
The continued growth of electric transportation options could increase economic output and generate hundreds of thousands of new jobs, while also saving customers money to use on other goods and services.

~$1.20 per gallon
EV drivers spend the equivalent of approximately $1.20 per gallon, based on average residential electric rates.

3.5 million
By 2030, U.S. EV sales are expected to exceed 3.5 million per year.

Our Policy Platform
Public policies must be reformed to help EVs and other forms of electric transportation reach their full potential to benefit customers, communities, and the environment. It is vital that policymakers:

- Modernize federal transportation programs to encourage investments in electric transportation and charging infrastructure;
- Permit electric companies to deliver the solutions customers need to adopt EVs, including providing charging infrastructure in homes, workplaces, and public places;
- Permit electric companies to invest in smart grid technologies that provide the capability to manage EV charging in a manner that benefits the energy grid and all customers;
- Permit electric companies to create the smarter energy infrastructure that underpins smart communities; and
- Expand access to electric transportation options by permitting electric companies to partner with critical stakeholders, including transit agencies, large commercial customers, and transportation planners.
Building Infrastructure to Electrify Transportation

The energy grid is ready for electric transportation. Electric companies are investing more than $100 billion each year in smarter, cleaner, and more resilient energy infrastructure to deliver the energy future customers want. These investments are key to enabling innovative customer solutions, including smart, sustainable transportation.

Today, the largest challenge facing the EV market is the charging infrastructure needed to support market growth, not the energy grid that powers that infrastructure. A report from EEI and the Institute for Electric Innovation predicts that, by 2030, U.S. EV sales will exceed 3.5 million per year and that 18.7 million passenger EVs will be on U.S. roads, requiring about 9.6 million charging stations.

EEI's member companies are investing more than $1 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation. Increasing investment from all stakeholders—including electric companies, automakers, charging network providers, and others—will help drive transportation electrification.

~9.6 million
By 2030, 9.6 million charging stations will be required to support 18.7 million EVs on U.S. roads.

>$1 billion
EEI’s member companies are investing more than $1 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation.

Learn More

Electric Vehicle Sales Forecast and the Charging Infrastructure Required Through 2030
Read more about the transition to EVs in the EEI-Institute for Electric Innovation report, Electric Vehicle Sales Forecast and the Charging Infrastructure Required Through 2030. Available at eei.org/evs.

Electric Perspectives
Electric Perspectives, EEI’s flagship publication, provides insights on the transformation underway across the electric power industry. Available in print and accessible online at electricperspectives.com.

Energy Talk
Get the news you need on EVs, critical policy issues, and electric power industry trends electronically from EEI. Email EnergyTalk@eei.org to subscribe.
About EEI

The Edison Electric Institute (EEI) is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for about 220 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States. In addition to our U.S. members, EEI has more than 65 international electric companies with operations in more than 90 countries, as International Members, and hundreds of industry suppliers and related organizations as Associate Members.

Organized in 1933, EEI provides public policy leadership, strategic business intelligence, and essential conferences and forums.

For more information, visit our Web site at www.eei.org.

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