



Edison Electric  
INSTITUTE

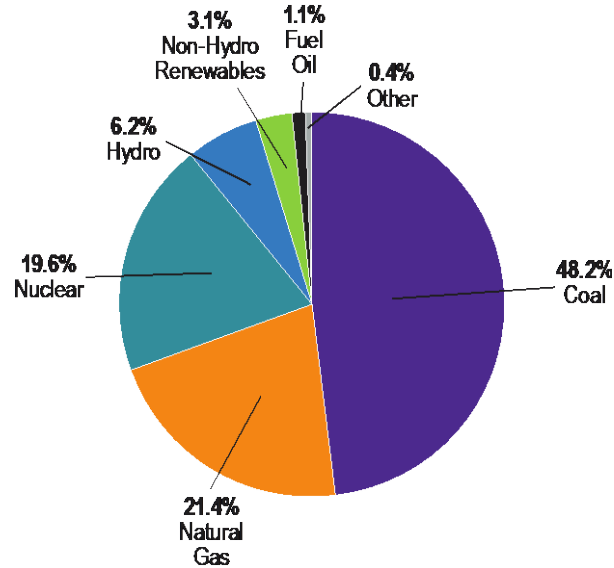
# **Technological Challenges and Trends in Electric, CNG/LNG and Hydrogen Powertrains**

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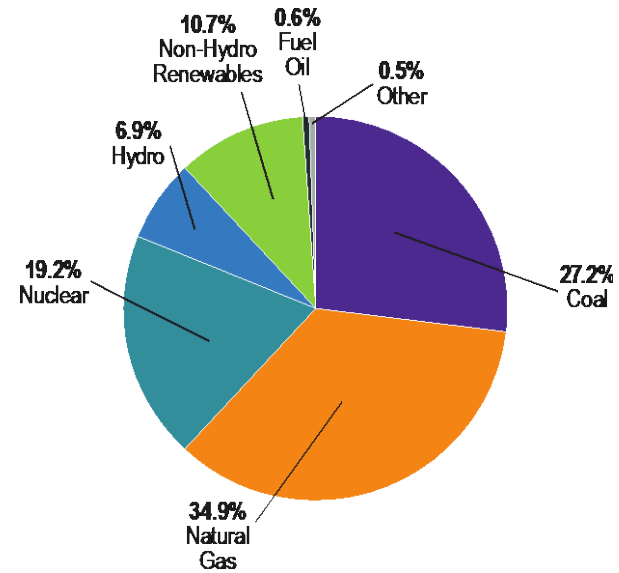
Busworld Academy North America  
Monday, January 13, 2020  
Omaha, NE

# Resource Mix

## 2008 National Energy Resource Mix



## 2018 National Energy Resource Mix



# Energy Companies Leading in Reducing Carbon

## REDUCING CARBON EMISSIONS SIGNIFICANTLY



**CARBON-FREE  
SOURCES**

**>1/3**

More than one-third of all U.S. power generation comes from carbon-free sources, including nuclear energy and hydropower and other renewables.



**2018**

**CARBON DIOXIDE  
EMISSIONS**

**↓27%**

As of year-end 2018, our industry's carbon dioxide emissions were 27% below 2005 levels—nearly the lowest level in 3 decades.



**2030**

**CARBON DIOXIDE  
EMISSIONS**

**↓50%**

Based on projected trends and member goals, CO<sub>2</sub> emissions from EEI members are projected to be 50% below 2005 levels by 2030.

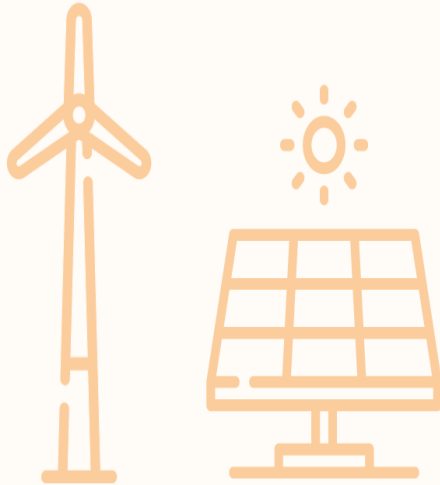
# Energy Companies Leading in Adding Renewables

## ADDING MORE RENEWABLES

### NEW GENERATION CAPACITY

>1/2

Over the past 5 years, more than half of new electricity generation capacity was wind and solar.



### SOLAR ENERGY

69%

Electric companies provide 69% of the solar energy in the country.

# Energy Companies Leading in Promoting Electric Transportation

## PROMOTING ELECTRIC TRANSPORTATION



**FEWER CO<sub>2</sub>  
EMISSIONS**

**54%**

Driving on electricity emits 54% fewer CO<sub>2</sub> emissions per mile than the average new gasoline car. As a result, electric vehicles help improve air quality and reduce smog.



**ELECTRIC VEHICLES**

**1.3  
million+**

Today, there are more than 1.3 million electric vehicles on U.S. roads. By 2030, that number is projected to reach 18.7 million.



**CUSTOMER PROGRAMS  
& PROJECTS**

**\$1.3  
billion+**

Electric companies are investing more than \$1.3 billion in customer programs and projects to deploy charging infrastructure and to accelerate electric transportation.