

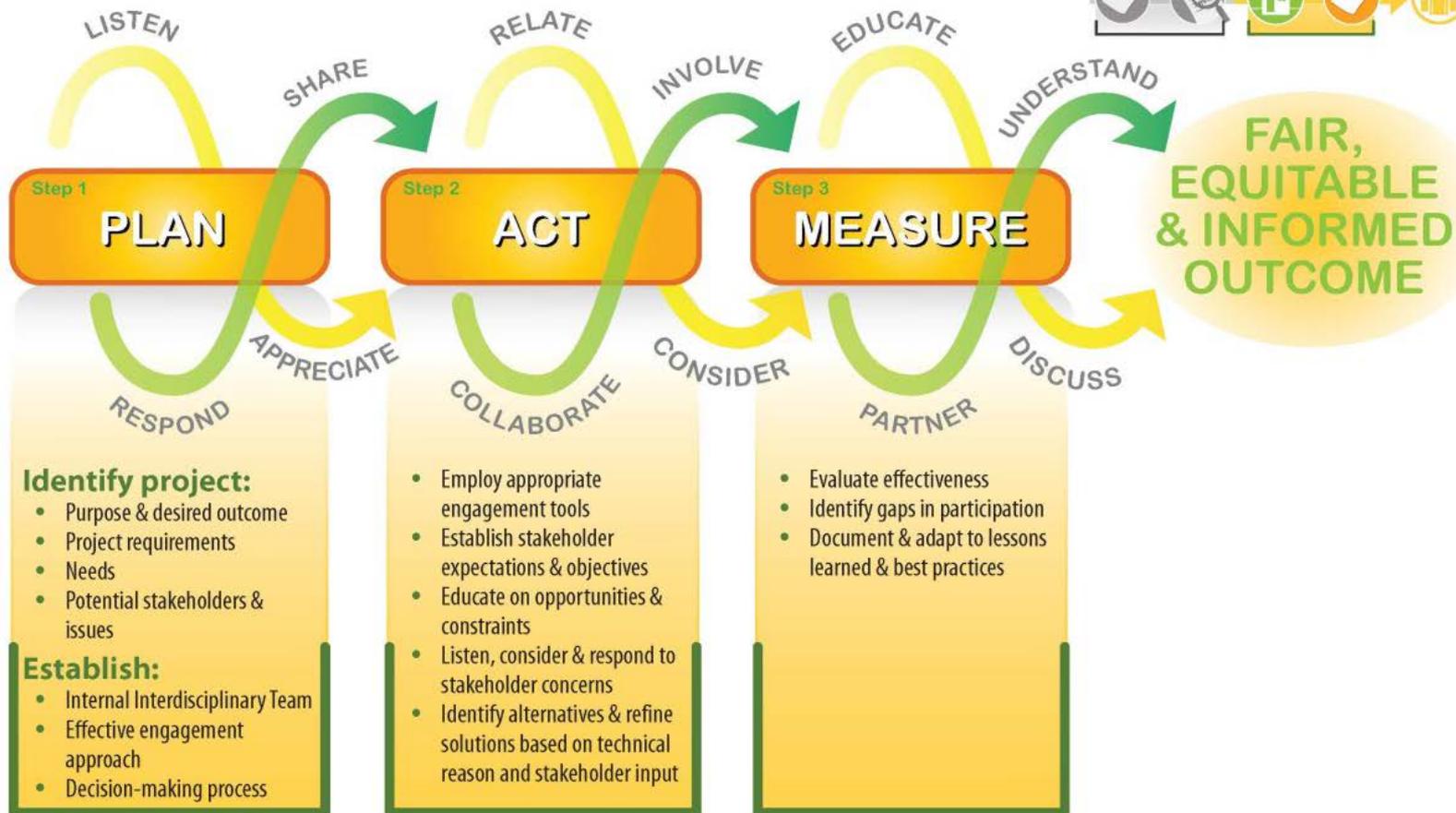
Omaha Public Power District

Future Generation and Resource Options

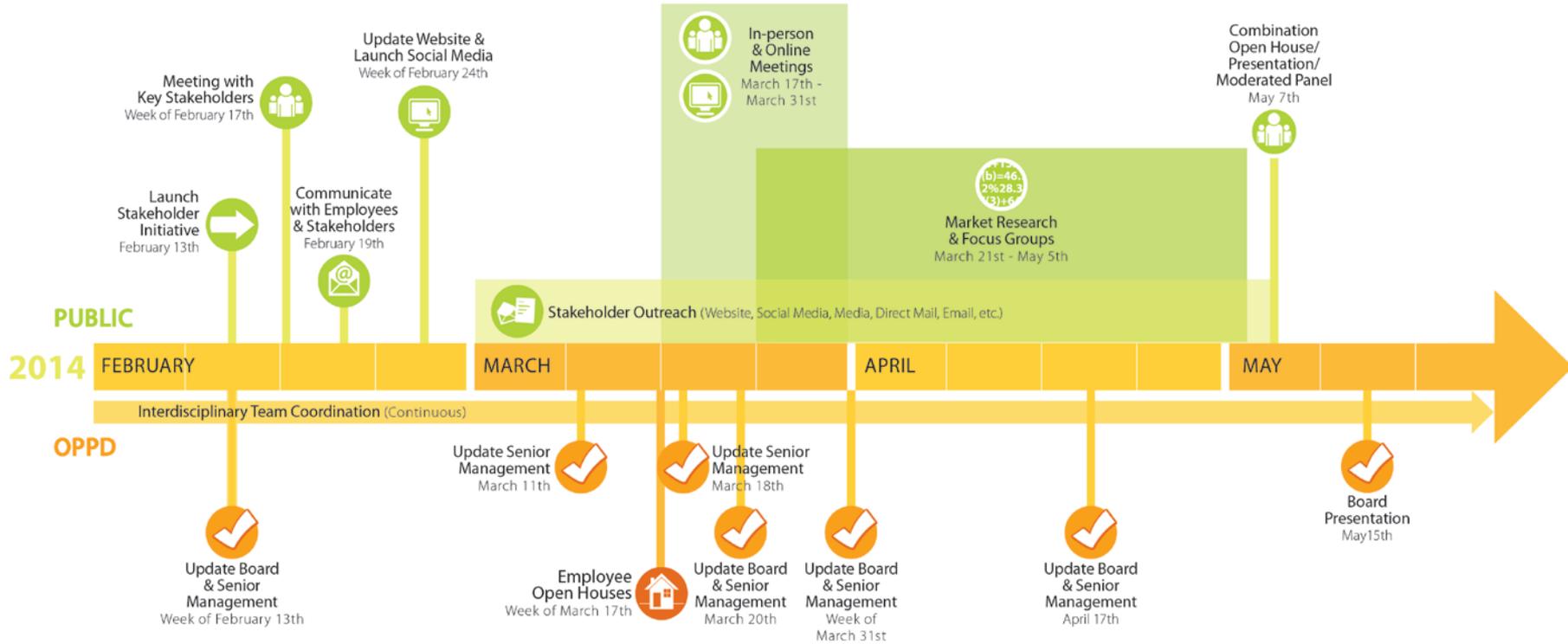
Timothy J. Burke, Vice President,
Customer Service and Public Affairs, OPPD

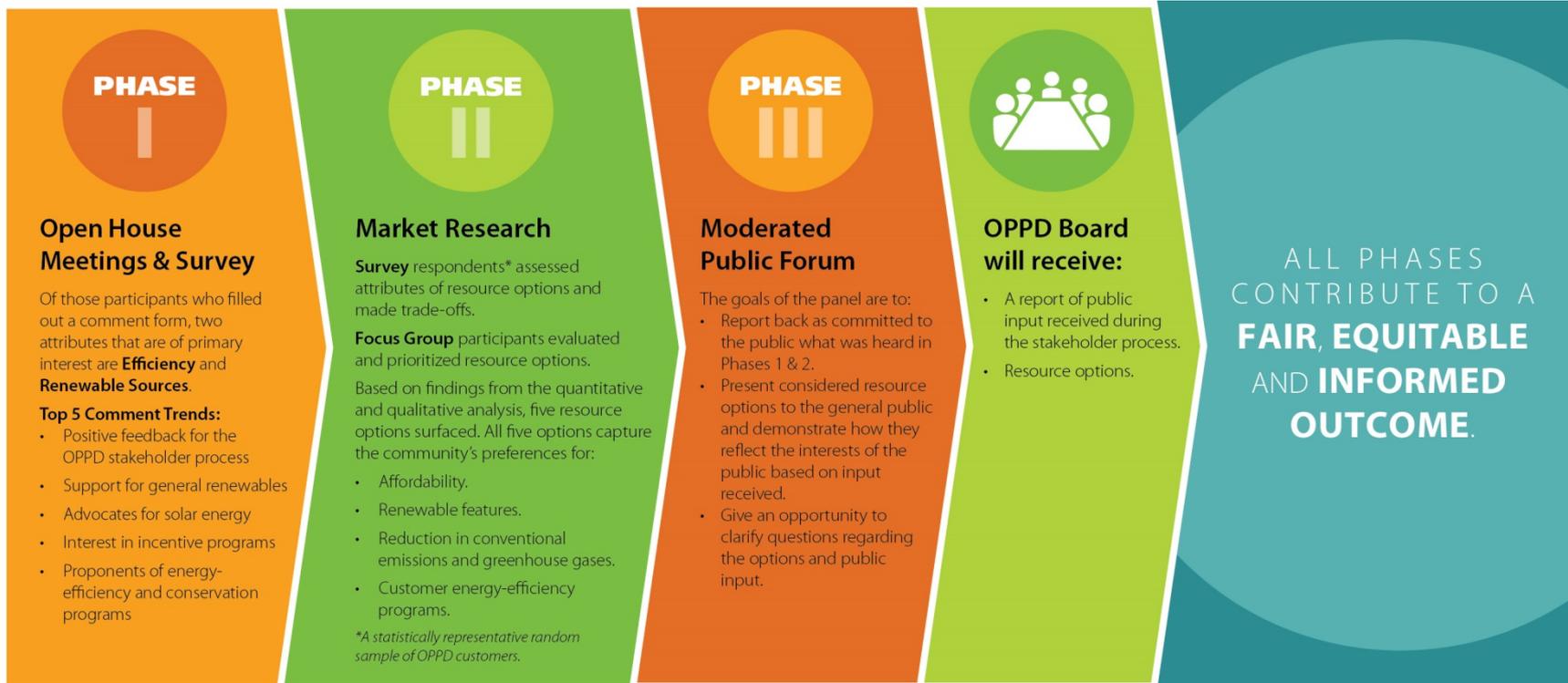
The Stakeholder Process

OPPD commits to the following process for future programs and initiatives:



The Schedule





OPPD's mission is to provide affordable, reliable and environmentally sensitive energy service to our customers.

Phase 1 – Information Gathering

- 14 Open Houses/Community Outreach across service territory
- On-line and in-person comment form
- Engaged customers through social media and website through OPPDListens.com
- Education about the power industry



Phase 1 – What We Heard

Top 5 Comment Trends

- ✓ Positive feedback for the OPPD stakeholder process
 - ✓ Support for general renewables
 - ✓ Interest in incentive programs
 - ✓ Proponents of energy-efficiency and conservation programs
 - ✓ Affordability and diversity still important
- 

Phase 2 – Market Research

- Qualitative and Quantitative Research conducted by industry leader
 - Market Strategies International
 - 8 residential and 1 commercial industrial focus groups (Qualitative)
 - Sought impressions of 15 portfolio options
 - On-line Survey (Quantitative)
 - A statistically representative random sample of OPPD customers
 - Trade-Offs of resource attributes and options evaluated
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Phase 2 – What We Heard

Five resource options surfaced by the customers.
All five options capture the community's preferences for:

- ✓ Affordability
 - ✓ Renewable features
 - ✓ Reduction in conventional emissions and greenhouse gases
 - ✓ Customer energy-efficiency programs
- 

Phase 3 – Moderated Public Forum

Forum was streamed live to locations throughout the district

The goals of the panel were:

- ✓ Report back what was heard in Phase 1 & 2
- ✓ Present the five customer preferred options
- ✓ Give the public the opportunity to clarify questions and provide feedback



Stakeholder Summary

- Stakeholders trust OPPD to make the right decisions
- They want electricity to be affordable, but willing to pay slightly more for:
 - Additional **Demand-Side Management** Programs
 - Additional **reductions in environmental emissions**
 - Low tipping point on bill increases
- They were **not in favor of short-term retrofitting or refueling** of a facility if it is uneconomic.
- Stakeholder process showed that customer expectation is aligned with **OPPD's mission statement**

Phase 2: Provided Reaction to Resource Option Attributes



Conventional Emissions

Attribute Importance

Achieve **50% reduction in emission levels of air pollutants** (sulfur dioxide, nitrogen oxide, and mercury).
Increase price of electricity to customers 3%.



10.0%



Maintain OPPD's current emission reduction plan, reducing emission levels of **air pollutants** (sulfur dioxide, nitrogen oxide, and mercury) by 20%. **Maintain current electricity pricing** to customers.



8.5%

Achieve **60% reduction in emission levels of air pollutants** (sulfur dioxide, nitrogen oxide, and mercury).
Increase price of electricity to customers 15%.



1.7%

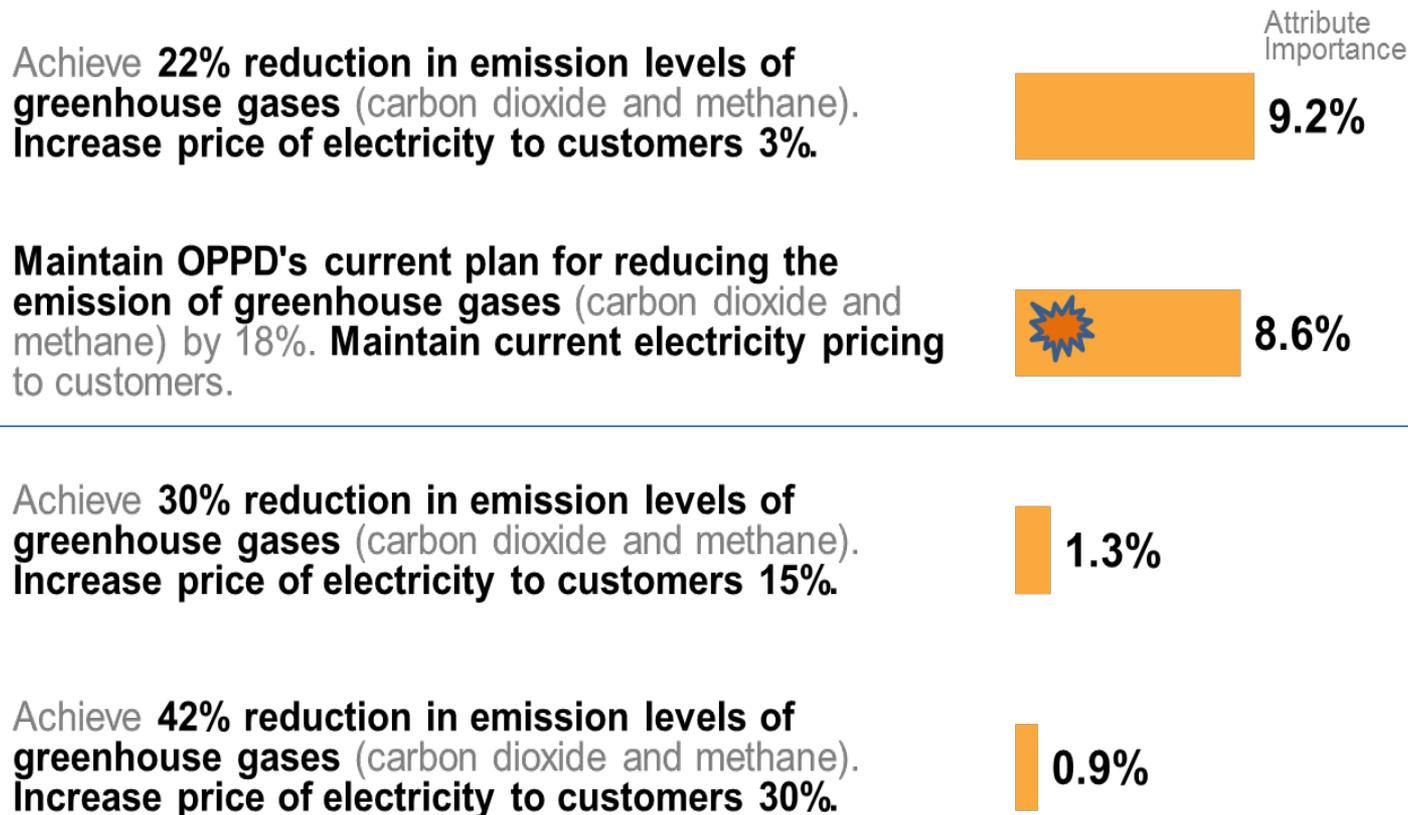
Achieve **70% reduction in emission levels of air pollutants** (sulfur dioxide and nitrogen oxide, and mercury). **Increase price of electricity to customers 30%.**



0.9%



Greenhouse Gases



Renewables



Maintain OPPD's current renewable energy plan, which will increase the share of total retail electricity sales generated using renewable sources (solar and wind) to **33%** by 2018. **Maintain current electricity pricing** to customers.

Increase the share of the total retail electricity supply that will be generated using renewable sources (solar and wind) from 33% to **35%**. **Increase price of electricity to customers 6%**.

Increase the share of the total retail electricity supply that will be generated using renewable sources (solar and wind) from 33% to **37%**. **Increase price of electricity to customers 9%**.

Increase the share of the total retail electricity supply that will be generated using renewable sources (solar and wind) from 33% to **40%**. **Increase price of electricity to customers 12%**.

Attribute Importance



Customer Efficiency Programs

Increase spending on financial incentives and advisory programs to help customers be more energy efficient. This may reduce OPPD's need for additional power plants in the future by **4.5%**. This change may **increase electric rates by 2.0%** for all customers, while those who do participate in the programs could save money by reducing their energy usage.



Increase spending on financial incentives and advisory programs to help customers be more energy efficient. This may reduce OPPD's need for additional power plants in the future by **7.5%**. This change may **increase electric rates by 2.5%** for all customers, while those who do participate in the programs could save money by reducing their energy usage.



Increase spending on financial incentives and advisory programs to help customers be more energy efficient. This may reduce OPPD's need for additional power plants in the future by **10.5%**. This change may **increase electric rates by 3.0%** for all customers, while those who do participate in the programs could save money by reducing their energy usage.



OPPD currently offers financial incentives and advisory programs to help customers be more energy efficient. These efforts may reduce the need for additional power plants in the future by **1.5%**. **Maintain this level of effort and maintain current electricity pricing** to customers.



Recommendation

North Omaha Station

2016: **Retire** units 1-3

2016: **Retrofit** units 4-5 with basic emissions control

2023: **Refuel** units 4-5 to gas

Nebraska City Station

2016: **Retrofit** unit 1 with basic emissions control

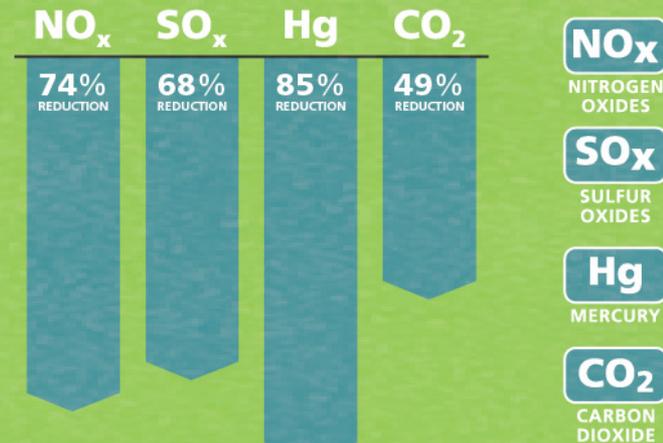
2023: **Reduce** load by 300 MW through customer participation in demand side management and energy-efficiency programs

Economics: Estimated rate impact.

0-2%
estimated

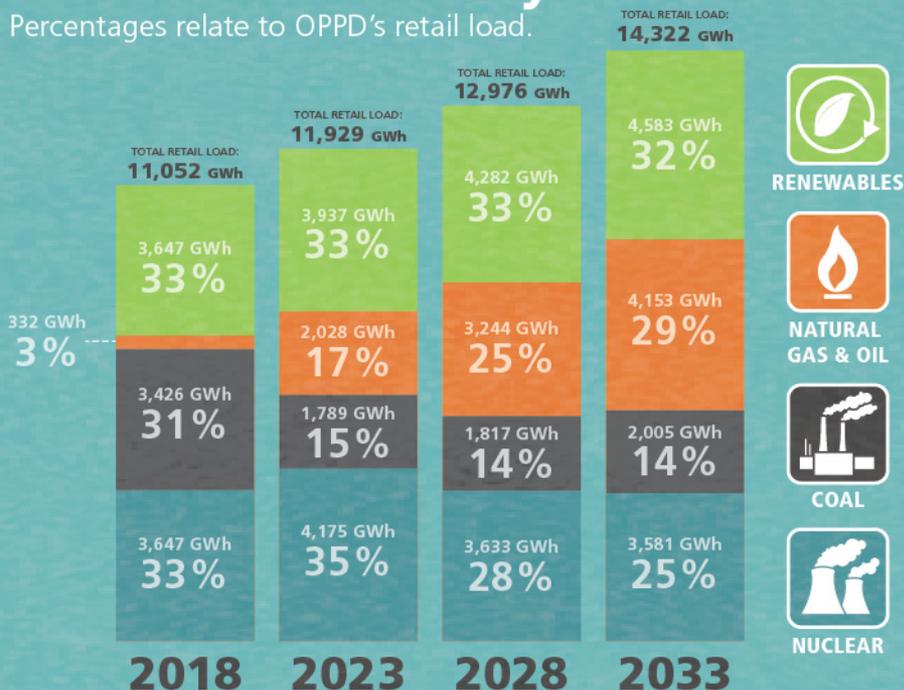
Environment:

Estimated 2033 emission levels compared to 2010.



Generation Diversity:

Percentages relate to OPPD's retail load.



Summary

- ✓ Thoroughly evaluated feasible options
 - ✓ Listened to and considered stakeholder input
 - ✓ Aligned option with mission
Provide affordable, reliable and environmentally sensitive energy services to our customers
 - ✓ Provided Board with a fair, equitable and informed recommendation
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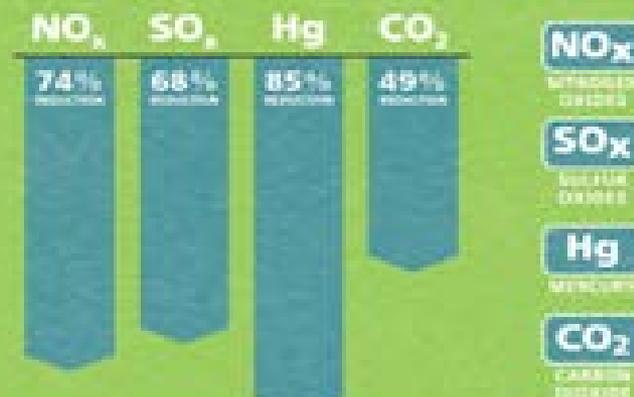
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