



Monitoring Report SD-7 Environmental Stewardship

System Management and Nuclear Oversight Committee Report
September 15, 2020

Mary Fisher, Vice President – Energy Production & Nuclear Decommissioning

SD-7: Environmental Stewardship

Managing its interactions with the environment is essential to OPPD's ability to serve customers, create value for stakeholders, and contribute to the well-being of the communities it serves and its employees.

Therefore OPPD shall:

- Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance
- Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050
- Conduct its business in a manner that meets all environmental regulatory standards, and go beyond compliance where practical

SD-7: Environmental Stewardship (continued)

- Be transparent by measuring and reporting its environmental performance on OPPD's website
- Engage customers and stakeholders to promote energy conservation and efficiency and minimize environmental impact
- Advocate and educate local, state, and federal governments to protect and advance OPPD's environmental impact

Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance

OPPD's Passenger Car Fleet:

- 37 hybrid cars
- 5 all electric cars
- 4 extended range plug-in hybrids

More than 200 vehicles that are all electric, hybrid, or flex fuel

This Year:

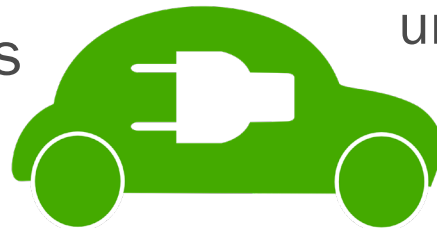
- Adding one electric car
- Replacing compact sport utility vehicles and ½ ton pickups in the fleet with the recently available Hybrid Escape and hybrid F150's

OPPD's Equipment:

- 45 all electric forklifts, yard carts, and man-lifts
- 3 plug-in buckets for line trucks

Next Year:

- Delivery of 2 more plug-in buckets for line trucks in the first quarter of 2021
- OPPD plans to continue replacing streetlight and trouble shooter style aerials with the plug-in hybrid models as units come up for replacement



Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance

Investment Recovery

The District focuses on finding on finding avenues for recycling:

2019

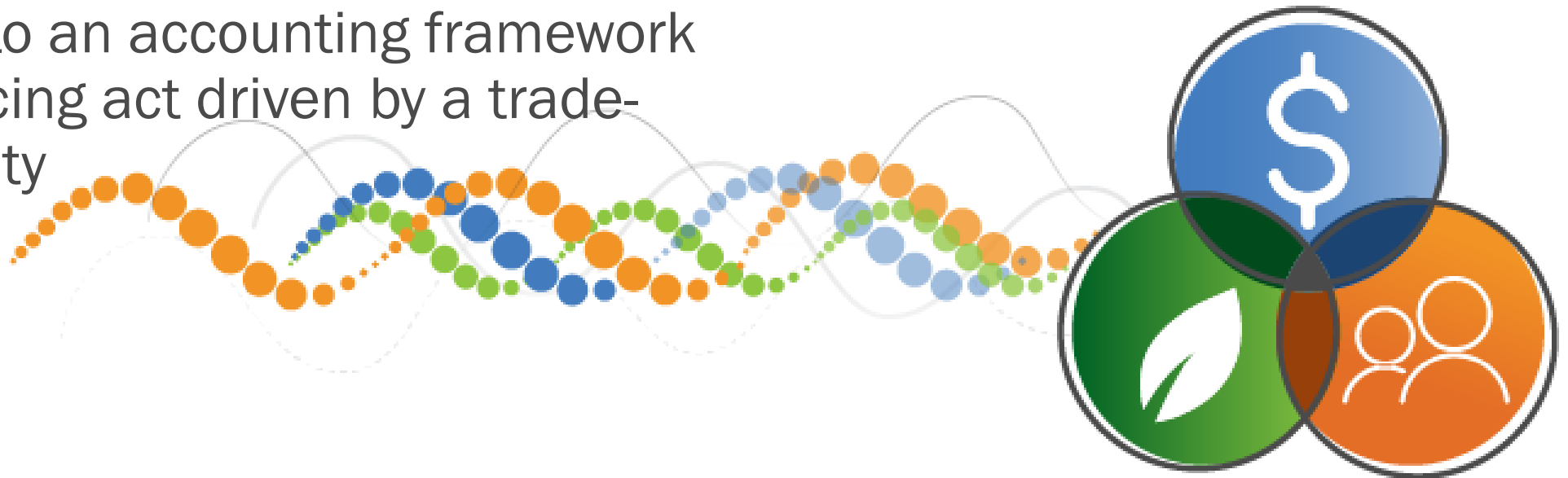
- Batteries – 9098 lbs.
- Metal – 76,564 lbs.
- Oil – 12,875 gallons
- Utility Poles – 1154 poles
- FCS Warehouse Contents - 2,560,000 lbs.
- Approximately 50% of fly ash recycled from North Omaha Station and 60% from Nebraska City Station
- Recycling materials also returned over \$2M back to OPPD



Operate in an environmentally responsible manner and strive for the continuous improvement of its environmental performance

Sustainability: Think Bigger

- Triple Bottom Line framework encompasses **economic**, **social** and **environmental** performance
- Evolved into an accounting framework and balancing act driven by a trade-off mentality
- Instead imagine...



“A triple helix for value creation, a genetic code for tomorrow’s capitalism, spurring the regeneration of our economies, societies, and biosphere”

Harvard Business Review, “25 Years Ago I Coined the Phrase “Triple Bottom Line.” Here’s Why It’s Time to Rethink It,” John Elkington, June 2018

Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

Pathways to Decarbonization

- Organization engaged. All core teams active
- 121 generation technologies identified in exploratory phase
- Seven modeling vendor workshops to explore capabilities
- Eight Scope 1 Direct Emission sources complete
- Scope 2 and 3 in progress, including purchased goods/services, building consumption, purchased power
- Stakeholder work to date includes engagement with multiple interested community groups, new platform



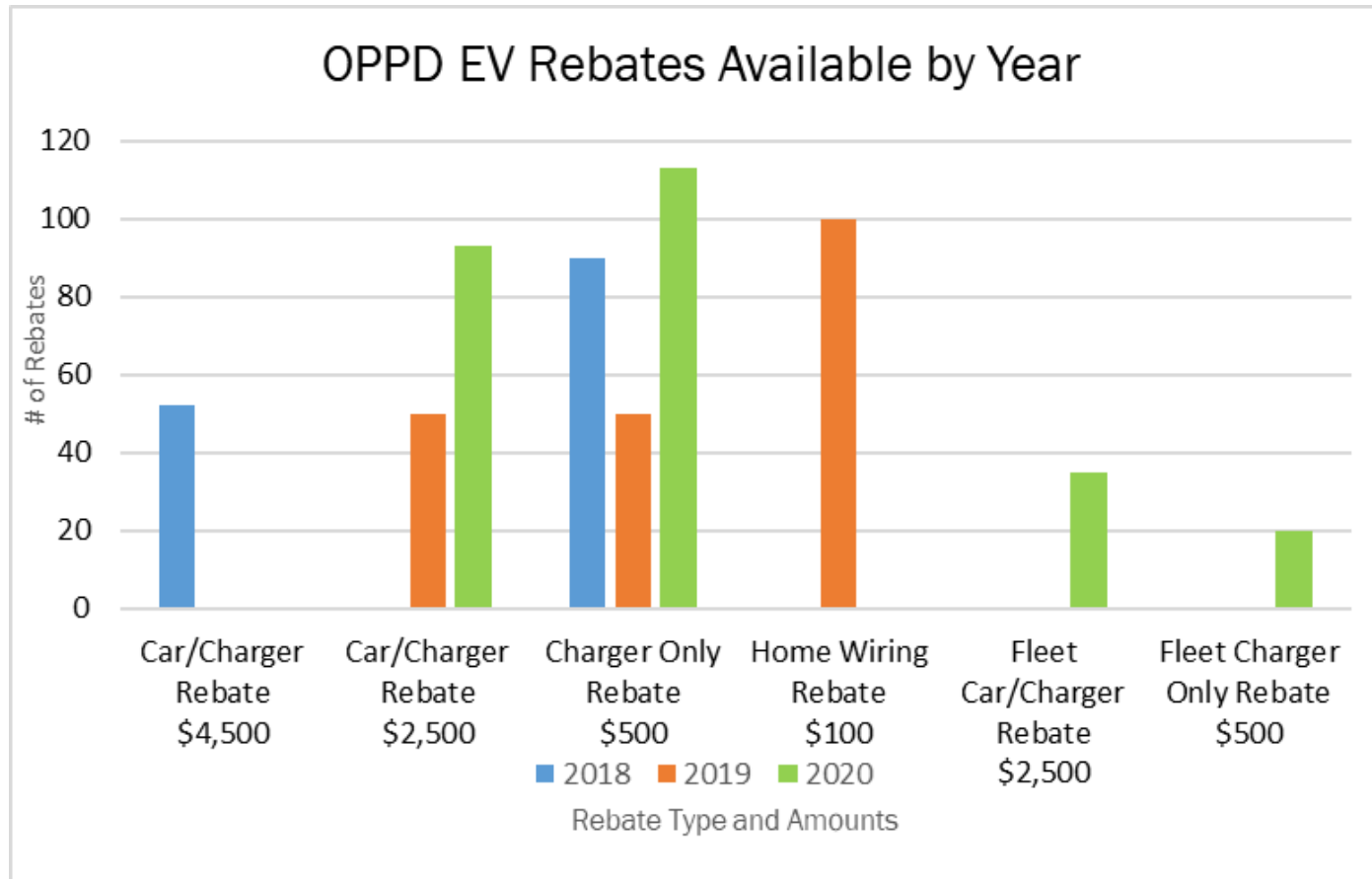
Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

Demand Side Management Portfolio Status

	2019 Actuals in Megawatts	2020 Plan in Megawatts
<i>Demand Response</i>		
Smart Thermostat Program	6.560	5.000
Cool Smart	63.330	62.730
Business Interruptible	50.970	50.910
Total Demand Response	120.860	118.640
<i>Energy Efficiency</i>		
HVAC Smart	1.415	1.500
Certified High Performance Homes	0.145	0.125
Smart Steps / Income Qualified Pilot	0.002	0.009
Business Prescriptive Rebates	3.679	4.000
Business Custom Rebates	0.653	0.400
Total Annual Energy Efficiency	5.894	6.034
Total Cumulative Energy Efficiency	36.282	41.781
Total Annual Cumulative Demand Side Management	157.142	160.421

Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

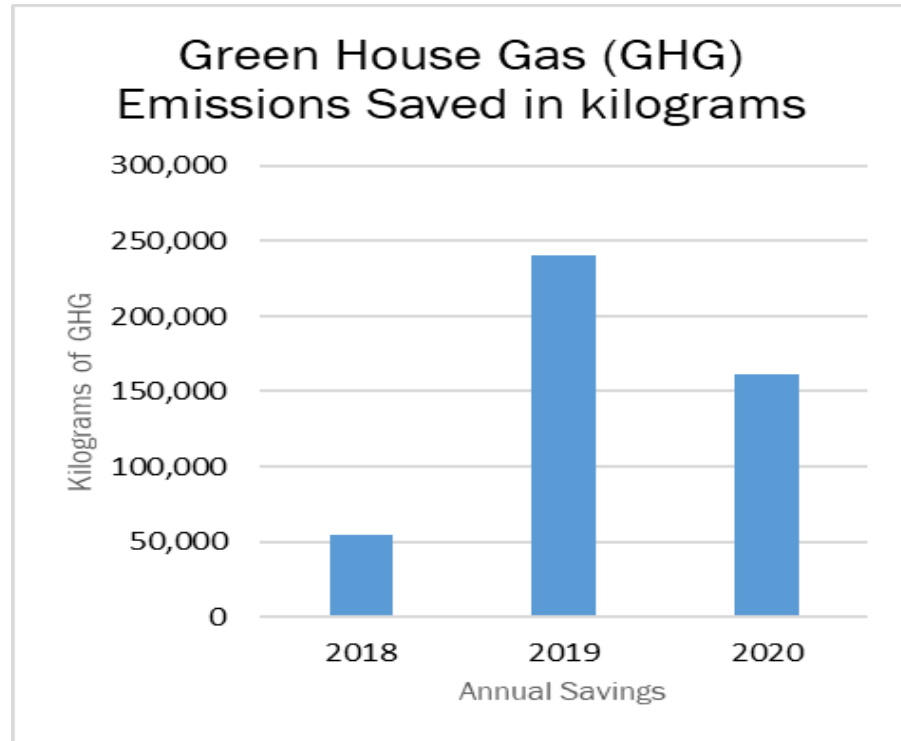
Electric Vehicle Rebate Program



- All available rebates in 2018 and 2019 were claimed
- 2020 residential rebate promotions began in August with 10 rebates in progress
- New in 2020 is a Fleet rebate with promotion beginning in September

Conduct all of its operations in a manner that strives for the goal of net zero carbon production by 2050

EV Making an Impact



*Emissions estimates supplied by ChargePoint

- Since the rebate program began in 2018, OPPD has helped customers to save over 455,625 kg of Green House Gas emissions.
- Equivalent to planting 11,871 trees and letting them grow for 10 years!



Conduct its business in a manner that meets all environmental regulatory standards and go beyond compliance where practical

No violations of environmental permits that resulted in enforcement action or fines

Standard Compliance

35 environmental regulated permits held
- Consists of Air, Water, Waste, Natural Resources

- Conducted monthly, quarterly, semi-annual, and annual internal inspections
- Facilitated two virtual NPDES inspection by the NDEE (NCS and NOS)
- Facilitated one virtual radiation inspection by the DHHS
- Facilitated multiple city of Omaha and NDEE air inspections (NOS, NCS, SCS, CCS)

Beyond Compliance

- Plant wide Applicability Limit (PAL) Permit
- Low Emitter Status
- Near zero opacity excursions
- Complying with stormwater requirements at SCS, CCS, JSS though not required
- Land applying sediment from the Settling Basin for soil amendment instead of landfilling
- Prairie in Progress, Avian Protection, working with NGPC to conduct bird surveys, Dedicated Natural Resources role added

Conduct its business in a manner that meets all environmental regulatory standards and go beyond compliance where practical

Transformer Oil PCB Sampling

- A database of transformer PCB levels is under development
- OPPD identified 21,000 transformers with unknown PCB levels
- Total number of transformers in service territory is 90,770
- Began in early 2020, Put on hold March 20th due to COVID impact
- Transformers Inspected with Project YTD: 1639
- Transformers found 50-499 ppm = 79
- Transformers found >500 ppm = 0
- Additional benefit of project - Other maintenance items have been identified early
- 220 Minor Maintenance Items fixed



Conduct its business in a manner that meets all environmental regulatory standards and go beyond compliance where practical

Low Emitter Status

Low Emitter Status is achieved after 12 consecutive quarterly tests at 50% below the Mercury and Air Toxics Standard for that constituent, except for Hg, which requires annual testing.

Low Emitter Status			
Unit	PM	HCI	Hg
Nebraska City Unit 1	Obtained 1Q2019 Next Test: 1Q2022	6 of 12 Quarterly tests complete	Not Applicable*
Nebraska City Unit 2	Obtained 1Q2018 Next Test: 1Q2021	SO2 as surrogate	Not Applicable*
North Omaha Unit 4	Obtained 1Q2019 Next Test: 1Q2022	Obtained 3Q 2020 Next Test: 3Q2023	Obtained June 2016 Next Test: June 2021
North Omaha Unit 5	Obtained 1Q2020 Next Test: 1Q2023	Obtained 1Q2019 Next Test: 1Q2022	Obtained June 2016 Next Test: June 2021

* Continuous monitoring is used to demonstrate compliance

Be transparent by measuring and reporting its environmental performance on OPPD's website

Environmental Programs

NATURAL RESOURCE MANAGEMENT



This section deals with OPPD's stewardship ensuring OPPD conducts business and produces energy in an environmentally sensitive manner, that is transparent to OPPD customer-owners. [NATURAL RESOURCE MANAGEMENT](#) touches on the many ways OPPD is making a difference and protecting the environment and wildlife.

The [Prairie in Progress](#) project is a joint effort with the Save Our Monarchs Foundation. [LEARN MORE](#)

CORPORATE RESPONSIBILITY



OPPD retains information about programs and activities that govern utilities and the regulations utilities are required to adhere to. [LEARN MORE](#)

ENERGY EFFICIENCY



OPPD provides products and services aimed at improving energy efficiency and saving our customer-owners money. Learn more about the energy efficient products and services available. [LEARN MORE](#)

Environmental Reports

AVIAN PROTECTION PLAN



This report is designed to protect and conserve avian populations by reducing risks that result from interactions with utility facilities and activities. [READ REPORT](#)

FLEET EMISSIONS



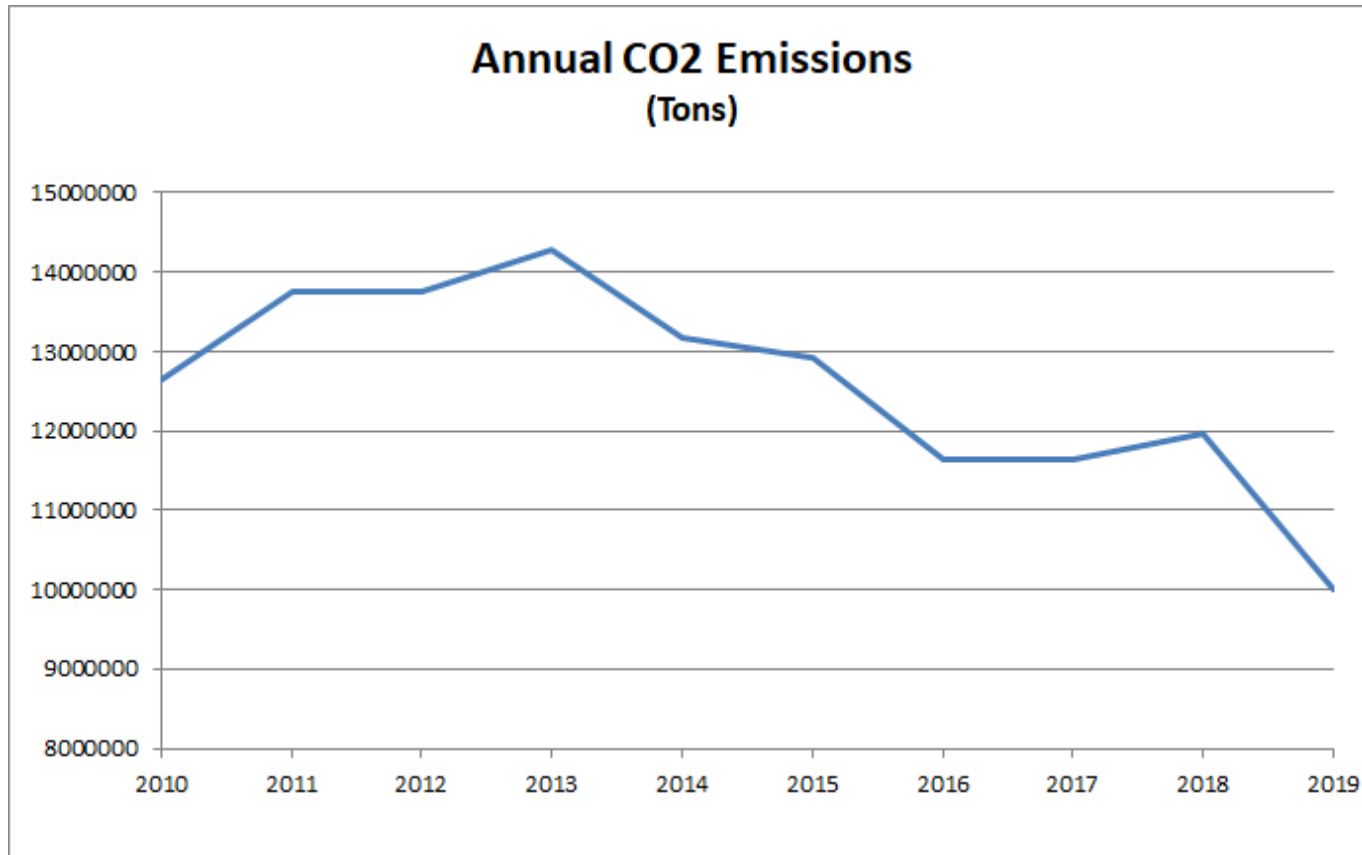
In an effort to be more transparent, OPPD publishes emissions reports for our customer-owners to review. [LEARN MORE](#)

CCR RULE COMPLIANCE DATA & INFORMATION



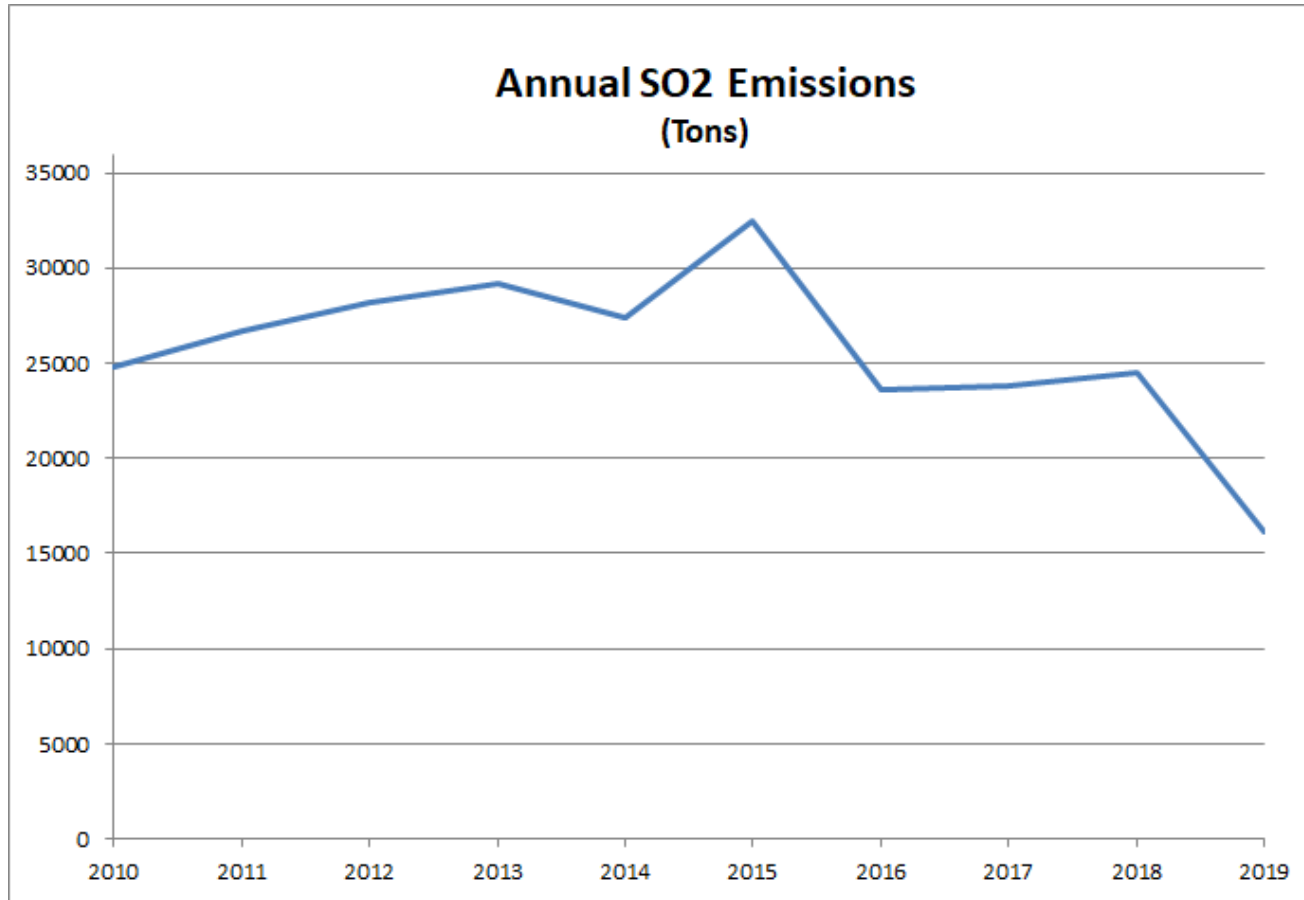
This section contains reports specified in the rule by the Environmental Protection Agency (EPA). [SEE REPORTS](#)

Be transparent by measuring and reporting its environmental performance on OPPD's website



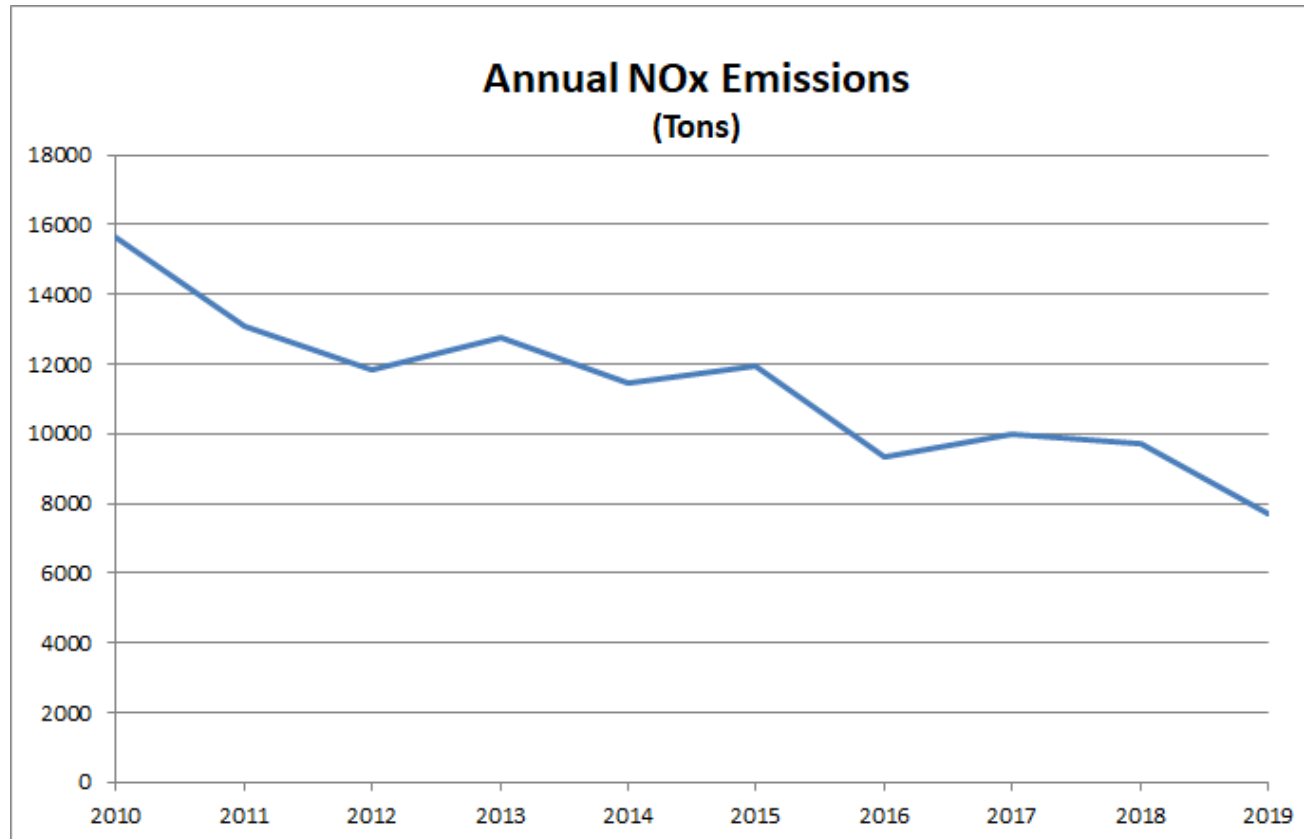
- 21% Decrease over last ten years
- Note: North Omaha units 1, 2, and 3 ceased coal operation in 2016

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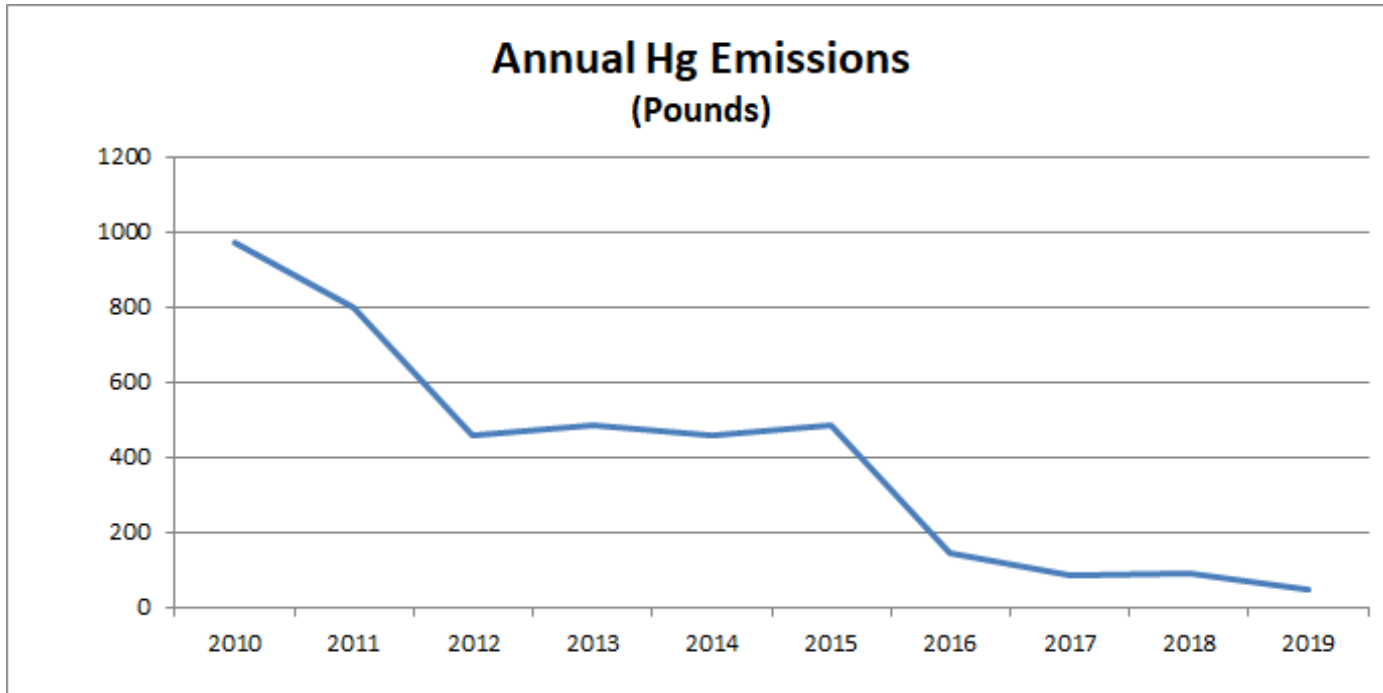
- 35% Decrease over last ten years
- Note: North Omaha units 1, 2, and 3 ceased coal operation in 2016

Be transparent by measuring and reporting its environmental performance on OPPD's website



- 51% Decrease over last ten years
- Note: North Omaha units 1, 2, and 3 ceased coal operation in 2016

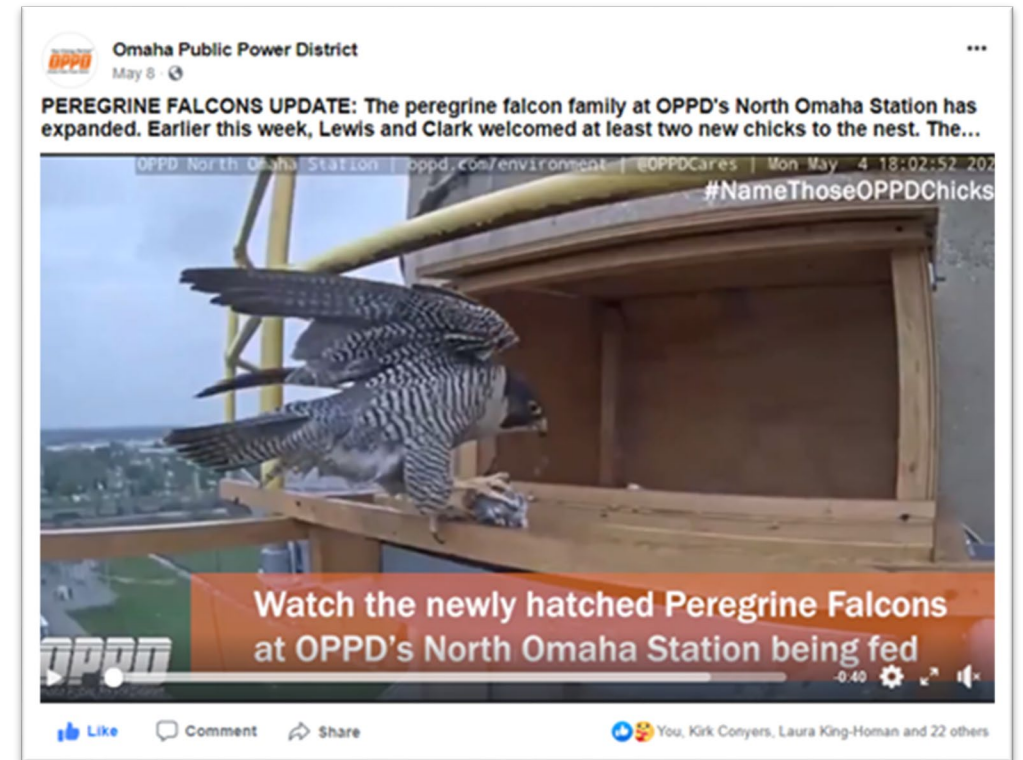
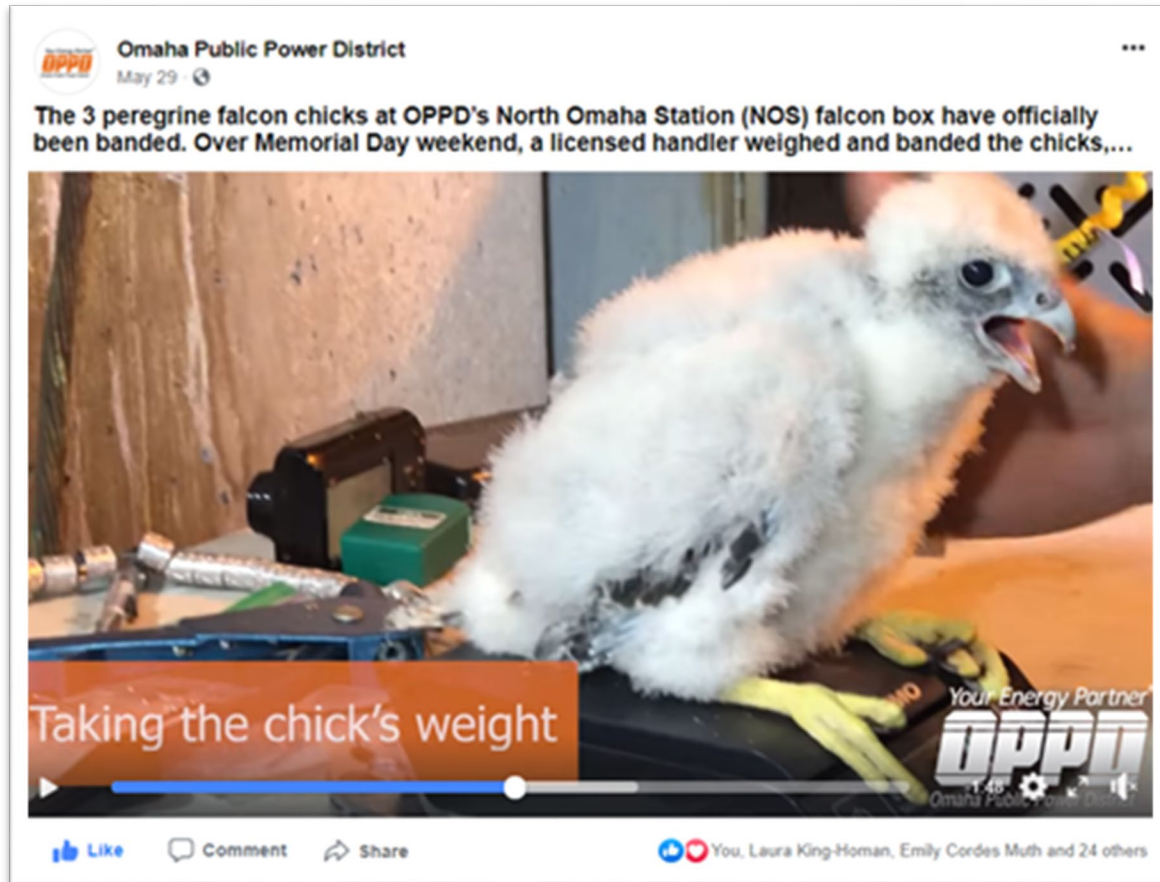
Be transparent by measuring and reporting its environmental performance on OPPD's website



- 95% Decrease over last ten years
- Prior to 2012 emissions were estimated using EPA methodology
- Actual test data used post 2012
- North Omaha units 1, 2, and 3 ceased coal operation in 2016
- Hg controls implemented for MATS rule compliance in 2016

Advocate and educate local, state, and federal governments to protect and advance OPPD's environmental impact

- From April to July 2020 the live feed had reached over 4 million people worldwide

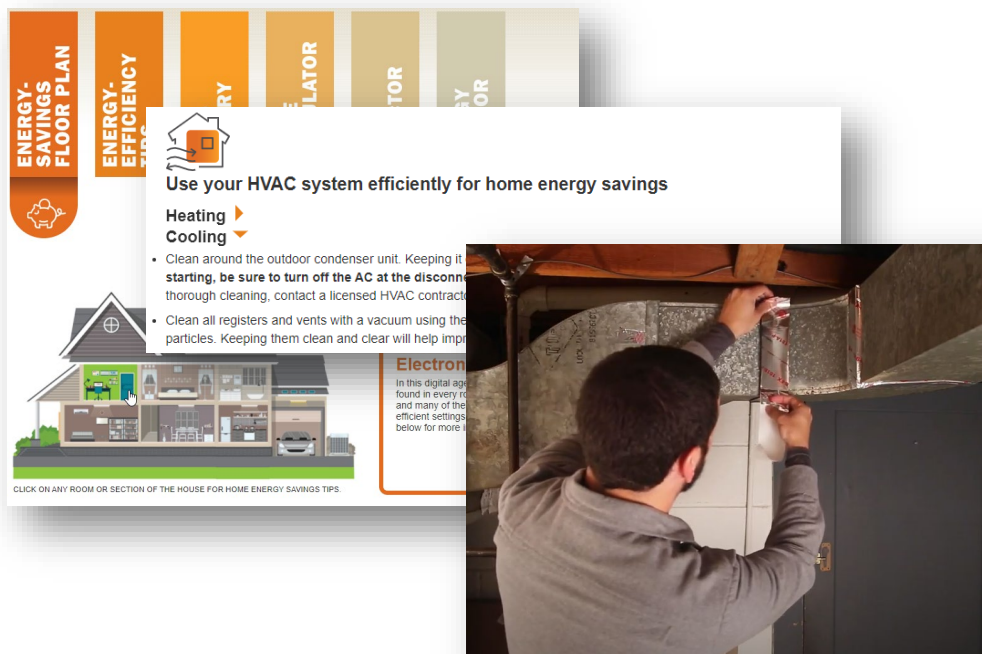


Advocate and educate local, state, and federal governments to protect and advance OPPD's environmental impact

- Letters and testimony to support operational environment for solar in various Sarpy County jurisdictions (Papillion, Sarpy County, Springfield, Gretna)
- Promoted speakers' bureau education to policymakers on renewable energy topics including sustainability and environmental plans:
 - Electric Vehicles -Decarbonization Plan
 - Battery Storage -Renewable Energy Portfolio
- Provided Power with Purpose presentations to various Sarpy County community leaders:
 - Sarpy County Commissioners
 - Sarpy County Wastewater Agency Representatives
 - City Administrators (Bellevue, La Vista, Papillion, Springfield, Gretna)
 - Gretna City Council members
 - Springfield Planning Commissioners
 - Springfield City Councilmembers

Energy Efficiency Education

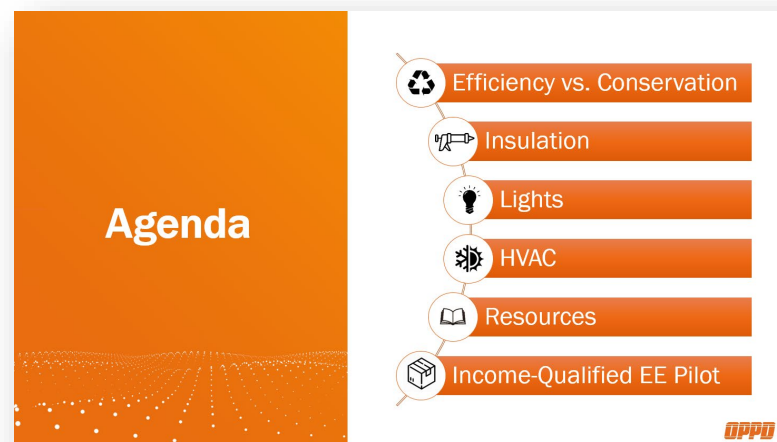
New EE Webpages



- Interactive home, expanded EE Tips, Usage Calculator, and new DIY Videos
- 55,000+ Site visits since launch on 10/2/2019
- EE Tips Page: over two (2) minutes Avg. Time on Page
- Avg. 580 site visits per month

EE Presentations

- 12 presentations in 2019 to 300 customers and students
- Presented at: Facebook, Lozier, various elementary schools, Bennington Women's Club and more
- Presentations tailored to the customer's needs



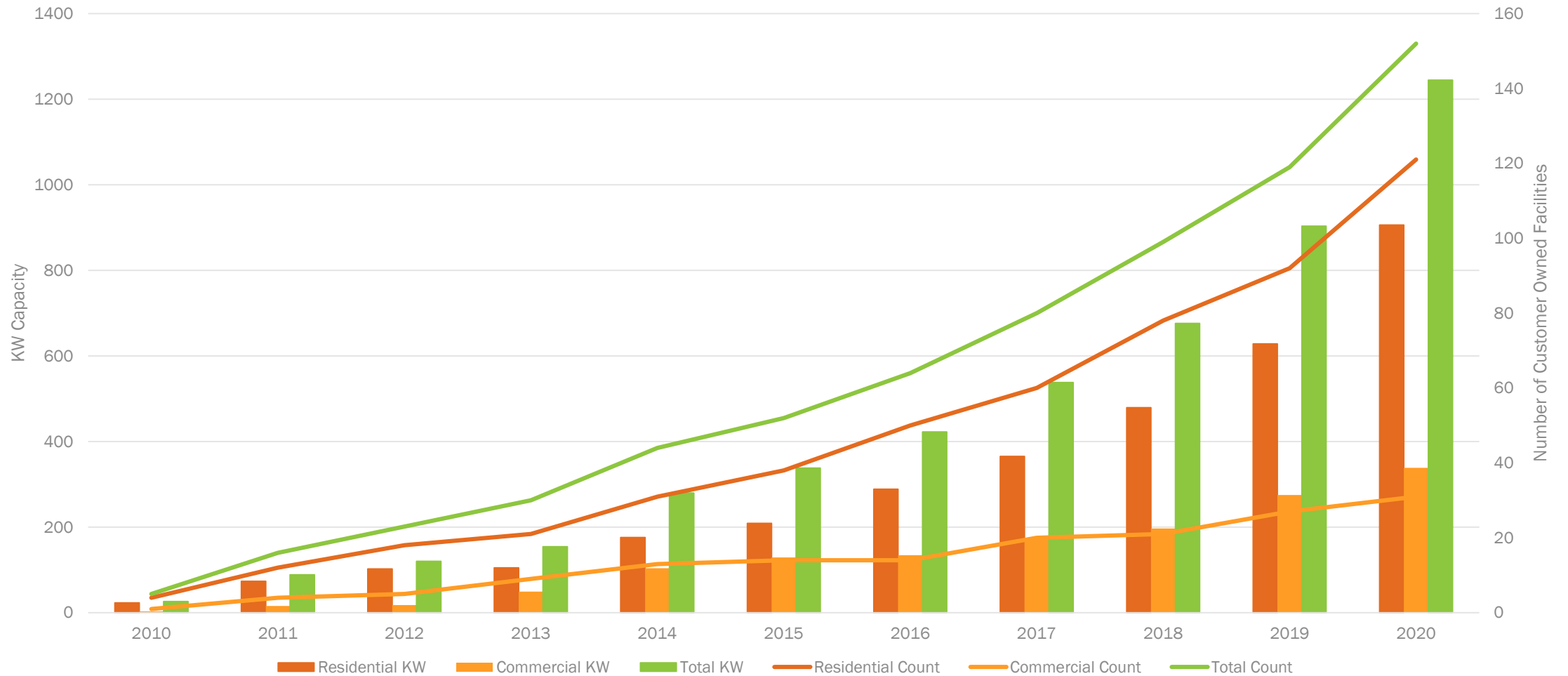
Customer-Owned Generation Process Improvements

The screenshot displays the OPPD website's 'CUSTOMER-OWNED GENERATION HOME' page. The top navigation bar includes links for Residential, Business, Outages, Environment, News & Resources, About, and Community. A left sidebar contains utility services like 'PAY MY BILL', 'REPORT AN OUTAGE', and 'OUTAGE INFORMATION'. The main content area features an introductory text about generating electricity, a 'What is customer-owned generation?' section with an image of a rooftop solar panel, and a 'What happens when there isn't enough sun or wind to p' section. Below this are two orange buttons: 'CUSTOMER-OWNED GENERATION QUICK START GUIDE' and 'CUSTOMER-OWNED GENERATION NET METERING'. At the bottom, a contact message reads 'Contact OPPD anytime! We're your energy partner and...'. On the right, a 'PV Solar Installation' form is partially visible, showing fields for 'PV Solar Mount Type' (Rooftop, Ground), 'PV Inverter Type' (String Inverter, Microinverter), and a table for 'PV System Specification' with columns for 'Qty' and 'Please select...'. Buttons for 'Add Array' and 'Add Inverter' are also present.

- Rich Content on OPPD.com
- Intuitive Online Application
- Trained OPPD Personnel and Contractors
- Streamlined Internal Processes
- ICIS Updated Daily for Safety
- New Interconnection Guide for Contractors

“I looked at OPPD’s customer-owned generation web pages today. They were great! They had more information than I could find at other power companies.”...Jessica

Growth in Small Customer-Owned Generation (25 KW or Less)



Recommendation

- The System Management Committee has reviewed and accepted this Monitoring Report for SD-7 and recommends that the Board find OPPD to be sufficiently in compliance with Board Policy SD-7