



EE Action Plan Update

March 26, 2020



AGENDA

Purpose of the EE Action Plan Update

Evolution of the Savings Forecast

Expected Accomplishments and Expenditures

Focusing on the Future

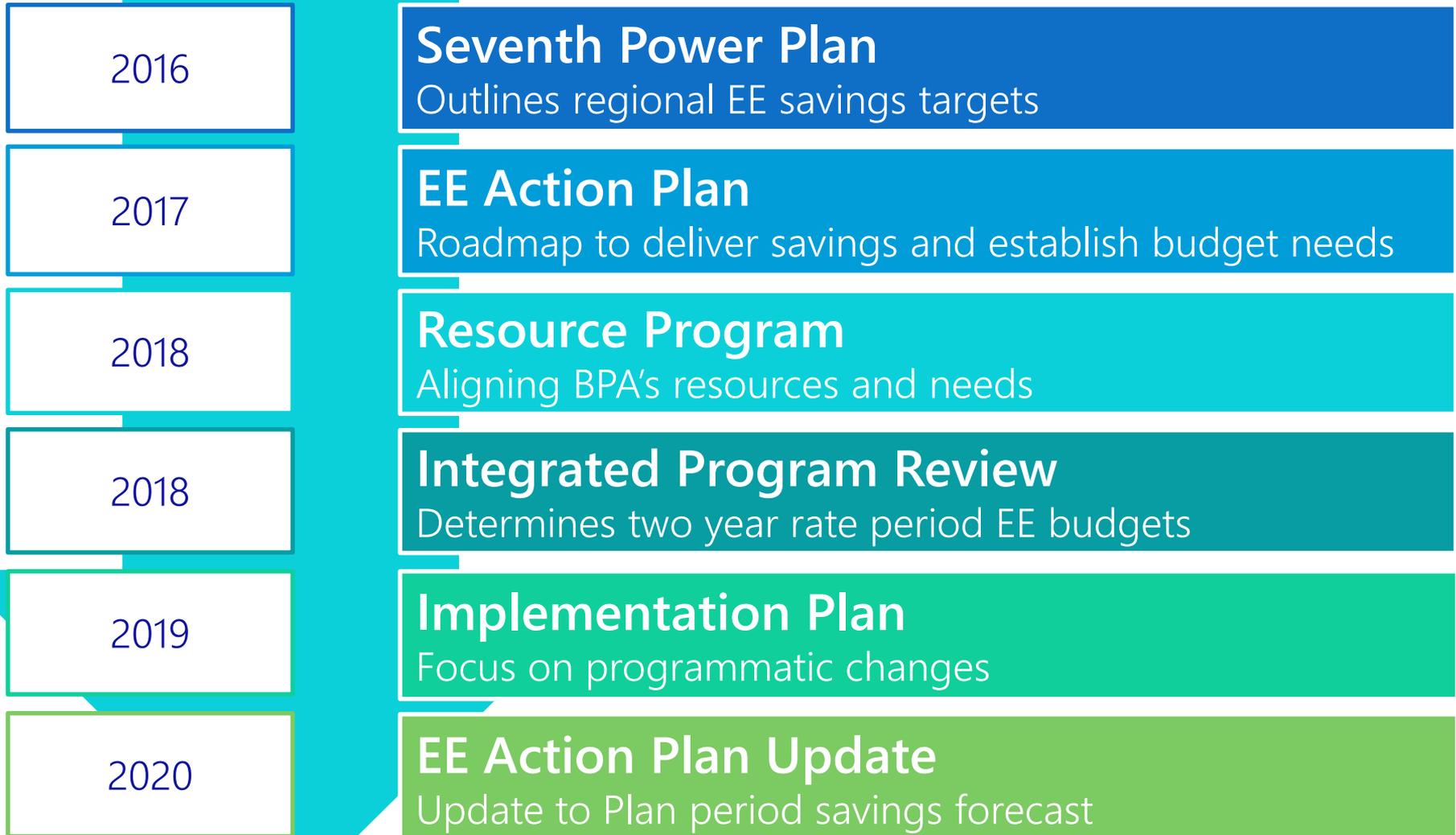
Communication Plan

Sector Level Achievements

BPA's ENERGY EFFICIENCY ACTION PLAN

- BPA's roadmap for achieving savings goals during the Seventh Power Plan Action Plan period (2016-2021).
- First published in March 2017.
- 2020 update includes actual costs and savings for 2016-2019 and updated forecasts for 2020-2021.

EVOLUTION OF SAVINGS FORECASTS



WHAT'S CHANGED SINCE 2016

- BPA's strategic plan adopted in 2018.
- BPA embarked on agency-wide cost-competitiveness initiative.
- BPA completed the 2018 Resource Program, setting direction of energy-efficiency acquisition to higher cost and harder-to-reach savings.
- Significant slow down in development and adoption of federal standards.

DEVELOPMENT PROCESS

2016-2019 Programmatic Savings

- Actual savings for the 2016-2019 period.
- Includes savings from both Energy Efficiency Incentives, or EEI, and utility self-fund sources.

2020-2021 Savings Programmatic Forecast

- Refined from Implementation Plan.
- Based on savings achieved pre-2019, the overall Seventh Power Plan targets, the Resource Program findings, existing program infrastructure and expected market dynamics.
- Reflect the low end of the savings range.

Expenditures and Budgets

- Actual expenditures for 2016-2019 coincide with reported savings.
- 2020-2021 budgets are based off of the expected level of savings.

Non-Programmatic Savings

- Estimated savings for years where input data has been obtained.
- Forecast for remaining years.
- Savings will change as new data is acquired.
- New initiatives and markets may be researched and added to the portfolio.

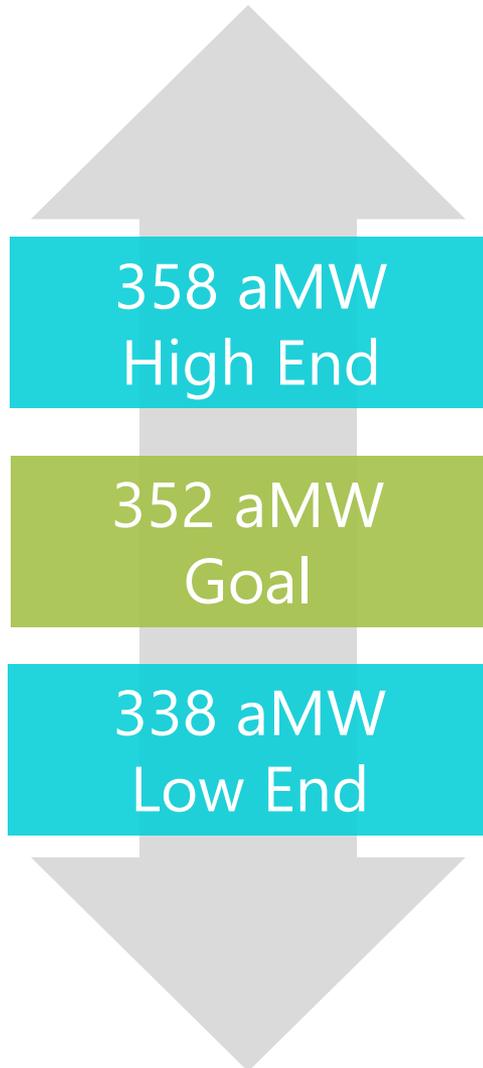
UPDATED EE PLAN GOALS

\$634 Million Investment



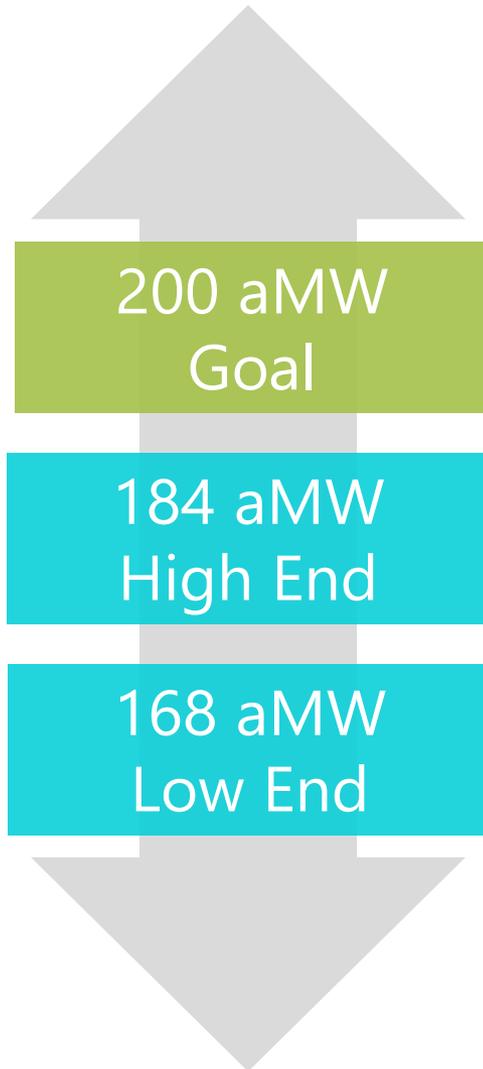
- BPA is reducing forecasted savings goals from original 2016 Action Plan.
- Savings range represents uncertainty in market adoption rates, consumer behavior and utility activity.

PROGRAMMATIC SAVINGS



- Direct implementation efforts and conservation purchases made by BPA and customer utilities.
- 33% of savings funded directly by customer utilities.
- Expected to achieve 96%-102% of original EE Action Plan goals, with the Residential and Commercial sectors exceeding expectations.
- Represent RTF-approved savings estimates, where available.
- Shifting away from low cost and abundant lighting savings, to more costly and difficult to acquire HVAC and weatherization savings.

MOMENTUM SAVINGS



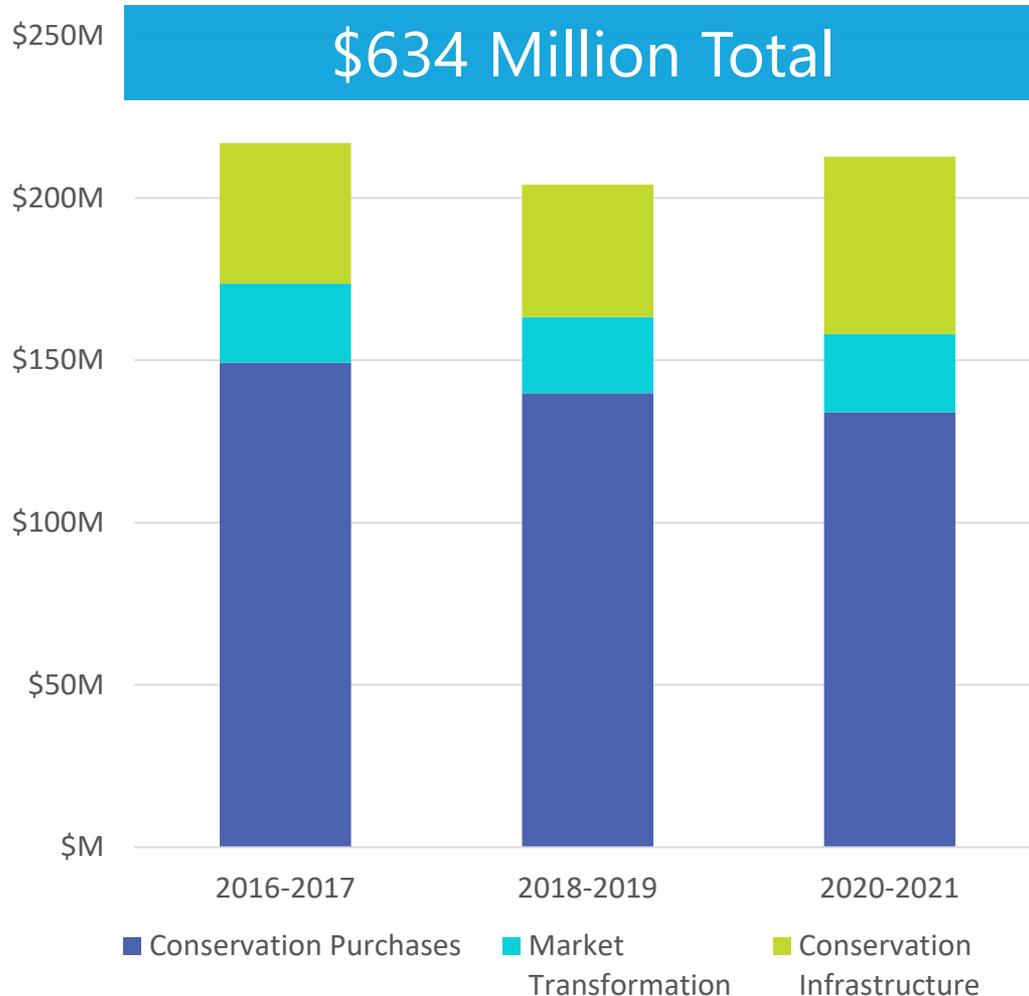
- Quantification of energy efficiency in the region not captured by programs. Includes BPA and Northwest Energy Efficiency Alliance, or NEEA, Momentum Savings.
- Expected to achieve 84-92% of original EE Action Plan goal. Approximately 50/50 split between BPA's Momentum models and NEEA Momentum.
- Significantly less savings from federal efficiency standards are being quantified due to inactivity on rulemaking.
- Momentum Savings research provides the Northwest with invaluable market insights and regional data.

MARKET TRANSFORMATION



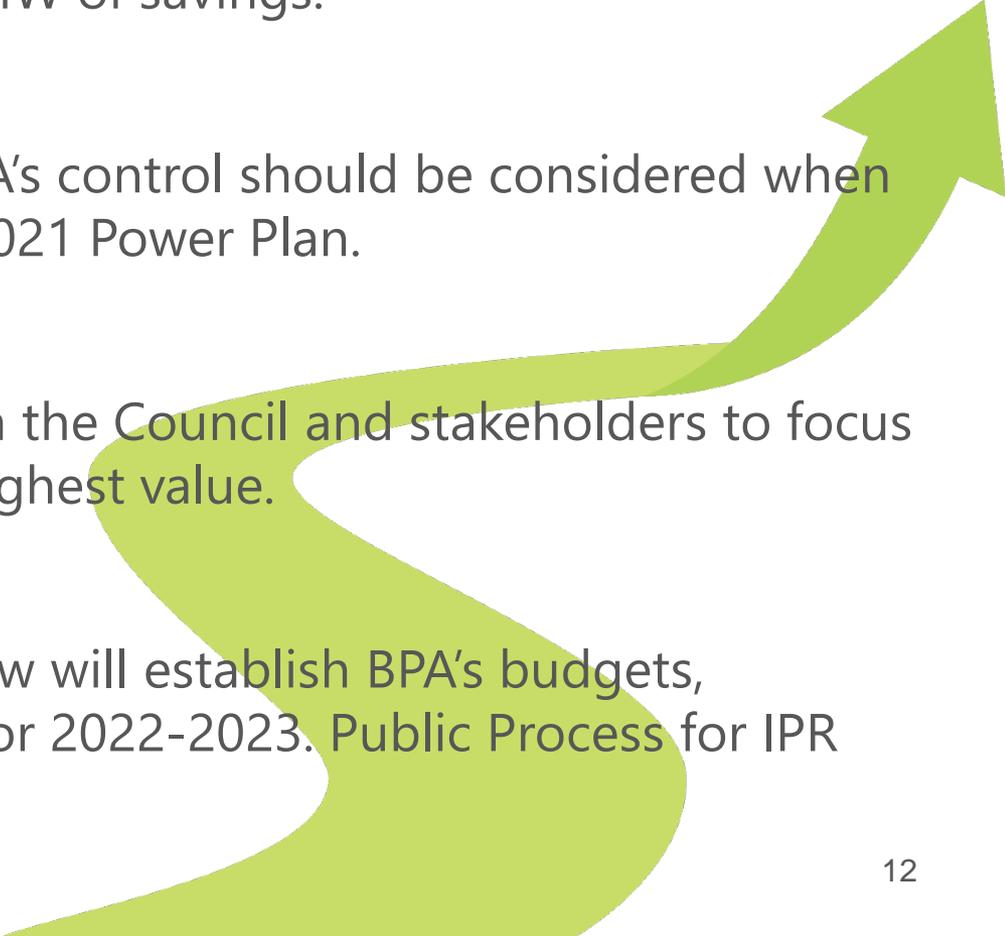
- As a direct funder, NEEA's market transformation efforts are reportable to BPA.
- Initiatives span retail products, codes and standards and residential and commercial HVAC.
- Anticipating to hit 86% of original EE Action Plan forecast.
- Savings are based off of NEEA's baseline and as new data is collected and new initiatives are added. Savings are subject to change.

INVESTING IN ENERGY EFFICIENCY



- Large scale investments from BPA over the course of the Seventh Power Plan.
- \$423M to direct conservation purchases and \$72M to NEEA.
- Spending does not reflect additional funds customer utilities spend on conservation purchases (self-funding).
- 2016-2019 are actual expenditures, 2020-2021 is a budgeted amount.

LOOKING TO THE FUTURE

- BPA, customer utilities and the region have much to be proud of and expect to achieve over 500 aMW of savings.
 - Reliance on savings out of BPA's control should be considered when developing goals out of the 2021 Power Plan.
 - BPA will continue to work with the Council and stakeholders to focus on savings that provide the highest value.
 - The Integrated Program Review will establish BPA's budgets, including Energy Efficiency's for 2022-2023. Public Process for IPR begins in June.
- 

RESOURCES

- Presentation available on BPA's website (<https://www.bpa.gov/EE/Policy/EEPlan/Pages/BPA-Energy-Efficiency-Plan.aspx>)
- Full report will be published in early April.

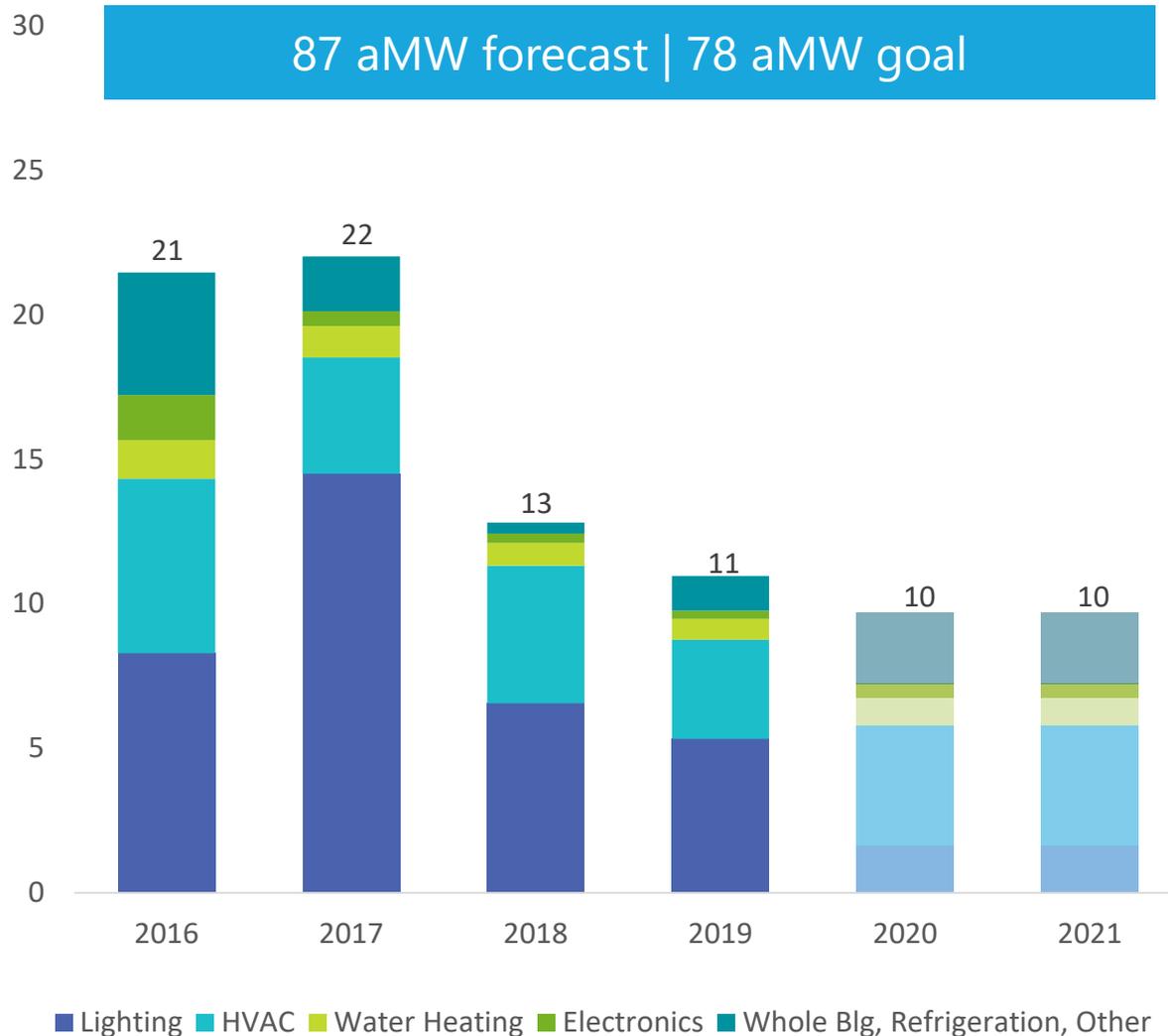


Questions?



Appendix

RESIDENTIAL SECTOR ACCOMPLISHMENTS

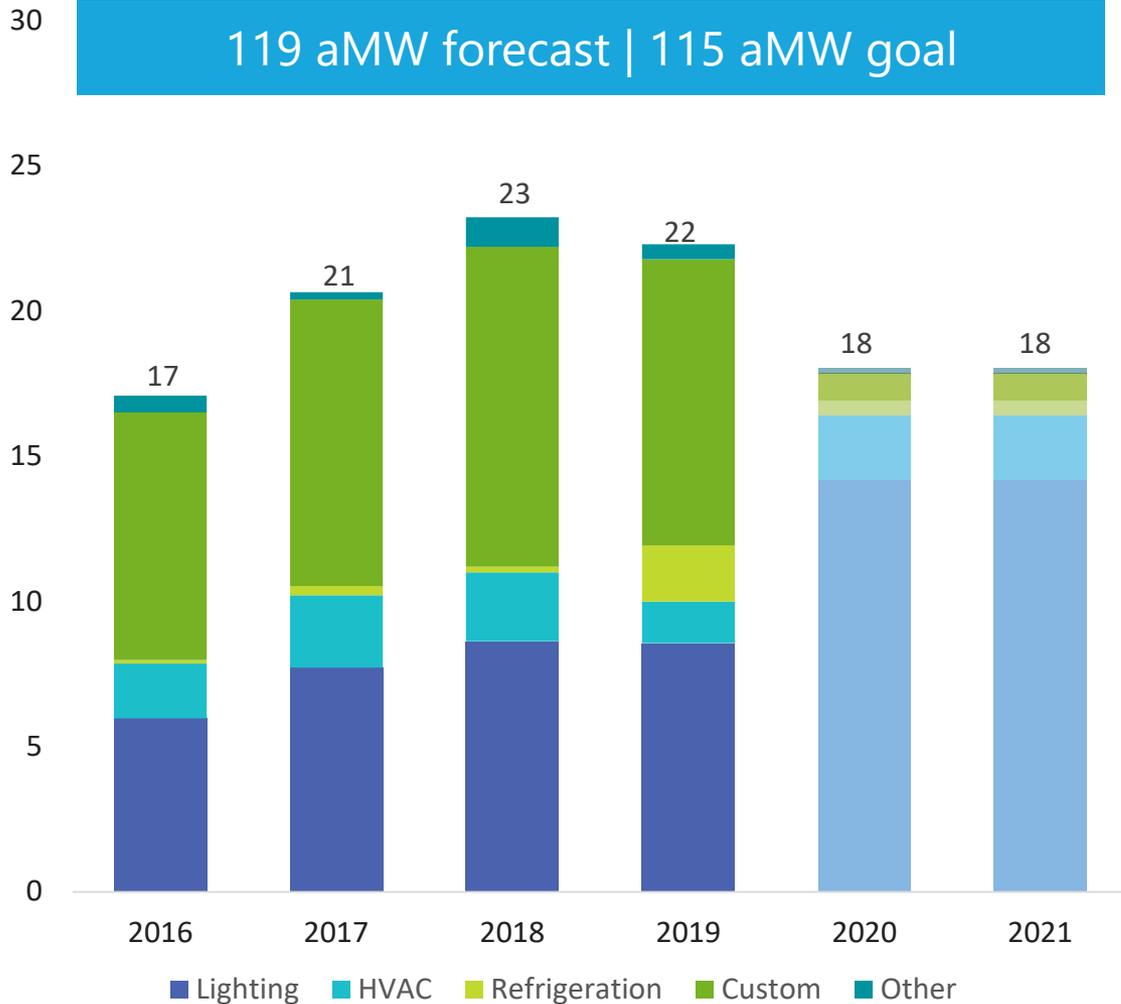


Summary

- Rapid adoption of LEDs drove high levels of savings early in the Plan period.
- Starting in 2020 shifting focus to HVAC, weatherization and HPWH to align with BPA's needs.
- Concerns about UES and cost effectiveness for many measures have shifted the focus to future stability and new measure development.

COMMERCIAL SECTOR SAVINGS

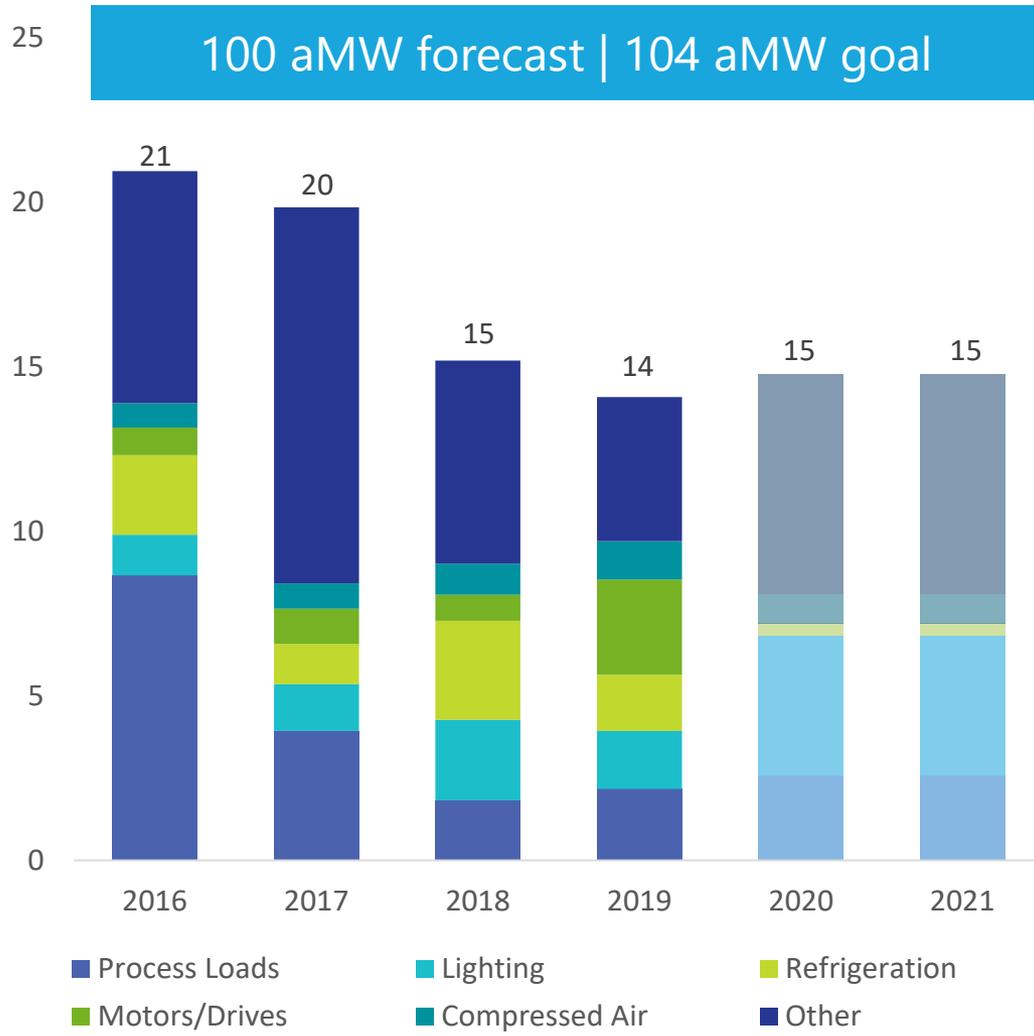
119 aMW forecast | 115 aMW goal



Summary

- The largest contributor to savings is lighting, which represents about 80% of the portfolio.
- The new multi-year HVAC strategy, including Trade Ally Network NW, should drive uptake of deemed measures.
- New incentive strategy for lighting starting in 2020 to adapt to the evolving lighting market.

INDUSTRIAL SECTOR SAVINGS

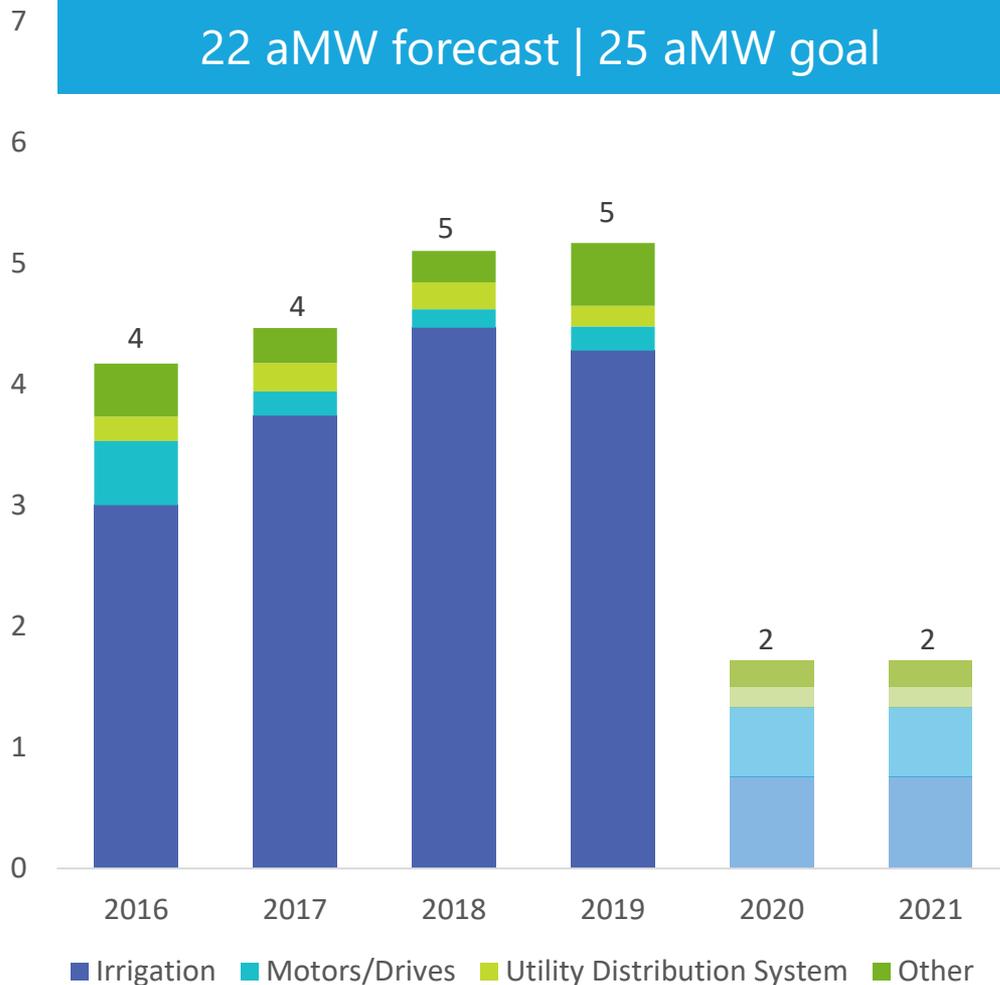


Summary

- Since the ESI program launch, 117 utilities—representing 99.8% of BPA-served industrial load—have enrolled in the program.
- Key activities to bolster engagement include development of account plans and outreach to drive pipeline development.
- New BPAQ measures were launched in FY2020. An uptake in implementation is expected with the new BPAQ tools.

AGRICULTURAL SECTOR SAVINGS

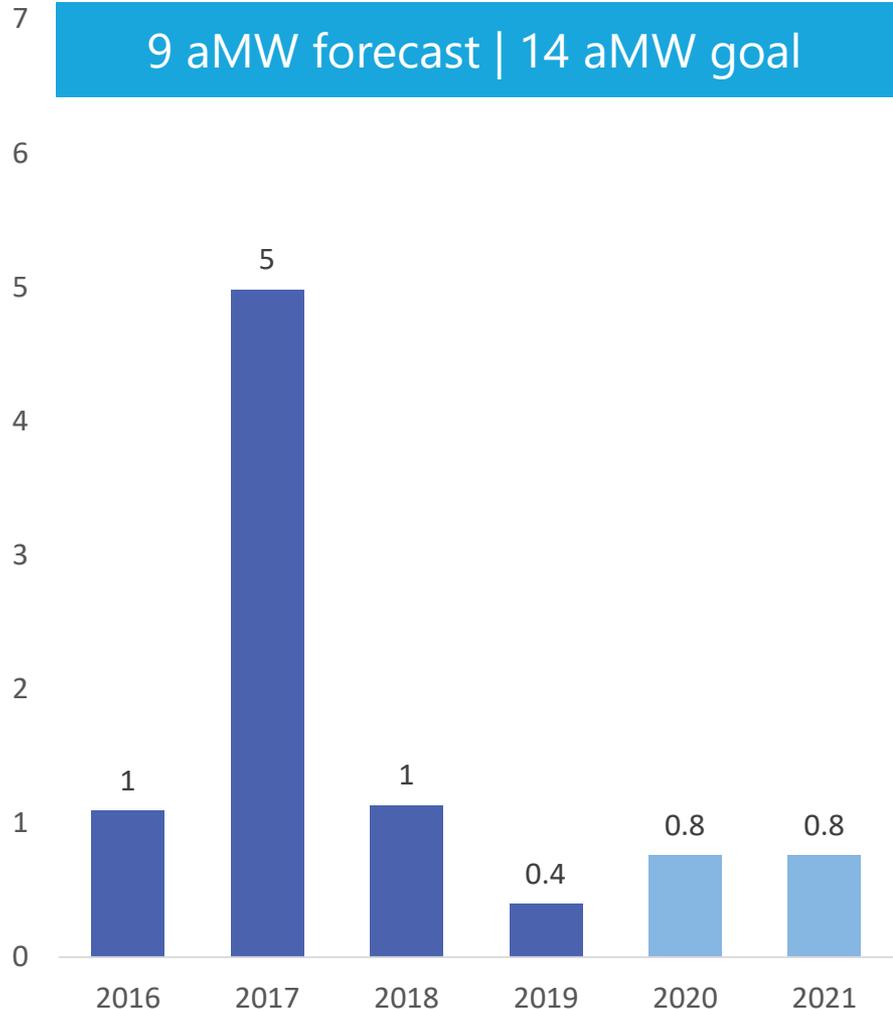
22 aMW forecast | 25 aMW goal



Summary

- Savings from the irrigation end-use are the primary contributor to sector's offerings making up 82% of the total savings.
- The loss of the SIS program removed a significant contributor to the portfolio, however irrigation offerings are still abundant.
- To streamline the incentive process, measures such as VFDs and pump upgrades have been converted to UES measures.

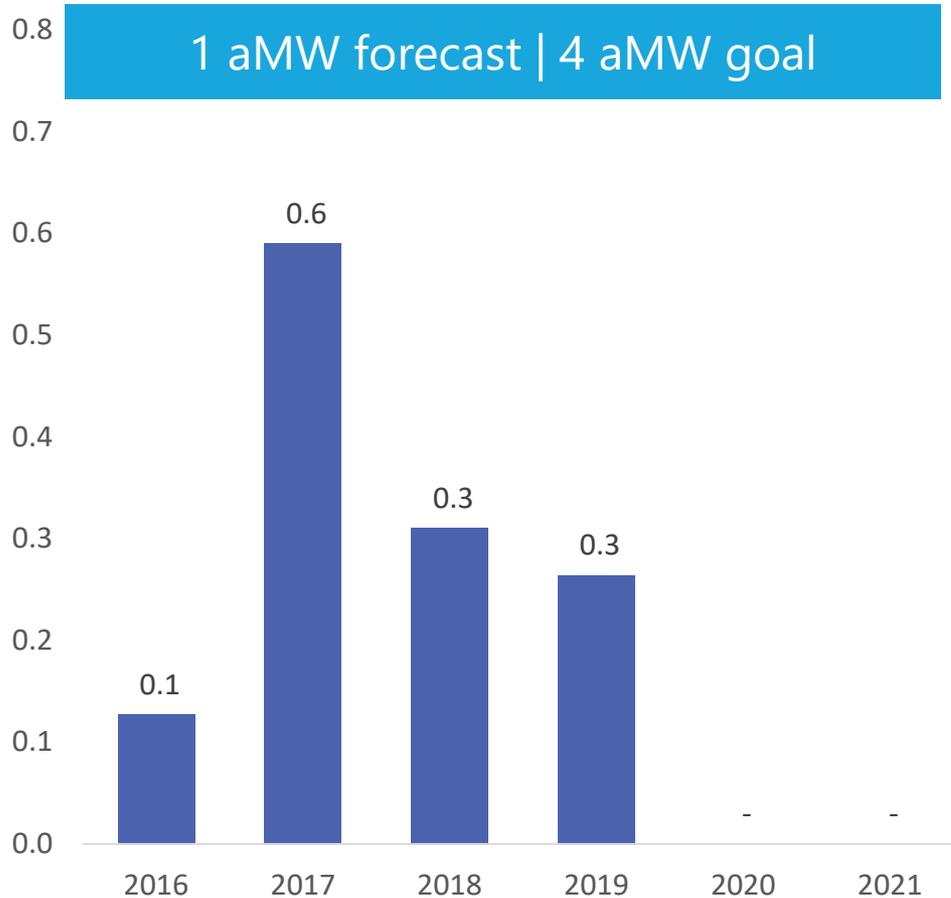
FEDERAL SECTOR SAVINGS



Summary

- Pulls from a very small pool of participants and the implementation of a project by a single participant or a single measure can result in large savings in any given year.
- All savings in 2020 and 2021 will be from the ESRP program, which offers lighting upgrades, VFD and pump upgrades, canal lining upgrades, among others.
- The ESFP will transition away from providing financing and implementation services. All participation in EE programs by federal agencies will be directed toward the Commercial and Industrial Sector.

UTILITY DISTRIBUTION SECTOR SAVINGS

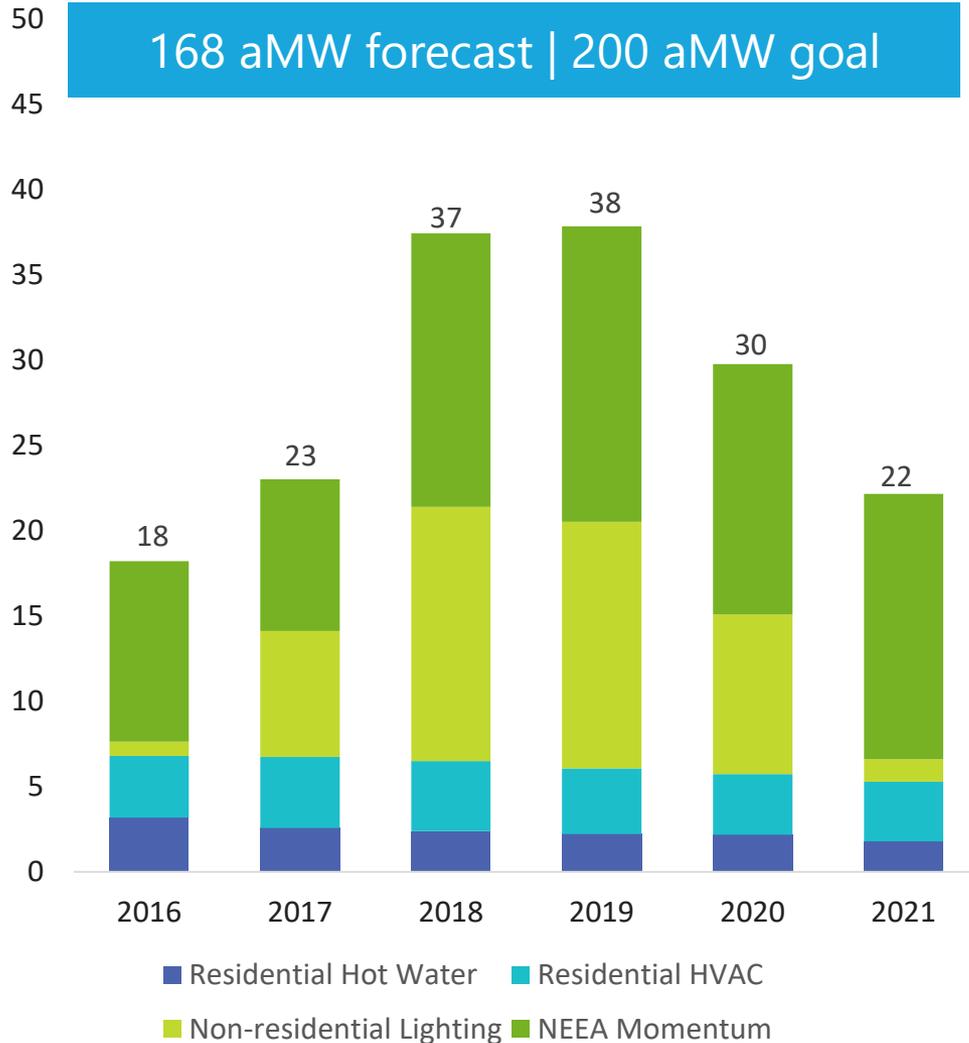


Summary

- Implemented distribution improvement projects with roughly 20 utilities, and CVR with two utilities.
- BPA is not forecasting any savings for 2020 and 2021 due to low levels of savings in the prior years.
- BPA is actively engaged with a customers and will continue to pursue projects in 2020 and 2021. A new offering for FY2020 is the launch of the RT Calculator, targeted for spring 2020.

MOMENTUM SAVINGS

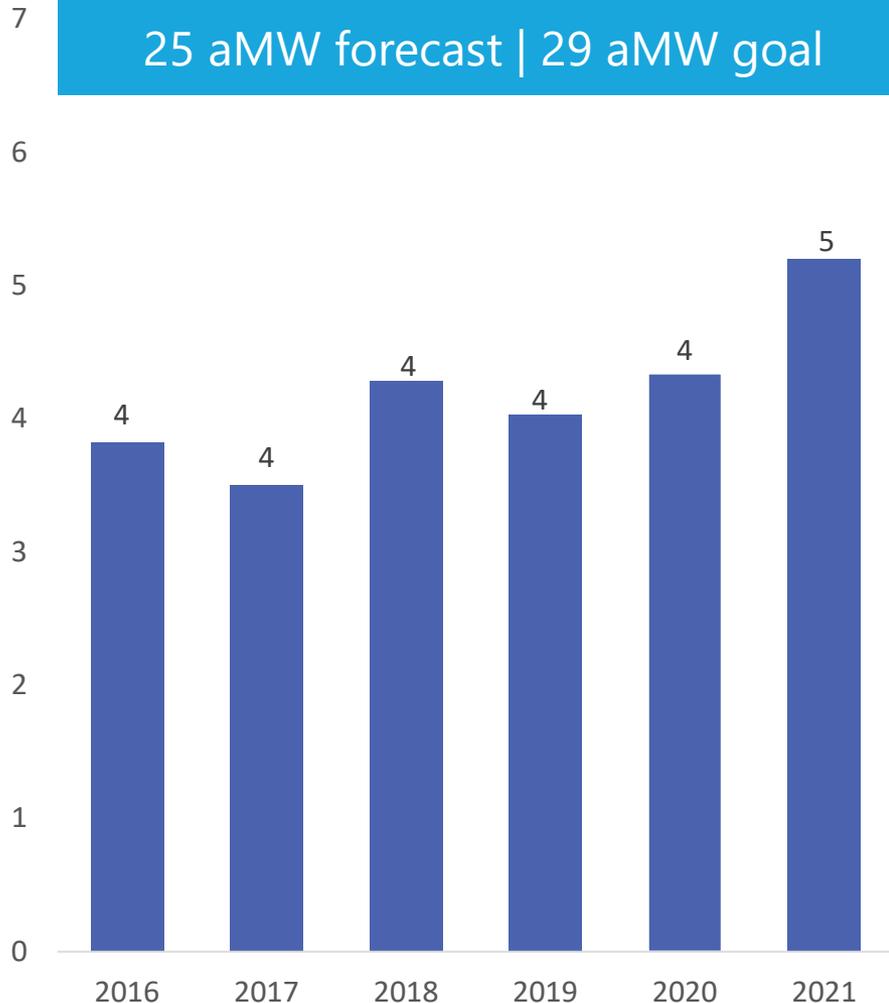
168 aMW forecast | 200 aMW goal



Summary

- BPA has performed research and developed comprehensive full-market models for the non-residential lighting, residential HVAC, and residential hot water markets.
- BPA also reports savings for NEEA initiatives that are above the Plan baseline, but are not included in NEEA’s Net Market Effects.
- BPA’s current estimate does not include savings estimates from any markets that are in the process of working towards a savings model, including data centers and commercial HVAC.

MARKET TRANSFORMATION SAVINGS



Summary

- NEEA develops and delivers programs that capture savings associated with market transformation. Initiatives span retail products, codes and standards and residential and commercial HVAC.
- The Implementation Plan published in January 2019 contained an error reflecting a contribution of 50 aMW, which was the value prior to applying BPA's funding share.
- NEEA's savings estimates will not be final until the end of the Seventh Plan period as new data is collected and new initiatives are added over the course of the six years.