



## Q4-2020 COLORADO DSM ROUNDTABLE

02.10.2021

# AGENDA

- 1:00 – 1:15 p.m. Welcome and DSM Regulatory Updates
- 1:15 – 2:15 p.m. DSM Programs: Q4-2020 Update
  - » Q4 Achievement and Highlights
  - » Covid-19 Lessons Learned
    - Challenges
    - Victories
    - All Thing In Between
- 2:15 – 2:30 p.m. Product Development Update
- 2:30 – 2:40 p.m. *Break*
- 2:40 – 3:45 p.m. Evaluation Reports (EMI)

# **DSM Regulatory Updates**

## **Q4-2020**

**George McGuirk**  
**DSM Regulatory**

# Q1 60/90-Day Notices

- Insulation and Air Sealing Rebate Update
  - *Posted: 1/20/2020*
  - *Implemented: 2/20/2020*
- Smart Thermostat Controls
  - *Posted: 1/20/2020*
  - *Implemented: 2/20/2020*
- Small Business Lighting and Commercial Refrigeration Update - 2020
  - *Posted: 3/13/2020*
  - *Implemented: 4/14/2020*
- 2019 Evaluations
  - *Posted: 3/13/2020*
  - *Implemented: 4/14/2020*
- Heating Efficiency Update - 2020
  - *Posted: 3/13/2020*
  - *Implemented: 4/14/2020*
- Peak Day Partners Update - 2020
  - *Posted: 3/13/2020*
  - *Implemented: 4/14/2020*
- Insulation and Air Sealing Update - 2020
  - *Posted: 3/13/2020*
  - *Implemented: 5/14/2020*

# Q2 60/90-Day Notices

- Cooling Efficiency Update

- *Posted: 5/29/2020*
- *Implemented: 6/30/2020*

- Home Energy Squad

- *Posted: 5/29/2020*
- *Implemented: 6/30/2020*

- Home Lighting Update - 2020

- *Posted: 5/29/2020*
- *Implemented: 6/30/2020*

- Water Heater Demand Response

- *Posted: 5/29/2020*
- *Implemented: 6/30/2020*

- School Education Kits

- *Posted: 5/29/2020*
- *Implemented: 6/30/2020*

- Single-Family Weatherization

- *Posted: 5/29/2020*
- *Implemented: 6/30/2020*

# Q3 60/90-Day Notices

- Residential Battery Demand Response
  - *Posted: 8/7/2020*
  - *Implemented: Pending*

# 2021-22 DSM Plan Update

- 2021-22 DSM Plan
  - Filed July 1, 2020 – Proceeding No. 20A-0287EG
  - Answer Testimony filed November 2, 2020
  - Settlement Agreement file December 3, 2020
  - Settlement Testimony filed December 14, 2020
  - Awaiting Recommended Decision from ALJ
    - Earliest Implementation Date: April 1, 2021
- Settlement Documentation Available
  - [https://www.dora.state.co.us/pls/efi/EFI\\_Search\\_UI.search](https://www.dora.state.co.us/pls/efi/EFI_Search_UI.search)
  - Proceeding No. 20A-0287EG

# 2021-22 DSM Plan Update

2021 Plan Year	Direct Filing		Settlement Filing		% Change	
	Energy Savings	Budget	Energy Savings	Budget	Energy Savings	Budget
Electric Energy Efficiency	538,525,703 (kWh)	\$ 89,870,680	537,639,070 (kWh)	\$ 89,954,799	-0.16%	0.09%
Electric Demand Response	84,632 (kW)	\$ 21,105,938	94,410 (kW)	\$ 23,384,188	11.55%	10.79%
Natural Gas Energy Efficiency	823,854 (Dth)	\$ 17,782,967	780,872 (Dth)	\$ 18,499,094	-5.22%	4.03%

2022 Plan Year	Direct Filing		Settlement Filing		% Change	
	Energy Savings	Budget	Energy Savings	Budget	Energy Savings	Budget
Electric Energy Efficiency	523,534,870 (kWh)	\$ 90,110,519	522,789,432 (kWh)	\$ 89,960,142	-0.14%	-0.17%
Electric Demand Response	105,901 (kW)	\$ 21,615,300	116,098 (kW)	\$ 23,820,175	9.63%	10.20%
Natural Gas Energy Efficiency	863,875 (Dth)	\$ 18,099,838	799,708 (Dth)	\$ 18,498,555	-7.43%	2.20%

# 2021-22 DSM Plan Update

- Stakeholder Engagements
  - Demand Response Working Group
  - On-Bill Financing Working Group
  - Income-Qualified Beneficial Electrification Pilot
- Roundtable reporting
  - Green/Stretch Codes Evaluation
  - Residential and Commercial HVAC
  - Weatherization Product Modifications
  - Battery Demand Response
  - 60/90-Day Notice Impacts

# DSM Regulatory Calendar

- ISOC Annual Status Report
  - Terminated – Decision No. C20-0263 in Proceeding No. 19M-0561EG
  - Details will be incorporated into DSM Status Report
- 2020 DSM Status Report
  - April 1, 2021 filing
- Upcoming Meetings – Save the Date!
  - Q1-2021 DSM Roundtable Meeting
    - Wednesday, May 12, 2021

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# **DSM Achievements Q4-2020**

**Mark Schoenheider  
Manager, Customer Energy Solutions**

# 2020 Q4 Achievement Highlights

## Electric Portfolio

- 465.8 GWh (93% of 501.7 GWh Target)
- 91.6 MW (99% of 92.3 MW Target)
- \$75.2M (81% of \$93.4M Budget)

## Business Programs

- 274.2 GWh (74% of Target)
- Lighting + Lighting Small Bus. 128.6 GWh (59%)
- New Construction 62.5 GWh (148%)
- Strategic Energy Management 37.4 GWh (106%)

## Residential / LI Programs

- 191.5 GWh (144% of Target)
- Home Lighting & Recycling – 119.1 GWh (174%)
- High Efficiency Air Conditioning – 3.7 GWh (142%)
- L.I. Single Family – 20 GWh (1122% vs. 1.8 GWh goal)

## Gas Portfolio

- 737,382 Net Dth (108% of 681,120 Target)
- \$14.24M Spend (96% of \$14.9M Budget)

## Business Programs

- 211,359 Net Dth (135% of Target)
- New Construction 138,488 Dth (268%)
- Heating Efficiency 26,982 (93%)
- Multifamily Buildings 2,887 Dth (5%)

## Residential / LI Programs

- 526,022 Net Dth (100% of Target)
- ENERGY STAR Homes – 81,892 Dth (109%)
- Home Energy Insights – 79,102 Dth (88%)
- L.I. SF Weatherization – 51,104 Dth (107%)

# Marketing Campaigns & Trade Outreach

## Business

- ESOURCE Virtual Forum Oct. 6-7
- Denver Metro Building Owners and Managers Association/BOMA rebates, benchmarking Oct. 29
- High Performance Buildings and Homes Committee (f.k.a. Energize Denver) ongoing
- Independent Electrical Contractors Rocky Mountain/IECRM: COVID impacts Oct. 14
- Slipstream Lighting, HVAC supply chain research, findings from Integrated Controls project Oct. 14
- City and County of Denver developing a NZE New Buildings Implementation Plan, Oct. 26
- IECRM Annual Member Meeting, State of the Industry (Alice Jackson presented) Nov. 12
- Three Commercial financing Webinars mid-December
- Energy Efficiency Business Coalition (EEBC) quarterly Dec. 17

## Residential

### Marketing

- HPWH direct mail in partnership with AO Smith
- Email promoting smart thermostats around Black Friday/Cyber Monday aligning with manufacturer sales
- Showerhead email campaign

### Trade ally/stakeholder outreach

- Continued AC AHRI waiver due to supply chain issues
- Beneficial Electrification (BE) discussions
  - Energy Efficiency Business Coalition (EEBC) quarterly panel presentation – December
  - Garfield, Eagle, Pitkin Counties beneficial electrification meeting
  - Colorado Energy Office/Beneficial Electrification League
  - City/County of Boulder, Denver
  - Identification of early adopter trade partners



# **Covid-19 Impacts Lessons Learned**

**Mark Schoenheider  
Manager, Customer Energy Solutions**

# COVID-19 Lessons Learned

- Business Lighting
- Commercial Remote Audits
- Recommissioning
- Home Performance, Home Energy Squad, Multifamily
- Business New Construction
- Energy Star New Homes
- Partners in Energy

# Business Lighting

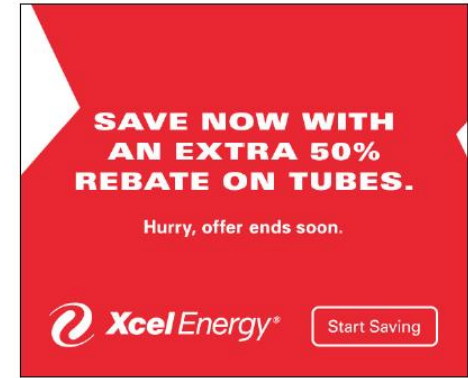
- Achieved 44% of filed kWh target
- May 1, bonus rebates launch
  - Additional 25% rebate bonus on indoor fixtures
  - Additional 50% rebate bonus on LED Tubes
  - Additional \$100/kW for on- and off-peak electric savings
- Sept 1, Additional 20% rebate bonus on LED Lamps
- Robust marketing campaign: segmented email, paid advertising, over 400 trade participated
- LED Instant Rebate – LED lamps rebated via midstream distributor channel had a strong year
- Prescriptive & custom downstream — LED fixture retrofit projects fell short due to customer's limited facility access, manufacturing delays, shipping delays, and maintenance staff layoffs

2020	Actual	Target	% to goal
Net Gen kWh	79,576,667	181,557,873	44%
Net Gen kW	12,517	24,994	50%
Spend	\$ 12,118,559	\$ 20,380,890	59%

## Continuing to grow 2021 Pipeline

- New market channels: Online equipment sales through big box retailers, manufacture direct

# Business Lighting- Digital Advertising



# Commercial Remote Audits

- Offered for more flexibility, but didn't take off
- Socialization of the option
- Technical considerations
- Customer experience considerations
- Looking forward

# Recommissioning (RCx)

- **Building Operator Certification**

- In-Student classes were suspended in early 2020. The first virtual class started in August with 25 students. Most students were from government customers (GSA) and were not interested in receiving certification
- Eight Students from previous classes submitted for the tuition reimbursement generating nearly 500,000 kWh

- **Building Tune-Up**

- Three building tune-ups were completed prior to the COVID closures. No implementation measures were completed after the closures

- **Fast Track**

- 3 Fast Track applications in Pre-Approval
- No 2020 savings

- **RCx Studies/Implementation**

- Customers held off on new studies and implementation at the start of COVID with the expectation of a short delay. As COVID progressed buildings that were occupied restricted access to only essential employees.
- Eight study applications were received in 2020. These studies have not completed their review or have received final approval
- Six prior year studies provided 600,000 kWh through measure implementation prior to the COVID closures

# Recommissioning (RCx)

- **RCx Training**

- New investigator applications are no longer being accepted pending transition to new Building Energy Assessments Program in the 21/22 filing

- **Transition to Building Energy Assessments 21/22**

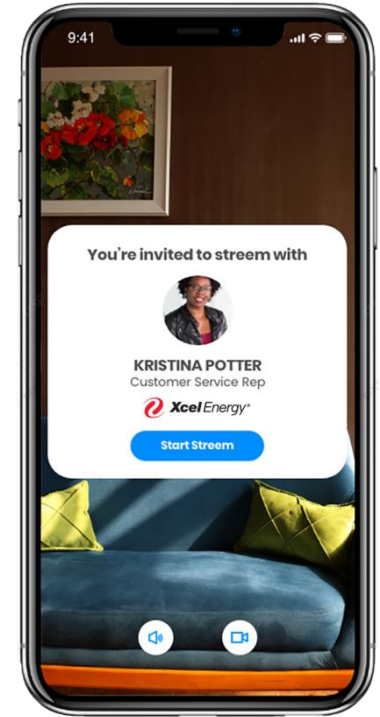
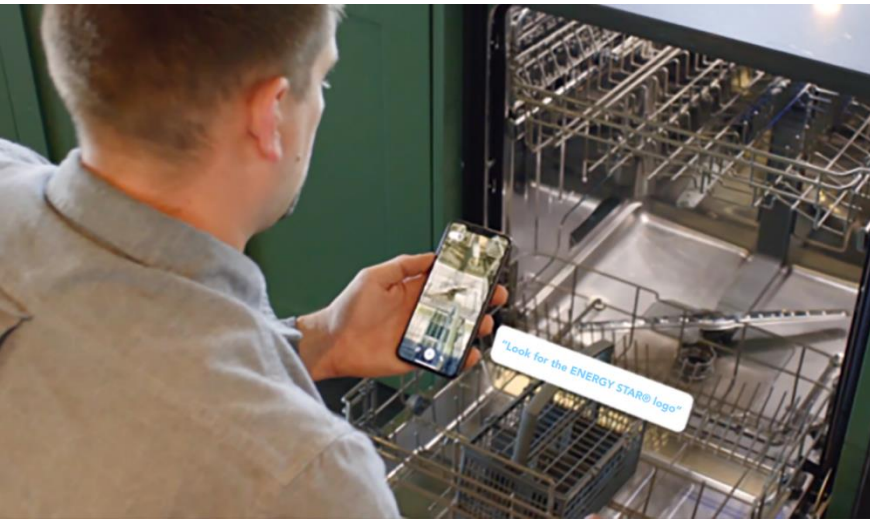
- Building Assessment – This assessment focuses on optimizing existing equipment within facilities. Prescriptive and Custom energy-saving opportunity rebates will be identified where applicable
- Targeted Building Assessment – Additional replacement for Recommissioning product, this offering encompasses the same components as the Building Assessment but at a greater depth. A detailed, comprehensive assessment that will be tailored to highly engaged customers that have an expectation of building an on-going relationship with their study provider and utility

# Home Performance

- Product redesign
  - Phase two: Expand trade partner network to include more HVAC
  - Initial interest was good however COVID-19 impacted the results. Trade partners were not comfortable taking on new program responsibilities.
  - Next steps: Continued effort in 2021 to engage
- Virtual QC visits
  - Virtual tool was tested to complete QC at time of installation
  - Allowed deeper visibility into work being completed
  - Virtual QCs will be completed in 2021 in addition to traditional visits

# Home Energy Squad Virtual Visits

- Bill onsert in October plus monthly email campaigns
- Strong participation: 285 virtual visits completed in Q4
- In-home visits paused briefly in December when counties moved to higher restrictions



# Multifamily Challenges

- 9 virtual assessments completed, 128 in-person
- Rollercoaster of direct installation activities
  - Shut down in-field operations in Q2
  - Ramp up Q3-Q4
  - Shut down again at the end of Q4
- Stage 3 - mostly lighting projects



# Business New Construction

- Essential Industry
  - Construction remained essential business during pandemic which led to very few project delays
  - New Construction projects typically have a lengthy lifetime in the New Construction Programs
  - Projects completed in 2020 were late in the completion stage and construction was not interrupted
- New Construction Lighting Bonus
  - Bonus rebate of 25% for New Construction Lighting projects that were not enrolled into the EEB or EDA Programs
  - Offering was implemented May 1st

# Business New Construction

- Lessons Learned

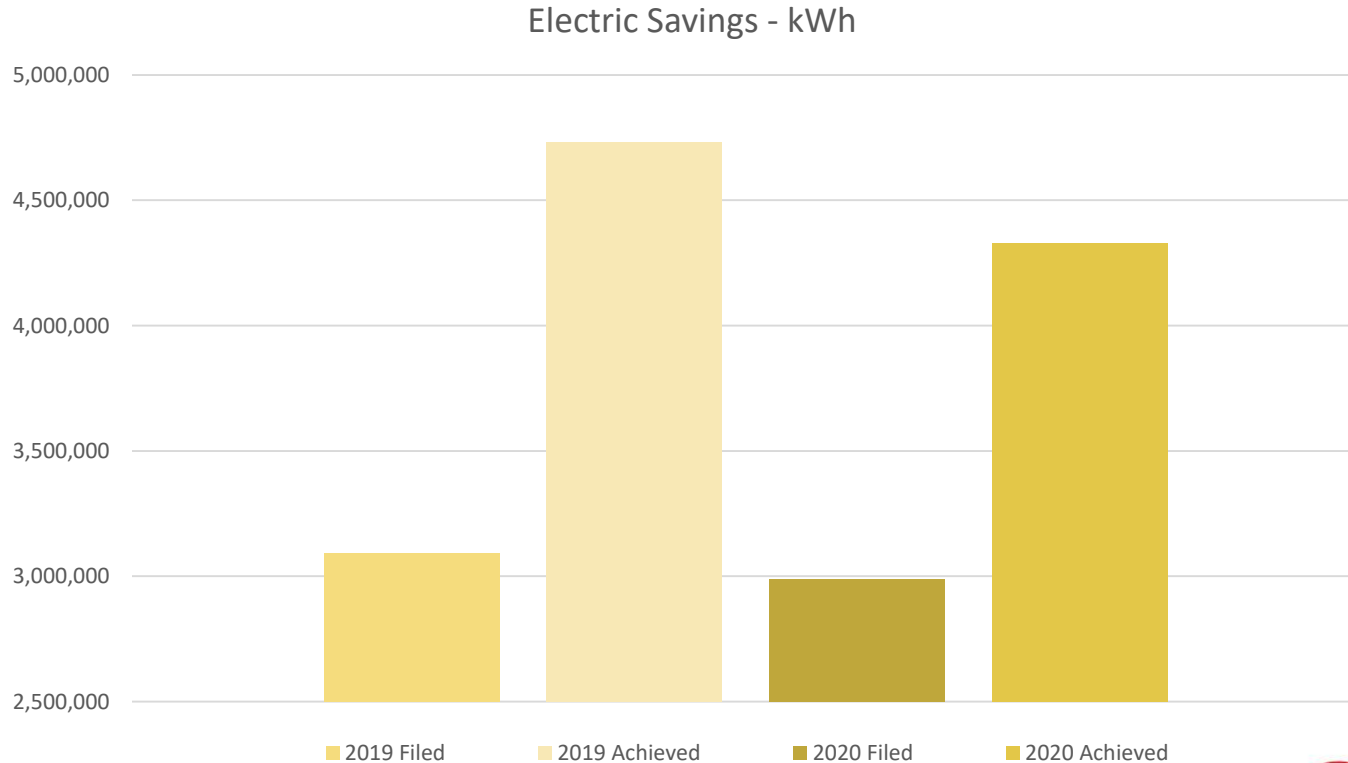
- Remote Measurement & Verification

- COVID-19 presented the opportunity for our vendors to remotely perform Measurement & Verification activities, traditionally performed on-site
    - Vendors were able to adapt to completing the tasks with video or pictures of the desired equipment and system upgrades
    - Remote M&V activities are viable options in the future with the continuation of the pandemic and customer preferences

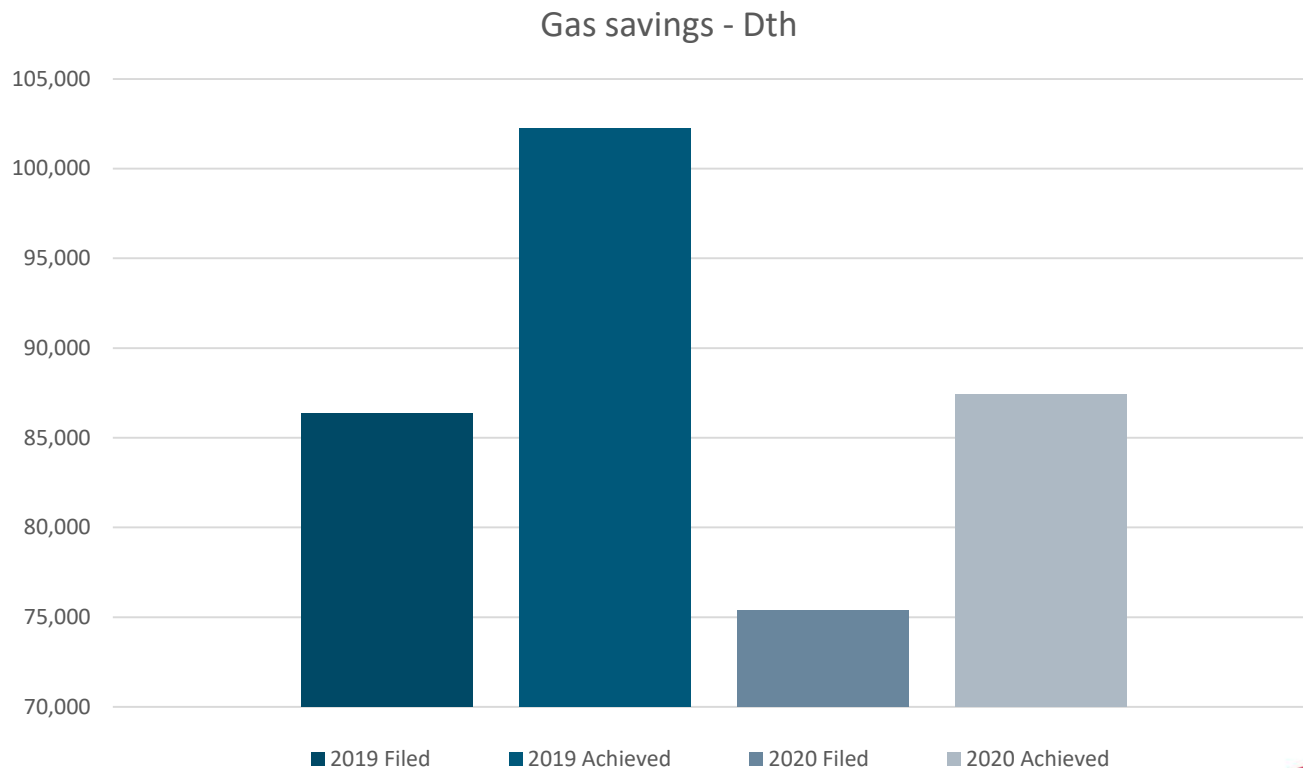
- Continue to build Pipeline

- The pipeline of project contributed to the success of the program in 2020. Continuing to build the pipeline and maintain projects will lead to continuation of success into future years

# Energy Star New Homes



# Energy Star New Homes



# Energy Star New Homes

- Drivers of our historical success
  - Sustained population growth has sustained demand for new homes
    - Denver MSA has grown 16.66% since 2010 (US census)
  - Our Program builders continue to build good houses
  - In 2020, construction was classified as an essential industry; thus, the program saw negligible if any COVID-19 related reduction in productivity and participation

# Energy Star New Homes

- Strategies to ensure future success
  - Introduction of Codes & Standards measures
    - Give code officials tools and skills to improve code advancement & enforcement
    - Connect with builders who are solely code compliant and bring them beyond code
  - Increase training offerings
    - As codes and enforcement increase, new techniques will keep builders better than code
  - Commit to direct-to-consumer marketing to pull potential new home buyers to program builders

# Energy Star New Homes

- Net Zero New Buildings
  - In 2020, about 1/6 of Program homes were in Denver proper
  - The enhanced Electric-only path for 2021 well positions the program to lead that transition
  - Keeping a perpetual eye on affordability
    - First cost
    - Operational expenses

# Partners In Energy

- **Program Delivery**

- Transitioned planning workshops to online delivery
- Incorporated end-use program updates into regular communication channels
  - Newsletters
  - Dedicated page on the Partners in Energy portal
  - Updates in monthly Office Hour webinars
- Developed video overview of COVID 19 response
  - [Energy Action Planning during COVID 19](#)

# Partners in Energy

- **Community Support**

- Office Hours & Online Events
  - Tips and Tools for Remote Engagement
  - Energy Action During COVID-19
  - Community Conversation: Building Community Resilience
- Surveyed communities on what challenges communities are facing and how Partners in Energy could best support them
- “Tips for Remote Engagement” training video and Remote Engagement toolkit
- “Energy Burden and Underserved Populations” training video and Underserved Populations toolkit



# **DSM Pilot and Product Development Q4-2020 Highlights**

**Dan King and Thor Bjork**  
**Product Developer, Customer Energy Solutions**

# Residential Battery Demand Response pilot

- **Background:**

- A pilot to test the ability of residential, customer-owned batteries to respond to demand response signals to reduce peak load, charge on demand, and shift solar export

- **Status:**

- Contracting complete with SolarEdge and Tesla
- Launch will take place in first quarter

# Water Heater Demand Response

- Launching soon!
- Water heaters will be used as a form of thermal energy storage, to shift loads away from peak times
- Residential only
- For new heat pump water heaters



# Indoor Agriculture Energy Assessment

- Targeted energy assessments for the indoor agriculture industry
- Rebates through our regular prescriptive and custom processes
- RFP released soon
- Slated for summer 2021 launch



## Product idea submissions

Share your Product Ideas:

[www.xcelenergy.com/productideas](http://www.xcelenergy.com/productideas)

