



SUSTAINABILITY PERFORMANCE

At A Glance First Quarter 2021

Jan. 1, 2021 — March 31, 2021

AMERICAN MUNICIPAL POWER, INC.

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Included below is American Municipal Power, Inc.'s (AMP) 2021 first quarter (Q1) "At a Glance" sustainability report. The quarterly update is intended to measure and compare the progress of sustainability metrics while also highlighting accomplishments. If you have questions or would like additional information, please contact Erin Miller, assistant vice president of energy policy and sustainability, at 614.540.1111 or emiller@amppartners.org.

AMP LAUNCHES 50 YEARS STRONGER TOGETHER CELEBRATION

In 1971, a handful of municipal electric utilities in Ohio joined together in the face of external pressures to form American Municipal Power (AMP).

Today, the organization has grown to serve 135 member utilities in Indiana, Kentucky, Maryland, Michigan, Ohio, Pennsylvania, Virginia and West Virginia, and one joint action agency in Delaware.

AMP will mark its 50th anniversary, celebrating five decades of serving municipal electric systems and honoring the innovative thinking and strength it took to build the organization.

Throughout the year, AMP is sharing stories, photos, videos and more in its weekly member e-newsletter, *Update*, on its social media platforms and on the [AMP 50 Years: Stronger Together web page](#) to recognize AMP's achievements and the contributions of leaders who helped to build the organization.



AMP AND EFFICIENCY SMART™ SHARE 21 ENERGY EFFICIENCY TIPS FOR 2021



AMP and Efficiency Smart kicked off the new year by highlighting *21 Energy Efficiency Tips for 2021*.

Since Jan. 1, AMP and Efficiency Smart have been sharing energy efficiency hacks and tips on social media — initially for the first 21 days of January, and regularly throughout 2021.

The campaign aims to help consumers limit their energy usage with simple tips and tricks, including washing clothes in cold water and using ceiling fans to more effectively heat and cool the home.

For a full listing of the *21 Energy Efficiency Tips for 2021* and other energy efficiency tips, visit www.energysmart.org/resources or www.amppartners.org/newsroom/amp-currents.

FOCUS FORWARD

The Focus Forward Advisory Council (FFAC) met on Jan. 12 to review 2020 accomplishments and plan activities for 2021. Based on a member survey and feedback during the Jan. 12 call, the FFAC member education webinar topics for 2021 are:

- Educating and Engaging Customers — solar, energy storage, electric vehicles, demand response, etc.
- Data Analytics and Rate Design
- Electric Vehicles — Incentives and Managed Charging
- What do Customers Want? Using Design Thinking for Program Development
- Community Solar 101 and Models

In addition to hosting the educational webinars, the FFAC will:

- Continue developing resources to help members educate their customers about electric vehicles (EVs), rooftop solar, battery storage and more.
- Review distributed energy resource legislative/regulatory items of interest for policy position considerations/recommendations.
- Guide deliverables for the Public Power Grid-Interactive Heat Pump Water Heater Guidebook and Calculator project, funded by a grant from APPA's Demonstration of Energy & Efficiency Developments (DEED) program.
- Hold virtual roundtable conversations for AMP members with the Smart Electric Power Alliance (SEPA) and national experts on topics such as energy storage, EVs, microgrids, solar and more.



The FFAC hosted Hometown Connections, Inc. (HCI) for a webinar on March 25, sharing with members trends and tips for educating and engaging customers on distributed energy resources (DERs). Tim Blodgett, HCI president and CEO, and Susan Ryba, HCI executive marketing consultant provided information about HCI services, the world of DERs, utility roles and programs, tips for enhancing customer relationships and suggested next steps. Both speakers reviewed customer expectations and the top five trends in customer engagement.

The FFAC developed a *Consumer's Guide to Rooftop Solar*. The guide serves as a starting point for public power community customers when considering rooftop solar for their homes. It provides

key tips, considerations and questions for the homeowner to ask solar installers.

The first SEPA Connect Virtual Roundtable for AMP members occurred on Feb. 10. The roundtable speakers were Chris Monacelli, a member of AMP's Board of Trustees, chair of Focus Forward Committee and Advisory Council and electric utility manager for the City of Westerville; Bill Bottiggi, general manager for the Braintree (Mass.) Electric Light Department; Skip Dise, vice president of product management for Clean Power Research; and Garrett Fitzgerald, principal of electrification for SEPA.

Speakers discussed growth projections of EV deployments and the importance of being prepared for peak demand impacts and educating customers about EVs to establish the utility as a trusted leader.

LEGISLATIVE AND REGULATORY UPDATES

Representatives from AMP and our member communities participated in the virtual 2021 American Public Power Association (APPA) Legislative Rally in March. The annual Rally is an opportunity for municipal electric system representatives to share firsthand insights with federal lawmakers and staff.

In addition to sharing their position on possible carbon emissions reduction policies, members also discussed how the continued sequestration of Build America Bonds and New Clean Renewable Energy Bonds, increasing transmission costs and capacity markets all have a negative impact on providing electric service to customers.

On Feb. 23, AMP and the Ohio Municipal Electric Association (OMEA) provided testimony to the Ohio House of Representatives Public Utilities Committee on House Bill 128 in support of the inclusion of the proposed report on transmission planning and siting. Comments can be found [here](#).

EFFICIENCY SMART

Efficiency Smart is celebrating 10 years of providing energy efficiency services for AMP member communities. Since Jan. 1, 2011, Efficiency Smart has served 65 AMP member utilities in Michigan, Ohio and Pennsylvania, as well as members of the Delaware Municipal Electric Corporation.



As of Dec. 31, 2020, Efficiency Smart has helped more than 77,000 customers complete energy efficiency projects. This has resulted in savings of more than 246,850 MWh, more than \$20,883,860 in annual electric costs and more than \$275,103,602 over the lifetime of the installed energy-saving products.

The fourth Efficiency Smart contract reported a savings of 11,000 MWh (net) at the end of the first quarter. There are currently 25 communities participating in the program. The City of Wapakoneta joined Efficiency Smart in February. Wapakoneta selected High-Performance, Demand Focus, which offers a 0.6 percent annual summer peak reduction goal in addition to a 0.4 percent annual energy reduction goal.

For more information, visit www.energysmart.org.

ECOSMART CHOICE®

Ten member communities purchased 18,546 megawatt hours (MWh) of renewable energy in the first quarter through AMP's EcoSmart Choice® Program.



EcoSmart Choice® is a voluntary green-pricing program available at no-cost to AMP member public power utilities.

Members enrolled in EcoSmart Choice® make the program available to their customers for a premium charge on their electric bill to cover the incremental cost of renewable energy. Participating customers may choose to offset 25 percent, 50 percent, 75 percent or 100 percent of their electricity usage.

For more information, visit www.ecosmartchoice.org

AMP RENEWABLE ENERGY PRODUCTION, ENERGY EFFICIENCY: EMISSIONS AVOIDANCE

	Q1 2021 MWh	CO2 emissions avoided (Tons)*	SO2 emissions avoided (Tons)*	NOx emissions avoided (Tons)*	Total emissions avoided (Tons)
Belleville Hydro (JV5)	80,076	31,670	17.22	14.41	31,702
Greenup Hydro **	62,977	24,907	13.54	11.34	24,932
Meldahl Hydro	124,713	49,324	26.81	22.45	49,373
Cannelton Hydro	99,812	39,476	21.46	17.97	39,515
Willow Island Hydro	66,135	26,156	14.22	11.90	26,183
Smithland Hydro	61,311	24,249	13.18	11.04	24,273
AMP Wind Farm (JV6)	2,434	963	0.52	0.44	964
Napoleon Solar	984	389	0.21	0.18	390
Landfill Gas ***	96,005	624,850	20.64	17.28	624,888
Blue Creek Wind	38,817	15,352	8.35	6.99	15,367
EcoSmart Choice	18,546	7,335	3.99	3.34	7,342
Efficiency Smart	2,064	816	0.44	0.37	817
Solar Phase II	19,550	7,732	4.20	3.52	7,740
Carbon Offset**** Reforestation Projects	467 acres	122			122
					853,607

* <https://www.pjm.com/-/media/library/reports-notices/special-reports/2020/2020-emissions-report.ashx>

** AMP's share of the Greenup Hydro facility is 48.6 percent.

*** Includes direct emissions reduced from methane (CO2e) and avoided emissions from CO2. <https://www.epa.gov/lmop/landfill-gas-energy-benefits-calculator>

**** U.S. EPA estimates 1.043 tons of CO2 is sequestered annually by one acre of average U.S. forest.

GREEN BOND FINANCED PROJECTS – Q1 2021 REPORT

	Meldahl	Combined Hydro (Cannelton, Willow Island, Smithland)	Solar Phase II
Net Renewable Capacity (MW)	108.8	208	58.3
Net Renewable Generation (MWh)	124,713	227,258	19,550
Capacity Factor (%)	53%	51%	N/R
Emissions Avoidance			
CO2 (GHG) emissions avoided (Tons)	49,324	89,881	7732
SO2 emissions avoided (Tons)	26.81	48.86	4.20
NOx emissions avoided (Tons)	22.45	40.91	N/R

2020 PJM Market Power Fuel Breakdown ^[2]	
Nuclear	34.20%
Natural Gas	39.60%
Coal	19.30%
Wind and Solar	3.80%
Hydroelectric	2.00%
Other	1.10%
Total	100.00%

2020 PJM Market Power Emissions Rate ^[1]	
CO2 (GHG) emissions Factor (lbs/MWh)	791
SO2 emissions Factor (lbs/MWh)	0.43
NOx emissions Factor (lbs/MWh)	0.36

^[1] [PJM 2016-2020 CO2, SO2 and NOx Emissions Rates Report April 9, 2021](#)

^[2] [PJM State of the Market Report, 2020 Table 3-58](#)

N/R - not required for reporting

POWER GENERATION

in net MWh

Jan. 1, 2021 — March 31, 2021

AMP Wind Farm (JV6): 2,434

AMP Fremont Energy Center (AFEC):* 1,003,339

Belleville Hydro (JV5): 80,076

Greenup Hydro:* 62,977

Meldahl Hydro: 124,713

Cannelton Hydro: 99,812

Willow Island Hydro: 66,135

Smithland Hydro: 61,311

Prairie State Energy Campus (PSEC):** 618,747

Distributed Generation: 119

Landfill Gas: 96,005

Blue Creek Wind:** 38,817

Napoleon Solar: 984

Solar Phase II: 19,550

* Total plant

** AMP's share

HEALTH AND SAFETY

Jan. 1, 2021 — March 31, 2021

Employee Work Related Fatalities:

0

Recordable Incidents or Accidents:

1

Lost Work Day Incidents:

0

COMMUNITY

Jan. 1, 2021 — March 31, 2021

AMP Employee Charitable Giving: \$4,146.50

ENVIRONMENT

emissions in short tons (AFEC, AMP share of Prairie State*, gas and diesel turbines)

Jan. 1, 2021 — March 31, 2021

CO₂: 1,117,131

SO₂: 561.1

NO_x: 252.2

PM: 16.7

CO: 24.7

Hg (in lbs): 3.3

VOC: 13.7

**Prairie State data not yet certified*

HAZARDOUS, UNIVERSAL, OTHER WASTE

Jan. 1, 2021 — March 31, 2021

22,038.12 lbs.

TRASH PULLED FROM THE OHIO RIVER

Jan. 1, 2021 — March 31, 2021

21,160 lbs.

ENERGY EFFICIENCY AND ECOSMART CHOICE REC SALES

Jan. 1, 2021 — March 31, 2021

Efficiency Smart Cumulative Savings

2014 — 2020: 127,833 MWh **2021 Q1:** 2,064 MWh

EcoSmart Choice REC Sales: 18,546 MWh

RECYCLING AND REUSE

Jan. 1, 2021 — March 31, 2021

Recycled glass, plastic, metals, paper and cardboard
7,950 lbs.