

MA Clean Peak Standard

Opportunities for Hydropower to partner with Storage providers

Judith Judson, Vice President – Distributed Energy Systems

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About Ameresco

Ameresco (NYSE:AMRC) is a leading energy services company with a comprehensive portfolio of energy efficiency and renewable energy solutions.

Founded in 2000 | Public in 2010



Comprehensive Portfolio

Objective approach and in-house technical expertise delivers the most advanced technologies to meet the unique needs of each customer. Majority of projects are budget-neutral, funded by energy cost savings.

Customer Driven

Federal & Municipal Governments, Commercial & Industrial, Higher Ed, K12, Public Housing, Healthcare, Airports. Market reputation across North America & Europe for excellence in customer satisfaction.



\$6 Billion+ in energy solution projects, 250+ MWe of Owned Assets in Operation



8,000+ Customers benefitting from energy efficiency measures and renewable energy generation



1,000+ Employees throughout North America and the United Kingdom



Up to 45% Energy cost savings with comprehensive, audit-based improvements



70+ Offices providing local expertise in markets served



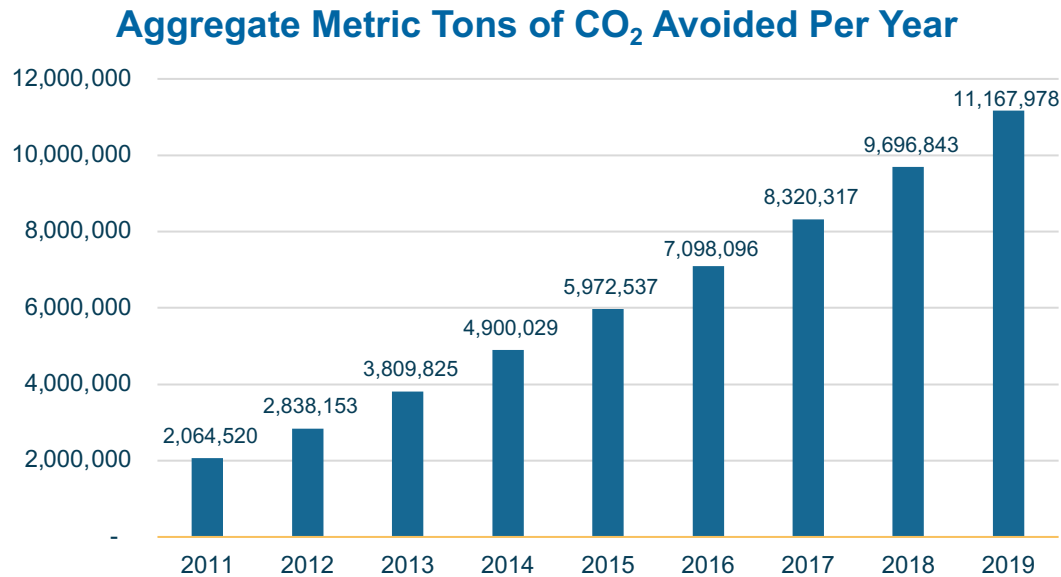
In 2019, our renewable energy assets and customer projects delivered a carbon offset equivalent to **11,167,978 metric tons of CO₂**

Enabling a Low Carbon Future

In 2019, Ameresco's renewable energy assets & customer projects delivered a Carbon Offset equivalent to:

50+ Million Metric Tons of CO₂

Ameresco's 2019 Carbon Offset of **11,167,978 Metric Tons of CO₂** is equal to one of...



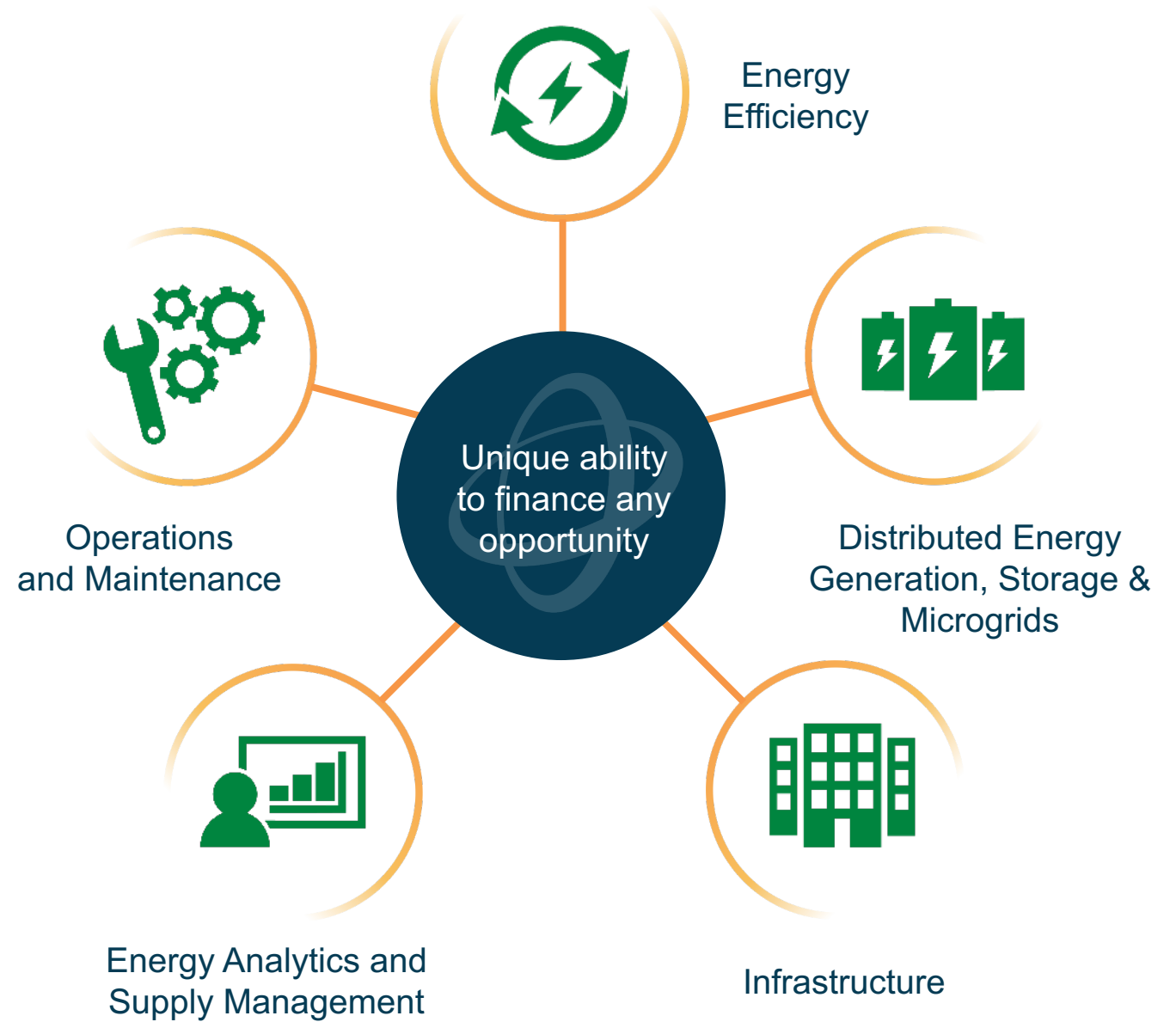
Greenhouse gas emissions from...
27,712,104,218 miles driven by an average passenger vehicle

or



Carbon sequestered by... **14,584,861 acres of U.S. forests in one year**

Ameresco's Advanced Technology Portfolio



Ameresco Storage Projects

22.5 MW / 49 MWh Operating or In Construction

- Standalone projects
- Combined with other power generation:
 - Solar PV
 - Combined heat and power plants (CHP)
 - On-site back-up generation
- Microgrid capability



Clean Peak Standard (CPS) Opportunity

- **RPS Class I and II Hydro can Qualify for CPS**
 - Class I with COD after January 1, 2019; **OR**
 - Class I or II with COD prior to January 1, 2019 **co-located with new energy storage resource**
- **Energy Storage Requirements**
 - Must be at least 25% of nameplate power rating of hydro resource over 4 hours
 - For 1 MW Hydro: Minimum storage size 0.25 MW / 1 MWh
 - Hydro must have a nameplate capacity of at least 75% of the nameplate capacity of the energy storage
 - For 1 MW Hydro: Maximum Storage size 1.33 MW / 5.33 MWh
 - Must be located on same or adjacent parcels, interconnected to same common collector

Clean Peak Standard (CPS) Opportunity

- **Clean Peak Multipliers**

- Existing Resource 0.1, Storage 1.0

Season	Dates	Peak Hours	Multipliers
Spring	Mar 1 – May 14	5 – 9 pm	1
Summer	May 15 – Sept 14	3 – 7 pm	4
Fall	Sept 15 – Nov 30	4 – 8 pm	1
Winter	Dec 1 – Feb 28	4 – 8 pm	4

- **Other Multipliers:** Resilience 1.5, Actual Peak 25

Financial Analysis Inputs

- **Key Questions to size storage to hydro resource:**
 - Expected seasonal hydro generation during peak windows?
 - Other “value stack” options?
 - Energy Arbitrage – shift to higher value hours
 - Is there an opportunity to provide resilience to any on-site load?



Other Inputs: Siting and Interconnection

- **Key Questions:**
 - **Interconnection options**
 - **Space for siting storage**
 - 1 MW / 4 MWh requires approximately 2,500 SF or 0.06 acres (fence perimeter)
 - **Container size:**
 - 25 – 40 feet in length
 - 5 – 8 feet in width
 - 8 – 10 feet tall



POWIN 40'FT BATTERY ENCLOSURE

Why Ameresco?



Innovative

Ameresco (NYSE:AMRC) is an innovative technology integrator with a comprehensive portfolio of energy efficiency and renewable energy solutions.



Experts

We deliver a broad and deep solution portfolio within a single energy partner. From design and development to financing and construction, our in-house technical expertise sets us apart.



Independent

Our objective approach enables us to implement the most advanced technologies to meet the unique needs of each customer.



Thank you

Judith Judson
VP – Distributed Energy Systems
jjudson@ameresco.com
(508) 598 - 3064