Renewable Energy Procurement

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Building Advantage
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- The webinar will start promptly at 3:00pm EST (Boston time) and is scheduled to last one (1) hour; including time for questions.

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Market Trends

80% of the world’s top 250 companies include corporate responsibility data in their annual reports, up from 44% in 2011.¹

63% of Fortune 100 companies committed to at least one climate or clean energy target by 2016.²

206 Companies have committed to RE100 (100% renewable energy).⁴

Utility-scale Offsite Renewable Energy (ORE) procurement for corporate buyers is projected to be expected to reach 2.7 GW in 2027 in North America.³

¹ The KPMG Survey of Corporate Responsibility Reporting 2017
³ Navigant report “Corporate Utility-Scale Offsite Renewable Energy Procurement Solutions” Q2, 2018
⁴ RE 100 (as of October 2018 http://there100.org/companies)
Massive Adoption

“Give me a place to stand on and I will move the earth.”

Archimedes

Source: Rocky Mountain Institute ®
Most Valuable Unit of Energy?

1. The one you don’t use
2. The one you produce
3. The one you buy
Renewable Energy Options

- Generate on site
- Default regional default generation mix
- Select 'green' tariff utility rate
- Participate in power purchase agreement (PPA)
- Engage in virtual power purchase agreement
- Purchase renewable energy certificates (RECs)

Price management

Sustainability
Onsite Generation

- Installed behind the meter at your facility. Either you own the asset or a third party does.
- Supports renewable energy efforts and sustainability goals.
- Risk profile, capital budget considerations, long term outlook.

Renewable Energy Directly Reduces Site Emissions
Regional Default Generation Mix

Some local utility providers are required to generate part of its energy from renewables.

Supports renewable energy efforts and sustainability goals.

May not be enough to meet goals. No additionality.

Some customers may not be aware and miss environmental reporting benefit.
Green Tariff Utility Rate

Specific rate from local utility grid for electricity generated from renewable sources

Supports renewable energy efforts and sustainability goals

Cost premiums, availability and possibly no additionality benefit

Utility statement eligible for environmental reporting purposes
Power Purchase Agreement (PPA)

The PPA contract defines all of the commercial terms for the sale of electricity between the two parties.

- PPA developer handles getting project up and running, including
- Environmental reporting with RECs ownership
- Contract length, Alignment between usage & generation profile, Additionality credit

Price management and environmental benefit
Virtual Power Purchase Agreement (VPPA)

- Contract between buyer & renewable energy generator
  Energy sold to local wholesale market
- No actual physical transfer of energy between electricity generator & buyer
- Location, future pricing expectations, length of contract, additionality

One VPPA could satisfy most or all of organization’s renewable energy goals
Renewable Energy Certificates (RECs)

Proof that megawatt-hours (MWh) of electricity were generated from an eligible renewable energy resource

Buy as much or as little as is needed

Prices could be negotiated bilaterally or ‘auction’ environment... no additionality credit

Documented proof eligible for the environmental reporting purposes
The Solution Spectrum

- Onsite Projects
- PPA / Market Supply
- Virtual PPA
- REC Purchase

Further from the Meter
ROI
Commitment
Story
Decrease
The Collaborative Necessity

- Environmental Health & Safety
- Facilities
- Finance
- Supply Chain Procurement
- Marketing & Communications

ALIGN INTERNALLY AND IDENTIFY CHAMPIONS
Create a Roadmap

What is your goal?

How are you going to get there?

How will you measure it?

geographical constraints

current utility rates

additionality credit

future energy price projections

use scenarios

production considerations

%
Helping Build a Sustainable Future

- Tools to drive engagement & visibility to the efforts
- Deliver indoor environment for maximum comfort and productivity
- Committed to operating ethically and transparently

SOCIAL

- Triple bottom line

ENVIRONMENTAL

- Renewable & power solutions to help lower carbon footprint
- Renewable energy procurement to help meet renewable goals
- HVAC solutions with next gen, low GWP refrigerant options to reduce Scope 1 emissions
- High efficiency systems lower energy generation needs, supporting Scope 2 reductions

FINANCIAL

- Financing options for faster implementation
- Reduce stress on grid and create new revenue with Demand Response
- Energy storage technology to lower operating costs and increase use of renewables
- Peak load management to reduce operating costs
- Distributed energy resources (DER) for higher resilience
- Connected solutions for system optimization
- Validated, visualized and documented results
- Energy management services to lower consumption
2030 Targets & Aspirations

Operations & Supply Chain
- Achieve Carbon-Neutral Operations and Net Positive Water

People
- Gender Parity in Leadership Roles
- Enhanced Workforce Diversity

Citizenship
- 10 Signature Programs
- 100,000 Employee Volunteer Hours

Customer Outcomes
- Reduce Customer Carbon Footprint by 1 GIGATON (or 1 billion metric tons of CO₂*).
Summary

- District energy can be scope 1 or 2 emissions
- Many different tools to meet commitments
  - Additionality is key
  - Innovation is important
  - Firming to 100 percent renewable is next
- Solving for natural gas is a focus area
- Utilizing experience with electric deals at scale is the basis of the next iteration of energy transition for corporates
Questions?

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