

PRESENTED AT

2017 Renewable Energy Law

January 31-February 1, 2017

Austin, Texas

Corporate Renewable Energy Procurement: Industry Insights

Moderator:

Shalini Ramanathan

Panelists:

Ellen Gilman Balfrey

Bobby Hollis

Giji M. John

Dan Seif



Corporate Renewable Energy Procurement Industry Insights



June 2016

Corporate Renewable Energy Procurement: Industry Insights

June 2016



AMERICAN COUNCIL ON RENEWABLE ENERGY

ACORE is a national non-profit organization dedicated to advancing the renewable energy sector through market development, policy changes, and financial innovation. With a savvy staff of experts, fifteen years of experience promoting renewable energy and hundreds of member companies, non-profits, and other organizations from across the spectrum of renewable energy technologies, consumers, and investors, ACORE is uniquely well-positioned to strategically promote the policies and financial structures essential to renewable energy growth. Additional information is available at:

www.acore.org

CORPORATE PROCUREMENT WORKING GROUP

Leveraging ACORE's 15 years of leadership on renewable energy policy, finance, and market development, the Corporate Procurement Working Group taps the organization's extensive network of leading renewable financiers, developers, power generators, and corporate consumers of renewable energy to facilitate the procurement and integration of renewable energy into the power generation portfolios of leading American companies. Additional information is available at:

www.acore.org/programs/member-initiatives/power-generation/corporate-procurement-working-group

© 2016 American Council On Renewable Energy (ACORE)

All Rights Reserved under U.S. and foreign law, treaties, and conventions. This work cannot be reproduced, downloaded, disseminated, published, or transferred in any form or by any means without the prior written permission of the copyright owner or pursuant to the License below:

Published by:

American Council On Renewable Energy
1600 K St. NW, Suite 650
Washington, DC 20006
202.393.0001

Questions or Comments: info@acore.org

AUTHORS



ACORE

James Hewett, Lesley Hunter, &
Greg Wetstone
www.acore.org



Apex Clean Energy

Ellen Gilman
www.apexcleanenergy.com

COVINGTON

Covington & Burling LLP

Mark Perlis & Gary Guzy
www.cov.com



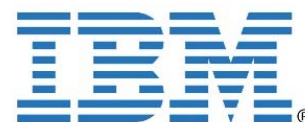
EDF Renewable Energy

Jacob Susman
www.edf-re.com



Green Strategies, Inc.

Roger Ballentine & Patrick Falwell
www.greenstrategies.com



IBM

Jay Dietrich
www.ibm.com



Kilpatrick Townsend & Stockton LLP

Mark J. Riedy, Robert H. Edwards
Jr., & Ariel I. Oseasohn
www.kilpatricktownsend.com



Morrison & Foerster LLP

Elizabeth Sluder & Bob Fleishman
www.mofo.com



Orrick, Herrington & Sutcliffe LLP

Christopher Gladbach, Amy
Dominick Padgett & Paul
Zarnowiecki
www.orrick.com



PricewaterhouseCoopers

George Favaloro & Ezequiel Hart
www.pwc.com



RES Americas

Shalini Ramanathan
www.opic.gov



Rushton Atlantic

Kenneth Kramer
www.rushtonatlantic.com



Skadden, Arps, Slate, Meagher & Flom LLP

Frank Shaw & Ethan Schultz
www.opic.gov



Sterling Planet

Robert Maddox
www.sterlingplanet.com



WGL Energy

Richard Walsh
www.wgl.com

WORKING GROUP SPONSORS

TERAWATT SPONSOR



GIGAWATT SPONSORS



MEGAWATT SPONSORS

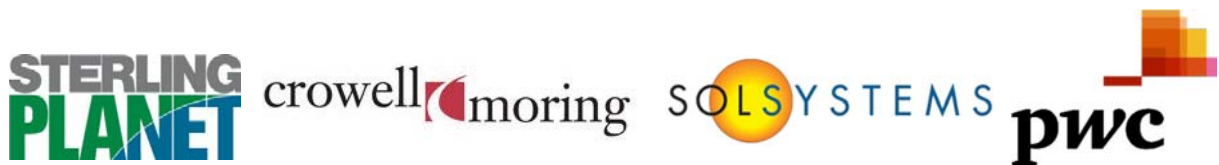


TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
MARKET OVERVIEW	6
Corporate Procurement and New Frontiers: Sustainability and Energy Regulation, <i>Morrison & Foerster LLP</i>	6
Why Corporate PPAs Still Make Sense with \$2 Natural Gas, Renewable Choice Energy	11
How C&I Purchasing is Changing the U.S. Wind Energy Landscape, EDF Renewable Energy	17
CONTRACTING INSIGHTS	23
Creating the Right Internal Procurement Team, PricewaterhouseCoopers	23
Maintaining Corporate Renewable Energy Claims, Sterling Planet	28
Procurement Options: RECs vs PPAs, RES Americas	33
Getting to a Signed Structured Power Purchase Agreement, Apex Clean Energy	36
Innovative Structures to Maximize Off-site Solar Adoption, WGL Energy	40
POLICY & LEGAL CONSIDERATIONS	49
Navigating the Rapidly Evolving Energy Marketplace, Green Strategies	49
Implications of the Clean Power Plan for Corporate Renewables Procurement: Strategies to Achieve Additionality, Covington & Burling LLP	52
The Renewable Jumble: Basic Legal Considerations for Corporate End-Users of Renewable Energy, <i>Skadden, Arps, Slate, Meagher & Flom LLP</i>	57
GUIDANCE ON FINANCING	62
Structuring and Financing Considerations for Corporate Renewable PPAs, Orrick, Herrington & <i>Sutcliffe LLP</i>	62
Corporate vs. Project Financing of Renewable Energy Projects, and Associated Valuation Issues, <i>Rushton Atlantic</i>	67
INTEGRATION & STORAGE	71
Energy Storage in the C&I Industry, Kilpatrick Townsend & Stockton LLP	71
How Smart Grid Deployment Can Facilitate Renewables Procurement by Commercial and Industrial Customers, IBM	76

EXECUTIVE SUMMARY

The growing purchase of renewable energy by corporate end users is fundamentally remaking the model for electric power sales in the U.S. This report offers industry insights relating to corporations' procurement of renewable energy to simplify renewable procurement processes and provide realistic options for corporate players across the economy. It is organized into the following sections:

- ▶ **Market Overview:** Why corporates are procuring renewable energy and how this trend is affecting U.S. electricity markets and the renewable energy industry.
- ▶ **Contracting Insights:** Insights about different renewable energy procurement options available to companies, including power purchase agreements (PPAs) and renewable energy credits (RECs).
- ▶ **Policy and Legal Considerations:** Key federal and state policy issues and legal considerations corporates should consider when designing and implementing strategies.
- ▶ **Guidance on Financing:** Financing structures for renewable energy procurement and how to create financeable PPAs.
- ▶ **Integration and Storage:** Ancillary service technology solutions to abate costs and enhance resiliency and reliability of corporate electricity supply.

The report is intended to be a resource for companies as they design and implement sustainability and renewable energy strategies, for renewable energy companies and investors that are working with corporations to realize these strategies, and for other interested parties. We hope that you find it useful.

A group of prominent renewable energy developers, utilities, brokers, professional service firms, and other companies authored the fifteen articles in this report. It should be noted that corporations are using renewable energy via a number of diverse applications, and this report does not attempt to offer a comprehensive overview of every renewable energy technology or procurement option available.

The views and opinions expressed in this report are those of the authors and do not necessarily reflect the views of ACORE.

MARKET OVERVIEW

CORPORATE PROCUREMENT AND NEW FRONTIERS: SUSTAINABILITY AND ENERGY REGULATION

Elizabeth Sluder & Bob Fleishman

Morrison & Foerster LLP

Protection of the environment and promotion of sustainability are critical issues for the business community. As more of America's leading corporations procure power from renewable energy sources, they are discovering that it is good for the environment and for business. This article explores some of the best unkept secrets regarding renewable energy procurement, and provides helpful tips for corporate consumers navigating federal and state energy regulation in renewable energy markets.

What You Should Know

As demand for renewable energy continues to rise, project costs and power prices continue to fall; as a result, renewable energy has become mainstream. Power purchasers now actively pursue opportunities to buy power from renewable energy facilities to lower costs, diversify their portfolios and, in some states, satisfy legal requirements to procure a certain percentage of their energy load from sustainable sources, commonly referred to as renewable portfolio standards (RPS).

Historically, utilities have shouldered the burden of the RPS requirements. To satisfy these legal requirements, the utilities' demand for energy output from renewable energy projects increased. As utilities (and, later, corporate power purchasers) drove up the demand for utility-scale renewable energy power plants, the price of power derived from those plants (particularly wind and solar) has decreased in recent years due to lower construction costs and technology improvements. In some parts of the United States, the purchased cost of such power is now comparable to, or less than, power produced by other conventional energy sources.¹

Policy considerations are also on the radar of corporate America. On a global level, on April 22, 2016, 175 countries signed the Paris Agreement, which requires signatories to institute domestic programs to reduce greenhouse emissions, regularly report on the status of such programs and measure how much such programs have reduced emissions.² In the United States, the Clean Power Plan (CPP)³ would require each state to propose how it will cut emissions from generation. Major power consumers

¹Lazard Ltd., Lazard's Levelized Cost of Energy Analysis — Version 9.0 (2015), <https://www.lazard.com/media/2390/lazards-levelized-cost-of-energy-analysis-90.pdf>.

²U.N. News Centre, 'Today is an Historic Day' says Ban as 175 Countries Sign Paris Climate Accord, United Nations: Sustainable Development Goals, 17 Goals to Transform Our World (Apr. 22, 2016), <http://www.un.org/sustainabledevelopment/blog/2016/04/today-is-an-historic-day-says-ban-as-175-countries-sign-paris-climate-accord/>.

³Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60), <https://www.gpo.gov/fdsys/pkg/FR-2015-10-23/pdf/2015-22842.pdf>.

Also available as part of the eCourse

[2017 Renewable Energy Law eConference](#)

First appeared as part of the conference materials for the
2017 Renewable Energy Law session

"C&I Energy Purchase Contracts"