How to Leverage Renewable Energy for Sustainability Performance

June 11, 2020

Welcome to NAEM

A professional community where you can get the solutions you need to make an impact

Benchmark	Benchmark your programs via events, online learning, research and executive networks
Learn	Learn tools & techniques to execute your strategy and be inspired by peers
Build	Build a network of peers whose experience can help you solve your challenges

Delivering Knowledge & Professional Wisdom

Peer Forums

Research Insights

Targeted Networking

Actionable strategies to empower EHS&S leaders to make an impact

NAEM Connects EHS & Sustainability Leaders

120
Corporate Members

4,200
Individual Members

60
Affiliate Members

Reaching a community of Practice

25K+

Effectively Incorporating Sustainability Into Your Business

Renewable Energy, Efficiency Procurement, and ESG Investing in a Shifting Policy Landscape

June 11, 2020

NAEM EHS&S 2020 Webinar Series

Introduction to Hodgson Russ

Broad-Ranged, Full Service Firm, with Deep Capabilities

- More than 200 attorneys practicing in all major areas of U.S. law
- Offices in New York City, Albany, Buffalo, Saratoga Springs, Palm Beach and Toronto
- Provides high quality, cost-effective representation, with personal attention to our clients' needs
- Founded in 1817, with deep roots in New York State, Hodgson Russ has experience in markets from Europe to the U.S. to Asia

Frequently recognized for excellence in the practice of law

- *American Lawyer's* "2019 AmLaw 200" and ranked 10th in the "A-List for Female Equity Partnership"
- *The National Law Journal's* "NLJ 500"
- "Best-Branded Law Firm", *2019 BTI Brand Elite: Client Perceptions of the Best-Branded Law Firms Report*
- *Best Lawyers,* "Best Law Firms" and "Best Lawyers in America"
- *Chambers USA: America's Leading Lawyers for Business*
- *Super Lawyers*

Hodgson Russ Office, The Guaranty Building, Buffalo, NY

Introduction to Renewable Energy Practice

Practice Areas

- Multidisciplinary team guides clients through virtually every aspect of a project's lifecycle:
  - Strategic Planning
  - Zoning and State Permitting
  - State and Federal Regulatory
  - Environmental Review
  - Financing
  - Lease and Easement Agreements
  - Title Insurance and Curatives
  - Contracts and Agreements
  - Taxation
  - Litigation
  - Insurance
  - Corporate Structuring and Collaborations

- **Projects:** Experienced in wind, solar, energy storage, landfill gas-to-energy, bioenergy projects, energy efficiency and decarbonization strategies
- **Clients:** Developers, lenders, land owners, permitting agencies, development agencies, parts and service suppliers, manufacturers, contractors and investors
- **International Expertise:** Counsel foreign entities participating in United States projects involving cross-border finance, CFIUS, FACTA Compliance, immigration issues, licensing and technology transfer, protection of foreign patents, international taxation and Tax Treaty compliance, multinational mergers and acquisitions, NAFTA and other trade issues

Hodgson Russ LLP ATTORNEYS

Presenter Bios

Noah Shaw, Partner (nshaw@hodgsonruss.com, 518.736.2924)

- Focuses on both distributed and utility-scale solar and storage, offshore wind, building technologies, electric vehicle infrastructure and energy efficiency development and finance, providing high-level, strategic counsel regarding business strategy, opportunities and regulatory challenges to a broad range of renewable energy market participants
- Former General Counsel and Secretary of the Board of Directors of NYSERDA, directly involved in:
  - Drafting and negotiation of the 2019 Climate Leadership and Community Protection Act
  - New York State's Clean Energy Standard, including program design and regulatory compliance
  - New York State's Green Bank, including governance, compliance and related transactional affairs

Michael Hecker, Partner, (mhecker@hodgsonruss.com, 716.848.1599)

- Environmental Practice Leader, Co-Leader Brownfield Redevelopment Practice
- Broad-based environmental and energy-related practice, with a focus on transactional matters, regulatory compliance counseling and permitting, administrative, civil, and criminal environmental defense, and remediation-based project oversight and assistance
- Chambers USA: America's Leading Lawyers for Business, 2020; Super Lawyers Rising Star – Metro NY and Upstate NY – 2014 - 2019

Peter Ross, Senior Associate (pross@hodgsonruss.com, 646.218.7528)

- Regulatory and litigation attorney, with deep understanding of renewable energy policy
- Advises clients in energy sector at every stage of project development
- Drafts and negotiates project documents (e.g., ESSAs, MIPAs, PPAs. O&M Agreements)
- Regularly advocates in state and federal court, as well as before public service commissions and other regulatory bodies
- Former Director of Policy and Business Development for a national solar and energy storage systems developer
- Former Energy Law Fellow at NYU School of Law's Guarini Center and Debevoise & Plimpton associate
- Served as Chair of Policy Committee for the New York Solar Energy Industries Association and as a Member of the New York City Bar Association's Energy Committee

Presentation Overview

- Introduction to Environmental, Social, and Governance (ESG)
  - What it is and why it matters
- Legal Frameworks
- Renewable Energy Procurement Options
  - Description
  - Examples
  - Pros and Cons

Hodgson Russ LLP ATTORNEYS

Introduction to ESG

- ESG Factors
  - Investor-Oriented: tracked and used by institutional investors to determine value
  - Related to Corporate Social Responsibility
  - Divided into categories to enable comparative assessments across companies & investments
- Companies increasingly encountering pressure on ESG issues from numerous sources, including:
  - Shareholders
  - Regulators
  - Courts

Introduction to ESG

- **Environmental sustainability:** How a company obtains, uses, and disposes of natural resources
  - Water usage, water disposal, air pollution, greenhouse gas emissions, scarce resources, and impact on natural habitats
- **Social issues:** How a company interacts with or affects individuals or groups of people, communities, and humanity
  - Labor relations, workforce diversity, safe working conditions, product safety, employee health, and community development
- **Governance issues:** How a company conducts business in an ethical manner
  - Board and management diversity, pay equity, supply chain engagement, shareholder access, and political contributions

Increasing Importance of ESG

- Blackrock (January 2020)
  - World's largest asset manager (~$7 trillion) announced it would make investment decisions with environmental sustainability as a core goal
  - BlackRock would begin to exit certain investments that "present a high sustainability-related risk," such as those in coal producers.
- Norwegian Sovereign Wealth Fund (June 2019)
  - Norway's $1.1 trillion sovereign fund will divest companies solely dedicated to oil and gas exploration and production in a bid to shield itself from a long-term fall in oil prices
- New York State Common Retirement Fund (April 2019)
  - Established strict investment standards to meet climate change goals
  - ~$200 billion pension fund committed at least $10 billion to sustainable investment program

Increasing Importance of ESG

Key Stakeholders

- Investors, customers, financial analysts and advisors, social and issue advocates and activists, good governance advocates; government officials (including public employee pension funds and sovereign fund managers), & raters and rankers

Difficult to compare ESG factors across companies:

- No single, universal set of metrics
- Criteria not clearly defined/change over time

Tracking Authority

- Crediting Agencies (Fitch, Moody's, S&P) provide ESG scores
- Companies have their own internal ESG criteria and reporting requirements
- Sustainability Accounting Standards Board (SASB)

Driving Shareholder Value

Per Governance & Accountability Institute, Inc., ESG shareholder benefits include:

- Achieving more resiliency and efficiencies
- Gaining better access to capital
- Enjoying higher equity & debt valuations
- Seeing better ESG investor ratings, rankings & scores
- Gaining inclusion in ESG / Sustainability Indexes & Third Party Recognitions
- Achieving enhanced human talent attraction / retention
- Developing increased efficiency (including cost savings) in many areas of their operations
- Attracting more new customers / clients
- Demonstrating improved risk management & mitigation
- Identifying new strategic opportunities
- Developing stronger and more robust and meaningful relationships with important stakeholders
- Protecting societal freedom, license to operate

The “E” in ESG

- Meeting ESG criteria and achieving sustainability goals has become an increasing focus for financiers, management, shareholders, and consumers of U.S. businesses
- One increasingly attractive option is for companies to minimize their carbon footprint by committing to operate on 100% renewable or carbon-free energy
- With deployment costs declining at a rapid pace, renewable energy and energy storage procurement is one economically attractive way for a business to achieve its sustainability objectives

Presentation Overview

- Introduction to ESG
  - What it is and why it matters
- Legal Frameworks
- Renewable Energy Procurement Options
  - Description
  - Examples
  - Pros and Cons

Hodgson Russ LLP ATTORNEYS

Employment Benefit Plans

- Interpretive Bulletins (IBs) 2015-01 and 2016-01
  - Plan fiduciaries may consider ESG factors in investment decision-making if the ESG factors have a direct relationship to the economic and financial value of the plan's investment
  - ESG factors can be a proper component of appropriate fiduciary investment decision-making (and not just a "tie-breaker" factor)
- DOL's Field Assistance Bulletin (FAB) 2018-01(issued April 23, 2018)
  - Fiduciaries under ERISA "must not too readily treat ESG factors as economically relevant to the particular investment choices at issue when making a decision"
  - Rather, ERISA fiduciaries "must always put first the economic interests of the plan in providing retirement benefits"
- Executive Order on Promoting Energy Infrastructure and Economic Growth (April 10, 2019)
  - President Trump directs the DOL to review retirement plan energy investment trends and the agency's proxy voting guidance

Non-profits: UPMIFA

- Uniform Prudent Management of Institutional Funds Act
  - Law adopted by States
  - Governs the management and investment of funds held by not-for-profit corporations and certain other institutions
  - Requires a duty of prudence:
    - "[E]ach person responsible for managing and investing an institutional fund shall manage and invest the fund in good faith and with the care an ordinarily prudent person in a like position would exercise under similar circumstances."
- Efforts to interpret "prudence" standard to enable greater divestment of GHG-intensive industries
  - See Bevis Longstreth's Outline

FTC Green Guides

Federal Trade Commission (FTC) prohibitions on marketing "renewable energy" without renewable energy certificates (RECs)

- "A marketer should not make unqualified renewable energy claims, directly or by implication, if fossil fuel, or electricity derived from fossil fuel, is used to manufacture any part of the advertised item or is used to power any part of the advertised service, unless the marketer has matched such non-renewable energy use with renewable energy certificates." 16 C.F.R. § 260.15(a).

RECs must be retired (not resold) to count

- "If a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy." 16 C.F.R. § 260.15(d).

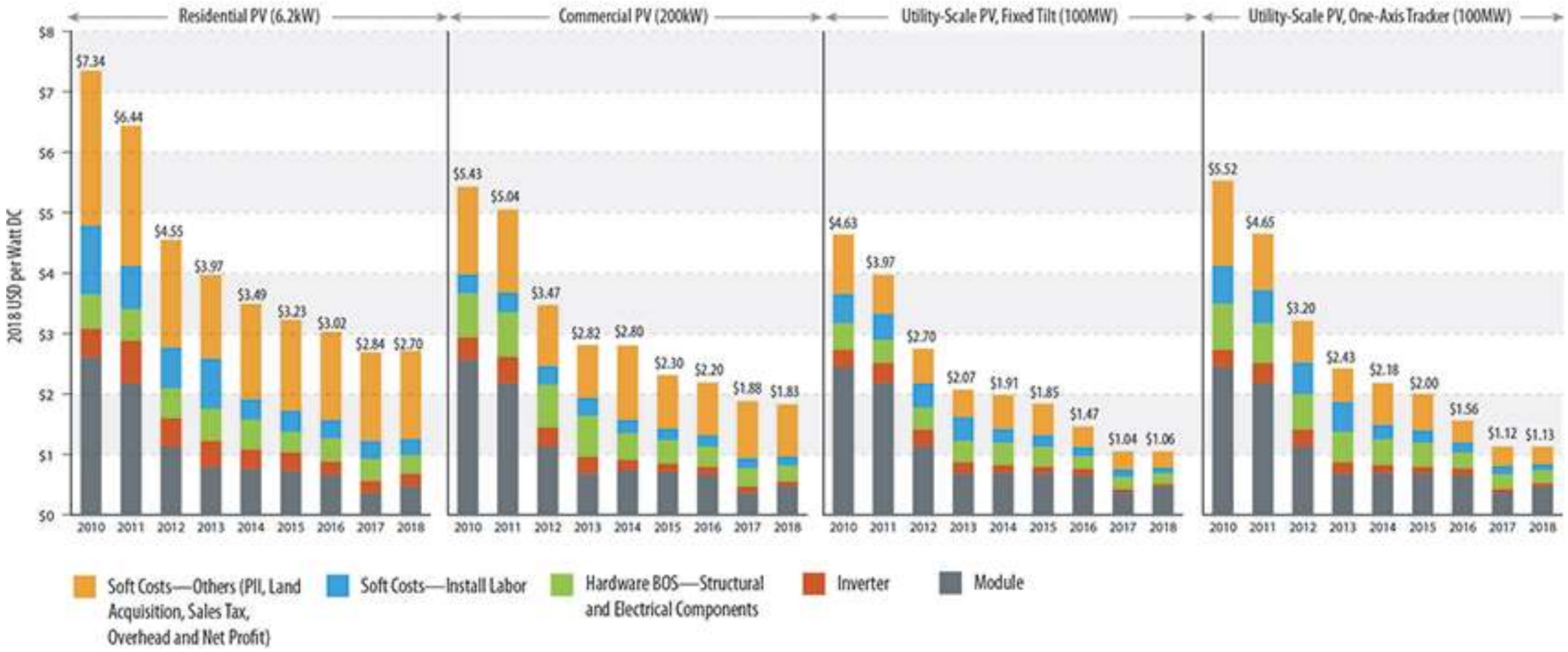
- Green-e.org and others provide certification for renewable energy claims, and closely follows these guidelines and rules
- One way to minimize the risk of misunderstanding is to specify the source of renewable energy clearly and prominently (say, 'wind' or 'solar energy').
- Marketers should not make an unqualified "made with renewable energy" claim unless all, or virtually all, the significant manufacturing processes involved in making the product or package are powered with renewable energy or non-renewable energy, matched by RECs. 16 C.F.R. § 260.15(c)
- No requirements that RECs be location- or time-matched

Hodgson Russ LLP ATTORNEYS

GHG Protocol

- The World Resource Institute's GHG Protocol establishes comprehensive global standardized frameworks to measure and manage greenhouse gas emissions (GHG) from private and public sector operations, value chains and mitigation actions
- The GHG Protocol Corporate Accounting and Reporting Standard provides requirements and guidance for companies and other organizations preparing a corporate-level GHG emissions inventory
  - Covers the accounting and reporting of seven greenhouse gases covered by the Kyoto Protocol
- Updated in 2015 with the Scope 2 Guidance, which allows companies to credibly measure and report emissions from purchased or acquired electricity, steam, heat, and cooling
- RECs must be acquired and retained for a company to claim a market-based GHG reduction in Scope 2 GHG emissions
  - Companies must report market-based and location-based Scope 2 emissions
  - Location-based → reflects the average emissions intensity of grids on which energy consumption occurs
  - Market-based → reflects emissions from electricity that companies have purposefully chosen (through contractual instruments for bundled and unbundled RECs)

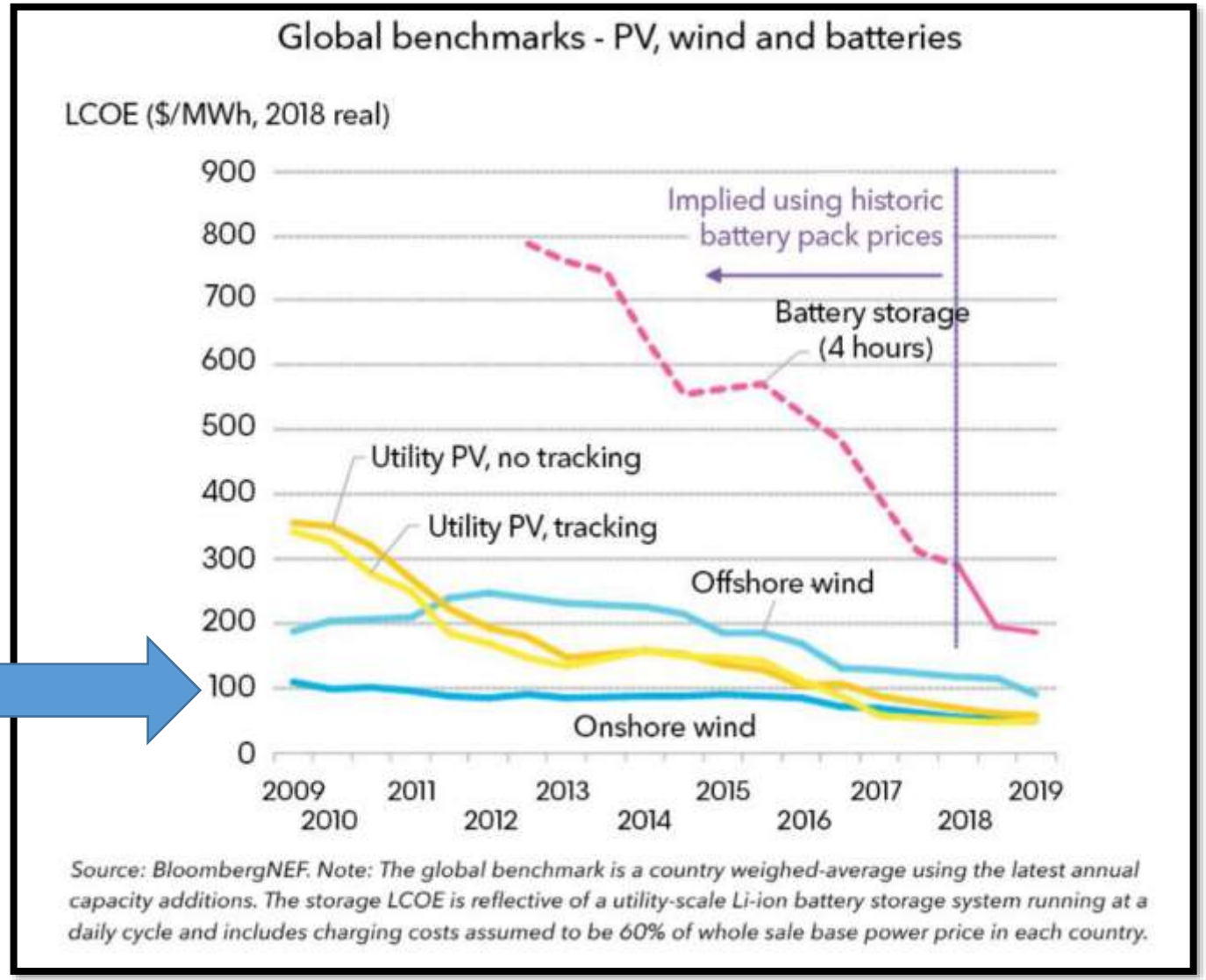
Declining Cost of Solar



Source: NREL

Hodgson Russ LLP ATTORNEYS

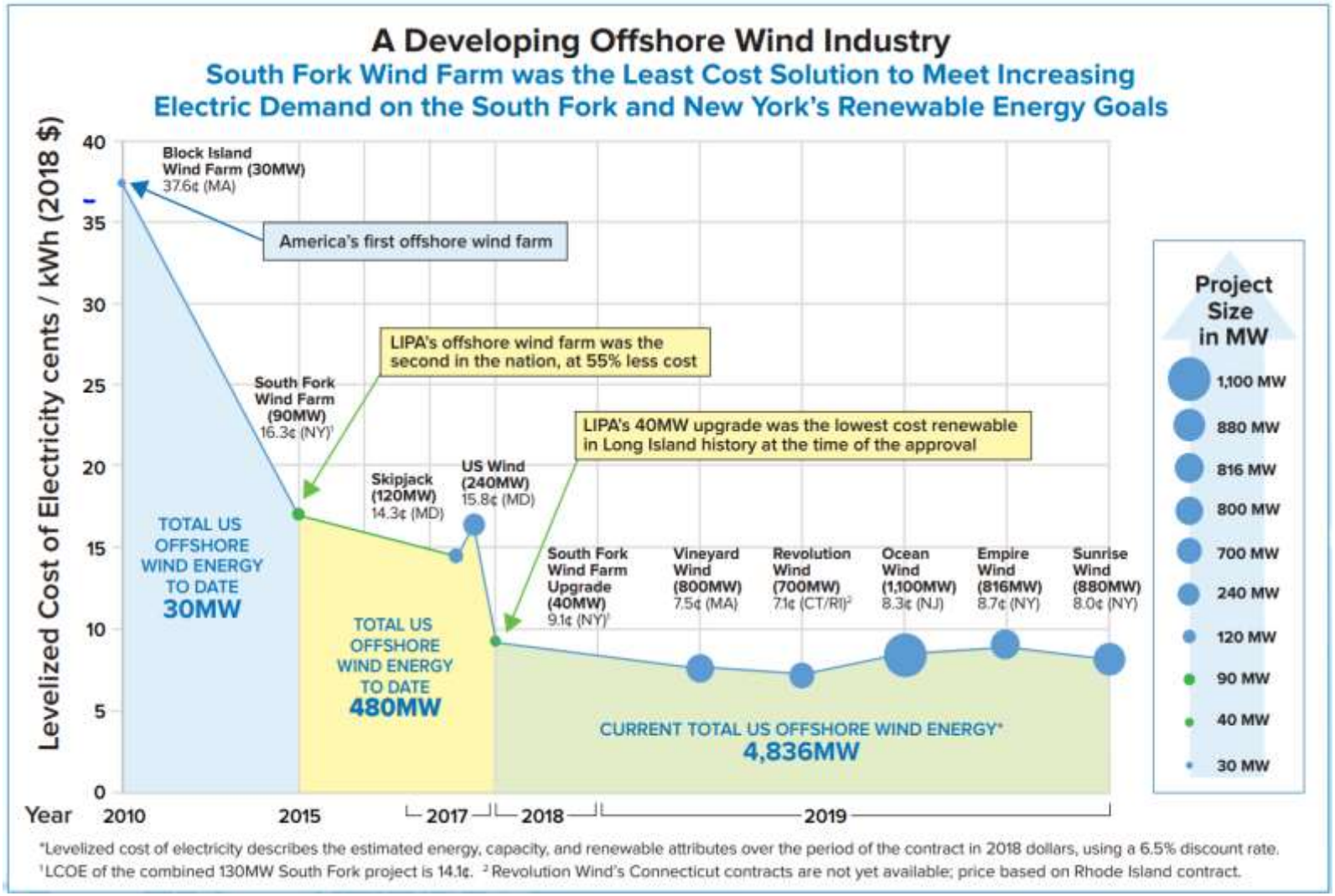
Declining Cost of Onshore Wind



Source: BNEF

Hodgson Russ LLP ATTORNEYS

Declining Cost of Offshore Wind



Source: LIPA South Fork Wind Farm Fact Sheet

Hodgson Russ LLP ATTORNEYS

Presentation Overview

- Introduction to ESG
  - What it is and why it matters
- Legal Frameworks
- Renewable Energy Procurement Options
  - Description
  - Examples
  - Pros and Cons

Hodgson Russ LLP ATTORNEYS

Renewable Procurement Options

Corporate decision-makers have several options to reduce their carbon footprint, including:

- Unbundled Renewable Energy Credit (“REC”) procurements
- Power Purchase Agreements
- Community Solar Subscription Agreements
- On-Site Generation
- Utility Green Tariffs

We’ll conclude with a brief discussion of REC Arbitrage.

Unbundled RECs

- A renewable energy credit ("REC") is the legal instrument that conveys to its owner the right to claim the associated environmental attributes of its generating resource
  - Represents the "renewableness" of the power
- Represents one megawatt-hour of renewable electricity generated and delivered to the utility grid
  - Approx. the average U.S. residential utility customer's consumption in one month
- RECs must be kept and retired to claim environmental benefits; option to sell RECs
- "Unbundled" = not tied to underlying electricity
  - Can be generated in one area and applied to consumption in another

Unbundled RECs

Pros

- Easily purchased from REC retailers
- Cost-efficient option
  - Avoids costs of developing, building, and operating onsite facilities
- Make environmental claims, enables ESG compliance, and reduces Scope II GHG emissions
- No purchase limit
  - Can cover company's total electricity needs

Cons

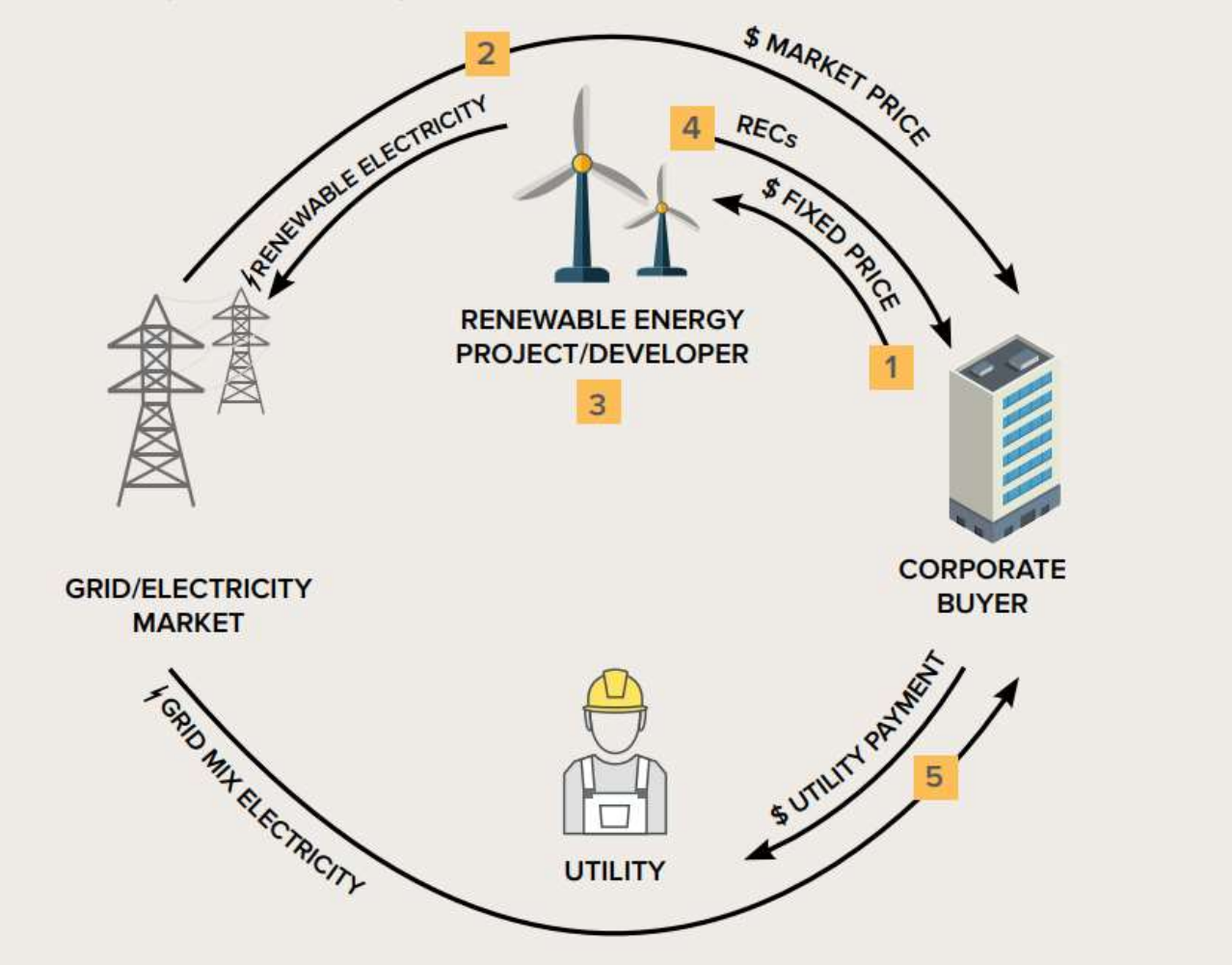
- Does not ensure additional new renewable generation
- Does not guarantee actual GHG reductions
- Attenuated connection to consumption of REC-holding customer
- No electricity-related upside/ ability to hedge costs

Power Purchase Agreements

Two main forms:

- Physical (also known as retail-sleeved or direct)
  - Electricity produced by renewable energy generator is physically delivered to power the corporate buyer's operations
  - Corporate offtaker takes title to the energy produced
  - Final Price = the contracted PPA price + transmission-related expenses
  - Limited to markets with "retail electricity choice"
    - I.e, deregulated retail markets that allow buyers to purchase electricity from suppliers other than their traditional utilities
  - Tailored to facility's load
- Virtual (also known as financial or synthetic)
  - Fixed price for the electricity generated by the project for the duration of the contract without taking title to, or physically consuming, the electricity generated by the project
  - Electricity is sold into the wholesale market at real-time or day-ahead prices
  - Buyer and project developer settle the cumulative difference between the fixed PPA price and the market price periodically
  - Does not impact existing electricity supply contracts with utility or retail supplier
- Buyers can purchase RECs with power, i.e. "bundled" RECs

Power Purchase Agreements



Virtual PPA

Source: Zanchi, Roberto, and Rachit Kansal. ***Choosing Off-site Renewable PPAs for Environmental and Social Impact: A Case Study on Cummins' Virtual Power Purchase Agreement in Indiana***. Rocky Mountain Institute, 2018. www.rmi.org/insight/choosing-offsite-renewable-ppas/

Hodgson Russ LLP ATTORNEYS

Power Purchase Agreements

Pros

- Cost-hedge against long-term volatility for term of PPA (typically 15 to 20 years)
- Provide utility bill savings in addition to environmental benefits
- Capable of showing additionality – new generation added as a result
- Make environmental claims, enables ESG compliance, and reduces Scope II GHG emissions (provided RECs are kept)

Cons

- More complex than unbundled RECs
  - Requires due diligence and modeling electricity prices for term of the contract
  - Takes time to negotiate
- Possible that environmental benefits are realized in location separate from company's energy consumption
- Financial risks if electricity prices fall during contract term (15 to 20 years)

Community Solar Subscriptions

Alternative similar to a virtual PPA

- In states such as New York and Massachusetts, commercial customers have opportunity to “anchor” community solar projects through purchasing bill credits
- Customers enter into subscription agreements with CS provider
- Solar project injects electricity into the grid, generating credits that can be applied to residential and commercial utility bills
- Limited to a certain percentage of a project’s offtake
  - E.g. 40% in NY; 50% in MA
- Upcoming opportunities in New York
  - Pending petition to expand one-subscription per meter rule
  - VDER retail rate increasingly favorable to commercial offtake

Community Solar Subscriptions

Pros

- Provide utility bill savings in addition to environmental benefits
- Capable of showing additionality – new generation added as a result
- Can be cost-effective option
- Some environmental claims (e.g., supporting the generation of renewable energy)
- Potentially less financial risk/complexity than PPA

Cons

- Capacity/offtake limited by regulation
  - Often cannot cover entire company's operation
- Cannot claim consumption of RE (don't own RECs)
- Only available in certain jurisdictions/ locations
- Relatively new program/administrative growing pains

On-Site Generation: Examples

Six Flags Great Adventure (Jackson, NJ)

- 23.5 megawatts solar project (11 MWs of solar carports and 12.5 MWs ground-mounted PV generation)
- Largest net metered solar project in New Jersey

Image source: Asbury Park Press

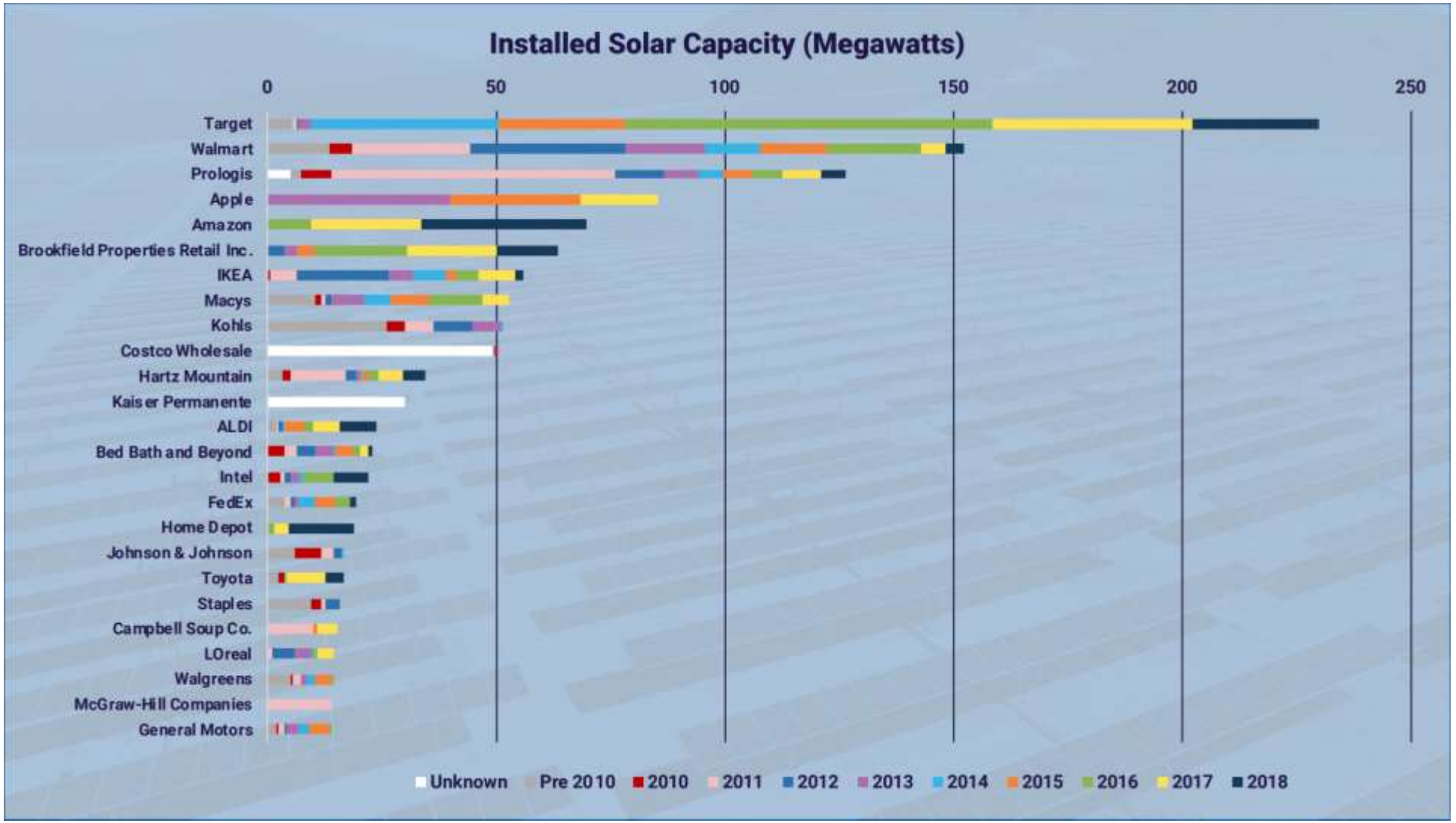
On-Site Generation: Examples

Apple Park (Cupertino, CA)

- 17-MW onsite rooftop solar installation and four MWs of biogas fuel cells, and controlled by a microgrid with battery storage
- Apple has direct ownership in over 600 MWs of renewable energy projects

Image source: Apple.com

Top 25 Corporate Users by Installed On-site Solar Capacity in 2018



Source: SEIA, 2018 Solar Means Business Report

*Includes company-owned & third-party owned systems

Hodgson Russ LLP ATTORNEYS

On-site Generation

Pros

- Prominent and visible
  - Investment in additional renewable energy clear to stakeholders
- Direct connection to company's energy consumed (provided RECs are retained)
- Capable of showing additionality – new generation added as a result

Cons

- Can be more expensive to develop, host, operate system
- May not meet all energy consumption
  - Limited to available, low-impact REC-eligible technologies (mostly solar PV, fuel cells).
  - Limited to available space of rooftops, carports, and adjacent property
- Must coordinate with existing land uses/building operations for company's core business
- On-site generated RECs must be kept if making environmental claims – no credit for "hosting"

Utility Green Tariffs

- Optional programs in regulated electricity markets offered by utilities and approved by state public utility commissions
- Allow larger commercial and industrial customers to buy bundled renewable electricity from a specific project through a special utility tariff rate
- Utilities supply the organization with up to 100 percent renewable power from projects either owned by the utility or contracted with independent power producers in the local grid or utility region
- Caters to customers' preference for a more direct financial connection to renewable energy projects, ideally within the same service territory or grid distribution area

Utility Green Tariffs

General Motors committed to 100% renewable energy at its Spring Hill Manufacturing plant in Tennessee

- Green tariff agreement with the Tennessee Valley Authority ("Green Invest program")
  - TVA procures new renewables to meet up to 100% of customer's firm annual energy
  - New renewable energy resources installed in the Tennessee Valley
  - Commitment: Up to 20 Years
  - Size: Utility-scale
  - Available to local power companies and business and industry customers across TVA's service territory
  - Leverages long-term agreements to build new, large-scale renewable energy installations in the Valley through a competitive bid process
- 100 MW of solar energy per year, beginning in late 2022
- Facility under development in Lowndes County, Mississippi

Source: General Motors & Tennessee Valley Authority.

Hodgson Russ LLP ATTORNEYS

Utility Green Tariffs

Pros

- Available in regulated markets where PPA options are limited
- Administratively simpler
  - Need not negotiate individual PPA with developer
- Utility retires RECs on behalf of electricity customer

Cons

- Typically more expensive than traditional PPAs
  - Utility charges fee for administering Green Tariff program
- Not available in all utility territories

REC Arbitrage

Example: “REC swapping” or “REC Arbitrage”

- GHG Protocol requires RECs to be acquired and retained for a company to claim a reduction in its GHG inventory
- All RECs represent one MWh of renewable energy but vary in price and characteristics:
  - State renewable portfolio standards drive price differences
    - Require in-state utilities to purchase RECs or make alternative compliance payment in order to show energy consumption is renewable
  - RECs from certain technologies (e.g. solar) and in certain markets can fetch a higher price
- With REC arbitrage or REC swapping, a company sells the high-priced RECs obtained through a PPA or company-owned onsite generation into the market and then replaces these RECs with an equivalent volume of cheaper RECs from a different project
- Allows consumers in expensive-REC jurisdictions to:
  - improve the economics of their renewable electricity procurement, and
  - substantiate renewable electricity use and carbon footprint reduction claims

REC Arbitrage

	Improves economics of electricity procurement	Enables electricity consumer to substantiate renewable electricity "use" claims
Project REC retained by developer (No arbitrage)	Yes (by the amount of the REC price)	No
Project REC retained by electricity consumer (No arbitrage)	No	Yes (using the project RECs)
REC arbitrage	Yes (by the difference between the project REC price and the replacement REC price)	Yes (using the replacement RECs)

Source: EPA Green Power Partnership (Sept. 2017)

REC Arbitrage

Impact on Claims

- Consumer's claims about renewable electricity use must align with the attributes of the replacement REC it owns, and not with the RECs associated with their project
  - E.g. If replacement RECs are from a wind-project, one can't claim to be powered by the onsite rooftop solar system.
- REC arbitrageurs should avoid giving the impression that they are using the renewable electricity associated with the project
  - The claim should be specific to the replacement RECs

Impacts on GHG Emissions Accounting

- Consumers undertaking a GHG inventory should calculate their emissions using the replacement RECs, not the original project RECs

Source: EPA Green Power Partnership (Sept. 2017); *see also* World Resource Institute's GHG Protocol Scope 2 Guidance

Available Resources

- EPA Green Power Partnership “Making Environmental Claims”
- WRI Report: Describing Purchaser Impact in U.S. Voluntary Renewable Energy Markets
- Federal Trade Commission: Green Marketing Guidelines
- EPA Green Power Partnership: Guide to Making Claims About Your Solar Power Use
- National Association of Attorneys General (NAAG): Environmental Marketing Guidelines for Electricity
- NREL: Renewable Electricity: How Do You Know You Are Using It?
- Vermont Attorney General's Office: Guidance for Third-Party Solar Projects
- RE100: Making credible renewable energy usage claims

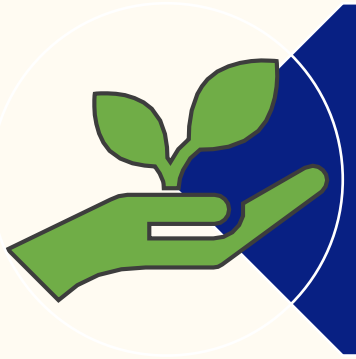
Hodgson Russ LLP ATTORNEYS

Thank you!

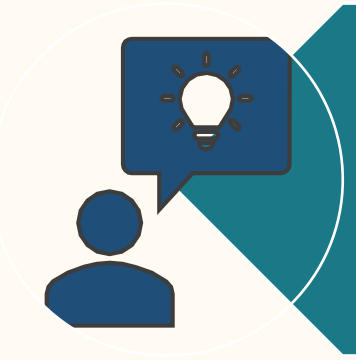
Questions?

Hodgson Russ LLP ATTORNEYS

Connecting Online



Sustainability Impact



EHS&S Management Forum

Check our website for registration and additional information about our conferences!

www.naem.org

New & Upcoming Reports from NAEM

- 2020 EHS & Sustainability Salaries
- 2020 Trends in Emerging Tech for EHS&S
- 2020 Staffing, Structure & Budgets
- Managing Covid-19 Challenges

All available @ NAEM.org/research

Upcoming Webinars on EHS&S Management

July 1

A First Look at the Impact of COVID-19 on EHS Functions

July 9

A Climate Solution Where All Sides Win

August 19

Integrating Human & Organizational Performance Into Your Management System

FREE for NAEM members

Information & Registration on-line at www.naem.org

Connect with NAEM!

- Online: www.naem.org
- Via email: caitlin@naem.org
- Social media:
  - Twitter: @NAEMorg
  - Facebook: www.facebook.com/NAEM.org
  - LinkedIn: https://www.linkedin.com/company/naem

Thank you for Attending!

A recording will be available in 3-4 days. You will receive an email once it's posted to our site.

Have a safe & healthy day!