Corporate renewable energy procurement survey insights

June 2016

pwc

Executive summary

One of the biggest developments in the renewable energy marketplace in the last 12–24 months has been the rapid growth in corporate renewables purchases. Some leading commercial and industrial companies are now playing an increasingly important role in the evolution of the renewable energy sector. Their share of renewables is growing, their demands of providers are rising, and their approaches to energy procurement are becoming more sophisticated.

To better understand what is driving the growth in corporate renewables, we designed a survey of companies headquartered in the US, most of which have large energy footprints and have purchased renewables in the past.

Highlights of the survey insights follow:

A strong majority of respondents intend to purchase in the next 18 months...

- Of the respondents surveyed, 72% are actively pursuing additional renewables purchases. And their appetite for renewables has been growing: 63% of respondents have become more inclined to purchase in the last six months. And among those who have made a purchase in the past, an even larger majority (85%) intend to make additional purchases in the next 18 months.
- This intent is driven by a desire to meet sustainability goals and to reduce greenhouse gas emissions (cited by 85% of those actively pursuing), generate an attractive ROI (76%), and limit exposure to energy price variability (59%).
- Four-fifths of the companies surveyed are planning to build out their renewables portfolio with multiple types of transactions (e.g., an offsite PPA and an onsite financial investment).
- While onsite PPAs remain most popular (selected by 67% of those actively pursuing procurement), more than half (58%) intend to purchase traditional offsite PPAs, and 30% plan to pursue offsite virtual PPAs. The responses also point to an increase in offsite versus onsite purchases.
- When identifying the most important renewables technologies to their organization over the next 12–24 months, virtually all respondents selected solar (96%), while a majority also cited wind (69%). Three categories dominated the ancillary technology options: 59% or more chose advanced metering, energy management software, and energy storage.

The lack of an internal mandate holds a minority back...

- Among the 28% of respondents who are not actively pursuing purchases, the most commonly cited reasons for not doing so are the lack of a mandate (61%), an unattractive ROI/ payback (56%), and the length of contracts (50%).

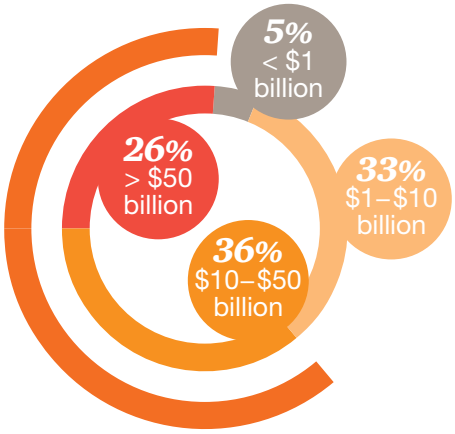
Note: A traditional PPA (power purchase agreement) is typically a 10–20 year agreement to buy electricity generated from a project that flows directly to the purchaser. Standard PPAs guarantee the owner of the project a stream of revenue by selling the power at a fixed and often inflation-indexed price to a creditworthy purchaser.

A virtual PPA is a 10–20 year contract by a customer to pay a fixed price for electricity from a renewable energy project where the electricity generated is not physically used by the customer. Instead, the electricity is sold into the market. These transactions can be structured in different ways, but they usually involve the customer getting an energy price hedge and the environment attributes of the green power generated.

Profile of survey respondents

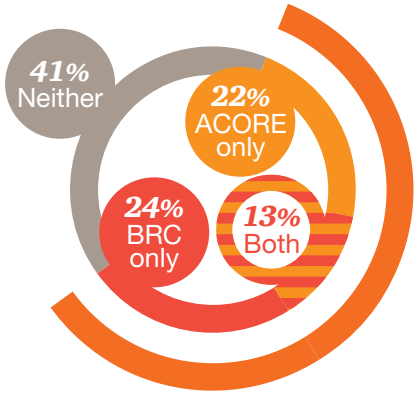
Company revenue

62% of respondents generate more than $10 billion annual revenue



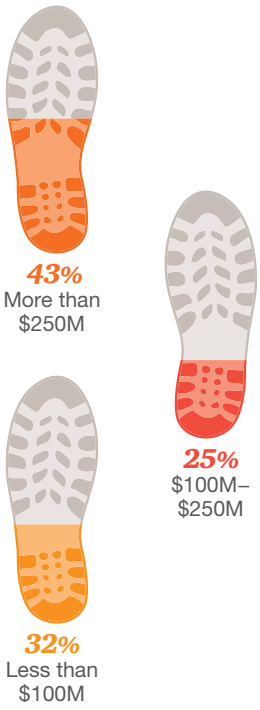
Renewable energy organization membership

59% of respondents are members of either ACORE, the BRC, or both*



Energy spend of organization

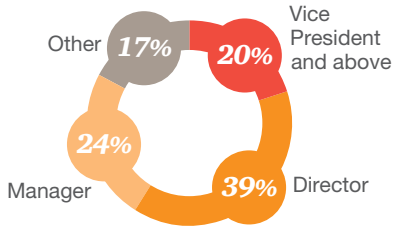
Majority of respondents have large energy footprints—68% spend more than $100M per year



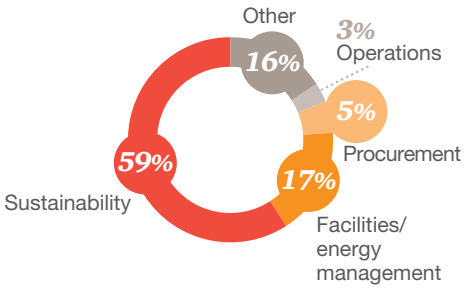
Level and role of respondents

Over 59% of respondents were director level or above from the sustainability, operations, facilities/energy management, or procurement functions

Level of respondent

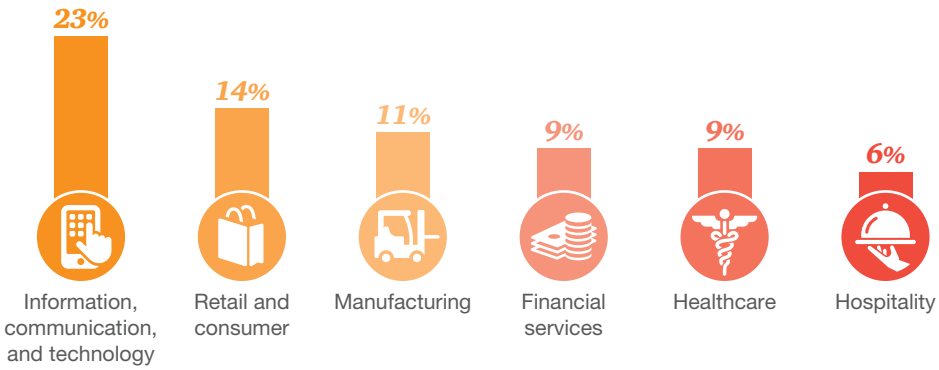


Role of respondent



Industry

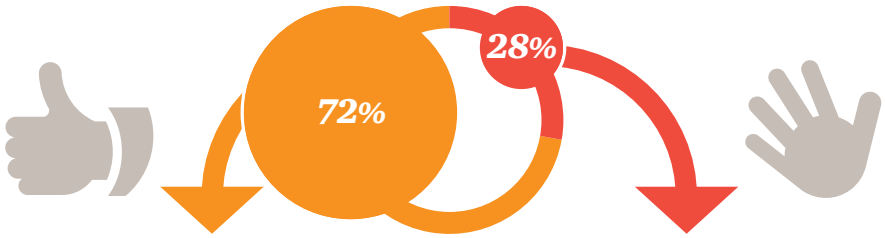
Respondents represent a broad range of industries; most prominent is information, communication, and technology**



* 28% of respondents worked in industries not listed in this chart.
** ACORE=American Council On Renewable Energy; BRC=Business Renewables Center (of the Rocky Mountain Institute).

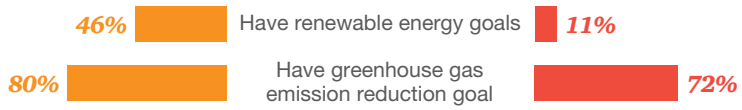
Purchase intent

Renewable energy procurement

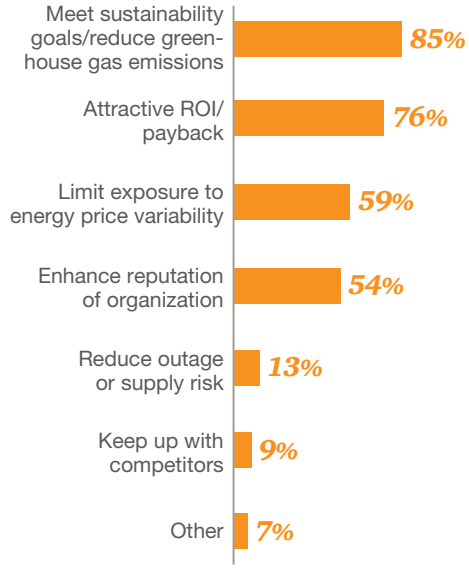


Actively pursuing | **Not actively pursuing**

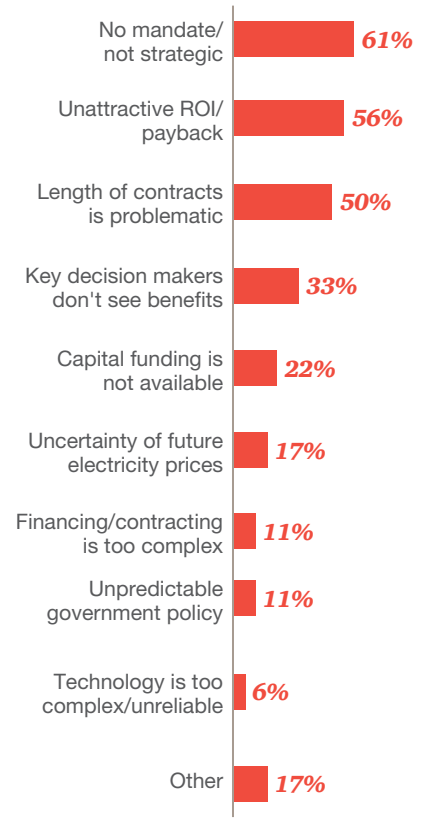
Corporate goals



Drivers of intent to purchase*



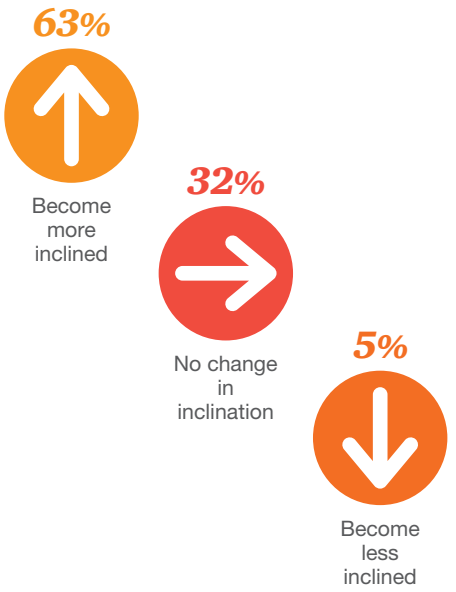
Drivers for lack of intent to purchase*



* Respondents were asked to list their "top 3" reasons

Changing inclination to purchase in last six months

The majority of respondents have become more inclined to purchase renewables in the past six months

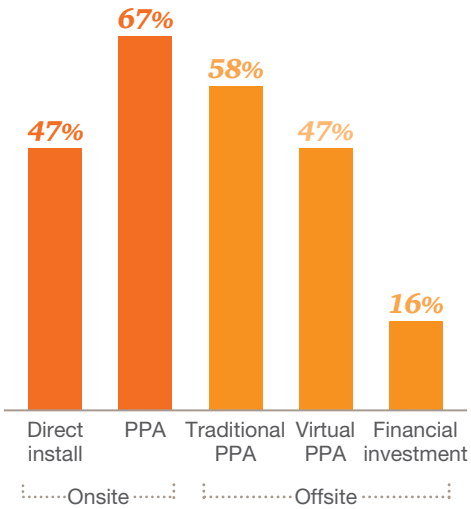


A corporate mandate (existing or lack thereof) is the most critical driver. While the ***"actives"*** have been able to achieve acceptable payback, the ***"not actives"*** have not yet identified projects or contract structures that meet their needs.

Intended transaction mix

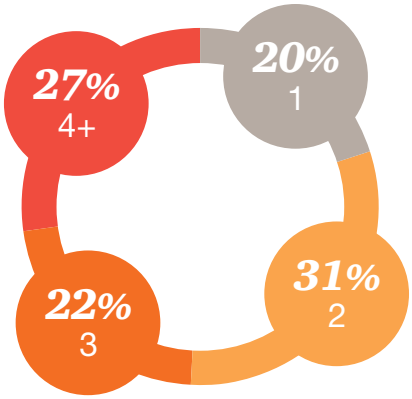
Breakdown of intended future purchases*

Onsite PPAs remain the most popular procurement type (67%) followed by traditional offsite PPAs (58%)



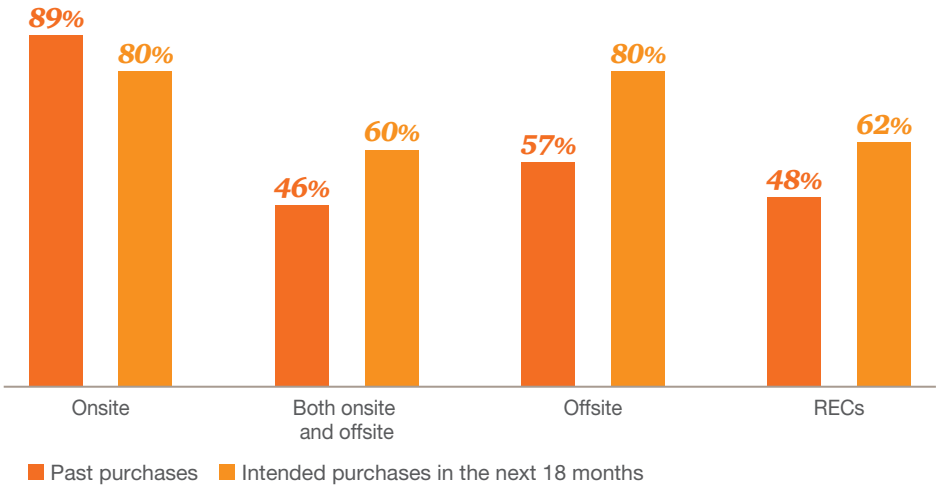
Number of transaction types*

Four-fifths of respondents are pursuing more than one type of transaction (e.g., onsite direct investment and offsite PPA)



Changes in purchasing—past versus future

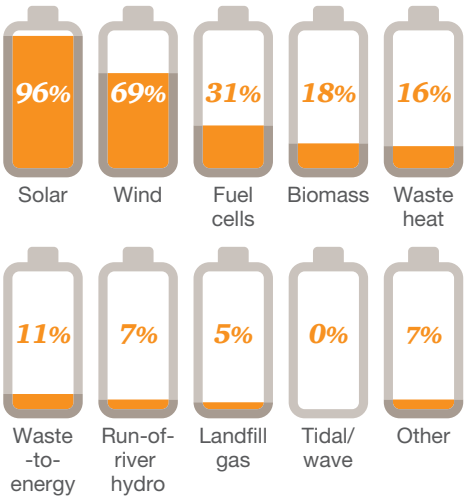
In the past, procurement skewed toward onsite purchases. However, future purchase intent seems to be balanced between onsite and offsite options, which may be driven by an increased appetite for virtual PPAs—a relatively new financing option



Technologies

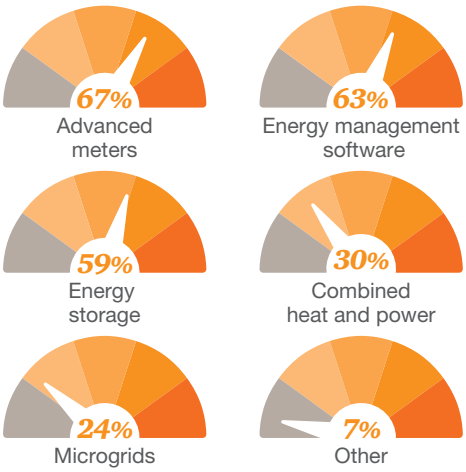
Most important renewable technologies over the next 12–24 months

Most respondents believe solar and wind will dominate their purchasing decisions



Most important ancillary technologies over the next 12–24 months

Respondents believe technologies for measuring and monitoring energy will be most important to their organizations

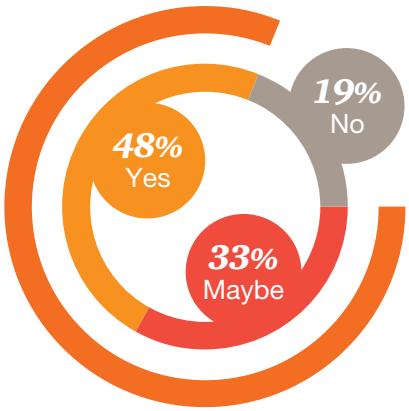


* Data only from those respondents that intend to purchase in the next 18 months.

Vendors

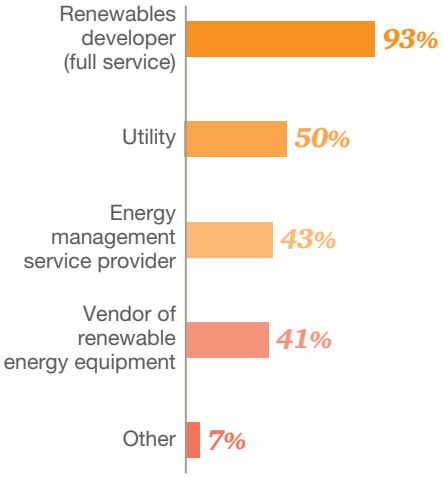
Use of third party advisor, consultant, or broker

A vast majority (81%) of companies are planning to engage a third party or are considering doing so to help develop their procurement strategy



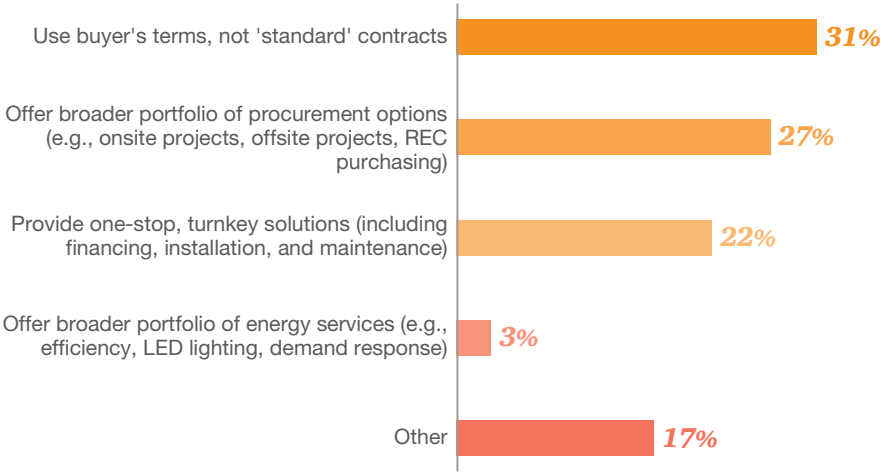
Renewable solution vendor preference

The majority of respondents will seek to purchase from a developer, while half will seek to work with a utility



How vendors can make it easier for customers

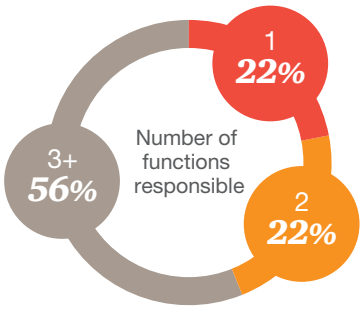
Customers want a more streamlined experience that suits their contracting terms and offers them a range of options across the lifecycle of the project



Decision making

Decision makers for renewable purchases

Renewables procurement is a highly cross-functional process: for three-quarters of the respondents, at least two functions are involved in the decision, and more than half of the companies require three or more decision makers. More than 60% of respondents said that Facilities/energy management and Sustainability are the key decision makers; Finance, Operations, and Procurement play a significant role, too



Facilities/energy management 63%
Sustainability 61%
Finance 57%
Operations 54%
Procurement 48%

Learnings from past purchasers

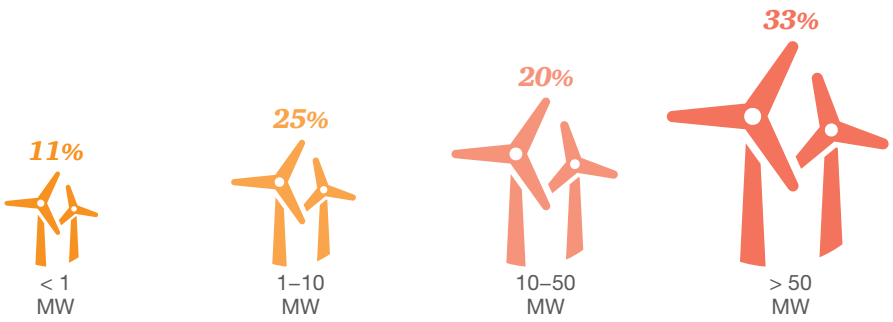
Have they purchased renewables?

Most respondents have already purchased onsite or offsite renewables

71% ***Have*** purchased renewables

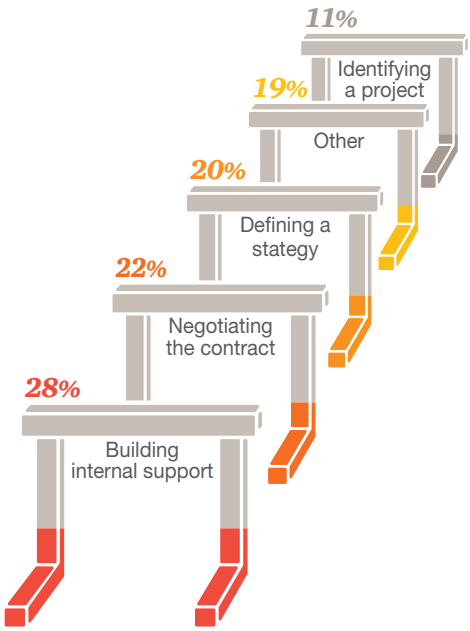
Quantity of renewables purchased

Over half of the purchasers have made significant (>10MW) investments in at least one type of renewable energy*



Building internal support is the biggest hurdle in the renewable energy procurement process...

Most difficult step



...while tracking the savings and telling the story are the toughest ongoing challenges.

Ongoing challenges**

Ongoing challenges with economics and payback...

- "Tracking the actual financial savings"
- "Adjusting to the impacts of dropping fossil fuel prices"
- "Explaining when the contract settles against us"
- "Tracking the ROI, given the complicated contract terms"

...and telling the story

- "Understanding the rights to environmental claims"
- "Understanding the broader benefit to the company"
- "Determining how to expand to additional locations, developing the business case for future projects, and defining the path forward to 100% renewables"
- "Telling the additionality story"

However, even with the challenges, past purchasers have a high intent to purchase going forward.

Purchase intent for next 12 to 18 months

8% ***No*** plans for future purchases

7% ***Planning*** additional purchases, but ***no*** current action

85%

Actively pursuing ***additional*** purchases

*11% of respondents did not provide information on the quantity of renewables purchased
**Anonymous quotes from respondents

www.pwc.com/us/renewables

About PwC's Renewable Energy Practice

At PwC, we offer a broad and deep set of assurance, tax, and advisory services to meet the business challenges of, and add value to, the dynamic renewable energy sector. Our broad network of industry professionals provides us with an in-depth understanding of key industry issues related to strategy, policy and regulation, operations, sustainability and climate change, risk, technology, finance, tax and incentives. Our clients include leading utilities, developers, technology providers, commercial and industrial companies, government entities, and financiers.

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Thank you

Thank you to ACORE and the BRC for providing support and facilitation.

ACORE is a national non-profit organization dedicated to advancing the renewable energy sector through market development, policy changes, and financial innovation. ACORE's Corporate Procurement Working Group simplifies renewable procurement to provide realistic options for corporate players across the economy.

Rocky Mountain Institute's Business Renewables Center (BRC) is a collaborative platform comprised of over 120 corporate buyers, project developers, and intermediaries, collectively representing 90% of the offsite corporate renewables market, that seeks to streamline and accelerate corporate purchasing of renewable energy.

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