

Mapping out the Pathway to Renewable Energy

To achieve your emissions reduction targets, you need a plan. In this guide, we outline a step-by-step process from creating a strategy to executing a deal for renewable energy.



Commercial purchasing of renewable energy is at an all-time high. Buyers are motivated by various goals, including sustainability commitments, competitive and stakeholder pressure, and economics.

Many of the solutions that exist today, or are in development, have the potential to create significant opportunities for companies to rethink their approaches to decarbonization. Once an organization understands where it is (step 1: establish a baseline) and where it's going (step 2: set targets), the essential next stage is to deploy a program of climate actions designed to reduce emissions.

In this article, we'll map out the pathway to renewable energy or clean technology procurement, from the prework to determining the scope of your project, the RFP process, and more.

Consider Your Motivations

What pressures am I facing? Primarily external pressure or internal drivers?
How much do cost reductions factor in, versus pure emissions reductions?

Collect And Analyze Data

To be prepared to create a strategy, a company must collect and understand its emissions data. The ability to view and understand your emissions by scope (1, 2, and 3) is essential to get started.

THE**STRATEGY****CYCLE**

Once you have a clear picture of your emissions, it's time to get educated about the renewable energy options available in the market today. Understanding the clean energy solutions and technologies, the reporting frameworks, and the risks and benefits are essential, and the Zeigo Network has tools to help.

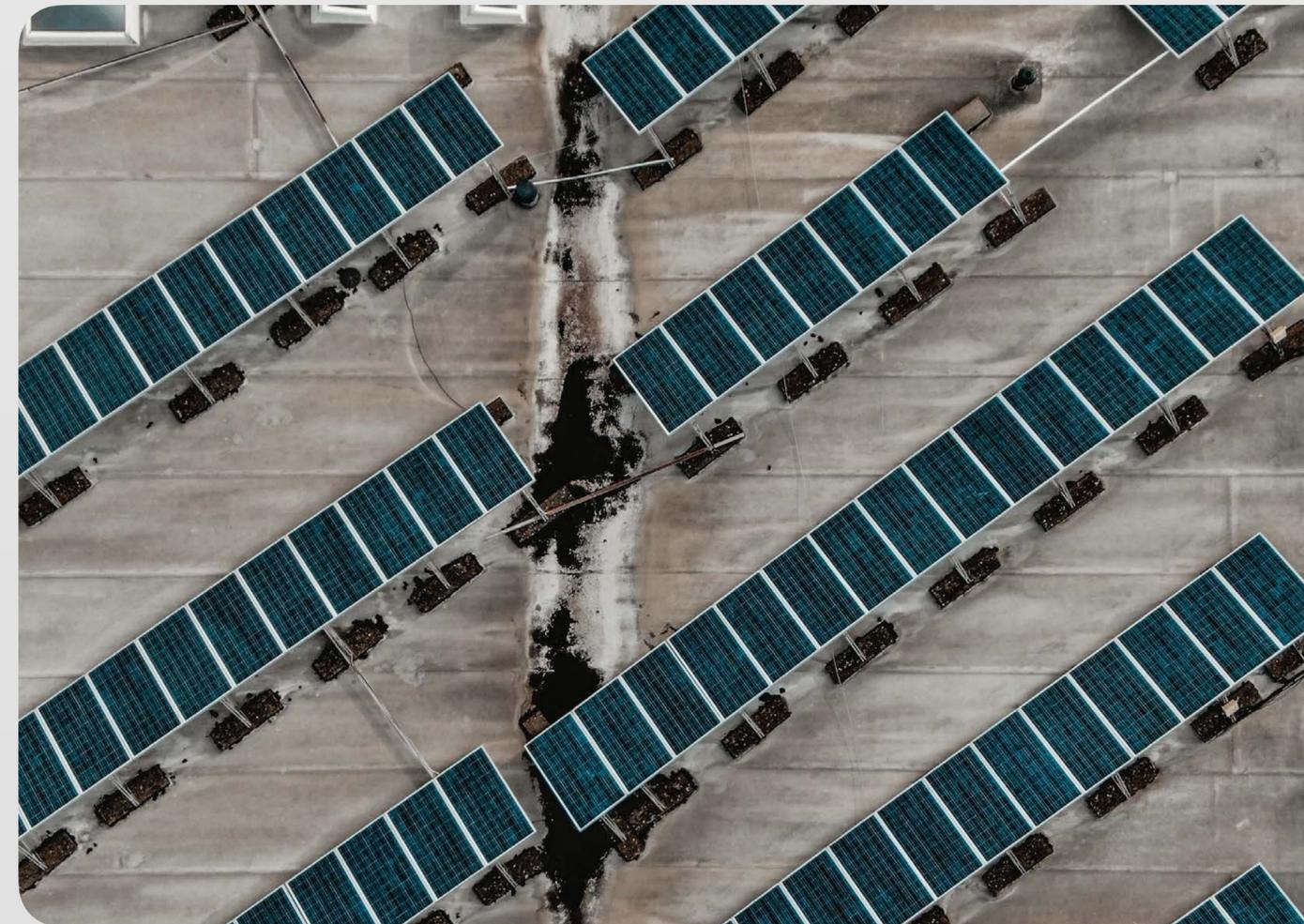
Now you're ready to create a strategy. Combine what you learned in the data collection task, the motivations exercise, and the education around solutions and reporting to decide what you want to accomplish and how to get there.

There are no perfect solutions or magic bullets,

so risks and contingencies must be considered. This step will likely cause you to return and re-form your strategy with additional education – hence the “cycle” part of creating a strategy. Strategies must be fleshed out enough to drive action but flexible enough to allow for adjustments when you learn something new.

RENEWABLE ENERGY TYPES

First, on-site projects are fairly self-explanatory, whereas a project like rooftop solar is on a company's site and may be either self-financed or leased through a PPA agreement with a developer. Second, directed PPAs allow for the renewable resource to be managed by the retail electricity provider within the same grid. Finally, synthetic or "virtual" PPAs allow a buyer to use a contract-for-difference (CFD) model to acquire the benefits of additional renewable generation without many of the standard geographical and logistical constraints. For more details, see the table on page 4.



RENEWABLE ENERGY TYPES

Corporations have several options for achieving renewable procurement goals, including virtual PPAs, directed PPAs, and on-site projects. Each option comes with a unique set of challenges and advantages.

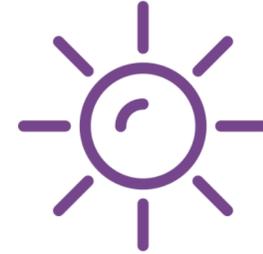


VIRTUAL PPA

Not linked to any specific facilities

Financial transaction (vs. physical) and acts as a "swap"

Typically includes additionality claim



ON-SITE PROJECTS

Potential in many global markets

Difficult to make substantial steps toward macro goals, but strong messaging and employee value

System purchase, PPA, lease options available



DIRECTED PPA

Physical transaction primarily eligible in deregulated markets

Contract directly through Retail Electricity Provider (REP)

Source from a defined asset, "wheeled" to facilities

Scheduling / balancing critical for a geographically diverse load



EACs

Available in many global markets

1 certificate offsets 1 MWh of scope 2 emissions

Technology, generation year, and (sometimes) specific RE project can be specified

Various products exist in different markets, such as RECs, I-RECs, LGC, GOs, REGOs, and more.



The initial tool for C&I green power purchasing was the energy attribute certificate (EAC) - including RECs, I-RECs, GOs, and other types. When electricity is generated from a renewable source, EACs are also produced in a one-to-one ratio as proof of that clean generation. The wholesale electricity is sold into the grid, while RECs are sold into the environmental commodities market. However, it is the RECs that represent the environmental attributes of electricity generation.

To date, billions of kilowatt-hours (kWh) of green power worldwide have been generated, traced, and certified through the trading of EACs.

EACs remain a core component of thousands of organizations' energy portfolios, including NGOs and utilities.

01 Align internally to prepare for success

02 Collect solution-specific data

03 Evaluate solution-specific risks

04 Engage the market

05 Execute

06 Report and Announce

07 Monitor performance

VPPA	ONSITE SOLAR	CERTIFICATE PURCHASE
There are many stakeholders to engage with, typically all the way up to the CFO and even CEO. Significant education is strongly recommended to ensure a smooth process that will likely take many months to complete.	Site-level leadership, procurement, and sustainability should be aligned and unified. Finance and accounting are likely involved as well	Sustainability, procurement, and possibly finance should be aligned. But there should be clarity for all based on purchasing toward a specific goal or target
If you haven't already, collect market-boundary-level annual purchased electricity data. Collect planned growth data for the next 15-20 years.	Collect site-level annual cost and usage data, including hourly interval data for the highest KWh sites. Know which sites are leased vs. owned, where you have available land, and the condition of roofs. Any planned changes at the facility should be clear too.	Collect KWh usage by market-boundary and identify indicative prices for priority markets to create a budget.
Different categories of risk should be considered, including execution risk, market risk, counterparty risk, LMP risk, and others.	While the total contract size is likely much lower than for an offsite PPA, the categories of risk that should be considered are similar, with the exception of LMP risk since onsite solar is not a contract for differences.	Assuming you've done your homework, there are no market risks inherent to EAC purchasing as with onsite and offsite PPAs.
It is highly recommended that a competitive RFP process be pursued	Use the Zeigo Network platform to find solution providers in your preferred geography. Alternatively, let the SE team run an RFP for you and analyze the results.	Connect directly with the Schneider Electric team. Alternately, peruse the Zeigo Network project catalog for strips available from solution provider members.
Negotiation and legal review can take 3 - 6 months. Be prepared to take your time and achieve the best outcome.	Negotiation and legal review can take 1 - 3 months. Be prepared to take your time and achieve the best outcome.	Be sure you have clarity on the retirement of the credits or offsets as well as the required documentation.
Since you collected data and prepared well on the front end, you're in good shape to know exactly how to report your action. It's important to be deliberate and careful with public messaging to ensure your action is correctly aligned with your public message.		
Track monthly and annual credit generation. Track and audit any financial gains or losses, as well as ensure billing is per the contract.	Evaluate the monthly and annual power output vs. Expectations. Calculate the savings or cost compared to the grid. Ensure that any credits are being retired.	No monitoring is required as credits are simply a commodity

At the end of the day, the renewable energy planning and procurement process is iterative. You will likely create a strategy, decide on a pathway, pursue a few different types of renewable energy, and then go back to the beginning and use what you've learned to refine your goals.

As you reflect on your strategy and objectives, consider these questions:

01 Where is your company on the pathway outlined above?

02 What steps have proven most challenging?

There are many opportunities to share your triumphs and challenges inside the Zeigo Network, so make sure to take advantage of our knowledgeable community if you're experiencing roadblocks or need help building a strategy.

Get started today

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