

DESIGNING PROGRAMS FOR corporate renewables procurement

Corporate renewable energy procurement brought an investment boom in low-cost renewable energy to Alberta, as detailed in our first fact sheet in this series, *Alberta's Corporate Renewables Procurement Advantage*. It is no wonder that power buyers are asking utilities and policy-makers in other provinces with regulated electricity systems to resolve their regulatory barriers to corporate procurement.

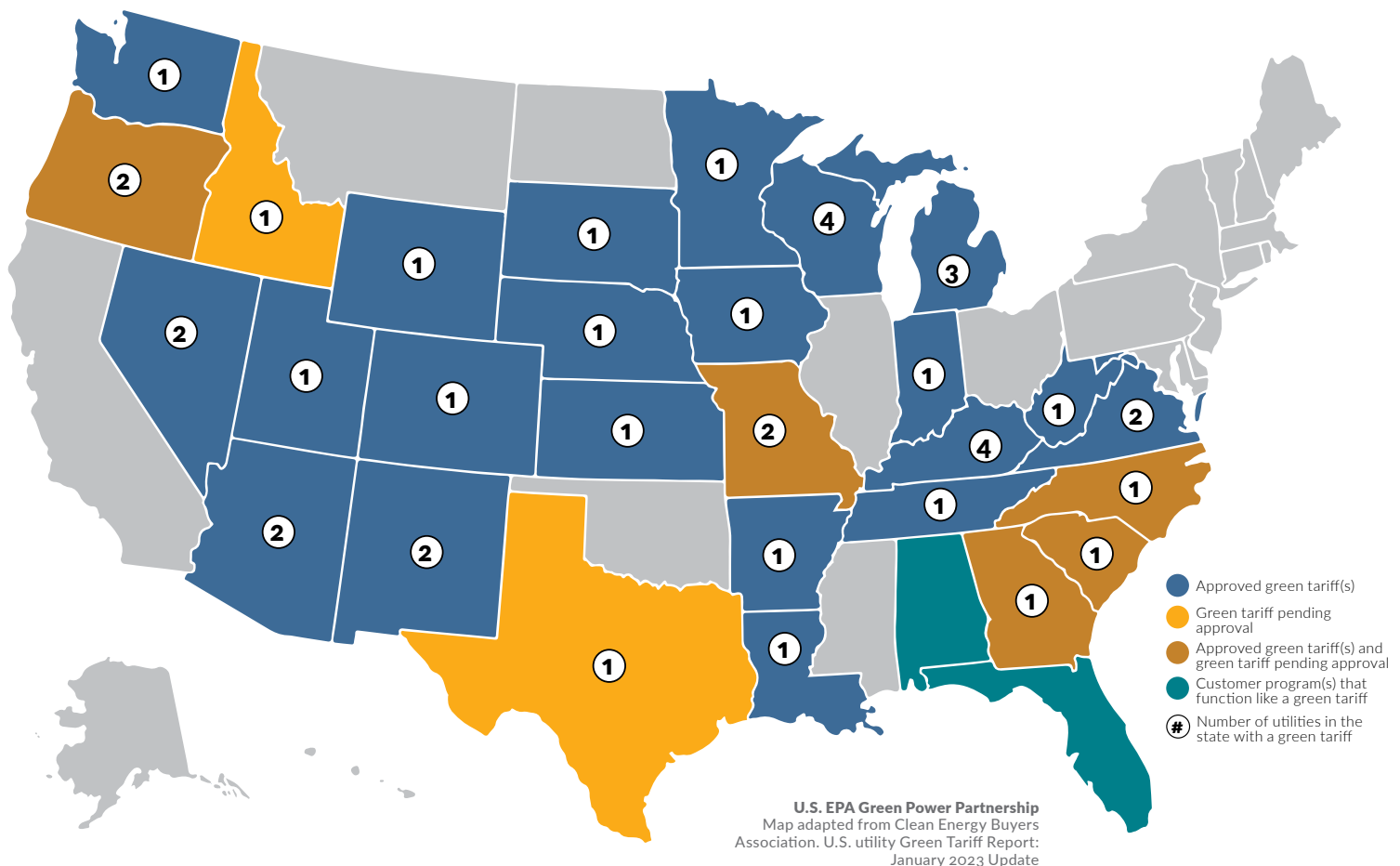
As explained in our second fact sheet, *Spreading the Benefits*, the solutions exist for these provinces and can bring tangible benefits for businesses, communities and ratepayers.

This final fact sheet in this series dives deeper into the mechanisms available to enable corporate renewable energy procurement. There is a healthy menu of options from which to choose, thanks predominantly to the 50 "green tariff" programs that have been developed in the U.S., where over half of all states have recognized the benefits of enabling corporate renewables procurement.

Both utilities and states have recognized that this type of procurement:

1. attracts renewable energy **investment**;
2. makes local job-creators more competitive and attracts **new employers** by enabling low-carbon electricity inputs to satisfy environmental, social and governance (ESG) requirements; and
3. **brings down electricity system costs** for all ratepayers by feeding the grid with power with zero-marginal-cost and recovering capital and infrastructure costs from the corporate buyer.

As such, utilities and state governments have been keen to develop a wide array of green tariff programs amenable to their particular corporate buyers and to suit their particular electricity regulatory regimes.



SUCCESSFUL GREEN TARIFF DESIGNS:

common elements

A green tariff that is useful to corporate buyers must include two core elements, enabling the buyer 1) to purchase environmental attributes from new renewable energy generators to displace their emitting grid electricity use and 2) to displace or receive a fair credit against their grid energy costs, including carbon charges or embedded carbon pricing. Beyond this, green tariffs can have a variety of design features, but the key features for successful, sustainable programs will also deploy elements to achieve two principles that are key to success:

1 SUSTAINABILITY

Programs will only be sustainable if they maintain social licence by treating ratepayers fairly and even sharing the benefits of additional renewable energy development with ratepayers. This means:

- *Including consumer representatives in program design consultations and tariff development*
- *Submitting program designs and program tariffs to regulatory review*
- *Educating the public and ratepayers about the fairness and benefits of the program*

2 MARKETABILITY

Programs will only be marketable if they are attractive to the target buyers and renewable energy developers in the jurisdiction and do not unnecessarily dissuade participation through unnecessary cost, complexity or risk. This means:

- *Consulting with both corporate buyers and renewable energy developers to optimize program designs for attractiveness to both parties*
- *Allowing buyers visibility and input into or control over the source of the renewable energy and the nature of the renewable energy counterparty*
- *Ensuring buyers are confident in the materiality and additionality of the renewable energy*
- *Tapping into market competition principles to secure lowest-cost long-term contracts for renewable energy*
- *Enabling flexibility in participation, where possible, to accommodate different buyers with different appetites relating to time horizons (term of purchasing commitment), annual energy volume, community or Indigenous equity participation, etc.*

The best program designs will find the right balances of these objectives to achieve win-win-win outcomes that benefit host communities, non-participating ratepayers and corporate buyers. This is achievable because renewable energy economics are now so positive that they offer plenty of benefits to distribute to all parties — to grow the pie, so to speak. If the programs are not sustainable or marketable, however, those benefits will not accrue to anyone.

common MODELS

Subscription model

With subscription-based programs, the utility or some other centralized procurement authority runs a procurement for the volume of renewable energy necessary to meet the demand of buyers who have signed up (“subscribed”) to the program.

This option is most appropriate for enabling participation from a wide range of many relatively smaller commercial and institutional subscribers, as it helps to organize buyer aggregation through centralized procurement to overcome barriers of scale.

CENTRALIZED

ORIENTED TO BUYER AGGREGATION

Trilateral sleeve-deal model

Sleeve deals put the focus on the individual preferences of the buyers, who choose their preferred renewable energy developer through their preferred process and participate directly in the negotiation toward a trilateral deal with the developer and the utility. Given the utility’s exclusive franchise and obligation to provide reliable supply to and recover costs fairly from all customer types, it still plays an important role in grid access and “wheeling” the power. However, the buyers’ interests are front-and-centre in choosing a project that suits their goals and values.

This option is most appropriate for large corporate buyers, each with their own unique risk profiles, energy and timeline requirements, and supplier preferences (such as, social benefits).

DE-CENTRALIZED

ORIENTED TO BUYER CHOICE

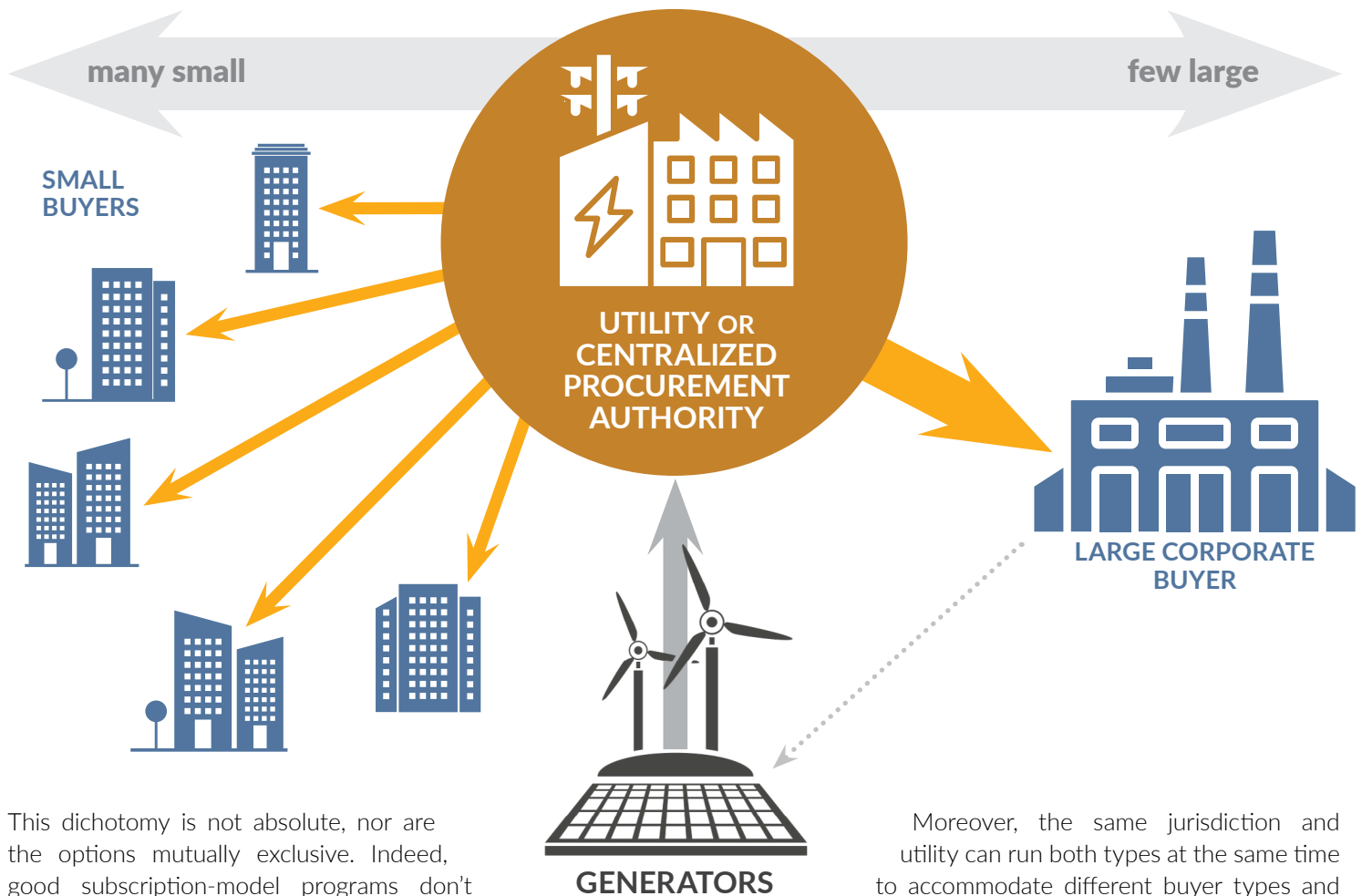
centralized **OR** decentralized

Within this broad framework, successful green tariff programs can vary across a number of parameters, allowing the program design to serve specific jurisdictions and types of buyers. One of the essential differences between program types relates to the accessibility and appeal of the program to different buyer types and how much say the buyers have over renewable energy project selection.

The different “green tariff” approaches lie on a spectrum based on who makes the main decisions around the contract features

for buyers and developers. These features include: volume of energy, renewable energy technology type, project eligibility (e.g., size and location of projects), developer qualification and ownership requirements (e.g., developer experience, Indigenous equity stake), term (length) of contract (for both the developer’s energy and the buyers’ purchasing commitment), and more. On opposite ends of the spectrum, we find two models (SEE PAGE 2):

1. **pure subscription-based models**
2. **pure trilateral sleeve-deal models**



This dichotomy is not absolute, nor are the options mutually exclusive. Indeed, good subscription-model programs don’t exclude buyer preferences from their design — they engage prospective buyers in advance to design a program that will appeal to buyers to drive subscription and maximize the renewable energy investment benefit.

Conversely, utilities and governments are often not simply passive intermediaries in sleeve deal programs. They will typically define eligibility parameters and tariff rates that will influence the outcomes of deals between buyers and developers.

Moreover, the same jurisdiction and utility can run both types at the same time to accommodate different buyer types and interests.

The key for policy-makers (governments and utilities) is to deploy programs that meet the needs of their industries, businesses and other job creators that are hungry for renewable energy, because their investment and operations, along with the renewable energy investment driven by their demand, benefit the entire province.

where to start

The specific policy designs as well as the regulatory and policy development processes needed in each jurisdiction will vary depending on the stakeholders involved, the overall regulatory apparatus and the details of existing regulations and discretion for utilities. **But in almost any jurisdiction that is not open to corporate renewable energy procurement by default, the following hurdles will need to be overcome:**

1 Introducing new institutional perspectives

“Exclusive franchise” utility systems typically start with established perspectives, seeing specific exemptions in the grid as undermining the centrally-planned whole. Moreover, new independent power producer (IPP) developer entry may be seen as a threat to the existing business model of these utilities. However, there is an opportunity here for diversification and innovation in those business models and for greater benefits to the system as a whole through green tariff concepts. As dozens of U.S. states and even more regional utility systems have shown, any system can enable corporate renewable energy procurement. Overlooking these opportunities only means large companies will move elsewhere to establish and grow their operations and employment and to purchase new renewable energy supply. If jurisdictions want to attract investment and job creation while enabling new, low-cost energy supply and spreading system costs over a broader ratebase, they need to adopt a constructive approach to satisfying this growing customer demand. U.S. states and utilities, alike, have realized these benefits.

2 Amending regulations & legislation to overcome legal barriers

Some jurisdictions give utilities the leeway to develop and apply green tariffs without regulatory reform. With broad discretion to serve customers reliably and at lowest cost, utilities have found that green tariffs can support these mandates, and they are authorized to implement them. In other instances, regulatory frameworks may restrict utilities by, for example, narrowly defining tariff categories and customer classes. In still other cases, governments may want to push reluctant utilities (who only see the loss of their market share) to open the jurisdiction up to this investment.

3 Engaging with stakeholders

Throughout the regulatory and program development process, policy-makers need to engage with prospective buyers to assess the needs of the important commercial, industrial and institutional customers they wish to serve through a green tariff program. There is now a diverse menu of different programs on offer to be copied from U.S. states, but engaging local corporate electricity consumers to understand their interests and preferences will inform the most appealing program design and eligibility parameters, maximizing subscription and benefits for the jurisdiction. It is also important to engage with wind and solar developers, to ensure that program design can enable strong competition to drive lowest-cost outcomes. Finally, it is key to program sustainability to engage with consumer representatives, to ensure a fair allocation of costs and benefits and inform tariff development that will sustain social licence for the program.

4 Design fair tariffs to allocate costs and benefits

Policy and regulatory amendments may be required to ensure that the regulatory processes are in place to ensure the costs of procuring and integrating the renewable energy are fairly allocated to the participating buyers. Buyers are not asking for special treatment or to avoid system costs by circumventing electricity grids through green tariffs; they are seeking to secure their renewable energy needs and mitigate their carbon cost risk by paying the fair costs of buying new, low-cost renewable energy that is added to the grid. Because of the low cost of wind and solar, they see an opportunity to reduce their long-term costs through renewable energy procurement – but they also accept the need to pay their fair share to use the electricity system. As long as the green tariff rates are not unfairly punitive to buyers and allow them to capture a fair proportion of the benefits that renewable energy brings to the grid, the program design will drive uptake. Meanwhile, with the right tariff designs, accommodating large customer demand for renewable energy can help to control system costs for all customer types.

At all steps in the process, it is key to recognize the opportunity that corporate renewable procurement affords and to find ways to open up and innovate in order to accommodate these opportunities.

next steps

Across Canadian provinces with emitting grids other than **Alberta**, including particularly **Saskatchewan, Ontario, New Brunswick** and **Nova Scotia**, the federal government has prompted active conversations about enabling purchasing of new renewable energy under long-term contract. The different provinces have had varied responses to this opportunity, but discussions at different levels are taking place in all provinces.



ALBERTA

The country's current leader in corporate procurement of renewable energy has reaped envy-inducing benefits. As of mid-2023, 2.57 gigawatts (GW) of renewable energy have been purchased through power purchase agreements, enabling a total of 3.19 GW of project capacity. This resulted in the creation of 5,430 jobs, \$4.74 billion in capital investment and production of enough energy to power 1.2 million homes.

SASKATCHEWAN

This prairie province's large industrial load makes it the perfect candidate for sleeve-deal designs. These would allow the biggest investors and job-creators in Saskatchewan to choose their own preferred green energy.

ONTARIO

Large industrial loads and the concentration of corporate headquarters make Ontario a prime market for sleeve deal designs that allow firms to achieve their sustainability targets. The potential here is massive.

NEW BRUNSWICK

Like all other provinces, New Brunswick is bursting with potential. Every jurisdiction has investors and job-creators who need to be responsive to global finance and sustainability expectations – they're just waiting for options.

NOVA SCOTIA

Showing true leadership, this East Coast province started with a subscription model that is very amenable to their many small commercial and institutional buyers. But wanting to offer green energy options to all, the province is also starting to enable sleeve-deals.

Nova Scotia is the clear leader in opening up to corporate renewable energy procurement, with both a subscription-model green tariff ("Green Choice Program") underway and a sleeve-deal green tariff under development. Deploying the two different programs will accommodate different types and scales of buyer demand. Both programs have been developed after substantial open and transparent consultation with all affected stakeholders and initial program designs were tweaked to strengthen the program and its prospects for subscription.

The rules and regulatory strictures are all transparent, building confidence among all stakeholders. Moreover, recognizing the very low prices for wind and solar energy, Nova Scotia has adopted a unique approach to ensuring those benefits can be shared with all ratepayers, while still offering attractive pricing for corporate buyers. **With Nova Scotia's strong lead, there are good prospects for all five of Canada's carbon-intensive grids to open up to the benefits of corporate renewables procurement.**

fact sheet SERIES

- How is Alberta reaping the benefits of the renewable energy boom? See *Alberta's Corporate Renewables Procurement Advantage* to find out!
- While Alberta got a leg-up on capturing this market opportunity, other provinces can enable corporate renewable procurement in Canada. Check out *Spreading the Benefits: Enabling Corporate Renewable Energy Procurement Across Canada* to see how.

ALBERTA'S corporate renewables procurement ADVANTAGE

How does it work?

The growth of corporate procurement of renewable energy in Alberta has been dramatic in recent years. Thanks to strong wind and solar resources, a stable carbon pricing regime and a unique regulatory environment that enables corporations and institutions to procure renewable energy from its renewables.

These agreements are part of a stable and durable green deal that offers renewables with developers for new cost and value that goes beyond the traditional power purchase agreement (PPA) model. In mid-2023, the cumulative total of public procurement contracts in Alberta surpassed 2.5 GW, with over 100 projects under way – three years ahead of the province's target with IRECC Canada.

The approximately 2,500 MW contracted through the new green deal is expected to be completed by 2025, creating 14,000 jobs in the province through a number of provincial economic responsibility programs by which the province has made the benefit of the additional renewable energy investment return by the private sector, including their energy needs for homes, bus, investment, job, workforce, economic, multiple revenues and a stronger investment climate for an environment and a global carbon.

Corporate Renewable Energy Deals in Canada

ENABLING CORPORATE RENEWABLE ENERGY PROCUREMENT ACROSS CANADA

Spreading the benefits

Alberta is enjoying a corporate renewable energy boom that is unique in Canada... so far. Alberta's open and competitive electricity system enables these deals by default because it allows companies to choose their electricity supplier, including buying under long-term contract.

Other systems in Canada have similar goals, but they have been hindered by a lack of transparency and a lack of competitive procurement. In many cases, it is not clear whether utility-owned energy programs (PEPs) offer through competitive procurement for long-term power purchase agreements. However, the utility industry has been reluctant to share this information, and the utility industry has been slow to supply electricity through the utility's vertically integrated distribution and generation assets.

In the United States, jurisdictions looking to harness the opportunities of renewable resources have demonstrated effective and transparent and open procurement. Different iterations of "green tariffs" have allowed American states to attract investment – have built renewable energy capacity and have provided a significant boost to the economy.

Alberta's unique approach to enabling corporate renewable energy procurement across Canada is a model for other jurisdictions in Canada, including Ontario, Nova Scotia and New Brunswick.

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