

2021 YEAR IN REVIEW 2022

A look back at 2021

A message from outgoing director Rebecca Nadel

Greetings BRC Community! As I write this I am reflecting on my past year as your director. As most of you know, I am moving to the U.S. for family reasons, leaving the BRC in the capable hands of our new Director, staff, advisory board, and members. This year has seen monumental growth in corporate procurement in Canada. We launched the Deal Tracker in Q1 and are already planning how to reformat it due to the steep rise in both the number and size of VPPAs announced.

Adding to good market dynamics, I couldn't be more pleased to introduce you to Nagwan Al-Guneid, your new BRC Director who is based in Calgary. She joins us from the Energy Futures Lab where her most recent position was manager of policy innovation and government relations. Nagwan is a recognized leader and connector in Alberta and was a Young Women in Energy Winner in 2020. She is a co-founder and board member

of [The Next 30](#), creating policy options for Alberta's future, and past president and board member of [Ask Her YYC](#), increasing representation in political leadership.

Each of you as members have made the important work of BRC possible and given me the opportunity to support the growth of renewables across Canada, a goal near and dear to my heart. Since BRC is well on track to help corporations and institutions procure 2 GW of renewable energy by 2025, you'll likely see more ambitions announced this year. I look forward to seeing all that you can accomplish. Best wishes to all of you and please keep in touch!



A look ahead to 2022

A message from incoming director Nagwan Al-Guneid

Hello et bonjour BRC Community! I am thrilled to have joined BRC-Canada. It has been an absolute pleasure meeting BRC's team and advisory board, as well as a number of supporters, members, and champions. I would like to give a special thanks and heartfelt gratitude to Rebecca's leadership and foundational work at BRC-Canada. I believe her leadership and contributions will set us up nicely to expand the ambition and develop what's next for this organization. With Canada's ambition to achieve a net-zero emitting electricity system by 2035, this is such an exciting time to be working in the renewables and electricity space with all of

you. There are multiple pathways to achieve a net-zero grid, and renewable energy procurement through PPAs will continue to be a key one in Canada. With your leadership and support, we aim to increase BRC's focus on attracting more corporations and institutions to procure renewable energy in 2022 and beyond. If you have ideas or connections to potential buyers, or even if you want to send a quick hello, please don't hesitate to [email](#) me directly. I look forward to working with all of you to decarbonize Canada's electricity grid!

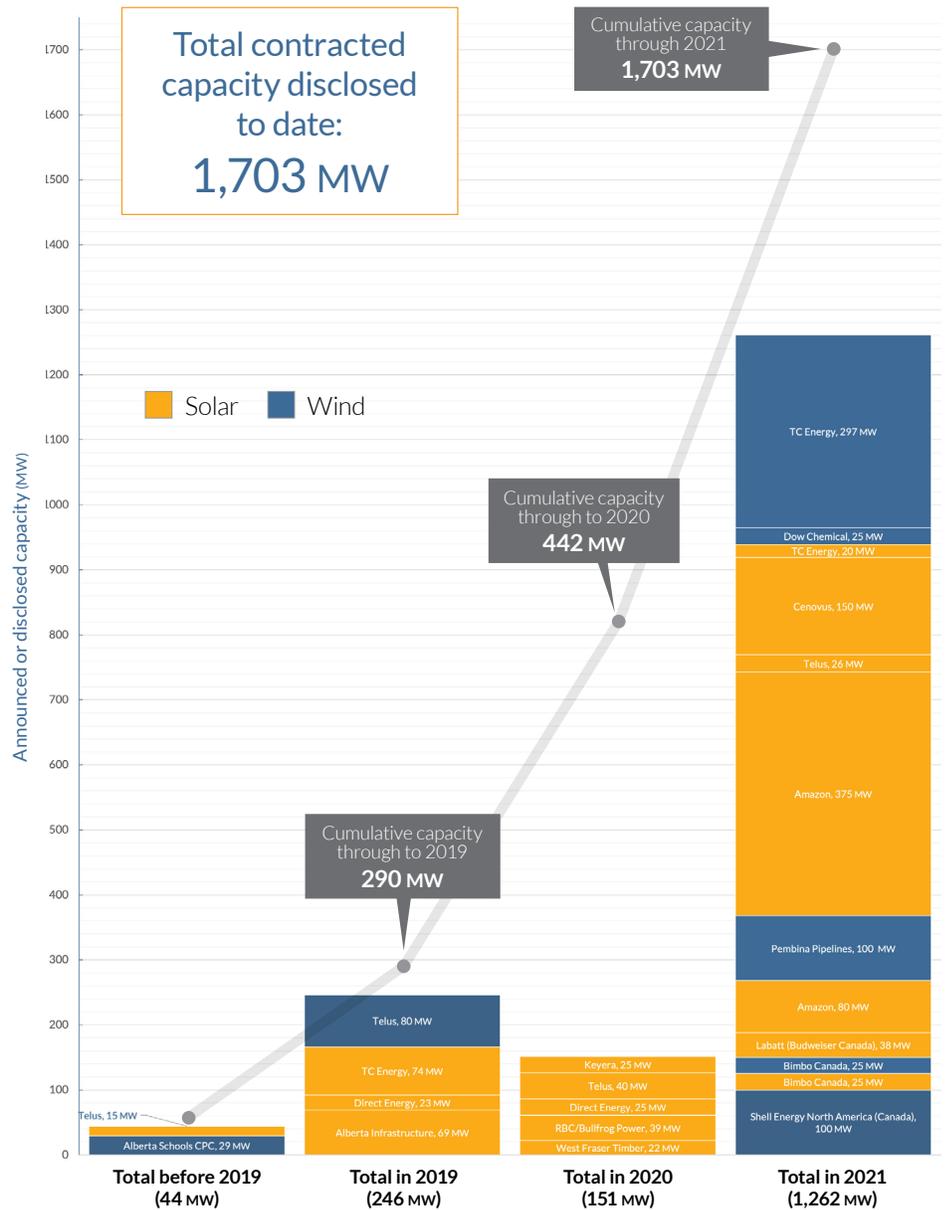


This was a banner year for corporate renewable energy deals in Canada.

If 2019 is remembered as the year that this market revealed itself in earnest, 2021 will go down as the year that signalled the remarkable scale of the corporate renewables boom.

With 1,262 MW worth of renewable energy contracts announced, 2021 nearly quadrupled Alberta's cumulative total, now standing at 1,703 MW. This total capacity is enough to power over 640,000 homes in Canada. The eleven deals announced in 2021 support twelve new renewable energy projects in total: five wind deals totalling 547 MW and seven deals for solar, totalling 715 MW.

With 22 deals all together since the market kicked off (16 of which have included at least one BRC-Canada member), the Alberta corporate renewable energy market now offers a sufficient dataset to take note of some emerging trends.



Buyers are coming from a diversity of sectors and with different motivations

With three new sectors added to the list in 2021 (Food & Beverage, Technology, and Chemicals), companies purchasing new renewable energy in Alberta are coming from an ever-growing list of nine different sectors.

With their considerable emissions, it is not surprising that Alberta's oil and gas sector and the related chemicals industry account for nearly half (46.4%) of the total cumulative deal volume in 2021. These industrial operators, as well as the single forestry sector buyer (another 1.3%), are subject to the province's Technology Innovation and Emissions

Reduction (TIER) industrial carbon pricing framework and can use offsets they procure from their renewable

energy deals to cover parts of their compliance obligations.

Remarkably, however, the remaining 52.3% of the deal volume is supported by other buyers without TIER compliance requirements, suggesting a healthy and robust voluntary ESG market that almost matches the compliance market. For a province with significant emissions and electricity use by industry, it is notable that Alberta is attracting so much renewable energy investment from commercial sectors aiming to cover their electricity needs renewably.

Economic Sector	# of deals	vPPA Volume (MW)
Public Institution*	2	98
Telecommunication	4	162
Electricity	3	87
Oil and Gas	7	766
Forestry	1	22
Finance	1	39
Food & Beverage	2	88
Technology	2	455
Chemicals	1	25

* e.g. school board, provincial government

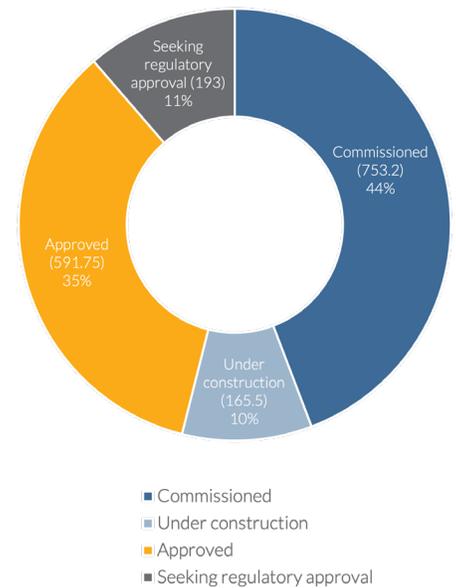
Big deals mean even bigger projects — plus the economic benefits that come with them

The 2021 deals are backing nearly 1,750 MW of new renewable energy development in Alberta for a cumulative total to-date of 2,277 MW.

The pace and size of these deals mean serious economic development. The market for corporate renewable energy deals in Alberta is fostering billions of dollars in new capital investment in the province: deals announced since 2019 will support \$3.75 billion of new construction by 2023 and the nearly 4,500 jobs that come with it.

Fully eight of the eleven deals announced in 2021 support projects that will produce more energy than the contract covers. No single project has yet been the subject of two announced deals, so it is unlikely this additional capacity will be covered by follow-on deals. Rather, this surplus production appears to expand on a recent trend where developers are taking a merchant position (subject to the Alberta power pool price) for a portion of the project's energy production.

Announced Deal Capacity (MW) by Project Status



Corporate renewable energy deals are backing a surge in renewable energy construction, which will continue in 2022

Corporate renewable energy deals are behind the biggest year for renewable energy construction in Alberta's history. Of the 488 MW of new wind power built in 2021 (increasing Alberta's installed wind capacity by 20.1%), over half (281 MW) are from new projects backed by corporate deals. The connection to

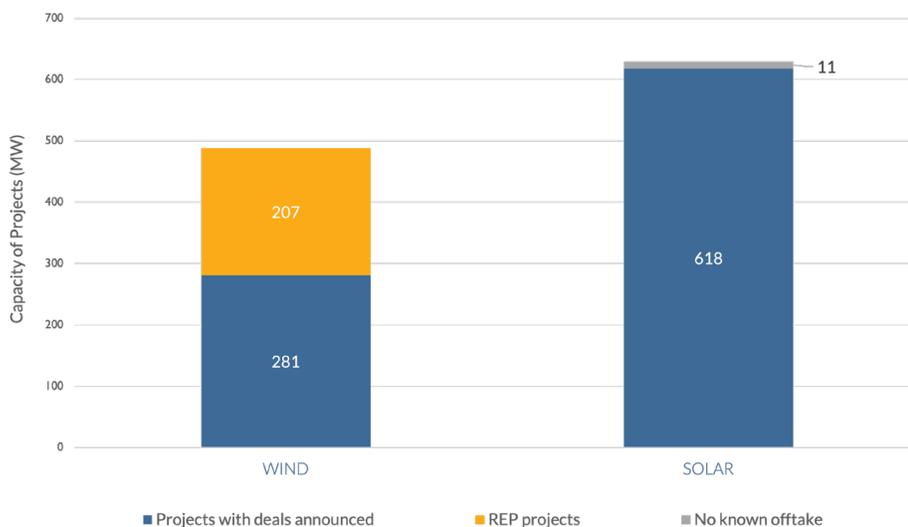
corporate deals is even stronger for solar: of the 629 MW commissioned in 2021 (multiplying Alberta's solar compliment 5 times over), 98.3% (618 MW) were backed by corporate deals. Almost all (95.5%) of the 736 MW of utility-scale solar that is now operating in Alberta has been linked to an announced corporate

offtake deal for the energy produced.

Clearly, the corporate renewable energy procurement market is driving renewable energy investment in Alberta. The upcoming year promises to break even more records, with around 1,700 MW of wind and solar under active construction, most without an offtake deal announced. As recent construction has shown that most commissioned projects are backed by a corporate deal, 2022 promises to bring a healthy contribution to the growing pool of announced deals.

The growth of Canada's corporate renewables market will also start going national soon. With Nova Scotia actively advancing its Green Choice Program and Saskatchewan similarly developing a green tariff program for consumers to subscribe to long-term energy from new renewable projects, Alberta will finally have company as a host for corporate renewable energy investment.

Newly Commissioned Projects in 2021 by Offtake Status



2021 was a busy year for the BRC! In addition to our spring and fall webinar series, we added our new public Corporate Renewables 101 sessions, started a monthly members newsletter, ran bi-monthly buyers calls, and launched our quarterly Deal Tracker.



Our spring session of Corporate Renewables 101 included panelists from [LevelTen Energy](#), [Marathon Capital](#) and [RES](#). [Click here](#) for the replay about the basics of power purchase agreements, the Alberta market, and how aggregation works.

Our fall session was with Dr. Sara Hastings-Simon, an expert in renewable energy markets from the University of Calgary.

[Click here](#) for more on what's behind the push to buy renewable electricity, how virtual power purchase agreements (VPPAs) and environmental attributes work, and Sara's financial valuation of Alberta's Renewable Energy Program - which shows the government is essentially making money (not a deficit) on renewable energy contracts.



State of the Market (WATCH)

U.S. and Canadian experts shared how the landscape has evolved in the past year, what's influencing it, and what's coming. They covered the rate of growth in renewable offtake agreements, the latest players, trends such as choice of technology, and emerging issues such as load-shaping, storage, and incorporating environmental and social considerations within ESG.

The Developer Perspective (WATCH)

In this wide-ranging panel discussion, BRC members [BluEarth Renewables](#), [Elemental Energy](#), and [Capital Power](#) shared highlights of their announced deals, meeting the growing demand for projects, impacts of COVID-19 on attracting and retaining talent, and their hopes for the future such as market expansion, addressing grid congestion, and how to meet the needs of a broad array of new buyers.

Managing Risk in a PPA (WATCH)

This lively discussion with [Cassels](#), [Power Advisory](#), and [Enel Green Power](#) started with an overview of risk management to address PPA structures, credit mechanisms, pool pricing, carbon policy, grid issues and more. It also covered the futures market and hedging, accounting risks, and how to leverage legal counsel throughout the corporate procurement process.



Our fall series began building the foundation for BRC's upcoming work on increasing Indigenous participation in large-scale renewables. In the [first session](#), panelists from [Greenplanet Energy Analytics](#) and [RBC](#) discussed how Indigenous partnerships fit in both the environmental and social components of ESG. They shared their real-life examples of how Indigenous groups are partnering with developers, as well as success factors and barriers to successful relationships.

The series wrapped up with a members-only deep dive into the same theme with [Cassels](#) and [Greenplanet Energy Analytics](#).

Calvin Waquan, an advisor, technology analyst and community educator with [GP Analytics](#) and proud member of the Mikisew Cree people, shared lessons learned from [3 Nations Energy](#), an Indigenous-led initiative to bring low-carbon, affordable, and reliable electricity to the community of Fort Chipewyan. Calvin emphasized the importance of developing cost-effective partnerships, building long-lasting relationships after projects are completed, and establishing energy sovereignty for Indigenous communities.

A big thank you to our 2021 sponsors who made it possible to offer all of these events



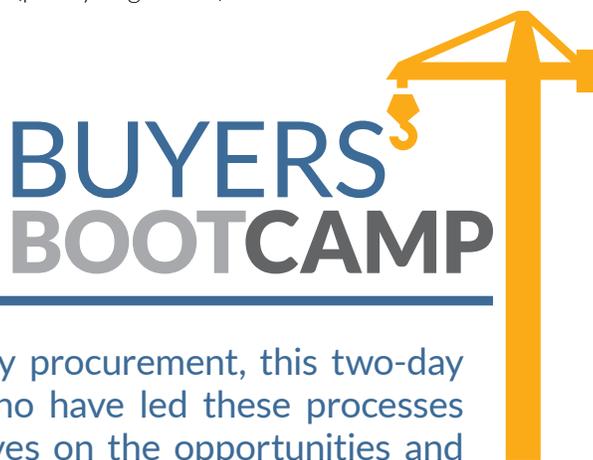
BI-MONTHLY BUYERS'calls

To provide more support for new buyers just getting to know the corporate renewable energy market and a networking space to exchange tips and tricks, the BRC launched bi-monthly Buyers' Calls starting in the spring of 2021.

These small, collaborative sessions feature a live Q&A with experienced buyers who co-host the session, allowing for interactive discussion of all things procurement – from the broad strokes down to the nitty-gritty.

Newcomer Amazon and long-time player TC Energy hosted the first session, followed up by Bullfrog Power, RBC, TELUS, and Labatt. They each shared details of their announced projects and insights into why and when they completed deals.

Common questions throughout the series were how long deals take to negotiate (usually up to a year - but even deals that fall through can prove helpful), what nuanced considerations buyers should look out for (e.g., choosing a developer, mitigating risk in the contract), and where they see the market going in the future (plenty of growth!).



April 2022 (TBD)

If you're just getting started with renewable energy procurement, this two-day intensive course is for you! Experts in the field who have led these processes themselves will provide key insights and perspectives on the opportunities and challenges of power purchase agreements (PPAs).

Course topics will include basics of the Canadian market, risk assessment, working with legal counsel, and how to make a business case to your CFO. The session will also include **interactive scenario discussions** where attendees will work with case studies to get hands-on experience of what it is like to set up a PPA.

The bootcamp is suitable for energy buyers from corporations as well as local and provincial governments, and particularly for those in roles such as Energy Procurement Managers, Sustainability Managers, CFOs, Finance Managers, and Legal and Contracts Managers.

REGISTRATION: Email info@businessrenewables.ca to secure your spot!

speakers

			
Jeremy Barretto Cassels Partner Business Law Group	Julia-Maria Becker RBC Senior Manager Sustainable Enterprise Operations	Kerry Clark EY Canada Associate Partner Financial Accounting Advisory Services	Patrick Leonard Amazon Renewable Energy Procurement Manager Amazon.com

Welcome to the BRC community!

We are excited to welcome **EIGHT NEW MEMBERS** in 2021, including our very first bitcoin mining company (Hut 8) and real estate sustainability firm (Purpose Building)! The BRC's increasingly diverse membership reflects how renewable energy investments are becoming more commonplace across all of Canada's business sectors. Thank you all for joining us for your procurement journey!

Check out our full membership list [here](#).



A big thank you to our Board!

Our Board members provide crucial insight and strategizing behind the scenes, and the BRC would not be able to grow as it has done without their help! We say a big thanks to outgoing Board member Cargill for their service over the past several years and welcome incoming members TELUS and Amazon.

RBC
EDF Renewables
Greengate Power

City of Edmonton
Marathon Capital
LevelTen Energy

Bullfrog Power
BluEarth Renewables
RES Canada

Starbucks
EY
Cassels

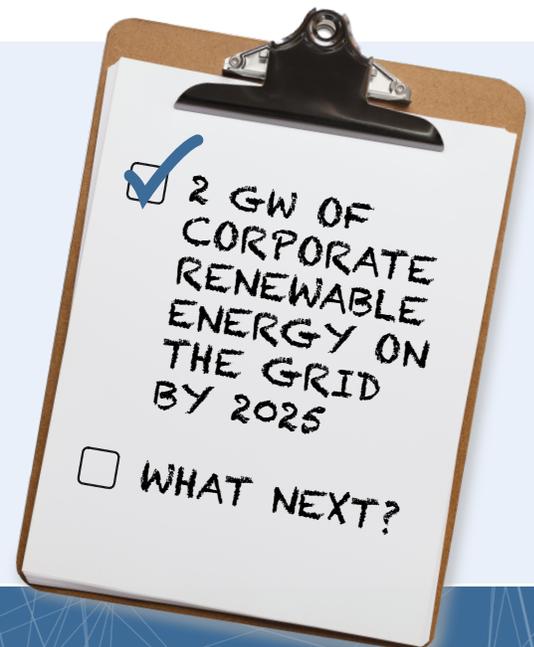
TC Energy
Power Advisory LLC
Capital Power

We want to hear from you!

Since we've nearly met our target of 2 GW of corporate renewable energy on the grid by 2025, BRC-Canada is currently re-strategizing around new goals.

- What do you want to see BRC-Canada achieve by 2025?
- What can we help you with?

Reach out and share your thoughts!
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