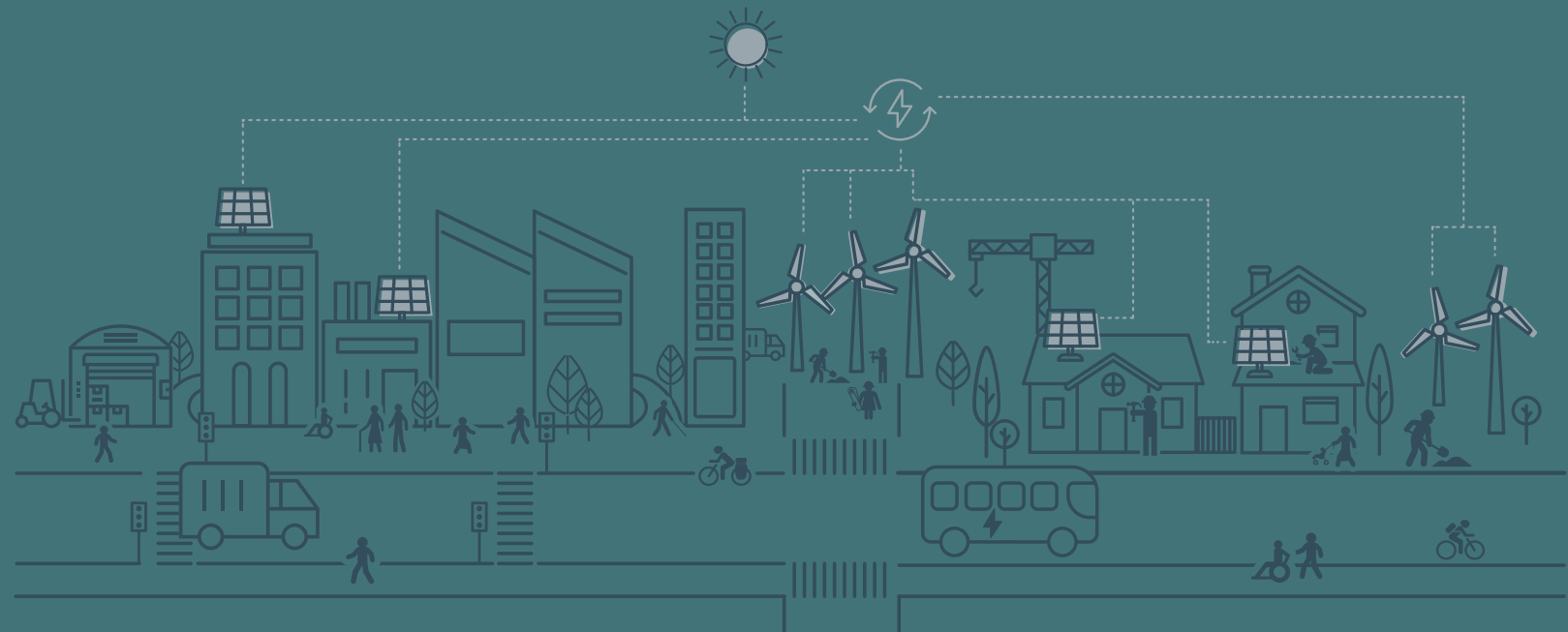




Unleashing Regina's Renewable, Energy-efficient Economy

ROUNDTABLE SUMMARY REPORT

FEBRUARY 2021





pīsimokamik (Elders' Sun Lodge) is the main site of one of Regina's biggest solar projects, featuring 294 panels on three Indigenous owned affordable housing developments. Photo: miEnergy/FHQTC

We have reached a transformative moment for the Regina area. Recognizing this opportunity, 35 local leaders and innovators gathered on December 10, 2020, for a virtual roundtable to explore ways to advance our local energy efficiency, net-zero building and renewable energy sectors, and to explore the potential for building a strong network of champions for the new energy economy.

This document captures and summarizes the outcomes of the roundtable. The executive summary outlines key highlights and messages and is followed by a detailed synthesis of the deep discussions and rich solutions generated. A list of participants can be found at the back of this report.

“We have the technologies, we have funding programs, the business case makes sense, there’s an army of youth who are ready to go and are saying ‘let’s do this already’.”

– Ian Loughran, Vereco Smart Green Homes, roundtable participant



Schoolchildren learn how solar, wind, and battery storage work together at the Cowessess Renewable Energy Storage Facility. Photo: Stephen Hall

Executive Summary

Participants came to a consensus that the renewable energy, energy efficiency and net-zero building sectors represent significant opportunities in terms of local job creation, economic diversification and growth, and they are critical to building a thriving, more inclusive and sustainable economy.

There was also a clear, honest recognition that despite local expertise and efforts, we are in many cases behind and need to rapidly scale up our efforts. However, participants saw this as a clear opportunity, as it means we have the most room for improvement; we can build on the lessons learned in other provinces and countries and adopt the most advanced technologies and approaches that currently exist.

The roundtable participants came from a diversity of sectors including business, economic development, industry associations, trades, economic development, municipal leadership and policy

and regulation. **Working together in cross-sector groups, they identified 11 significant opportunities across four areas, three major barriers and a road map to transform these barriers into opportunities.**

The enthusiastic, solutions-focused discussion painted a clear picture of what we could achieve over the next five years if these sectors are collaboratively pursued and prioritized through demonstrated leadership. Participants were optimistic about our ability to realize a shared vision of a socially inclusive, environmentally sustainable, diversified economy and expressed a readiness to get to work.

Four significant areas of opportunity for advancing Regina's renewable energy, energy efficiency and net-zero building sectors:

1. Take advantage of the growing number of financing and incentive programs.
2. Align with society's growing interest in inclusive and sustainable economic growth.
3. Build on our homegrown skilled workforce and the leadership of Indigenous communities.
4. Adopt proven solutions to grow our competitive advantage – we have the technology and tools.

Three major barriers to advancing these economic sectors:

Barriers to seizing these opportunities are not technological; we have the technology, tools and many of the skills. The persistent challenges fall into just three areas:

1. Knowledge gaps and lack of awareness among decision-makers and the public.
2. Lack of leadership and coordination.
3. Need for a clear, predictable, enabling policy environment and market signals.

A road map to overcoming persistent barriers:

Participants identified 16 high-impact solutions that can help overcome these barriers and brainstormed actions this network could take to work toward them. Examples include:

- Create a "Community Energy Sandbox" where we can work together to advance energy data sharing, storage, efficiency and retrofits well ahead of 2030 building codes and energy transition deadlines.
- Demonstrate leadership from businesses and municipalities to stop constructing inefficient buildings.
- Implement clear policy direction that spans political terms, building buy-in for leaders and administrative staff while ensuring predictability for local businesses and organizations that are advancing these energy solutions.

Why this roundtable? Why now?

Background and opportunity

The City of Regina has committed to running the entire city on 100 per cent renewable energy by 2050 and will develop both community-wide and corporate action plans to achieve that goal. We'll need to reduce the amount of energy we use by retrofitting existing buildings and constructing more efficient new buildings. And we'll need to meet that reduced energy demand with more clean and renewable energy as well as energy storage.

The federal government is signalling that it will support these sectors through pricing, incentives and financing. Meanwhile, the costs of energy storage and renewable energy are plummeting. It's clear that coordinated efforts over the next five years will be key to seizing these opportunities and positioning our communities and businesses to benefit.

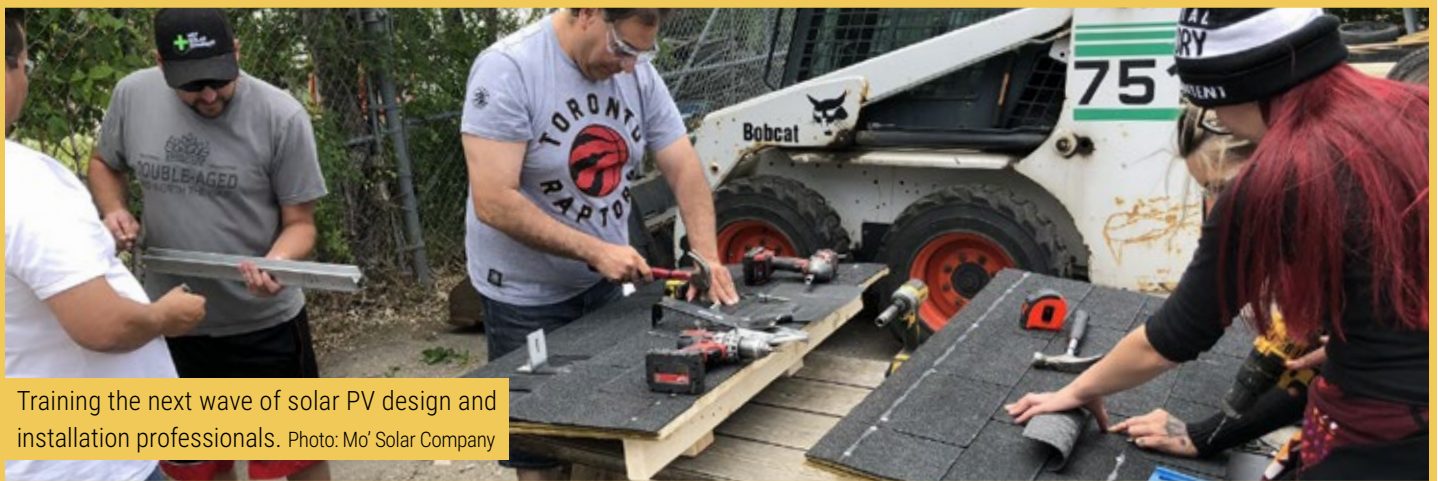
At the same time, Regina's economic ecosystem is aligning. Regina business executives have put forward a vision of Regina in 2050 as a "socially inclusive, economically diverse, environmentally sustainable, and entrepreneurial city" and have identified a need for a bold, shared economic vision.¹ The 2030 growth plan for the Greater Regina Area identifies actions that require collaborative efforts, including creating a strong ecosystem that leverages and supports renewable energy resources.²

Insights and recommendations

The morning was filled with rich insights and fresh ideas, combining the perspectives of young people just beginning their careers in the energy sector and those with decades of expertise, many of whom previously held roles within our provincial utilities.

Participants shared promising examples of local energy innovation leadership, as in Île-à-la-Crosse, which is working on a holistic capacity-building plan to coordinate community-wide retrofits. They also discussed lessons learned over decades of developing projects throughout the province and across jurisdictions and insights into economic and public policy drivers and incentives that can spur sector growth.

Participants worked in cross-sector groups to answer four big questions with the aim of identifying key opportunities, current barriers, pathways forward and concrete actions that can be taken immediately to advance our local renewable energy, energy efficiency and net-zero building sectors.



Training the next wave of solar PV design and installation professionals. Photo: Mo' Solar Company

"I see the interest from young Indigenous people to be part of the energy sector in a bigger way. As Indigenous people, there is an inherent connection to the land and understanding of energy and conservation."

– **Jordyn Burnouf, Indigenous Clean Energy and Medicine Rope Strategies, roundtable participant**

What do you see as the biggest opportunities that need to be seized now to unleash the growth of your sector and the clean energy innovation economy as a whole?

Participants identified 11 key opportunities across four major areas.



Area 1: Take advantage of the growing number of financing and incentive programs and our unique context

1. Federal economic stimulus and recovery funding for retrofits, climate action funds and a potential 10 per cent provincial benefit for home retrofits offer huge opportunities for municipalities and businesses to get projects moving *now*.
2. The province recently passed legislation enabling municipalities to implement property-assessed clean energy (PACE) financing. Together with low interest rates, PACE programs can reduce barriers for homeowners and businesses to improve their properties with solar installations, efficiency upgrades, electric vehicle charging infrastructure, etc. Saskatoon is moving forward, and Regina could too.
3. Compared to other jurisdictions, Saskatchewan has a simple regulatory and ownership structure with our Crown utilities. This is a huge opportunity for locally driven project development that is currently underutilized.



Area 2: Align with society's growing interest in inclusive and sustainable economic growth

4. The COVID-19 pandemic caused us to slow down and connect to what is important. As a result, there has been a shift in values, including an increased interest in local businesses, community resiliency and healthy homes – comfort, durability and indoor air quality – that aligns with the benefits of highly energy-efficient buildings and new financial incentives.
5. The growing public support for and interest in energy efficiency, renewable energy and reducing waste aligns with Indigenous world views, values and teachings of conservation – of taking only what we need. This convergence of societal values, which has been strengthened by the ability to save money while meeting community energy needs, is enabling more coordinated efforts toward common objectives.



Area 3: Build on our homegrown skilled workforce and the leadership of Indigenous communities

6. There are many skilled workers and tradespeople in our province, including electricians, builders, insulators, plumbers, welders and more. Jobs created in the energy innovation economy will put more skilled tradespeople to work.
7. There is huge opportunity for meaningful and equitable inclusion of youth and diverse communities through strengthened employment and education pathways into our local renewable energy, green building, efficiency and clean tech sectors.
8. Indigenous communities are driving change through their economic development programs and want to partner with others. As well, the First Nations Power Authority is renegotiating its master agreement with SaskPower,³ which represents a significant opportunity to collaborate, include more municipalities in that partnership and advance these sectors.



Area 4: Adopt proven solutions to grow our competitive advantage – we have the technology and tools

9. Data-driven solutions and technology – such as smart metering for electricity, water and natural gas, and community-driven asset-management software – are disrupting top-down planning and empowering communities with the knowledge to scale up energy efficiency and renewable energy and storage, saving water and reducing energy bills.
10. Community ownership of and access to consumption data can enable better energy management, strengthen the business case for housing and renewable energy infrastructure projects and drive energy sovereignty for Indigenous communities.
11. The costs of renewables and energy storage are plummeting, driving new local economic and clean energy opportunities. The integration of energy storage is a game-changer, making it possible to increase the capacity and reliability of community-scale energy projects, and to increase the proportion of renewable energy on the grid by smoothing intermittent generation from wind and solar.

What are the most persistent barriers for your sector to contribute to a vibrant energy innovation economy?

The overwhelming consensus from participants was that the barriers to realizing the full potential of these sectors are not technological. They fall into three categories: *education, leadership* and *policy*.



Knowledge gaps and lack of awareness among decision-makers and the public

- The public and decision-makers need better access to trusted, quality information. There are significant economic opportunities and jobs in renewable energy and efficiency, but their significance and the path to seizing them are not well understood.
- There is a lack of awareness of new green energy industries. We need public education to better recognize the full suite of benefits and to grow demand for these energy solutions



Lack of leadership and coordination

- Change can be slow, and we need to move forward now. There is a lack of visible, cohesive political and industry leadership championing these sectors in our province, and we often end up in “silos,” looking at the economic drivers of each sector on its own. We need a broader perspective on how energy innovation can drive our economy through enabling policy and capacity building.
- Municipal and provincial governments in Saskatchewan have different priorities, agendas and energy transition targets, and our utilities are managed politically (reporting to ministers as opposed to shareholders).



Need for a clear, predictable, enabling policy environment and market signals

- Access to capital for project development is a persistent challenge, and barriers are experienced at each stage: slow building permits, limits to self-generated power, etc.
- We lack an adequate, holistic evaluation framework to measure the impact of integrating more renewable energy (i.e., additional jobs created, new business opportunities, expanded capacity, community resiliency and participation, etc.). When evaluating electricity distribution and production, the lowest possible cost cannot be the primary driver.

“We need to get at the big picture to see the whole value proposition and overcome these systemic barriers.”

– Guy Bruce, roundtable participant



Michael Nemeth of Bright Buildings showcases the highly insulated Temperance Street Passive House, the first certified Passive House in Saskatchewan and the prairies. Photo: Green Energy Futures

How can we transform these barriers? What needs to change for us to fully seize these opportunities?

The following actions were identified as having the highest potential to transform the persistent challenges listed above.

Together, these actions form the basis of a strategic road map to advance renewable energy, energy efficiency and net-zero building. We must all work together in an aligned and coordinated way so that these sectors can form the backbone of a diversified, inclusive and thriving economy.

Immediate and short-term solutions	Ongoing and long-term solutions
 Leadership and coordination	
<p>Increase information sharing and cross-sector collaboration to help advance shared objectives in skills training, public information and policy development.</p>	<p>Adopt a more holistic view of these economic sectors. Focus on the interconnections between renewable energy, energy storage, energy efficiency and net-zero building so policies and programs can enable them all.</p>
<p>Businesses and municipalities need to demonstrate leadership. We know how to build highly energy-efficient structures; there's no excuse for building inefficient ones.</p>	<p>Have better discussions. Climate action through emissions reduction doesn't need to be a polarized discussion. The business case is clear, and the way forward needs to be communicated as a logical pathway, not a debate.</p>
<p>Recognize where to "push" the utilities and when to "pull" them along. Businesses and municipalities need to do what is possible now to demonstrate that jobs are created, while pushing at the policy level in areas that are creating barriers.</p>	
<p>Have people at the table who are ready to do the work; support them with mentorship and capacity building to ensure equitable participation, in terms of both technical and collaborative skills.</p>	
 Education and awareness	
<p>Educate and raise awareness among leaders and decision-makers to help establish well-designed, evidence-based enabling policy and programs.</p>	<p>Improve energy literacy by ensuring good access to accurate energy information coupled with strong public and stakeholder engagement.</p>
 Enabling policy and strong market signals	
<p>We need access to capital and financing to move green projects forward.</p>	<p>Prioritize resources to our renewable energy, energy efficiency and net-zero building sectors and help transition workers from conventional energy to emerging energy jobs in our communities.</p>
<p>SaskPower needs to drive more renewable power through power purchase agreements and requests for proposals that are equitable and inclusive and that engage local suppliers and contractors.</p>	<p>We need long-term funding and/or financing for municipalities and businesses to help pay for the initial capital costs of greenhouse gas emissions-reduction projects.</p>
<p>Advocate for the expansion of energy efficiency programs beyond the utilities, building on models from other provinces.</p>	<p>Support and increase engagement of the public as the ultimate shareholders in our utilities.</p>
<p>Create policies that enable both utility-scale and community-owned/led renewable energy projects, such as solar co-ops and community wind farms.</p>	<p>Implement clear policy direction that spans political terms, building buy-in for community leaders and administrative staff while ensuring predictability for businesses.</p>

Moving forward, what can we do individually and collectively?

The overwhelming consensus from all small group discussions was that we can't wait for policy change to act. We have to find ways to collaborate effectively, build coalitions and work together with clear, shared goals. **Some examples of actions that community and business leaders can do now include:**



Collaborative leadership

- Share diverse ideas among our sectors but take a collective message to decision-makers; provide compelling policy recommendations that present clear “win-wins” for local communities, contractors and suppliers.
- Form influencing groups among municipalities, companies and organizations. Together, Saskatoon and Regina make up more than half our province's population and can drive transformation. Put positive pressure on the highest levels within the provincial government and utilities and support elected officials when they are trying to make positive changes.
- Use and promote the Saskatchewan Chamber of Commerce database of Indigenous businesses and organizations to facilitate partnerships.



Quick wins

- Create a “Community Energy Sandbox” where we can work together to advance energy data sharing, storage, efficiency and retrofits well ahead of 2030 building codes and energy transition deadlines.
- Create more projects that will build clear business cases and spur economic growth by strengthening the local supply chains and workforce; leverage pandemic recovery funding and the city's access to funding through the Federation of Canadian Municipalities.
- “Let's get to work.” Focus on quick wins that get people back to work and create opportunities for the community to gain knowledge through experience; move forward with 10 MW renewable projects and focus on retrofits, which are labour-intensive.



Education and awareness

- Use our industry communication channels and business development networks to secure more green stimulus funding and financing.
- Educate and provide data for decision-makers and work with them to ensure public reporting on energy consumption and emissions and options to reduce both. Share stories of green energy demonstration projects that can build familiarity and awareness; for example, current battery storage projects.
- Educate ourselves by sharing knowledge on current government and regulatory processes so we can effectively work around barriers to advance local communities' goals and aspirations.



Advocate for clear and predictable policy

- Advocate for dedicated milestones and targets for distributed, community-scale energy to facilitate local planning. (e.g., 10 per cent distributed energy or five per cent residential solar by 2030).
- Advocate for policies that create space for developing all approaches at the same time (community-scale and utility-scale renewables, community-wide retrofits, transport electrification, battery storage, etc.). Municipal-scale policies can help create this space now, with community energy plans informing the best local actions.
- Advance the city's green building policies by leveraging builder relationships among the Regina and Saskatoon home builders' associations and connecting them with funding programs.
- Advocate for funding for retrofit projects, tax breaks for energy efficiency and better carbon credits for big business or pollution taxes to reduce consumption.

Next steps

It is clear that within this cross-sector coalition, we have the technology, knowledge and expertise to build a strong foundation for Regina's future energy-efficient, renewable economy over the next five years.

Having identified areas where we can take immediate action to create the conditions for our energy innovation sectors – renewable energy, energy efficiency and net-zero building – to thrive, the next steps are to work together to build awareness and provide education, to cultivate leadership and to further identify and refine areas for policy clarity and predictability.

Participants and co-convenors will be working with the City of Regina and partners to widen the circle of community leadership to move these actions forward. Businesses and organizations wanting to advance these same goals are encouraged to join in these collaborative efforts, and are invited to contact any of the co-convening organizations.

Co-convening organizations

The following organizations collaborated and served as co-convening partners to make this event possible:

- Distributed Energy Association of Saskatchewan
- Energy Management Task Force
- Regina and Region Home Builder's Association
- Saskatchewan Environmental Society
- David Suzuki Foundation, Charged Up program

Participants

Brian Brunskill	Guy Bruce	Regina and Region Home Builders' Association
City of Regina: Administration	Indigenous Clean Energy	Robinson Residential Design Inc.
City of Regina: City Council	Indigenous Works	Saskatchewan Apprenticeship and Trade Certification Commission
Clarence Campeau Development Fund	Layne Arthur Architecture Ltd.	Saskatchewan Building Trades
Cowessess Ventures Ltd.	Lux Wind Power Ltd.	Saskatchewan Chamber of Commerce
Crosier Kilgour & Partners Ltd.	Medicine Rope Strategies	Saskatchewan Electric Vehicles Association
David Suzuki Foundation, Charged Up program	Mera Group	Saskatchewan Environmental Society
Distributed Energy Association of Saskatchewan	MiEnergy	Saskatchewan Research Council
Economic Development Regina	MLT Aikins LLP	Sun Ridge Residential Inc.
Energy Management Task Force Saskatchewan	Pacesetter Homes	University of Regina
Exa Energy Consulting	Partners for Climate Protection	Vereco Smart Green Homes / Urban Systems
First Nations Power Authority	Prairie Sun Solar	Wascana Solar Co-op
Greenwave Innovations	Regina and District Chamber of Commerce	

Endnotes

1. Economic Development Regina. "Local Executives Envision Regina in 2050," September 18, 2018; Economic Development Regina and Praxis Consulting, "Quarterly Report, September 2018" Regina Executive Leadership Outlook.
2. Economic Development Regina. The Regina Advantage: A Plan for Economic Growth 2020-2030; <https://economicdevelopmentregina.com/economic-data/economic-growth-plan>
3. First Nations Power Authority. "How does the Master Agreement work in Saskatchewan?"

