Energy Futures Lab Fellowship

EFL 2025-26 Fellowship

The Emerging Narrative

Tensions hindering progress on Alberta's energy transition

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energyfutureslab

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PARTNERS & SUPPORTERS

About the Energy Futures Lab

An award-winning social innovation lab focused on energy transition

The Energy Futures Lab is an Alberta-based coalition of innovators and leading organizations from across the energy system. It was created to address a growing sense of polarization in Canada and to tackle the most pressing system-level challenges in the energy transition. Since its inception in 2015, the Energy Futures Lab has brought together stakeholders and Indigenous Rights and Title holders from across the Canadian energy system to collaboratively accelerate progress towards our shared vision of a net-zero energy future, drawing on diverse perspectives to create innovative and enduring solutions to complex, system-level challenges.

The Fellowship: making good ideas better, together

Since 2015, the Lab has hosted 10 rounds of its iconic Fellowship, whose work has been central to the creation and advancement of the Lab's vision.

Comprised of entrepreneurs, leaders and emerging leaders, thinkers, and change makers from Indigenous and non-Indigenous industry, government, academia, non-profit and independent organizations, the Fellowship embodies the 4 key understandings that underpin the Lab's theory of change:

1. **No single actor can transform the energy system alone.**

   The complexity of the energy transition demands collaboration across sectors, economies, and geographies. Lasting change emerges when diverse leaders align around shared goals and take action together to create new or better solutions, to existing issues. informed by a diversity of perspectives. This is social innovation in action.

2. **The biggest barrier isn't technology, it's inertia.**

   Canada has the tools and resources to build the energy system the future requires of us, but mindsets, institutional silos, and entrenched interests slow progress. Overcoming this requires shifting culture, solving together and reimagining what's possible.

3. **Narratives shape what people believe is possible.**

   Public response and political will are influenced by the stories we tell. Shifting the narrative to one of shared opportunity is essential for unlocking collective action.

4. **Systemic challenges need systemic responses.**

   Solutions that work in isolation often fail to scale. And too often, we focus on what's easiest to fix—tackling symptoms while the root causes remain untouched. By enabling solutions that confront the deeper, more complex entanglements at the heart of the energy transition through systems thinking and cross-sector collaboration, we help shift the system itself—not just its surface.

About the Fellowship

How might we leverage Canada's assets and innovation capacity to accelerate an inclusive and equitable transition to a prosperous net-zero future?

To answer this question, EFL has carefully curated a cohort of 50 community and industry leaders, innovators and influencers working as part of the energy system.

Together, these Fellows serve as an "in-house" representation of Canada's broader energy system, including leaders and experts in different sectors, regions, cultures and technologies, primarily focused in Western Canada. Fellows will anticipate and analyze implications of the shifting global context for Canada's energy system, and identify windows of opportunity for Lab action to influence outcomes aligned with its shared 2050 vision.

From Jan 2025 - Dec 2026, Fellows may face notably strong headwinds to their objective of empowering Canadian businesses and communities to lead and thrive amid shifting energy paradigms.

A new federal government, tariffs on exports and distinct provincial and regional political priorities (and in some cases, polarization) add to the complexity affecting decisions and investments aimed at ensuring stability of Canada's regional and federal economies. This complexity is magnified when viewed through the wider lens of climate change, shifting trade agendas and growing global energy needs.

At the heart of the Lab and the Fellowship lies a simple yet powerful belief: our shared hopes for the future far outweigh our differences. Fellows work together, leaning into tough conversations and working through issues to demonstrate the value of collaboration.

"Canada needs to move quickly and decisively while also enabling unprecedented levels of collaboration at a moment of intense polarization. This makes the Energy Futures Lab the ideal partner to lead the creation of solutions that can help Canada navigate more quickly towards a secure and prosperous future that leverages our strengths as energy leaders."

- Alison Cretney,
Executive Director, Energy Futures Lab

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Our Shared Ambition & Approach

A shared vision is at the core of any effective collaboration. Ours calls for transformational change, which Lab action is designed to advance.

Throughout the cohort, we're exploring multiple pathways and perspectives on our best way forward, and learning by doing. We're coming together around select issues in year 1 and testing, refining, re-testing and evaluating interventions in year 2. Fellows began with a reminder of the end to which we are working (our vision) and a process for getting there. The vision remains our North Star as we develop our portfolio of interventions.

Our Vision

The vision was developed by the original cohort of Fellows in 2015 and adjusted slightly through the years

We anticipate that by 2050 the world has made major advances in transitioning to a sustainable, inclusive and prosperous global energy system, where production and consumption aligns with the scientific principles of sustainability. In the energy system the future requires of us, we are thriving and committed to nurturing a sustainable, inclusive and prosperous energy system.

The Energy Futures Lab defines the energy system the future requires of us as a system that simultaneously:

- Is **net-zero** for carbon emissions for the production and consumption of energy in Alberta and Canada.
- Enables quality of life for all people by **meeting energy needs reliably and affordably**.
- Is a leader in energy-based partnership towards **reconciliation with Indigenous peoples** in Canada.
- Is **inclusive, accessible, and equitable** to current and future generations.
- Enhances the **health of our natural environment** and the **health of all those living within it**.
- Is a continued source of economic **prosperity** for the province and the country.
- Supports **diversity, resiliency, and adaptability**.

Our 2-Year Approach: What & Why

Over 2025-26, how might EFL Fellows effectively identify and test resolution pathways for key tensions that fundamentally hinder the pace and sustainability of Canada's energy transition?

Advancing the energy transition in Alberta requires us to engage urgently in the sticky work of developing and testing practical, tangible interventions aimed at reconciling and addressing tensions hindering its progress.

The following page provides a timeline of the **2-year arc for the 2025-26 Fellowship**.

Over 2025-2026, Fellows will:

Identify and describe key tensions hindering the pace and trajectory of Alberta's energy transition

Identify and test tangible resolution intervention pathways for these tensions

Compile and share learnings

Why Tensions? Why Now?

To date, the bulk of work in social innovation, and to some extent within EFL, acknowledges tensions and seeks to navigate them, but does not necessarily aim to resolve or reconcile them.

Many of these tensions are significant and growing, material to multiple industries, and/or are deeply seated in identity. This makes them both difficult AND critical to resolve.

Given this, pathways and practices to bridge and navigate these tensions must be found. Failure to do so may further decrease the transition pace, and/or result in uneven and undesirable outcomes.

Timeline: The Fellowship Arc

2025

2026

1

WORKSHOP
Establishing the playing field & rules

Framing and investigating tensions impacting the pace and scale of transition across sectors

2

CHECK IN
Stress-testing our understanding of the tensions

Gaining deeper understanding of the tensions as framed and determining whether they merit further investigation.

3

WORKSHOP
Leverage points & interventions

Where are tensions being reconciled well and what can we learn from those examples? Identify & build out resolution interventions for testing.

4

SURVEY
Are we on track?

Evaluating the approach to date. Can we improve? Are there other ways the Fellowship could be supporting the mission? What needs to change?.

5

WORKSHOP
Action & adventure in energy land

Debriefing on tested interventions, insight and adaptation identification.

6

CHECK IN
Evaluating early results

Start to compile impacts, consider how interventions might scale and what resourcing would be required.

7

WORKSHOP
So what, now what?

Report findings and share learnings from evaluation. Articulate public-facing artifacts. For interventions showing promise for scaling, determine next steps.

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Current Tensions

Fellows have identified four key tensions fundamentally hindering the pace and trajectory of the energy transition in Alberta where they believe the Fellowship should focus to best advance the transition at pace and scale, in a good way.

Updated summaries of these follow, along with summary information from over 100 Fellow-completed interviews. In September 2025, Fellows will develop an initial portfolio of interventions aimed at reconciling and navigating these tensions.

What is a tension?

A tension refers to a situation where there are conflicting values that create strain or stress (Cabaj, 2024);

These values are in opposition to each other and create polarity. For example, on the one hand, you want to raise loyal children who are attached to the family, and on the other hand, you want them to grow to be very independent individuals. Both poles have value, but they appear to be antithetical. Often, people swing between the two opposing values; one value is held to be more important for a while and then there is a swing in precedence to the other, opposing value before the pendulum swings again. The back and forth of the pendulum of framing values as an either-or choice is often what contributes to the intractability of a challenge. If the pendulum keeps swinging back and forth, how do we move forward? Reconciling tensions often requires finding a way to coexist or integrate the opposing elements so that we can move forward. In our example, parents aim not to choose between loyal, attached children and those that grow to be independent. Rather, they try to navigate how to ensure family loyalty AND prepare their children for independence in the world.

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4 Key Tensions

“Innovation is not born from the dream, innovation is born from the struggle.” - Simon Sinek

Choosing tensions: criteria

To help Canada navigate more quickly towards a secure and prosperous future that leverages our strengths as energy leaders, Fellows have identified 4 tensions they feel are affecting and slowing progress in multiple energy transition pathways.

Tensions were informed by:

- The EFL Fellows
- Survey results from the wider EFL network, and
- Input from the EFL team

The tensions were further developed by EFL Fellows at the Banff workshop March 11-13, 2025 and five were selected. Further Fellow-led work has condensed them to four fundamental tensions on which to focus, based on the extent to which each tension demonstrates:

Cross-sectoral relevance

The tension is relevant to multiple existing or emerging industries related to energy (e.g. CCUS, SAF, hydrogen, solar and wind, ag tech, green chemistry, etc.)

Severity & urgency to address

The tension is seemingly intractable or getting worse, thereby hindering the pace and scale of energy transition

Pervasiveness in the system

The tension's scope is significantly widespread to be worth our solutioning attention

Importance to the EFL vision

Resolving the tension is necessary to achieving the EFL vision

Cascading effects

Constructively addressing the tension will generate positive cascading effects (for one or more emerging industries)

Ability to influence

Opportunities exist for Fellows to influence, nudge action, and test solutions

Solution would benefit from an integrated approach

Using the 'EFL Way' embodied in the Fellowship: harnessing diversity, Indigenous engagement, multi-solutioning, Framework for Strategic Sustainable Development (FSSD), etc.

Substantiveness

The tension is meaty enough to hold Fellows' energy and interest for the duration of their time together over the 2-year arc

Tensions have been updated using data from June 2025 Fellow gathering and input, and additional work by the EFL team.

Tension Title	On the one hand…	On the other hand…	Innovation Question
Investment Coherence & Confidence	Alberta's commitment to emerging low carbon energy industries must be coherent, credible, and competitive while responding to current context.	A desire to maintain a (historically) known, predictable, steady course toward prosperity limits how much return on investment calculations can adapt to meet the needs of a rapidly changing energy landscape.	**How might we align public policy, financial logic, and social narratives to create a coherent and investable energy future for Alberta — one that is globally competitive, economically diverse, and environmentally sustainable?**
Energy Development in Rural Spaces	Developers need predictability and profitability to justify energy investments in rural spaces. Costs must be controlled and projects advance quickly. Additional processes of consultation, accountability, and long-term commitments are often seen as risks to the bottom line.	Rural communities demand trust, accountability, and tangible value; profitability without accountability equals broken promises. What developers see as "added costs" are for communities the foundation of legitimacy and long-term benefit.	**How might we build trust, accountability, and connection that create long-term value for rural communities while enabling profitable energy development?**
Relationships with Indigenous Communities	Urgency drives a push for rapid energy development. From a settler perspective, relationship building, consultation, and equity considerations are often framed as delays or impediments. Governments and industry argue that timelines, financing, and emissions targets demand speed, even if it means compressing processes of engagement.	For Indigenous Nations, rights, due process, and trust-building are non-negotiable foundations for partnership. Without centering these, development risks not only delay, but repeating patterns of exclusion and harm. Neutral third spaces, explicit recognition of rights, and addressing capacity barriers (e.g., broadband, voices still missing) are critical to moving forward in good faith.	**How might centering Indigenous rights, knowledge(s), and leadership enable us to meet the urgency, scale, and pace of the energy transition in ways that move beyond the status quo?**
Pore Space	Driven by urgency of climate and policy mandates, governments and private interests seek to rapidly secure pore space for carbon sequestration. Carbon capture and storage projects are seen as critical for emissions reduction targets and for minimizing disruption to incumbent industry activity.	Pore space lies beneath homes, communities, and traditional lands, raising questions of holistic stewardship, public trust, and Indigenous Rights. Addressing these tensions requires not only policy fixes but also spaces for shared education, open dialogue, and inclusion of voices that might otherwise be excluded.	**How might we steward pore space in ways that balance urgent CCS needs with emerging energy uses and Indigenous/public rights — through policy, governance, and neutral third-space dialogue?**

TENSION 1:

Investment Coherence & Confidence

Innovation Question:

How might we align public policy, financial logic, and social narratives to create a coherent and investable energy future for Alberta — one that is globally competitive, economically diverse, and environmentally sustainable?

Why is this critical to address?

Investor confidence is shaped not only by consistent public policy signals, but also by the financial logic, institutional structures, and cultural narratives that define how return on investment (ROI) is understood and acted upon. Currently, Alberta's investment environment for clean energy is constrained by fragmented decision-making, inconsistent market signals, and a lack of long-term, unifying industrial policy.

As global markets shift to prioritize low-carbon energy, a failure to integrate emerging low carbon energy industries may risk Alberta losing investment and trade opportunities. Yet, even when public policy improves, investment flows may still lag due to deep-seated financial logic and behavioral norms that define what "return" means. A desire to chart a steady course toward prosperity across time horizons based on known (but possibly outdated) risk profiles may limit the evolution of ROI calculations in a rapidly changing world, leading to a failing attempt to play a new game using old rules.

Value 1: On the one hand...

Alberta's commitment to emerging low carbon energy industries must be coherent, credible, and competitive while responding to current context.

What does this look like?

- Investors & entrepreneurs need confidence that AB is committed to a diversified and decarbonized energy economy; that policy will be consistent, regulatory environments stable, and market signals aligned with long-term trends.
- When AB's policy direction changes dramatically without indication or consultation, often with electoral cycles, or when long-term industrial strategy is missing, investors look elsewhere.
- While rhetorical support for clean tech exists, it is often perceived as politically contingent and disconnected from financial systems, creating a high-risk environment for early and mid-stage ventures.
- Government action is not just a response to markets, it is a primary driver of long-term thinking, setting an enabling vision and coordinating investment, permitting and scale.
- Without a clear and future-oriented industrial policy situating energy within AB's broader economic development strategy, AB's approach appears piecemeal, reactive, and difficult to trust.

Value 2: On the other hand...

A desire to maintain a (historically) known, predictable, steady course toward prosperity limits how much ROI calculations can adapt to meet the needs of a rapidly changing energy landscape.

What does this look like?

- Traditional energy projects continue to dominate portfolios because they promise short-term profitability and align with familiar models of risk management Emerging clean energy opportunities often appear speculative or slow to scale, making them harder to justify under current valuation models.
- Even while contracts for difference gain ground, many ROI models still fail to account for longer-term system risks — including carbon pricing, regulatory shifts, stranded assets, and the escalating costs of climate and ecological breakdown – that are reduced or mitigated by emerging energy opportunities. There are few widely adopted mechanisms that reward forward-looking investment or integrate future-focused externalities into current financial decision-making.

TENSION 1:

Investment Coherence & Confidence

Innovation Question:

How might we align public policy, financial logic, and social narratives to create a coherent and investable energy future for Alberta — one that is globally competitive, economically diverse, and environmentally sustainable?

Examples of where this tension is being reconciled well:

- Creation of the Canada Growth Fund helps projects **bridge the funding gap** between high upfront costs of early-stage innovation and large-scale deployment.
- The Science-Based Targets initiative (SBTi) has just published a new global standard that directs banks and other financial institutions to **cut off funding** for fossil fuel expansion by 2030
- **Grandfathering** projects allows companies to continue operating under the regulations that were in place when projects were built, even if new laws or policies are introduced later.

Initial Hunches on The Fundamentals of Success

Clarity drives capital
60% of surveyed investors emphasized the role of a standardized Canadian taxonomy in driving capital to Canada. Investors stress the urgency of establishing this taxonomy to provide regulatory clarity, to ensure Canada's competitiveness in global markets and attract investment. Investors urge the government to build on the work by the SFAC.. Harmonized disclosure is also critical to ensure investors know what is actually happening and have a common language for understanding and comparing data.

Low-Carbon Energy Opportunities Attract Multinational Companies
Supply chain decarbonization will be a game changer in the energy transition. To help multinational companies, such as Ikea, Microsoft, Amazon, Philips, and Walmart meet their own carbon emissions goals, such companies are prioritizing low-carbon partners and suppliers and even offering resources to help suppliers meet these targets. For Alberta to be an attractive place to invest, it needs to provide access to low-carbon energy.

Access to Capital and other Competitive Incentives

Bridging the funding gap between early-stage innovation and large-scale deployment could help emerging low carbon energy industries projects secure financing in the face of high upfront costs. Additionally, government backed incentives, including tax credits and funding programs can accelerate investment in emerging energy industries.

Mechanisms for Policy Certainty to Ensure Economic Stability

Mechanisms, such as grandfathering, allow for stable, predictable policy frameworks that gives investors confidence. Contracts for difference may also support this.

Collaboration between Government, Industry, Research Institutions, and Investors

When governments, corporations, and research institutions collaborate, they share financial and technical risks, making investment more attractive and secure. Partnerships and government involvement can signal credibility to investors. Joint ventures allow for knowledge exchange, access to expertise, and faster technological development, providing scalability and viability of new industries.

INTERVIEW DATA SUMMARY

Investor Coherence & Confidence

Please note: The following summary notes pertaining to Investment Coherence & Confidence were synthesized from interviews sets for original tensions ROI and Investor Confidence.

Side A: Alberta's commitment to emerging low carbon energy industries must be coherent, credible, and competitive while responding to current context.

- **Predictability and Stability**: Investors seek a consistent policy environment to support long-term investment decisions.
- **Regulatory Clarity**: Clear and stable regulations & rapid regulatory processes are essential to reduce uncertainty & risk and encourage investment.
- **Government Support**: Incentives such as tax credits, grants, and subsidies are critical to de-risk low carbon initiatives.
- **Infrastructure Development**: Investments in supporting infrastructure (e.g., EV chargers, clean fuel mandates) are necessary for clean tech adoption.
- **Economic Viability**: Clean tech projects must be commercially sustainable, reducing reliance on government funding over time.
- **Innovative Financing and Incentives**: Proposals for green funds, resilience credits, and upfront incentives to enhance economics.
- **Market Mechanisms**: Use of carbon pricing and removal of subsidies for polluters to level the playing field.
- **Integration w/Traditional Energy**: Leverage existing resources w/technologies like CCS for a balanced approach

Main Themes by Perspective

- **Policy Stability**: Consistent policies across political cycles are vital for investor confidence and long-term planning in low carbon industries and coordination across federal, provincial, and municipal levels reduces investment barriers.
- **Government Leadership**: Strong, proactive government support (active intervention) is needed to lead the transition and attract investment.
- **Education and Awareness**: Public understanding of clean tech benefits is key to adoption and investment support.
- **Indigenous Involvement**: Engaging Indigenous groups can lower risks and enhance project support.
- **Funding and Financing Mechanisms**: Bridging funding gaps, especially in early or scale-up phases, with tools like carbon contracts for difference.
- **Market Mechanisms**: Stable carbon pricing and market stabilization funds to incentivize investment.
- **Long-Term Value Recognition**: Prioritizing sustainability and long-term benefits over short-term returns.
- **Collaboration with Industry**: Working alongside traditional energy sectors for mutual benefit.

Side B: A desire to maintain a (historically) known, predictable, steady course toward prosperity limits how much ROI calculations can adapt to meet the needs of a rapidly changing energy landscape.

Areas of Overlap

- **Policy Stability**: Both sides agree that consistent policies are fundamental to fostering investor confidence.
- **Infrastructure Development**: Investment in supporting infrastructure is a shared priority for clean tech success.
- frameworks to reduce risk.
- **Market Mechanisms**: Agreement on using tools like carbon pricing, though with different emphases
- **Government Involvement**: Both see a government role, though Side A limits it to enabling conditions while Side B seeks active support.

Differences & Outliers

- **Focus and Scope**:
  - **Side A**: Broadens solutions to benefit all energy projects, integrating low-carbon with traditional.
  - **Side B**: Targets low-carbon projects specifically, aiming for a transition.
- **Government Role**:
  - **Side A**: Prefers minimal intervention or catalytic support
  - **Side B**: Advocates for significant intervention
- **Economic Priorities**:
  - **Side A**: Focuses on competitiveness and reducing regulatory costs.
  - **Side B**: Emphasizes opportunities in low-carbon sectors despite initial risks.
- **Political Interference**: Side A uniquely highlights concerns about political changes disrupting investment
  - **Education and Awareness**: Side B - greater emphasis on public education to drive clean tech adoption
  - **Indigenous Involvement**: Side B specifically advocates for Indigenous engagement to reduce risks

Areas of Common Hope

- **Stable Policies**: Predictable frameworks to reduce political risk.
- **Effective Incentives**: Mechanisms to make low-carbon projects viable.
- **Government Support**: Enabling conditions or active intervention.
- **Economic Viability**: Hope that projects can achieve commercial sustainability over time

TENSION 2:

Energy Development in Rural Spaces

INNOVATION QUESTION

How might we build trust, accountability, and connection that create long-term value for rural communities while enabling profitable energy development?

Why is this critical to address?

Rural areas are often the location for major energy infrastructure. Oil & gas (O&G) once contributed more significantly to jobs and revenues in rural areas, but as industry has shifted, such areas have been challenged to attract industry to replace it. However, several new, proposed emerging energy opportunities in AB's rural areas have met with pushback from communities. Many O&G companies have abdicated responsibilities for well clean-up and left large unpaid tax bills, creating strain on the local environment, breaking trust with communities and leaving them to deal with the fallout. Many rurally-based Indigenous communities have a marked need for energy infrastructure, investment and revenue, and face even deeper issues of broken trust with developers and government. Within the current provincial government, rural districts have outsized political power relative to their population and will be key players in where and how the future of Alberta's energy system plays out, and on what timelines.

Value 1: On the one hand...

Developers need predictability and profitability to justify energy investments in rural spaces. Costs must be controlled and projects advance quickly. Additional processes of consultation, accountability, and long-term commitments are often seen as risks to the bottom line.

What does this look like?

- Duty to negotiate vs right to access subsurface
- Orphan well transition from oil assets dropping previous land engagement in NE AB (Cold Lake)

Value 2: On the other hand...

Rural communities demand trust, accountability, and tangible value; profitability without accountability equals broken promises. What developers see as "added costs" are for communities the foundation of legitimacy and long-term benefit.

What does this look like?

- Pushback from communities leading to cancelled projects
- Lack of clarity on who bears the burden of legacy oil development results in a divide between economic promises and the struggles of small communities
- The Rural Municipalities of Alberta says as of Dec. 31, 2024, $254 million in property taxes from oil and gas companies was outstanding, while another $200 million has been written off, never to be collected.
- Orphaned and inactive wells in AB current sit at an estimated $36 billion in liabilities littered across the province with almost no security in place to clean it all up.

TENSION 2:

Energy Development in Rural Spaces

INNOVATION QUESTION

How might we build trust, accountability, and connection that create long-term value for rural communities while enabling profitable energy development?

FOOD FOR THOUGHT: 80% of respondents polled supported Community Benefits Agreements, once they read the description.

Examples of where this tension is being reconciled well:

- The **Renewable Energy Transition Inc (RETI) Sustainable Aviation Fuel (SAF)** facility in Wheatland County uses shared equity ownership with Indigenous Nations.
- **Community Investment:** Canada's top oil and gas producers invested more than $110 million in local communities in 2021, such as Canadian Natural Resource supporting the HALO Air Ambulance that provides emergency services in Southern Alberta and MEG Energy's support for Calgary-based Youth Housing Programs.
- **The Buffalo Plains Wind Farm (ABO Wind)** created a **Community Vibrancy Fund** for local facilities and projects that ensure the community benefits directly.
- **Reconcept** is allotting production credits to community members impacted by the development of their agrivoltaic solar farm. Residents will receive credits proportional to a percentage of their energy used on an annual basis directly related to their proximity to the project. These credits will be added to their bill each month, lowering energy costs based on the performance of the local project.

Initial Hunches on The Fundamentals of Success

Provide Value to Communities Impacted by Energy Projects

To build social license in communities while increasing predictability and reducing costly pushback, energy developers must find ways to provide value to impacted community members through community benefit agreements, shared equity ownership, community vibrancy funds, production credits, and other revenue sharing and benefit models.

Meaningful Community Consultation

Studies suggest that transparency, open communication, and inclusive decision-making can reduce opposition and build support for energy initiatives. In some cases, local consultation even helps shape project designs to better align with community priorities.

INTERVIEW DATA SUMMARY

Rural Spaces

Side A: Developers need predictability and profitability to justify energy investments in rural spaces. .

- **Predictability and Profitability**: Developers seek consistent, province-wide permitting processes and clear regulatory standards to ensure financial viability and reduce risks (e.g., delays erode investor confidence).
- **Community Engagement**: While supportive of engagement, they find current processes inconsistent across municipalities, increasing administrative burdens.
- **Regulatory Clarity**: A desire for streamlined frameworks to make Alberta competitive for energy investment.
- **Innovation and Technology**: Enthusiasm for new solutions like compressed air storage and small modular reactors to address rural energy needs.
- **Communication Gaps**: Frustration with poor dialogue leading to mistrust and project delays, advocating for better relationship-building.

Main Themes by Perspective

- **Meaningful Consultation:** Communities demand early, genuine involvement in project planning rather than late-stage notifications.
- **Tangible Value:** Emphasis on local benefits such as jobs, revenue sharing, or infrastructure investment to justify hosting projects.
- **Environmental Protection:** Concerns about preserving agricultural land, scenic areas, and minimizing environmental impact.
- **Local Control:** Frustration with the lack of municipal authority, often overridden by provincial or federal bodies.
- **Accountability and Trust:** Skepticism about developers' promises, particularly regarding cleanup and long-term community support.

Side B: Rural communities demand trust, accountability, and tangible value;

Areas of Overlap

- **Better Communication:** Both recognize poor dialogue as a source of mistrust and delays, seeking improved engagement.
- **Desire for Clarity:** Both want clear rules—Side A for predictability, Side B for accountability and empowerment.
- **Value Creation:** Agreement that projects should deliver benefits, though definitions differ (profitability vs. local gains).

Outliers

- **Urban vs. Rural Prioritization**: Side B suggests focusing clean tech in urban areas first, while Side A targets rural deployment for logistical reasons.
- **Technological Optimism**: Side A is more enthusiastic about innovative solutions, while Side B prioritizes land and community impacts over tech adoption.

Areas of Common Hope

- **Better Communication**: Both sides want improved dialogue to reduce mistrust and enhance collaboration.
- **Clear Frameworks**: Agreement on needing clear rules—Side A for predictability, Side B for accountability.
- **Tangible Benefits**: Both value local gains, though Side A focuses on profitability and Side B on community benefits.
- **Innovation and Sustainability**: Side A pushes technological solutions, while Side B seeks sustainable land use, with overlap in balanced approaches.
- **Respect for Rural Communities**: Both recognize the need to include rural voices, though Side B emphasizes local empowerment more strongly.

TENSION 3:

Relationships with Indigenous Communities

INNOVATION QUESTION

How might centering Indigenous rights, knowledge(s), and leadership enable us to meet the urgency, scale, and pace of the energy transition in ways that move beyond the status quo?

Why is this critical to address?

Integrating Indigenous values and forging strong partnerships is essential to accelerating the energy transition and building an energy system that is fair and equitable. Upholding Treaty rights, navigating legal claims tied to ceded and unceded territories, and rebuilding trust after intergenerational genocide are critical steps. A new way forward must respect the diverse priorities of Indigenous communities—including potential autonomy and self-governance—and ensure their leadership in shaping our collective energy future. Without strong relationships, projects risk delays, legal challenges, or outright denial of access.

Value 1: On the one hand...

Urgency drives a push for rapid energy development. From a settler perspective, relationship building, consultation, and equity considerations are often framed as delays or impediments. Governments and industry argue that timelines, financing, and emissions targets demand speed, even if it means compressing processes of engagement.

What does this look like?

- Indigenous Nations' opposition to energy development projects slow down development, such as Treaty 8 challenges to the Site C Dam due to impacts on traditional land use.
- Small modular reactors (SMRs) are considered a potential pathway toward low-carbon energy development, but are being largely considered for rural, northern and remote communities and Treaty lands. Meaningful consultation and agreement with Nations on impacts across the full life cycle of SMRs and associated waste will be critical to projects' advancement.

Value 2: On the other hand...

For Indigenous Nations, rights, due process, and trust-building are non-negotiable foundations. Without centering these, development risks not only delay, but repeating patterns of exclusion and harm. Neutral third spaces, explicit recognition of rights, and addressing capacity barriers (e.g. broadband, voices still missing) are critical to moving forward in good faith.

What does this look like?

- The signing of the Gaayhllxid / Gíihlagalgang "Rising Tide" Haida Title Lands Agreement between Haida Gwaii First Nation and the Canadian government that provides title to all lands of Haida Gwaii to the Nation is a sea-change in Canadian-Indigenous relations and the associated resource rights, but took many years to develop and finalize, including a 5-year transition period.

TENSION 3:

Relationships with Indigenous Communities

INNOVATION QUESTION

How might centering Indigenous rights, knowledge(s), and leadership enable us to meet the urgency, scale, and pace of the energy transition in ways that move beyond the status quo?

Examples of where this tension is being reconciled well:

- **Indigenous Clean Energy** works to amplify Indigenous leadership in Canada's clean energy sector, fostering collaboration with governments, energy companies, and other stakeholders.
- **Haida Gwaii Nation land title and land back agreement** sets a powerful example of Indigenous-led reconciliation and sovereignty.
- The **First Nations Major Projects Coalition (FNMPC)** supports Indigenous communities in participating in major resource and infrastructure projects. The coalition provides tools, knowledge, advice and access to capital.
- **Enoch Cree Nation, along with five other Treaty 6 Nations**, holds an equity stake in Cascade Power Project through a partnership and loan guarantee facilitated by the Alberta Indigenous Opportunities Corporation (AIOC).

Initial Hunches on The Fundamentals of Success

Culturally Grounded Frameworks

Energy planning that seeks to integrate Indigenous protocols, knowledges and worldviews helps ensure projects align with community values and demonstrate how traditional wisdom and modern technology can work together to create solutions.

Mutual Learning and Adaptation

Energy infrastructure projects benefit from co-creation, where Indigenous insights can shape project design by integrating deep knowledge of place and cultural stewardship, while western insights can support scalability and access to capital by integrating efficiency and expertise in large-scale infrastructure development. This process of mutual learning requires flexibility and openness to adapt to different perspectives and ways of approaching the work.

Access to Capital

Indigenous loan guarantees, such as through the GoC, help Indigenous communities secure ownership stakes in projects so they can be active partners in shaping projects that impact their lands and futures.

INTERVIEW DATA SUMMARY

Indigenous Relations

Side A: Urgency drives a push for rapid energy development. From a settler perspective, relationship building, consultation, and equity considerations are often framed as delays or impediments. Governments and industry argue that timelines, financing, and emissions targets demand speed, even if it means compressing processes of engagement.

- **Urgency of energy transition:** Rapid development is critical to meet global and national energy needs.
- **Indigenous engagement as a challenge:** Consultation is valued but can conflict with tight timelines.
- **Economic reconciliation:** Equity ownership and economic benefits align interests efficiently.
- **Structured processes:** Clear, predictable consultation frameworks enhance efficiency.
- **Education and communication:** Improving Indigenous participation through knowledge-sharing supports faster progress.

Main Themes by Perspective

- **Indigenous communities as co-creators:** Indigenous groups should be rights-holders and leaders, not just stakeholders.
- **Time-intensive engagement:** Meaningful consultation cannot be rushed and must align with community processes.
- **Integration of Indigenous knowledge:** Traditional knowledge is essential for sustainable energy solutions.
- **Trust and relationships:** Long-term, respectful partnerships are critical.
- **Capacity-building:** Resources and roles for Indigenous professionals enhance participation.
- **Addressing historical wrongs:** Reconciliation involves correcting past injustices and power imbalances.

Side B: For Indigenous Nations, rights, due process, and trust-building are non-negotiable foundations. Without them, development risks not only delay, but repeating patterns of exclusion and harm. Neutral third spaces, explicit recognition of rights, and addressing capacity barriers (e.g. broadband, voices still missing) are critical to moving forward in good faith.

Areas of Overlap

- Both sides value Indigenous engagement and knowledge in the energy transition.
- Both recognize the need for better relationships and trust.
- Both see flaws in current consultation processes and seek improvement.

Differences & Outliers

- **Differences:**
  - Side A focuses on speed and efficiency, integrating Indigenous input within urgent project demands.
  - Side B prioritizes depth and quality of engagement, accepting longer timelines for justice and sustainability.
- **Outliers:**
  - Side A: Skepticism about energy transition motives and frustration with consultation delays.
  - Side B Emphasis on rebalancing power dynamics and historical reconciliation.:

Areas of Common Hope

- **Better Relationships and Trust:** Both desire respectful, strong partnerships with Indigenous communities.
- **Effective Engagement Processes:** Both seek meaningful, inclusive consultation.
- **Economic Benefits:** Both envision shared prosperity, whether through wealth management (Side A) or equity (Side B).
- **Valuing Indigenous Knowledge:** Both recognize its importance for the energy future.

TENSION 4:

Pore Space

INNOVATION QUESTION

How might we steward pore space in ways that balance urgent CCS needs with emerging energy uses and Indigenous/public rights — through policy, governance, and neutral third-space dialogue?

Why is this critical to address?

In the face of an urgent need for carbon sequestration, numerous places in Alberta are navigating competing interests in subsurface use. These areas are actively exploring pore space usage for CCS, subsurface storage of waste as well as various other emerging industries, such as lithium extraction, geothermal energy, and hydrogen storage. Prioritizing pore space for CO_2 sequestration for traditional O&G emissions may limit its use in emerging energy industries reliant on subsurface access and could potentially impact continued energy innovation and community interests. The issue is further complicated as regulation and use of pore space is seen in some cases as an assertion of colonial jurisdiction and power; a number of Indigenous communities argue that pore space rights in parts of Western Canada (particularly in Treaties 4 & 6) were never surrendered to the Crown and continue to be the property of the First Nations.

Value 1: On the one hand...

Driven by urgency of climate and policy mandates, governments and private interests seek to rapidly secure pore space for carbon sequestration. CCS projects are seen as critical for emissions reduction targets and for minimizing disruption to incumbent industry activity.

What does this look like?

- Bill C-59 provides incentives for CCS infrastructure reliant on pore space for permanent CO_2 storage (excluding EOR).
- Multiple communities have already approved sequestration projects
- Lease processes for resources like lithium brines are advancing without fully considering competing subsurface claims.

Value 2: On the other hand...

On the other hand, pore space lies beneath homes, communities, and traditional lands, raising questions of holistic stewardship, public trust, and Indigenous Rights. Addressing these tensions requires not only policy fixes but also spaces for shared education, open dialogue, and inclusion of voices that might otherwise be excluded.

What does this look like?

- Some Indigenous communities argue pore space rights were never ceded in Treaty territories, while others raise concerns about the pace and scale of approvals.
- Prioritizing CCS may crowd out access for geothermal, lithium, and hydrogen storage, limiting innovation.
- Technical risks (legacy wells, seismicity) and the absence of clear public input further complicate the picture.

TENSION 5:

Pore Space

Innovation Question:

How might we steward pore space in ways that balance urgent CCS needs with emerging energy uses and Indigenous/public rights — through policy, governance, and neutral third-space dialogue?

Examples of where this tension is being reconciled well:

- **Australia** has developed a structured legal framework to manage different subsurface resource uses and ensure minimal conflicts between activities.
- **Carbon Alpha** develops bioenergy with carbon capture and storage, particularly in Saskatchewan.
- **RETI's SAF facility in Wheatland County** integrates CCS and uses shared equity ownership with Indigenous Nations.
- The Government of Alberta created the **Post-Closure Stewardship Fund (PCSF)** to offset costs associated with the long-term monitoring and maintenance of sequestration sites. Agreement Holders pay a fee per tonne of sequestered CO_2 into the fund.

Initial Hunches on The Fundamentals of Success

Public Consultation and Collaboration

Engaging stakeholders to determine how various emerging industries will compete for the pore space and balance industry needs and environmental concerns.

Carbon Sequestration Hubs

Alberta explores designated sequestration hubs to separate CCS projects from other subsurface activities.

Policy Priorities and Regulatory Clarity

Providing clear policy and regulatory guidance on how subsurface rights are prioritized and managed (whether by geography, incumbent, intended use, or otherwise).

Engaging and advancing with Indigenous Communities

Clarity on the obligations and imperatives of the governments and companies currently in negotiation with Nations and communities over pore space in the lead up to judicial decisions and engaging or partnering with potentially affected Nation to determine this.

Public Consultation and Collaboration

Engaging stakeholders to determine how various emerging industries will compete for the pore space and balance industry needs and environmental concerns.

INTERVIEW DATA SUMMARY

Pore Space

Side A: Driven by urgency of climate and policy mandates, governments and private interests seek to rapidly secure pore space for carbon sequestration. CCS projects are seen as critical for emissions reduction targets and for minimizing disruption to incumbent industry activity.

- **Urgency and Policy Mandates**: Emphasis on the need to quickly leverage pore space for carbon sequestration to meet emissions targets and capitalize on policy-driven opportunities.
- **Carbon Sequestration as a Solution**: Viewed as a strategic tool to offset environmental damage, enhance oil recovery (EOR), and support economic goals.
- **Industry Concerns and Disruption**: Focus on minimizing impacts to existing oil and gas operations and ensuring economic viability.
- **Regulatory Framework and Safety**: Calls for a strong, clear regulatory system to manage conflicts, ensure safe CO_2 injection, and address risks like induced seismicity.
- **Research and Testing**: Advocacy for more data and real-world testing to resolve uncertainties and bolster public confidence.

Main Themes by Perspective

- **Stewardship and Environmental Responsibility**: Stress managing pore space thoughtfully due to its location beneath homes, communities, and traditional lands.
- **Indigenous Rights and Community Interests**: Concerns about subsurface rights, consultation, and the long-term impacts on Indigenous and local communities.
- **Emerging Energy Technologies**: Worry that prioritizing CO_2 sequestration could limit lithium extraction, geothermal energy, and other innovative uses.
- **Collaboration and Data Sharing**: Desire for cooperative efforts, research, and transparency to understand impacts and optimize subsurface use.
- **Social License and Public Trust**: Emphasis on earning community support through engagement and sustainable practices.

Side B: On the other hand, pore space lies beneath homes, communities, and traditional lands, raising questions of holistic stewardship, public trust, and Indigenous Rights. Addressing these tensions requires not only policy fixes but also spaces for shared education, open dialogue, and inclusion of voices that might otherwise be excluded.

Areas of Overlap

- **Regulatory Framework**: Both sides agree on the need for clear, strong policies to manage pore space use and mitigate risks.
- **Research and Testing**: A shared call for more data and studies to address uncertainties and inform decisions.
- **Safety and Environmental Impacts**: Both express concerns about safe CO_2 storage and its broader implications.

Outliers

- **Urgency vs. Stewardship**: Side A prioritizes rapid deployment driven by policy mandates, while Side B advocates for a slower, more deliberate approach focused on long-term stewardship.
- **Industry vs. Community Focus**: Side A aims to protect industry interests and minimize disruption, whereas Side B emphasizes community rights and environmental protection.
- **Sequestration vs. Emerging Technologies**: Side A sees CO_2 sequestration as the primary use, while Side B worries it could hinder lithium, geothermal, and other future-oriented technologies.

Areas of Common Hope

- **Collaboration and Research**: Both sides see value in joint efforts and studies to address uncertainties and optimize pore space use.
- **Strong Regulatory Framework**: Agreement on the need for clear policies to ensure safety, manage conflicts, and build trust.
- **Maximizing Pore Space Use**: Shared interest in combining opportunities (e.g., EOR with sequestration, or geothermal with CO_2) to enhance efficiency and benefits.

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Interventions

“There will be storms ahead, but it’s the hopeful leaders who can best chart a course through them.”

- Jamil Zaki, Professor of Psychology, Stanford

No one organization or group of system actors will be able to solve all tensions inherent in Alberta’s energy system. From here, Fellows will study the structure of the tensions to identify leverage points and develop intervention options to test.

Interventions

Building a Portfolio of Interventions

Donella Meadows wrote, "[we must] listen to what the system tells us, and discover how its properties and our values can work together to bring forth something much better than could ever be produced by our will alone."

Fellows will track the context for each of the chosen tensions, confirming needed adaptations relevant to any context changes and taking advantage of windows of opportunity to nudge change with clarity, compassion and persistence.

In September 2025, Fellows gathered again to explore in detail the outputs and patterns of their ethnographic interviews, determine their implications on the design of interventions, and develop an initial set of activities they will take to help nudge the system towards reconciling the tensions.

Activities will be informed by the Framework for Strategic Sustainable Development (FSSD), an internationally renowned, science-based framework for sustainability. Initial focus will be on the social sustainability aspects of this framework; further aspects will be used in 2026 as part of the portfolio adaptation process.

The portfolio aims to build practical examples and leading practices that will provide direction to those interested in resolving entrenched challenges presented by the tensions, and in so doing, help to grow the radical middle advancing Alberta's energy transition.

With our portfolio in hand, the real work begins: further refining our understanding of the positions, as well as the entities and people that hold them, and then ideating and testing potential avenues that embody a new, third way forward.

2025-26 Fellow Solution Portfolio

CBAM in Focus

Aligning carbon pricing with Canada's competitiveness and climate goals

Future Economy

Community Compass

Empowering Alberta communities to shape development, align priorities, and unlock responsible, value-driven industrial growth.

Regional Pathways, Future Economy

Engaging Pore Space Knowledge Keepers

Bringing together technical and cultural wisdom to shape responsible, high-value subsurface development

Culture Shift, Clean Technologies

Equity Bridge

Creating mechanisms to unlock a shift from debt-based solutions to shared equity, empowering Indigenous communities to obtain meaningful ownership in early-stage energy projects

Future Economy, Regional Pathways, Culture Shift

Rural Futures Community of Practice

Connecting rural leaders to share solutions, build capacity, and turn collaboration into action across Alberta

Regional Pathways, Future Economy

Powering Canada's Industrial Strategy

Collaboratively shaping ideas for a Canadian industrial strategy to drive investment in Canada's economy and low-carbon growth.

Clean Technologies, Future Economy

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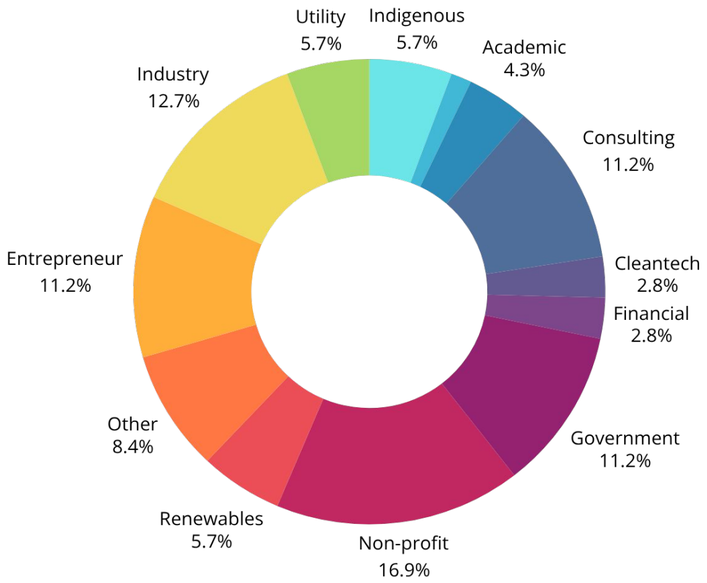
Fellowship Demographics

EFL Fellows 2025-2026 (As of Mar 1, 2026)

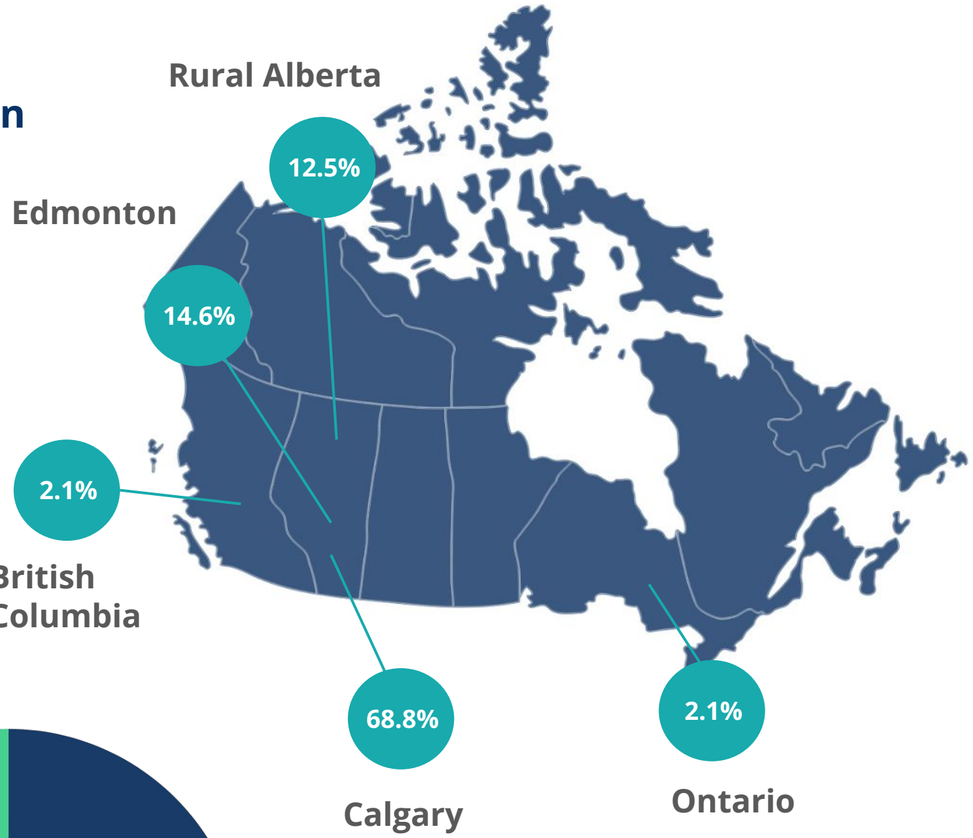
Aaron Foyer, Orennia, Vice President, Research and Analytics
Adrian Anderson, Arup Canada Inc, Industrial Decarb Lead
Aidan Bodsworth, MEGlobal, Regulatory Specialist
Alison Thompson, Borealis GeoPower, CEO
Aurelio Zanni, Shell Canada, Commercial Regulatory Manager
Bill Whitelaw, geoLOGIC Systems, Managing Director, Strategy & Sustainability
Brad Nickel, EQUS REA Ltd, Business Opportunity Specialist
Cameron Brown, Global Public Affairs, Lead, Energy Evolution
Chelsea Donelon, TransAlta Corp, Director, Canadian Development
Chris Brown, Calgary Economic Development, Sr. Director, Business Development
Christina Kehrig, Alberta's Industrial Heartland Association, Manager Business Development - Sustainability
Christophe Owttrim, Emissions Reduction Alberta, Executive Director, Technology & Innovation
Dani Hansen, BMO Capital Markets, VP Carbon Advisory
Demetria Zinyemba, Independent
Donald Jantz, Sustainable Campus Collaborative, Executive Director
Duncan Mundell, AltaML, Head of Invent
Eric Pelletier, Battery Metals Association of Canada, Director
Ericka Rios, Alberta Innovates, Clean Technology Manager
Gabriela Wilson, ATB Financial, Environment & Sustainability Director
Geoffrey Tauvette, Canadian Council for Sustainable Aviation Fuels, Executive Director
Jacob Rao, InnoTech Pioneers, Principal Consultant & Founder
Jennifer Young, Melange Energy, President and Founder
Kari Hyde, Pembina Institute, Manager, Utility Integration & Demand Side Management
Kelty Latos, ConocoPhillips, Senior Geologist
Kim Welby, Progressive West Consulting, Chief Operating Officer
Krystal Northey, Canadian Climate Institute, Lead, Public Affairs
Lacy Gielen, Stantec Consulting, Indigenous Relations Lead - Mining, Minerals & Metals
Lauretta Pearse, ATCO Energy Systems, Engineer - Distribution Improvements
Leoni Rivers, Leoni Rivers Consulting, CEO
Mark Hopkins, Human Venture Leadership, Associate
Martin Boucher, NorQuest College, Research Chair in Sustainability
Matt Toohey, Modern West Advisory, Chief Sustainability Officer
Michael Benson, Canada Energy Regulator, Technical Leader
Michelle Goodkey, Good Synergies, Founder & Principal
Morgan Rodwell, Fluor Canada Ltd, Executive Director, Process Technology
Paola Casillas, Prairies Economic Development Canada, Business Officer/ Economist - Program Operations
Patricia Bailey, City of Grande Prairie, Chief Strategy Officer
Peter Casurella, SouthGrow Regional Initiative, Executive Director
Rory Wheat, Varme Energy, VP Development
Sascha D'Souza, FortisAlberta, Senior Engineer- Emerging Customer Solutions
Sheila Schindel, Innovate BC, Managing Director, Commercialization & IP Programs
Sinmi Adeoye-Esene, Daniola, Founder & CEO
Suzanne Life-Yeomans, First Nations Women's Council of Economic Security, Indigenous Relations Consultant
Tristan Walker, Massif Energy, President

Current Fellowship Demographics

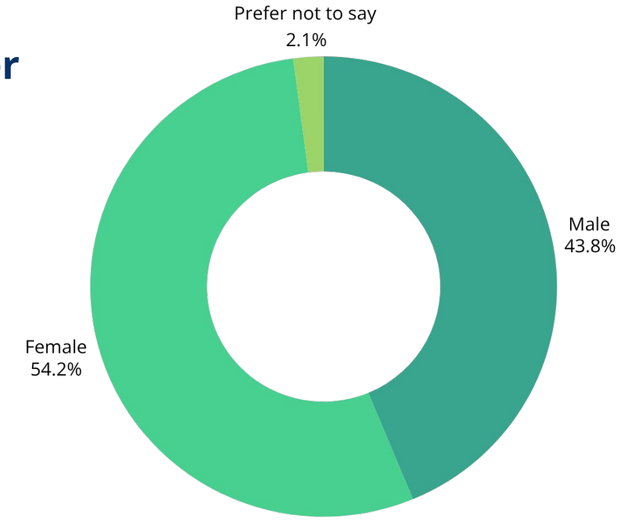
Sector



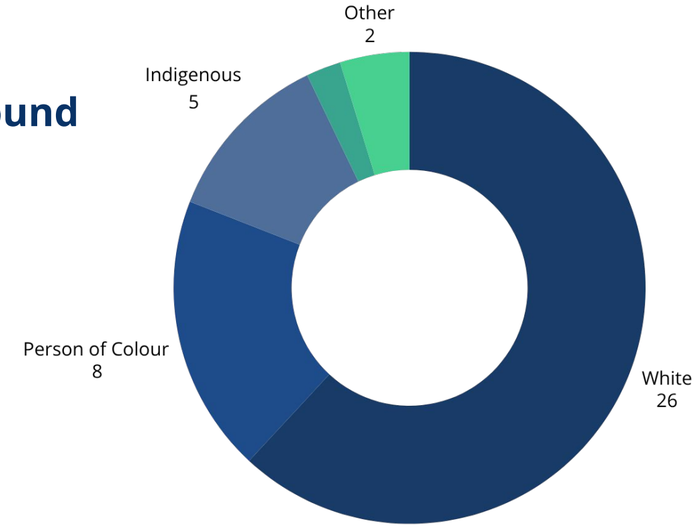
Location



Gender



Racial Background



**Responses voluntarily self-identified by Fellows.*