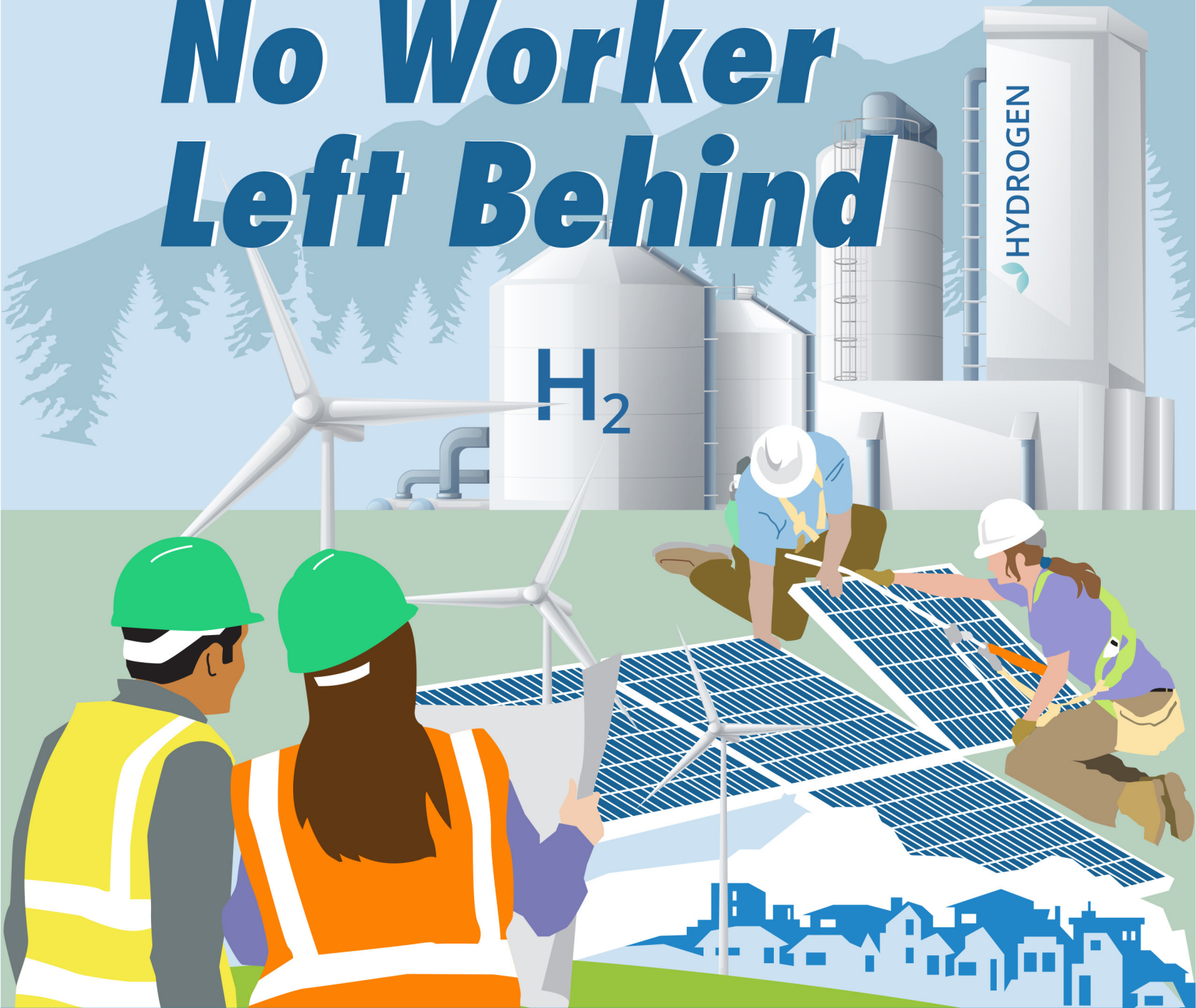


# *No Worker Left Behind*



## A Job Creation Strategy for Energy Transition in Alberta



Ian Hussey (lead author) with Mitchell Pawluk (appendix author)

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**Ian Hussey** (lead author) with **Mitchell Pawluk** (appendix author).

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## About This Publication

This publication consists of two parts. The first part, authored by Ian Hussey, discusses a plan prepared by the Alberta Federation of Labour (AFL) on how to create energy jobs in Alberta as we build a sustainable economy. The report weaves together key points of the AFL's plan, with insights from banks and policy groups, as well as the contextualization and information provided by Parkland's "Implementing a Just Transition" conference held in February 2022. The second part, an appendix authored by Mitchell Pawluk, presents the proceedings of the "Implementing a Just Transition" conference

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## About Parkland Institute

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- conduct research on economic, social, cultural and political issues facing Albertans and Canadians
- publish research and provide informed comment on current policy issues to the media and the public
- sponsor conferences and public forums on issues facing Albertans
- bring together academic and non-academic communities

All Parkland Institute reports are academically peer reviewed to ensure the integrity and accuracy of the research.

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## Executive Summary

Countries around the world are transitioning their economies to reduce carbon emissions and slow the impact of the climate crisis. In Canada, the federal government has a plan to reduce national emissions to 40% below 2005 levels by 2030. Alberta has made many positive steps toward building a clean energy future. Our province must further embrace the chance to be a clean-energy leader, or we risk being left behind as other places invest and innovate.

Albertans and Canadians need to be well-positioned to benefit from the opportunities that will arise as the world builds a low-carbon economy. All levels of government need to engage with their constituents to ensure policies will support a more equitable future for all.

Workers on the front lines of the energy transition need to lead the discussion about how best to transform Canada's energy economy. The Canadian union movement has been instrumental in developing the concept of Just Transition and has considerable experience in its implementation.

The Alberta Federation of Labour (AFL) recently published an industrial blueprint on how to create 200,000 energy jobs in Alberta as we build a sustainable economy by 2050. This report weaves together key points of the AFL's plan with insights from financial institutions and policy research groups, as well as contextualization and information provided by Parkland Institute's February 2022 conference, "Implementing a Just Transition."

### ***Background: Alberta Oil and Gas Jobs, Capital Spending, and Demand***

The energy transition needs to be discussed against the background of the shrinking job market in the Canadian oil and gas industry. From September 2014 through December 2022, the Canadian oil and gas industry cut 19% of its workforce — 43,548 jobs — due to structural changes and increasing automation. About 81% of these job cuts — 35,160 jobs — were in Alberta.

There are three connected reasons for Canadian oil and gas job cuts: decreasing capital spending, increasing use of automation, and increasing use of modular facility designs. Fewer engineering, construction, operational, and office jobs are now needed to produce growing volumes of oil and gas.

Accelerating automation is arising in the context of the climate emergency which is largely caused by the burning of fossil fuels. Leading oil and gas companies are speeding up automation to lower production costs by cutting jobs because they know they will soon be competing in a shrinking market.

The International Energy Agency estimates that global oil demand will peak in the mid-2030s and global natural gas demand will peak in 2030. Demand for Alberta oil and gas is expected to meaningfully decline in the 2030s.

A 2022 forecast from the Alberta Energy Regulator (AER) indicates that throughout the 2020s, oil sands capital spending will be about 40% of the 2014 peak of \$33.9 billion. For the crude oil and natural gas industries, the AER expects capital spending to be 65-70% of the 2014 peak of \$26.7 billion throughout the 2020s. These levels of capital spending and the deepening automation mean that the lost jobs are probably not coming back, and more job losses are expected.

The future of Alberta's energy industry may seem bleak. It does not need to be. In fact, building a sustainable economy is an enormous opportunity to adapt and reinvigorate our energy industry.

### ***The AFL's Industrial Strategy for the Energy Industry***

The AFL's industrial strategy is a proposal for an orderly transition between now and 2050 to maximize the opportunities and minimize the traumatic consequences of a disorderly transition. A disorderly transition creates a stronger likelihood for job losses and community decline.

“A disorderly transition creates a stronger likelihood for job losses and community decline.”

The AFL's strategy has three parts:

1. Maintain as much oil and gas extraction as is possible in a net-zero emissions future.
2. As much as possible, transition oil and gas production, as well as captured carbon dioxide (CO<sub>2</sub>), to feedstock for materials manufacturing.
3. Expand Alberta's clean-energy economy — electricity, hydrogen, critical minerals and metals, sustainable aviation fuel, and geothermal — to five to 10 times the current size.

The AFL's job creation analysis indicates their industrial strategy can create and sustain more than 200,000 energy-related jobs over the 2030-2050 period. This is 34,000 more jobs than existed in the oil and gas industry in 2014 at the height of Alberta's oil and gas investment boom.

The AFL document estimates that Alberta's oil and gas sector could retain at least 100,000 direct jobs in 2050, including 85,000 in hydrocarbon and CO<sub>2</sub>-based manufacturing (e.g., carbon fiber, asphalt binder, and recyclable plastics). For reference, Alberta's oil and gas sector employed about 136,000 workers in 2022.

The hydrogen and sustainable fuel (e.g., biofuel) industries could employ 70,000 workers by 2050. Blue hydrogen is made from natural gas and supported by carbon-capture technology. Green hydrogen is made by using renewable electricity to split water into hydrogen and oxygen. Alberta has the potential to build a blue hydrogen production industry in the next decade, and the potential to transition from blue to green hydrogen in the early 2030s, when the cost of electrolyzers falls.

Clean, reliable, low-cost electricity is the foundation of the future economy. Electricity-generation capacity from non-emitting sources across Canada, including in Alberta, needs to roughly triple by 2050. Decarbonization of Alberta's grid will primarily be achieved through the use of wind and solar power. This means Alberta also needs to develop electricity-storage capacity. Storage can come from batteries and eventually green hydrogen in Alberta, and from British Columbia's hydro dam reservoirs if new transmission lines are built connecting the two provincial grids. The AFL estimates the clean electricity sector could create 20,000 jobs by 2050.

Alberta can become an important player in the North American critical minerals and metals industry, particularly in the mining and processing of minerals and metals and the manufacturing of battery cells and components. Investments will also be needed to install electric-vehicle charging infrastructure throughout the province. The AFL estimates 8,000 jobs can be created by 2050 in electric transportation, batteries, and critical minerals and metals.

If Alberta pursues a net-zero building strategy, then thousands of residential and commercial buildings will need to be retrofitted with rooftop solar, heat pumps, high-efficiency gas furnaces, and other energy-efficiency measures, such as improved insulation and new windows and doors. The AFL estimates 14,000 jobs can be created by 2050 in Alberta's building-retrofit industry.

### ***How to Pay for Alberta's Energy Transition Job Creation Strategy***

There are five revenue sources that the Government of Alberta can use to help fund the province's public services and an energy transition job creation strategy:

1. Corporate income taxes.
2. Income taxes paid by wealthy Albertans.
3. Royalties on oil sands production.
4. Windfall profit taxes during periods of high commodity prices.
5. A new federal Just Transition Transfer to provinces and territories.



“Albertans as the resource owners are not receiving their fair share of oil sands resource wealth.”

**Corporate income taxes** – Alberta should align with the other three western Canadian provinces by returning to a 12% corporate tax rate. If Alberta had kept a 12% rate for 2019-2021, then the provincial government would have collected \$6.3 billion over this period in addition to the \$11.7 billion it received.

**Income taxes paid by wealthy Albertans** – Alberta’s income tax system has favoured high-income earners for a long time. If Alberta set the same income tax rate as British Columbia for the top 7% of income earners — who make \$131,221 a year or higher — then Alberta’s annual revenue would increase by \$1.255 billion.

**Royalties on oil sands production** – Albertans as the resource owners are not receiving their fair share of oil sands resource wealth. Most major oil sands projects are entering post-payout status when the royalty rates are the highest, but the royalty rate only rises to 40% of the project’s net revenues when West Texas Intermediate is at \$120 a barrel. Albertans should earn at least 50% of net revenues when oil prices are high, and the price for when the maximum rate applies should be \$80 or \$90 a barrel.

**Windfall profit taxes during periods of high commodity prices** – Compared to the United Kingdom’s 35% windfall profit tax on oil and gas extraction, and the European Union’s 33% windfall tax on the oil, gas, coal, and refinery sectors, the Government of Canada has proposed a modest 15% windfall tax, called the “Canada Revenue Dividend,” on the profits of banks and life-insurance companies above \$1 billion in 2020 and 2021. The Parliamentary Budget Officer (PBO) estimates this measure would generate \$3 billion.

The PBO estimates that applying the Canada Revenue Dividend to the oil and gas sector and to big-box stores would generate \$4.4 billion. Prime Minister Trudeau has said that his government will not apply the windfall tax to the oil and gas sector and grocery stores because the cost of the tax may be passed on to consumers during a period of high inflation.

The Government of Canada’s second proposed measure is a permanent hike of the tax rate from 15% to 16.5% on the profits of banks and insurers above \$100 million. The PBO estimates this measure would generate \$2.3 billion over the next five years.

**A new federal Just Transition Transfer to provinces and territories** – The final revenue reform recommendation is a federal Just Transition Transfer payment to the provinces. Transfer payments could also be paid to First Nations, Inuit communities, and Métis settlements. The funds for the provinces would be disbursed based on emission levels. Alberta emits 38% of Canada’s greenhouse gases (GHGs), so our province would receive 38% of the funds. World Bank chief economist Nicholas Stern recommends countries spend 1-2% of gross domestic product (GDP) on the energy



transition. If the federal government followed this advice in funding the Just Transition Transfer, then Alberta should receive \$10 billion to \$20 billion per year.

If this funding were granted over the entire proposed transition period (three decades), it would be more than enough to fund the \$300 billion needed to pay for Alberta's energy transition job creation strategy (a sum comparable to the total investments in the oil sands in the last 50 years).

The \$300 billion total does not include funding for transition programs for workers and communities, nor does it include the significant increase in funding that will be needed for post-secondary education. Fortunately, investments by the private sector would be in addition to the federal funding and would potentially increase the total by 100% or more, given the private sector is expected to contribute the most toward the energy transition because of the huge business opportunities that it presents.

“The private sector is expected to contribute the most toward the energy transition.”

This means it should be possible for the Government of Alberta to use some of the federal transfer funds to help pay for programs for affected workers and communities, and for growing and improving universities and technical schools so they can adequately serve our workforce and societal needs.

The Government of Alberta must also contribute to the energy transition strategy alongside the federal government and the private sector. Alberta's contribution of 1-2% of provincial GDP would be \$3.356 billion to \$6.712 billion per year. This is one reason why the Alberta government needs to return to a 12% corporate tax rate and to reform the oil sands royalty system so Albertans earn at least 50% of net revenues when oil prices are high.

### ***How to Maximize the Benefits for Local Workers, Communities, and Businesses***

Three strategies can ensure we maximize the local benefits of building a sustainable economy:

1. Regional development planning involving diverse stakeholders.
2. Community benefit agreements and social procurement.
3. Active labour market policies (ALMP), including a labour market development plan and increased funding for technical schools, union training centres, and universities.

Communities across Alberta have diverse assets and opportunities. Successful economic transitions require robust and community-led regional development plans. Regional plans should address local priorities and maximize the benefits going to local workers, communities, and businesses. The best way to achieve these outcomes is to develop the plans through a

“Vocational and skills training will be critical to the success of Alberta’s labour market development plan and energy transition job creation strategy.”

multistakeholder committee that includes municipal leaders, Indigenous leaders, trade unions, nonprofit groups, and business leaders from diverse industries.

Government infrastructure projects and other large development projects — whether privately funded, publicly funded, or a combination of both — should require community benefit agreements (CBAs). CBAs can address many important issues, such as ensuring government infrastructure and other large development projects employ local workers and source an agreed upon amount of local goods and services (a practice called “social procurement”).

Governments must create a labour market development plan to ensure Alberta retains and develops the workforce needed to execute our province’s energy transition industrial strategy.

The labour market development plan should:

1. Assess the likely impacts the energy transition will have on existing jobs and industries.
2. Outline the possible new job opportunities that can be created by implementing an Alberta energy transition industrial strategy.
3. Specify the ALMP the Government of Alberta must implement to retain and develop the workforce needed to grasp the opportunities that arise as we build a sustainable economy.
4. Envision the types of programs, outreach, and recruitment needed to diversify our workforce and ensure workers from equity-seeking groups can fairly benefit from the opportunities arising from Alberta’s energy transition strategy.

Vocational and skills training will be critical to the success of Alberta’s labour market development plan and energy transition job creation strategy. This will require increased funding to technical schools, union training centres, and universities.

## Conclusion

The energy transition will involve some big challenges for Alberta and Canada. Alongside the challenges, there will be tremendous opportunities for Alberta workers, communities, and businesses. Alberta has a highly trained and experienced workforce. Many future jobs require skills Alberta workers already have, though for certain workers some retraining will be necessary. Many workers have transferable skills that are needed and in high demand in the new, low-carbon energy economy. There are and there will be tremendous job opportunities for young people who receive training in the

“ We can achieve great things if we work together, and we have many competitive advantages if we plan and act quickly and decisively. ”

trades, data science, and information technology. With a growing and aging population, there will also be significant demand for public sector workers in K-12 education, post-secondary education, health care, childcare, seniors care, public administration, career and employment services, urban and regional planning, land stewardship, and other fields.

Analysis of a recent economic model indicates that regardless of the path that Canada takes to reach net-zero emissions, Alberta's economy is expected to grow. There will be some challenges if a faster restructuring of Alberta's economy occurs in the coming years. The oil sands industry would play a smaller role, but our provincial economy would likely also be more diversified and resilient because of growth in sectors outside of oil and gas, like information technology, services, agriculture, and manufacturing. Diversification will also likely build on Alberta's existing oil and gas resources and strengths, such as increasing investments and jobs in petrochemicals, biofuels, and hydrogen.

We should be hopeful, optimistic, and community-minded as Alberta and Canada work to maximize the benefits of building a sustainable economy and minimize the risks of failing to transition. We can achieve great things if we work together, and we have many competitive advantages if we plan and act quickly and decisively.

## 1. Introduction

Countries around the world are transitioning their economies to reduce carbon emissions and slow the impact of the climate crisis. In Canada, the federal government has a plan to reduce national emissions to 40% below 2005 levels by 2030. Alberta has made many positive steps toward building a clean energy future. Our province must further embrace the chance to be a clean-energy leader, or we risk being left behind as other places invest and innovate.

Albertans and Canadians need to be well-positioned to benefit from the opportunities that will arise as the world builds a low-carbon economy. To be successful, the transition must involve workers and communities who will be impacted. All levels of government need to engage with their constituents to ensure that economic, labour, and climate policies will support a more equitable future for all.

In 2021 and 2022, the federal government consulted on what should be included in its Just Transition programming and its *Just Transition Act* that is expected to be introduced in spring 2023 (TCP 2023). Natural Resources Canada (NRCan) launched an engagement process on Just Transition in July 2021 that aimed to gather feedback from workers, unions, industry, non-governmental organizations, and Indigenous, provincial, and territorial governments (NRCan 2021). NRCan received more than 30,000 written submissions by April 30, 2022, when the submission period closed (NRCan 2022). NRCan also held 17 roundtables with experts, unions, and industry in 2021-2022 (ibid). NRCan continues to meet with Indigenous, provincial, and territorial governments about Just Transition (ibid).

“Workers on the front lines of the energy transition need to lead the discussion about how best to transform Canada’s energy economy.”

Workers on the front lines of the energy transition need to lead the discussion about how best to transform Canada’s energy economy. The Canadian union movement has been instrumental in developing the concept of Just Transition and has considerable experience in its implementation in different sectors of the economy.

For many years, the Alberta Federation of Labour (AFL) has been a leader in public discussions on resource development, climate change, and green jobs. The AFL recently published an industrial blueprint on how to create 200,000 new energy jobs in Alberta as the province transitions to a low-carbon economy by 2050 (see AFL 2022).

My report weaves together key points of the AFL’s plan with insights from financial institutions and policy research groups, as well as contextualization and information provided by Parkland Institute’s February 2022 conference, “Implementing a Just Transition.” The report proceeds as follows. In Section 2, I provide background information on Alberta’s oil and gas industry. In

Section 3, I summarize the AFL's industrial strategy for the energy industry, including the job creation analysis. In Section 4, I delve into how to pay for Alberta's energy transition job creation strategy. In Section 5, I examine how to ensure we maximize the benefits going to local workers, communities, and businesses as Alberta builds a sustainable economy. In Section 6, I offer some brief concluding remarks on the challenges and opportunities for Alberta and Canada as we continue to build a sustainable economy.

## 2. Background: Alberta Oil and Gas Jobs, Capital Spending, and Demand

The Canadian economy — particularly in Alberta, and including many Indigenous communities — has been strongly connected to the fossil fuel industry for decades, so our transition to a net-zero emissions model by 2050 is bound to be complex and resisted by powerful corporations and a considerable portion of public opinion.

About 6% of Alberta's total population is Indigenous; approximately 23,000 Indigenous people from 18 First Nations and six Métis settlements live in Alberta's oil sands region (NRCan 2016; Alook et al. 2017). Many Indigenous people and communities are connected to the resource extraction industry in numerous and complex ways, including as workers and oilfield service company owners (GoA 2018; Alook et al. 2019). Indigenous people comprise 6.3% of the upstream oil and gas workforce in Canada, which is almost double the 3.3% Indigenous portion of the total Canadian workforce (CBC News 2021; StatsCan 2021).

To understand the challenges and opportunities involved, the energy transition needs to be discussed against the background of the shrinking job market in the Canadian oil and gas industry (see Hussey 2020). From September 2014 through December 2022, the Canadian oil and gas industry cut 19% of its workforce — 43,548 jobs — due to structural changes and increasing automation (PetroLMI 2023; Hussey 2022). About 81% of these job cuts — 35,160 jobs — were in Alberta (PetroLMI 2023).

There are three interconnected reasons for Canadian oil and gas job cuts: decreasing capital spending, increasing use of automation, and increasing use of modular facility designs. These spending, technology, and design trends mean fewer engineering, construction, operational, and back-office jobs are now needed to produce increasing volumes of oil and gas.

A decade-long trend of increasing automation was accelerated after the 2014 oil price crash (Hussey 2020). Automation in the oil and gas industry was further accelerated in 2020 during the spread of COVID-19 (Hussey 2022).

Accelerating oil and gas automation is happening in the global context of the climate emergency which is largely caused by the burning of fossil fuels. Leading oil and gas companies are speeding up automation to lower production costs by cutting jobs because they know they will soon be competing in a shrinking market.

“The energy transition needs to be discussed against the background of the shrinking job market in the Canadian oil and gas industry.”

The peak of global oil demand might occur as early as the late-2020s (Cosbey et al. 2021, 36), though a recent report from the International Energy Agency (IEA) indicates the peak may not occur until the mid-2030s (McDonnell 2022). The IEA forecasts that the peak of global natural gas demand will occur in 2030, and then demand will remain steady until 2050 (ibid).

The vast majority of Alberta's oil and gas exports are sold to the U.S. Demand for Alberta oil and gas is expected to meaningfully decline in the 2030s (Tertzakian 2022). The main reason oil demand will decrease is because electric vehicle sales are expected to increase significantly and quickly (AFL 2022; Cosbey et al. 2021). Electric vehicles are already less expensive than conventional cars on a lifetime basis, and upfront cost parity between the two could be achieved by the mid-2020s (Stackhouse et al. 2021, 19). The main reason for the expected decrease in Alberta natural gas exports is that U.S. demand is expected to continue to decline and other sources of demand are not expected to be strong enough to replace decreasing U.S. demand (Bataille et al. 2021, 11).

While big oil and gas companies have been cutting jobs on the front lines, chief executive officers (CEOs) and shareholders have remained very well compensated. For example, the "Big Four" oil sands majors of Suncor Energy, Canadian Natural Resources Limited, Cenovus Energy, and Imperial Oil paid their CEOs an average of \$12.8 million in 2021 — which represented an average annual pay increase of \$3.3 million from the previous year (Hussey 2022, 31-32). The Big Four paid their shareholders \$10.9 billion in 2021 through dividends and share buybacks (ibid, 19).

The combined capital spending of the Alberta oil sands, crude oil, and natural gas industries peaked in 2014 at \$60.6 billion (\$33.9 billion for oil sands; \$26.7 billion for crude oil and natural gas) (AER 2022). A 2022 forecast from the Alberta Energy Regulator (AER) indicates that throughout the 2020s, oil sands capital spending will be about 40% of the 2014 peak (ibid). For the crude oil and natural gas industries, the AER expects capital spending to be 65-70% of the 2014 peak throughout the 2020s.

These levels of capital spending and the deepening automation mean that the previously lost jobs are probably not coming back, and more job losses are expected. An August 2020 forecast from Ernst & Young and Petroleum Labour Market Information indicates automation may result in 46,108 job losses in the Canadian upstream oil and gas sector by 2040, or 54.4% of the upstream jobs that existed in 2019 (EY and PetroLMI 2020). Some industry analysts believe these jobs cuts could happen even more quickly because of the pace of automation (AFL 2022, 25).



“ *The energy transition is an enormous opportunity to adapt and reinvigorate Alberta’s and Canada’s energy industry.* ”

Given the above information, the future may seem bleak for the energy industry in Alberta and Canada. It does not need to be. In fact, economists at TD Bank assert that the energy transition is an enormous opportunity to adapt and reinvigorate Alberta’s and Canada’s energy industry (Caranci and Fong 2021), but only if we embrace the opportunities that are arising as the world builds a low-carbon economy.

In the next section, I explore some of the exciting opportunities for Alberta’s energy industry in a transitioning world. Some of them will need time to develop — but many are ready for prime time.

### 3. The AFL's Industrial Strategy for the Energy Industry

The energy transition is not going to be easy or linear. It will involve many interconnected parts.

Alberta's energy transition and achieving net-zero emissions do not mean the complete phase-out of oil and gas production and use (IEA 2022, 49). However, they do mean oil and gas industries will become smaller and need to pivot, innovate, and transform themselves. The 2020s and 2030s will likely involve the greatest degree of disruption as many clean energy technologies have become cost-competitive and will rapidly increase their market penetration (AFL 2022, 14).

For many Albertans and Canadians, the scale and pace of change required by the climate crisis and energy transition will seem risky. Failing to transition is a much greater risk to Albertans' and Canadians' well-being and prosperity (Bataille et al. 2021, 20). Economists at the Royal Bank of Canada estimates that if Canada and the world "keep emitting at the current pace, [Canada] would need to save \$40 billion annually to cover the costs of future disasters made worse by climate change" (Stackhouse et al. 2021, 7). The financial cost of future disasters could be even higher given "the uncertainty over how climate patterns will evolve" because of "[m]elting permafrost, collapsing rainforests and other catastrophes" (ibid).

These are concerning possibilities given that Canada is warming at twice the global average and the Canadian North is warming at three times the global average (Deranger et al. 2021, 8). Furthermore, even though Indigenous communities have contributed relatively small amounts of greenhouse gas emissions, the climate impacts on Indigenous communities are disproportionately larger (ibid, 27).

“The energy transition in Alberta, Canada, and the world has already begun.”

The energy transition in Alberta, Canada, and the world has already begun. As it accelerates in the 2020s and beyond, robust transition plans and programs for affected workers and communities will need to be developed and implemented. In fact, because deepening automation is causing job loss in Alberta's oil and gas industry already, Alberta workers and communities need transition programs, planning, and funding to begin immediately and to be sustained and updated throughout our journey to net-zero emissions by 2050.

Programs for workers and communities are needed across Alberta, and particularly in regions where there is significant direct employment in the oil and gas industry. As I noted in the previous section, the areas of the province with resource extraction sites — such as Fort McMurray and Cold Lake — are home to many First Nations and Métis settlements.

Economists at TD Bank estimate that 25-30% of workers in Fort McMurray and Cold Lake are employed directly in the oil and gas sector (Caranci and Fong 2021, 7). Declining oil and gas production will result in lost jobs in every sector of these regional economies (Mertins-Kirkwood and Deshpande 2019, 21). This means all workers in affected communities should be eligible for Just Transition programs, not only workers directly employed in oil and gas (ibid, 27). Furthermore, to provide support for workers on top of local and provincial transition programs, the federal government should expand and strengthen employment insurance (ibid, 28).

Albertans and Canadians can remain prosperous in a transitioning world, but only if we embrace the opportunities for our workers, communities, and industries. The public sector has a large role to play in the transition, including through direct investments (market interventions) and industrial strategies (market steering), to maximize the opportunities and minimize the disruptions of the energy transition to Alberta and Canada (AFL 2022, 9).

Alberta's current prosperity, particularly through the oil sands industry, owes much to Premier Peter Lougheed's entrepreneurial, interventionist government of the 1970s and '80s. For Lougheed's government, investing in oil sands upstream and midstream facilities and in the technology research needed to expand the oil sands industry was an economic diversification and job creation strategy (ibid, 11).

The AFL argues that the 21st century version of entrepreneurial state in Alberta requires the provincial government — working alongside unions, industry, and Indigenous leaders — to transition and diversify Alberta's economy. The AFL is also calling for more state ownership through the creation of Crown corporations and through equity investments in companies.

The AFL's industrial strategy is a proposal for an orderly transition between now and 2050 to maximize the opportunities and minimize the traumatic and unpleasant consequences of a disorderly transition. As TD Bank economists recently explained, "[a] disorderly transition creates a stronger impulse for job losses, geographic inequity and a deterioration in inequality" (Caranci and Fong 2021, 7).

The AFL's strategy has three parts:

1. Maintain as much oil and gas extraction as is possible in a net-zero emissions future.
2. As much as possible, transition bitumen and natural gas production, as well as captured CO<sub>2</sub>, to feedstock for materials manufacturing (e.g. carbon fiber, asphalt binder, and recyclable plastics).
3. Expand Alberta's clean-energy economy — including electricity, hydrogen, critical minerals and metals, sustainable aviation fuel, and geothermal — to five to 10 times the current size (AFL 2022, 24).

The rationale behind the AFL's strategy also has three parts:

1. Albertans own our natural resources and thus we are obliged to mitigate the risk of oil and gas demand decline that is inherent of the energy transition.
2. Albertans as the resource owners are also obliged to maximize the benefits of our resources, both in the short-term and for future generations.
3. "Alberta has by far the highest greenhouse gas emissions of any province, caused primarily by oil and gas extraction. Decarbonizing production while transitioning to materials manufacturing will significantly lower, if not eliminate, lifecycle emissions associated with Alberta hydrocarbons" (ibid, 33).

“The AFL's job creation analysis indicates their industrial strategy can create and sustain more than 200,000 energy-related jobs over the 2030-2050 period.”

The AFL's job creation analysis indicates their industrial strategy can create and sustain more than 200,000 energy-related jobs over the 2030-2050 period (ibid, 85). This is 34,000 more jobs than existed in the oil and gas industry in 2014 at the height of Alberta's oil and gas investment boom (Hussey 2022, 35).

By 2030, the materials manufacturing industry that uses bitumen as feedstock to produce high-value products — such as carbon fiber and asphalt binder — could be a \$3 billion a year industry and use 35,000 barrels bitumen per day (AFL 2022, 81). The industry could expand to using 1.5 million barrels a day and to doing \$60 billion in sales a year by 2050. The current market for CO<sub>2</sub>-based manufacturing is US\$1 billion, “but is expected to grow to \$70 billion by 2030 and as much as \$550 billion by 2040” (ibid, 37). The AFL estimates more than 85,000 direct jobs could be created in the hydrocarbon and CO<sub>2</sub>-based manufacturing industries by 2050 (ibid, 81).

Most forecasts indicate Alberta oil and gas production will decline substantially in a net-zero world. As mentioned in the previous section, the industry is already cutting thousands of jobs due to automation and reduced capital spending. The industry is also expected to significantly expand the use of carbon capture, utilization, and storage (CCUS). The AFL estimates

that Alberta's oil and gas sector could retain at least 100,000 direct jobs in 2050, including the 85,000 in hydrocarbon and CO<sub>2</sub>-based manufacturing (ibid). Alberta's oil and gas sector employed about 136,000 workers in 2022 (PetroLMI 2023).

As the AFL report acknowledges, it is not a sure thing that CCUS can be scaled up to the degree proposed in the organization's industrial strategy or proposed by the Oil Sands Pathway Alliance (AFL 2022, 8; Stackhouse et al. 2021, 39). However, Canada is a global leader in CCUS, including the Alberta Carbon Trunk Line and Quest projects in Alberta. Shell Canada has announced a new CCUS project that it says will not require government subsidies (AFL 2022, 39). CCUS projects will also be needed for hydrogen production and for hard-to-abate industries like cement production. The CO<sub>2</sub>-based manufacturing sector will require Alberta's CCUS gathering network to be designed to enable captured CO<sub>2</sub> to be used in materials manufacturing (ibid).

The AFL estimates that 70,000 jobs could be created by 2050 in the hydrogen and sustainable fuel industries (ibid, 82). Blue hydrogen is made from natural gas and supported by carbon-capture technology. Green hydrogen is made by using renewable electricity to split water into hydrogen and oxygen. Alberta has the potential to build a blue hydrogen production industry in the next decade, and the potential to transition from blue to green hydrogen in the early 2030s when the cost of electrolyzers falls (ibid, 48, 45).

Sustainable aviation fuel is less carbon-intensive than regular jet fuel. One way that sustainable aviation fuel is made is by blending biofuel and jet fuel. Suncor has already invested in two sustainable aviation fuel companies. An Indigenous business group recently announced their hope to supply airline companies flying out of the Calgary airport with sustainable aviation fuel (Bloomberg 2022).

Clean, reliable, low-cost electricity is the foundation of the future economy. Electricity-generation capacity from non-emitting sources across Canada, including in Alberta, needs to roughly triple by 2050 (IEA 2022, 173). Significant investments in transmission, distribution, and storage are also required.

Decarbonization of Alberta's grid in the coming years and decades will primarily be achieved through the use of wind and solar power. This means Alberta also needs to develop electricity-storage capacity, or we need to develop access to storage in British Columbia through electricity-grid interties. Storage can come from batteries and eventually green hydrogen in Alberta, and from BC's hydro dam reservoirs (AFL 2022, 45). The AFL estimates the clean electricity sector could create 20,000 jobs by 2050 (ibid, 82).

“Clean, reliable, low-cost electricity is the foundation of the future economy.”

The AFL envisions Alberta becoming an important player in the North American critical minerals and metals industry, particularly in the mining and processing of minerals and metals and the manufacturing of battery cells and components. Investments will also be needed to install electric-vehicle charging infrastructure throughout the province. The AFL estimates 8,000 jobs can be created by 2050 in electric transportation, batteries, and critical minerals and metals (AFL 2022, 83).

If Alberta pursues a net-zero building strategy, then thousands of residential and commercial buildings will need to be retrofitted with rooftop solar, heat pumps, high-efficiency gas furnaces, and other energy-efficiency measures, such as improved insulation and new windows and doors. The AFL estimates 14,000 jobs can be created by 2050 in Alberta's building-retrofit industry (ibid).

The AFL's industrial strategy for the energy industry is bold and ambitious. Let's turn now to an exploration of possible ways to pay for Alberta's energy transition job creation strategy.

## 4. How to Pay for Alberta's Energy Transition Job Creation Strategy

Alberta's energy transition job creation strategy could cost \$300 billion over the next three decades. This sum does not include funding for transition programs and planning for affected workers and communities, nor does it include increased funding to expand and improve universities and technical schools in the province so they can adequately serve our workforce and societal needs (more on this in Section 5).

The AFL notes that the estimated \$300 billion cost of Alberta's energy industry strategy is comparable to the total investment in the oil sands over the last 50 years (AFL 2022, 63). Most of the funds invested in Alberta's energy transition will likely come from the private sector, but all levels of government will also need to contribute funds. The sums required may seem immense, but "they're also affordable, especially when measured against the economic returns of new technologies, products and even entire industries in which Canada can be a global leader" (Stackhouse et al. 2021, 4).

The AFL asserts that Alberta has a decade, at most, to capitalize on high oil revenues before they decline in the 2030s (AFL 2022, 26). This decline is predicted by consulting firms such as Wood Mackenzie, who forecast that the growing popularity of electric vehicles will decrease demand for oil. The AFL suggests using these revenues to support Alberta's energy transition and job creation strategy. Based on this reasonable assumption, there is no time to waste in implementing revenue reform in Alberta.

There are five revenue sources that the Government of Alberta can use to help fund the province's public services and an energy transition job creation strategy:

1. Corporate income taxes.
2. Income taxes paid by wealthy Albertans.
3. Royalties on oil sands production.
4. Windfall profit taxes during periods of high commodity prices.
5. A new federal Just Transition Transfer to provinces and territories.

The United Conservative Party government cut the income tax rate paid by large corporations from 12% in mid-2019 to 8% in mid-2020. The tax cut was sold as a way to create jobs and boost the economy, but that is not what happened. My recent report shows the Big Four oil sands producers used the tax giveaway to increase executives' pay and boost cash transfers to shareholders while accelerating automation and cutting jobs (see Hussey 2022).

“Alberta has a decade, at most, to capitalize on high oil revenues before they decline in the 2030s.”



Corporate tax giveaways do not work; the United Conservative's term in office has proved it. Instead of handing more than a billion dollars a year in public funds to four profitable oil companies, the Government of Alberta could have hired more than 10,000 nurses, emergency medical responders, teachers, and educational assistants (ibid, 46).

Besides Alberta, the other three western Canadian provinces have corporate tax rates of 12%. Alberta should align with its western peers and return to a 12% tax on the profits of large corporations. Economist Troy Cochrane recently calculated that if Alberta had kept a 12% corporate tax rate for 2019-2021, then the provincial government would have collected \$6.3 billion over this period in addition to the \$11.7 billion it received (Kilgannon 2022, 5).

Alberta's income tax system has favoured high-income earners for a long time. The Government of Alberta needs to adjust tax brackets so the top 7% of income earners — who make \$131,221 a year or higher — pay a fairer amount of income taxes. Economist Gillian Petit recently calculated that if Alberta set the same income tax rate as British Columbia for these high-income earners, then Alberta's annual revenue would increase by \$1.255 billion (ibid, 4).

Alberta's oil sands royalty rates are generous in several respects. Changes are required so Albertans can start receiving a fair share of our resource wealth. For example, in the post-payout period of an oil sands project, the royalty rate only rises to 40% of the project's net revenues when West Texas Intermediate is at \$120 a barrel. Albertans, as the resource owners, should earn at least 50% of net revenues when oil prices are high. The Government of Alberta should also consider lowering to \$80 or \$90 the price threshold for when the maximum royalty rate applies.

The AFL notes that most major oil sands projects are entering post-payout status, so the Government of Alberta has an unprecedented opportunity to use these resources to invest in an energy transition job creation plan (AFL 2022, 63). The AFL argues that “we need to think of these funds as capital to be invested that will provide returns for Albertans that include jobs, tax revenue, and eventually dividends [from equity shares] that can be reinvested” (ibid).

It is also recommended that the Government of Canada ensure a fairer deal for all Canadians by joining its peers in the United Kingdom (UK) and the European Union (EU) in imposing a temporary windfall tax on the excess profits of large corporations in certain sectors, such as oil and gas, banking, and insurance, during periods of high commodity prices. The proceeds from the tax on excess profits could go toward helping to pay for the energy transition and toward supporting households struggling with the surging cost of living.

“The Government of Canada’s two proposed tax measures on banks and life-insurance companies are relatively small.”

In May 2022, the UK imposed a windfall tax of 25% on oil and gas companies’ profits (Reuters 2022). The tax applies to profits made from oil and gas extraction in the UK, but not to other activities like refining or retail fuel sales (BBC 2022). The tax will increase to 35% in January 2023 and will remain in place until March 2028 (ibid).

In September 2022, the EU imposed a windfall tax, which they called a “solidarity contribution,” of at least 33% on the profits of companies in the oil, gas, coal, and refinery sectors (European Council 2022; EY 2022). Member states can calculate the tax on 2022 or 2023 profits that “are above a 20% increase of the average yearly taxable profits since 2018” (European Council 2022).

Compared to the UK and the EU, the Government of Canada’s two proposed tax measures on banks and life-insurance companies are relatively small. The first measure is a one-time 15% windfall tax, which they called the “Canada Revenue Dividend,” on the profits made by banks and life-insurance companies above \$1 billion in 2020 and 2021. The Parliamentary Budget Officer (PBO) estimates this measure would generate \$3 billion (Al Mallees 2022a).

More recently, the PBO estimated that applying the Canada Revenue Dividend to the oil and gas sector and to big-box stores would generate \$4.4 billion (Al Mallees 2022b). Prime Minister Trudeau has said that his government will not apply the windfall tax to the oil and gas sector and grocery stores because the cost of the tax may be passed on to consumers during a period of high inflation (Zimonjic et al. 2022).

The second measure proposed by the federal government is a permanent hike of the tax rate from 15% to 16.5% on the profits of banks and insurers above \$100 million. The PBO estimates this measure would generate \$2.3 billion over the next five years (Al Mallees 2022a).

The fifth and final revenue reform that is recommended to help pay for a Just Transition is a new federal transfer payment to the provinces and territories. Transfer payments could also be paid to First Nations, Inuit communities, and Métis settlements.

Many labour and environmental groups are calling on the Government of Canada to create a Just Transition Transfer. The AFL asserts that the funding formula for the transfer would see the federal government disburse funds based on the current greenhouse gas (GHG) emissions of each province and territory (AFL 2022, 65). This approach recognizes that some provinces have more work to do than others to reach net-zero emissions by 2050. Alberta currently emits 38% of Canada’s GHGs, so our province would receive 38% of the Just Transition Transfer funds.

World Bank chief economist Nicholas Stern recommends countries spend 1-2% of gross domestic product (GDP) on the energy transition (Mertins-Kirkwood and Duncalfe 2021, 28-29). If the federal government followed this advice in funding the Just Transition Transfer, then Alberta would receive \$10 billion to \$20 billion per year (AFL 2022, 65).

If this funding were granted over the entire proposed transition period (three decades), it would be more than enough to fund the \$300 billion mentioned above as the sum needed to pay for Alberta's energy transition job creation strategy. But, as I said earlier, the \$300 billion total does not include funding for transition programs for workers and communities, nor does it include the significant increase in funding that will be needed for post-secondary education.

Fortunately, investments by the private sector would be in addition to the federal funding and would potentially increase the total by 100% or more, given it is generally assumed that the private sector will contribute the most toward the energy transition because of the enormous business opportunities that it presents. This means it should be possible for the Government of Alberta to use some of the federal transfer funds to help pay for programs for affected workers and communities, and for growing and improving universities and technical schools so they can adequately serve our workforce and societal needs.

“The Government of Alberta must also contribute to the energy transition strategy alongside the federal government and the private sector.”

The Government of Alberta must also contribute to the energy transition strategy alongside the federal government and the private sector. Alberta's 2021 GDP was \$335.6 billion (GoA n.d.), so the Government of Alberta's contribution of 1-2% of GDP would be \$3.356 billion to \$6.712 billion per year. This is one reason why our provincial government needs to return to a 12% corporate tax rate and to reform the oil sands royalty system so Albertans, as the resource owners, earn at least 50% of net revenues when oil prices are high.

In sum, the five recommended revenue reforms would make available the funding that is estimated to be required for Alberta's energy transition job creation strategy. The investments that comprise the job creation strategy would help to grow and diversify Alberta's economy. Furthermore, the recommended revenue reforms could also help pay for Just Transition planning and programming for affected workers and communities, and for enhancing our province's universities and technical schools.

Let's turn now to an analysis of how to maximize the benefits going to local workers, communities, and businesses as we build a more sustainable economy in Alberta.

## 5. How to Maximize the Benefits for Local Workers, Communities, and Businesses

Alberta's energy transition job creation plan needs to maximize the benefits going to local workers, communities, and businesses. This can be accomplished by using three strategies:

1. Regional development planning involving diverse stakeholders.
2. Community benefit agreements and social procurement.
3. Active labour market policies, including a labour market development plan, and increased funding for technical schools, union training centres, and universities.

Communities across Alberta have diverse assets and opportunities. Successful economic transitions require robust and community-led regional development plans (JTC 2020; AFL and CTC 2017; Hussey and Jackson 2019). Regional plans should be designed to address local priorities and maximize the benefits going to local workers, communities, and businesses. The best way to achieve these outcomes is to develop the plans through a multistakeholder committee that includes municipal elected officials, Indigenous political and business leaders, trade unions, nonprofit groups, and business leaders from diverse industries.

An important part of the regional development plans will be identifying the most impactful ways public and private investments can further the provincial energy transition job creation strategy. Government infrastructure projects and other large development projects — whether privately funded, publicly funded, or a combination of both — should require community benefit agreements (CBAs) so local workers, residents, and businesses can “see themselves and their communities directly benefiting from new development” (AFL 2022, 69).

CBAs are legal agreements crafted during the planning and permitting process of large construction projects. In the context of Alberta's energy transition strategy, CBAs would be agreements between the local or provincial government and development companies. The process of crafting a CBA for a government infrastructure project or a large development project can and should ensure local workers and community leaders participate in the decision-making process (ibid, 69; JTC 2020).

CBAAs can address many important issues, such as:

- Ensuring that government infrastructure and other large development projects employ local workers in jobs with decent pay and good working conditions, including workers from equity-seeking groups (e.g., workers who are women, racialized, and LGBTQ2S+).
- Ensuring that big companies do not use public money to build projects under exploitative business practices, including paying workers unfair wages.
- Ensuring that government infrastructure and other large development projects employ unionized workers, so the workers receive the economic and social benefits of unionization.
- Ensuring that government infrastructure and other large development projects source an agreed upon amount of local goods and services; this purchasing practice is called “social procurement.”
- Ensuring that social procurement clauses in a CBA go beyond general quotas for local goods and services by stipulating that a set amount of goods and services be provided by local businesses owned by women, Indigenous people, racialized people, and LGBTQ2S+ people (AFL 2022, 69-71).

Governments are among the biggest purchasers of goods and services in Alberta and Canada (ibid, 75). Alberta workers and communities can greatly benefit from CBAs. For example, Alberta can learn from Newfoundland and Labrador’s experience of using CBAs to increase the number of women trades workers to three times the national average (CBTU 2022, 4). Alberta can achieve similar results if we consistently use CBAs across the province in the coming years and decades as we build a sustainable economy.

“The energy transition can be an opportunity to grow and transform Alberta’s labour market for the better.”

Active labour market policies (ALMP) are equally as important as and complementary to the use of CBAs and social procurement. The energy transition, including the development of new technologies and industries, can be an opportunity to grow and transform Alberta’s labour market for the better. The Government of Alberta needs to use ALMP to seize these opportunities and guarantee all workers unionized jobs with decent pay and good working conditions.

The AFL adapted a framework from the United Nations and International Labour Organization that Alberta’s provincial, municipal, and Indigenous governments can use to understand the four impacts on jobs that will happen during the energy transition:

1. Job creation: new jobs will be created in the energy transition, and workers will need vocational and skills training to enter new industries.

2. Job substitution: existing jobs will be substituted for new jobs in the transition from a high-carbon to a low-carbon economy (e.g., shifting from building internal combustion engine vehicles to building electric vehicles).
3. Job elimination: some existing jobs will be reduced or completely phased-out in the transition to a low-carbon economy.
4. Job transformation and redefinition: existing jobs that will continue to be needed as we transition to a low-carbon economy may require the practices, methods, and tools of the job to change (AFL 2022, 66-67).

Governments can use this framework to plan for the coming labour market changes and to draft a labour market development plan to ensure that Alberta retains and develops the workforce needed to execute our province's energy transition industrial strategy.

The labour market development plan should:

1. Assess the likely impacts the energy transition will have on existing jobs and industries.
2. Outline the possible new job opportunities that can be created by implementing an Alberta energy transition industrial strategy.
3. Specify the ALMP that the Government of Alberta must draft and implement to retain and develop the workforce we need to take advantage of the opportunities that will arise as we build a sustainable economy.
4. Envision the types of programs, outreach, and recruitment needed to diversify our workforce and ensure that Indigenous workers and workers from other equity-seeking groups can fairly benefit from the opportunities arising from Alberta's energy transition strategy (ibid, 67-68).

Vocational and skills training will be critical to the success of Alberta's labour market development plan and energy transition job creation strategy. This will require increased funding to technical schools, union training centres, and universities (ibid, 68).

Workers experiencing the four job impacts of the energy transition listed above will require different levels of vocational training and other assistance. For example, trades workers may need minimal, but vital training to adapt to new technologies, methods, and practices. Workers experiencing job transformation and redefinition may also need training in new technologies, methods, and practices (ibid, 67-68).

Trades workers impacted by job substitution may also require minimal, but vital training, and programs that connect them to jobs in emerging industries. Governments could offer funding to employers in emerging

industries in the form of wage subsidies to incentivize them to hire and train displaced workers from high-carbon industries (ibid, 68).

Displaced workers or workers experiencing barriers to enter the labour market or new industries may require more extensive training, wage subsidies, and help in their job search process (ibid, 68). Some displaced workers may need funding to move to a new community to take a new job. Some older workers may need funding to bridge them to retirement (Hussey and Jackson 2019).



## 6. Conclusion

This report synthesizes and builds on insights from recent government and industry activity, recent research from the AFL, financial institutions, and policy research groups, as well as the diverse experiences and knowledge presented at Parkland Institute's February 2022 conference, "Implementing a Just Transition" (see the appendix for the conference proceedings).

The energy transition will involve some big challenges for Alberta and Canada. There will be technical challenges, such as scaling up electricity storage capacity. There will also be political challenges, such as achieving and maintaining productive relationships between the Government of Alberta, the Government of Canada, Indigenous governments, and municipal governments, which all have important roles in planning and administering programs for workers and communities throughout the decades-long energy transition. Perhaps the biggest cultural, political, and economic challenge before the governments and residents of Alberta and Canada is reconciliation with Indigenous people, which is critical to the planning and development of Alberta's and Canada's future energy economy.

Alongside the challenges, there will be tremendous opportunities for Alberta workers, communities, and businesses. Alberta has a highly trained and experienced workforce. Many future jobs require skills Alberta workers already have, though for certain workers some retraining will be necessary. Many workers have transferable skills that are needed and in high demand in the new, low-carbon energy economy. There are and there will be tremendous job opportunities for young people who receive training in the trades, data science, and information technology. With a growing and aging population, there will also be significant demand for public sector workers in K-12 education, post-secondary education, health care, childcare, seniors care, public administration, career and employment services, urban and regional planning, land stewardship, and other fields.

Analysis of a recent economic model indicates that regardless of the path that Canada takes to reach net-zero emissions, Alberta's economy is expected to grow (Bataille et al. 2021, 8-9). There will be some challenges if a faster restructuring of Alberta's economy occurs in the coming years. The oil sands industry would play a smaller role, but our provincial economy would likely also be more diversified and resilient because of growth in sectors outside of oil and gas, like information technology, services, agriculture, and manufacturing. Diversification will also likely build on Alberta's existing oil and gas resources and strengths, such as increasing investments and jobs in petrochemicals, biofuels, and hydrogen.

We should be hopeful, optimistic, and community-minded as Alberta and Canada work to maximize the benefits of building a sustainable economy and minimize the risks of failing to transition. We can achieve great things if we work together, and we have many competitive advantages if we plan and act quickly and decisively.

## Appendix

### Proceedings From the “Implementing a Just Transition” Conference

From February 23 to 24, 2022, the Parkland Institute and its conference partners hosted a virtual conference called “Implementing a Just Transition.” International and Canadian experts, networks, and stakeholders came together to discuss a wide range of issues, policies, and approaches.

The conference provided participants with an opportunity to learn how other countries are implementing their Just Transition strategies and hear from community leaders, researchers, and advocates from Alberta and across Canada about the challenges and opportunities for various sectors on the vanguard of this transition.

In this appendix, we share the summary proceedings from these rich discussions, which outline the key points made by each speaker and the common themes that emerged during panel discussions.

The conference was supported by the Social Science and Humanities Research Council of Canada through a SSHRC Connections Grant.

## PANEL 1

### Creating a People-Centred Clean Energy Future

The opening session of the conference set the stage for what Canadians need to do to make the shift to a people-centred clean energy economy. The panel of speakers explored how all levels of government must engage with impacted communities and workers as they implement policies that will respond to the climate crisis.

#### MODERATOR

- Jason Foster, director of the Parkland Institute at the University of Alberta, and associate professor of Human Resources and Labour Relations at Athabasca University

#### PANELISTS

- Catherine Abreu, founder and executive director of Destination Zero
- Jyoti Gondek, mayor of Calgary
- Gil McGowan, president of the Alberta Federation of Labour

## PANELIST STATEMENTS

### ■ Catherine Abreu: Stories of Community-Building



*"[Just Transition] is about community-building, putting people at the centre of questions around economic and social transition, and rejecting the narratives that seek to divide us. Because, I think, if we've learnt anything from the COVID-19 crisis, it's that we, in times of crisis, can rise to the occasion and take collective action that matters, not only in our personal lives, but in the lives of everyone we love, all around us."*

– Catherine Abreu

In her opening statement, Catherine Abreu drew upon two stories to emphasize the importance of communities in building progressive, transformative movements.

The first story focused on the Canadian trucker convoy, a protest that took place in early 2022 and saw thousands of Canadians — many of them working class — traverse the country to meet in Ottawa and protest COVID-19 policies. While many dismissed the importance of the trucker convoy, Abreu argued it was a learning opportunity for progressives who had failed to understand the socio-economic insecurities driving communities to participate in the convoy.

Without recognizing these problems, progressives leave an opening for reactionary decision-makers to exploit vulnerable Canadians for their own political purposes in ways that uphold oppressive institutions. Instead of ignoring these divisive movements, progressives should acknowledge the structural insecurities that drive them and empower communities to enact systemic change on their own terms. This applies to Just Transitions as well; it is not enough to talk about technocratic solutions without simultaneously centring these conversations on building resilient communities.

The second story was about Abreu's personal background, explaining why her family moved from Atlantic Canada to Ontario. While her parents had strong Atlantic connections, the collapse of the cod fishery forced her family and many others to migrate away from their homes, destroying communities in the process. This type of unplanned resource collapse is exactly what fuels fears about societal change and highlights the need for a government-led plan for a Just Transition. As communities, we need to look at the insecurities facing us and feel the power of our collective feelings, channeling our outrage into transformative solutions that unify us.

## ■ **Jyoti Gondek:** *Lessons From Declaring a Climate Emergency in Calgary*



*"We need to understand how labour organizations should be recognized for their fight to ensure that people are treated with fairness, instead of the polarizing debate we hear all the time about unions versus management and private sector versus unionized sectors. That language is standing to divide us and it's polarizing us."*

– Jyoti Gondek

Less than a month after becoming mayor, Jyoti Gondek and the City Council of Calgary declared a climate emergency in the city. The motion also called for Calgary to update its net-zero target to 2050. Many critics lambasted Gondek for the move, falsely claiming she had declared a war on oil and gas. However, during her conference remarks, Gondek highlighted the tangible benefits that come from a government acknowledging the climate crisis and working with community organizations to achieve a Just Transition. Specifically, Gondek outlined how the declaration of a climate emergency led to increased federal funding to address the energy transition, opened Calgary to more clean tech businesses, and achieved new investments in hydrogen.

The important takeaway is that, once political actors across governments, industries, and ideologies commit to a Just Transition, we are able to work together toward building a sustainable future centred on people. In terms of next steps, the most important action is working together and rejecting narratives that seek to divide Albertans into opposing groups. Only by building strong relations with various allies can we move forward delivering an equitable transition for all.

## ■ **Gil McGowan:** *Steps Toward a Just Transition in Alberta*



*"The world is embarking on the biggest peacetime economic transformation since the beginning of the industrial revolution...the question is not if change will happen but how fast. And it's already clear it's happening a lot faster than a lot of defenders of the status quo predicted."*

– Gil McGowan

By examining the continuous decline in oil and gas investments and the steady drop in oil sands employment, we can see that an energy transition is already underway in Alberta's economy. Unlike the previous busts we experienced, these statistics reflect a structural change in Alberta's economy.

Gil McGowan believes there are different ways that we can choose to respond to this transition. We have already seen many disappointing responses from politicians in Alberta, including advancing conspiracy theories, but these approaches do not protect workers from the inevitable energy transition. Instead, McGowan argues that political actors should advance a worker-centric response.

According to McGowan, such a response consists of eight steps:

- 1) leaders must stop lying about climate change and the energy transition;
- 2) we must make distinctions between the interests of corporations and the interests of workers;
- 3) we must be wary of political narratives, even if they are comforting;
- 4) leaders should acknowledge that delay does not only have environmental costs — it also has big economic costs;
- 5) we should be skeptical of oil companies touting technological solutions;
- 6) we need to acknowledge that the burden of the energy transition will not fall equally to all Canadians and that some regions are going to shoulder a bigger share of the burden;
- 7) we should not simply rely on the markets to sort things out; and finally
- 8) we need to ensure that the energy transition is a Just Transition, where workers and citizens are at the centre of the conversation.

## Q&A

## CORE THEMES

**When people are fearful of change, we need to approach them with compassion and give them time to make peace with the transition.**

The concept of loss aversion — that people will fight harder to avoid a loss, even in the face of an equivalent or better gain — can help us understand hostile reactions to the energy transition. We should not blame workers in extractive industries for the broken status quos, but rather approach them with compassion and build relationships with them while also maintaining a critical stance toward the larger institutions that contribute to the climate crisis.

Governments have a responsibility to provide a real plan for a Just Transition, as this will lower anxieties and tell workers where our economy is headed. An example of a compassionate approach is Alberta's coal phase-out, where workers and affected communities were able to express their concerns in townhalls. This provided an opportunity for workers to engage in communal dialogue, begin accepting their loss, and talk about policies that would help their communities.

**All levels of government have an important role to play in providing worker-centric support.**

Municipal governments, despite their smaller scope, can implement various policies to advance a Just Transition. Examples include creating benefits-driven procurement policies and requiring community-benefit agreements for large-scale development projects.

The most important action that municipal governments can take is, arguably, engaging with various stakeholders and clearly communicating to the public about the climate crisis. Municipal actors are well-positioned for this work due to their proximity to on-the-ground developments compared to other levels of government. However, there is an important role for federal and provincial governments to play, specifically in providing active labour market policies that connect displaced workers to new jobs.

**We can address rural-urban divides by reframing the way in which we discuss Just Transitions.**

We must acknowledge that rural Albertans are particularly concerned about losing their livelihoods, which is being amplified through movements like the Canadian trucker convoy. Instead of ignoring this divide, we can begin to address it by talking about a Just Transition through the language of opportunity.

When discussing policy initiatives with rural Albertans, we should emphasize the economic opportunities created by the shift to renewable energy, rather than focusing on the losses of an energy transition. Emerging sectors, such as wind, solar, and hydrogen energy, offer new pathways for jobs that we should highlight in discussing what a Just Transition means for workers.

## PANEL 2

### Leading Global Practices for Just Transition

Governments around the world are moving forward with the development of policy and actions for Just Transitions of their economies. In this session, participants learned how other countries are dealing with this process — the challenges they've experienced, the solutions they've encountered, what worked best. Our distinguished panel of international experts shared their knowledge and experience leading national and international commissions that put people at the centre of climate, social, and economic policy development.

#### MODERATOR

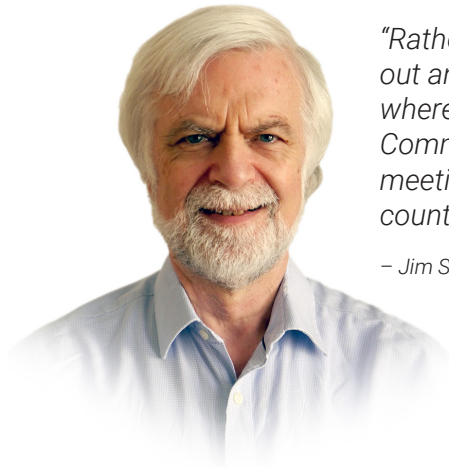
- Tamara Krawchenko, associate professor in the School of Public Administration at the University of Victoria

#### PANELISTS

- Jim Skea, professor of sustainable energy at the Imperial College in London and chair of Scotland's Just Transition Commission
- Samantha Smith, director of the International Trade Union Confederation's Just Transition Centre
- Brian Motherway, head of the energy efficiency division at the International Energy Agency

## PANELIST STATEMENTS

### ■ **Jim Skea:** *Scotland's Just Transition Commission*



*"Rather than waiting for people to come to you, you've got to go out and try to engage with people where they're congregating or where they're acting together, which is why [the Just Transition Commission] really tried to follow that approach of having our meetings out in different communities, in different parts of the country."*

– Jim Skea



In terms of global practices, Scotland's policies and advocacy have set it apart as a world leader on Just Transition. Much of this work is the result of their Just Transition Commission, created in 2018 and chaired by Jim Skea. In his presentation, Skea provided an overview of the work that the commission has accomplished to date and their plans for future work.

The purpose of the commission was to reconcile trade union and environmental movements behind common policies that would advance the energy transition without leaving workers behind. To accomplish its goals, the commission includes members from various backgrounds, including representatives from trade unions, environmental NGOs, and private industry. In conducting their work, they met at various locations across the country, such as oil refineries or places where coal mines were closed, to directly engage with communities.

As a result of their efforts, the commission produced two initial reports, a Green Recovery Report, and, most importantly, their final report. In the final report, there were 24 unique recommendations under the umbrella of four broad themes:

- 1) making an orderly, managed transition;
- 2) equipping people with the skills to take advantage of the transition;
- 3) empowering and strengthening local communities; and
- 4) sharing benefits widely and ensuring burdens are distributed based on the ability to pay.

Subsequently, the Scottish government accepted all 24 recommendations and appointed a minister for Just Transition, Employment, and Fair Work. This was followed by the creation of a Just Transition planning framework and Just Transition plans for specific economic sectors. The Just Transition Commission's primary job now is providing scrutiny and advice to the government, along with monitoring their progress. This is done through an annual report written by the commission.

While there are plenty of policies advanced by Scotland's Just Transition Commission, Skea's presentation also emphasized the lessons others can learn from the commission's process for collecting information. Specifically, the commission demonstrated the benefit of directly involving workers in the discussions, such as by holding meetings in locations across the country where workers and communities come together.

Another good example of this is the Scottish Climate Assembly, a citizens' assembly created by the government to get recommendations around Just Transition from everyday citizens. These processes ensure the government's approach to Just Transition is people-centric and accessible.

## ■ **Samantha Smith:** *Insights From the Labour Movement*



*"When you see processes where there's no unions there and employers are saying 'we don't really do that organized labour thing,' then that's immediately a red flag ... More to the point, as those of you from the labour movement will know, if we're not in the discussion from the start, we're probably not going to be happy about the outcome."*

– Samantha Smith

As many panelists acknowledged throughout the conference, workers face unique barriers in the process of a Just Transition. Samantha Smith, through her work with the Just Transition Centre, has many insights into what practices best allow for countries to meaningfully bring workers into these complex discussions. As outlined in her remarks, in order to ensure a Just Transition, it is crucial for governments to engage in social dialogue with unions and employers when making decisions.

The concept of social dialogue has long roots in the labour movement and has been used to ensure that the voices of workers are heard in negotiations, resulting in outcomes that benefit all actors at the table, rather than just the interests of industry. This remains important for negotiations around a Just Transition, as unions bring expertise into labour market policies and know how to deliver training programs that best serve workers.

When unions are included at the table, it's not only their members that benefit but all community members. This is because labour representatives advocate for fair and just conditions of work for all, regardless of union status. Another important step in Canada's Just Transition is that we need to bring First Nations, Métis, and Inuit communities into the social dialogue process — not as special interest groups but as nations whose perspectives are on par with provincial, territorial, and federal governments.

Beyond social dialogue, there are other important lessons that are applicable to the Canadian context. The first lesson is that energy sector workers are usually suspicious of a Just Transition. This is primarily due to the unjust impacts experienced by workers in previous economic transitions. As a result, instead of focusing on climate change and job losses, conversations around Just Transition should focus on emerging new jobs and the safety net that is in place for workers in impacted communities.

Another key lesson is that the cost of a Just Transition should not fall on working class families. Instead, governments should finance this cost through the implementation of a "fair tax" system that asks corporations and the wealthy to pay their fair share.

The final lesson is that this is a process which has to be driven by the national government. While bottom-up efforts are important, the scale of the climate crisis and energy transition requires a larger role for the state.

## ■ **Brian Motherway:** *Best Practices for a People-Centred Transition*



*"Clean energy transitions are for people and about people. We want to transform the energy system so that we can protect people from the worst realities of climate change, so we can create new high-quality jobs, so we can improve air quality in cities, so we can provide energy access and affordable energy to more people than have it today. At the heart, it really is a people-centred project."*

– Brian Motherway

Brian Motherway began his presentation by explaining that we are still far from a pathway to achieve net-zero emissions by 2050, despite an increase in the number of governments committing to taking action on climate change. Countries around the world must make substantial progress on climate commitments in the next few decades.

We will need to accomplish many important milestones as we progress toward a net-zero future. To reach the milestones, Motherway asserts that we need to continually bring more people on board with a Just Transition, and that the best way to accomplish that is by creating people-centred policies.

To create people-centred recommendations and policies, the International Energy Agency established the Global Commission on People-Centred Clean Energy Transitions. This commission brought together policy-makers from around the world into dialogue with representatives from labour unions, youth groups, and other important segments of civil society.

Through this dialogue, the commission made a set of recommendations to ensure a Just Transition remains people centred. The recommendations fell into four broad themes:

- 1) creating decent jobs and worker protection;
- 2) providing social and economic development;
- 3) upholding equity, social inclusion, and fairness; and
- 4) including community members as active participants.

Ultimately, these recommendations underline that transitions cannot just be about technocratic reform; instead, they must be about maximizing the creation of decent jobs and social programs tailored to best support each

community. The best way to accomplish this tailoring, as mentioned by earlier panelists, is to implement robust engagement processes and dialogue amongst stakeholders.

## Q&A

## CORE THEMES

**Ensuring community engagement is inclusive and accessible is an important step in the Just Transition process.**

We must recognize that people have differing levels of capacity, which will affect their ability to equally participate in the engagement process. The risk of excluding specific segments of the community is high. If not properly addressed, this can lead to reactionary social movements in response to the energy transition, such as the Yellow Jacket protests in Paris.

To avoid this, we must reject the conventional tendency of waiting for times of crisis to then assemble stakeholders. Instead, political actors should proactively provide direct engagement by meeting people in their own communities.

Governments and civil society leaders can also use trusted intermediaries, such as local elected officials, in the dialogue process. However, we must remain cautious when using intermediaries, as the people and institutions that residents trust vary by political context. When properly implemented, this work can be successful and inspire other social movements to enact similar forms of direct engagement. Good examples include the townhalls held during Alberta's phase-out of coal-fired electricity, and the use of citizen assemblies in Scotland.

**Labour unions can advance a Just Transition through their collective agreements, resulting in better jobs and a better society.**

Unions can advocate for Just Transition provisions in their collective agreements. These provisions can include committing a company and its employees to the International Labour Organization's 2015 Guidelines for a Just Transition, which is a key resource for the trade union movement.

Local labour unions can negotiate provisions around extended severance pay and an extended layoff notice period into their collective agreements. These steps help provide security to workers who lose their jobs in the transition and provide an initial foundation for them to begin moving forward. Local unions can also negotiate provisions around skills training, as employers should pay for the training to ensure their workers receive employable skills on the job.

Ultimately, the overarching goal should be getting employers to commit to the three Rs: retain, retrain, and redeploy. Organizations should retain their

own employees in the transition, pay to have them retrained, and redeploy them to new parts of the company when necessary.

**Fairly distributing the cost of a Just Transition is not straightforward and requires us to consider different factors.**

One factor we need to consider is the individual circumstances of different economic sectors. For workers in wealthier, extractive industries, we should not shame them for having a good livelihood. Instead, we should ensure these workers receive the proper training to equip them with transferable skills and that their shift to new sectors is met with equal tradeoffs, either financially or in their quality of life.

For low-wage sectors, it is important to ensure they receive proper support from their employers. It is also necessary to consider the fair distribution of burden beyond just the division of worker productivity and wealth, and to ask why other parties are not paying their fair share of the burden. At the domestic level, this requires asking companies and the wealthy to pay more in taxes. At the global level, this requires asking wealthier countries, who contribute more to the climate crisis, to recognize and address the disparity between themselves and poorer countries. This can be done both through symbolic actions and additional financial support.

## PANEL 3

### Engaging Impacted Communities in Transition

The net-zero transition presents an opportunity to address the systemic inequalities that have historically existed in the traditional energy system. This panel shared considerations for building the net-zero economy in an equitable, affordable, and accessible manner. The discussion focused particularly on two specific groups – women and Indigenous communities – and presented the findings from a Pembina Institute report that examines coal transition programs and shows how the lessons learned from the coal phase-out can inform Just Transitions in different contexts.

#### MODERATOR

- Isabel Altamirano-Jiménez, professor of political science at the University of Alberta, and Canada research chair in comparative Indigenous feminist studies

#### PANELISTS

- Angele Alook, assistant professor in the School of Gender, Sexuality and Women's Studies at York University
- Grace Brown, senior analyst at the Pembina Institute
- Sarah Winstanley, analyst at the Pembina Institute

## PANELIST STATEMENTS

### ■ **Angele Alook:** *A Decolonial Just Transition*



*"For me, a caring economy is moving away from profit-based, growth-based resource extraction economies and moving away from economies that bring death to Indigenous communities. And moving toward caring economies that are based on life-sustaining principles in Indigenous communities, economies based on caring, sharing, and reciprocity, where we have social systems in place to take care of our most vulnerable from cradle to grave, in all stages of life."*

– Angele Alook

As the status quo begins to crumble, we must start to imagine what a new world beyond extractive economies might look like and what values might underpin the new socio-economic systems. Angele Alook's presentation begins this work by exploring what a decolonial Just Transition in Canada could be if fully embraced by governments and social movements.

The process of a decolonial Just Transition must begin with two steps. The first is a return to treaty rights. Governments should acknowledge and respect the rights outlined in treaties and the inherent rights of Indigenous peoples, as laid out in documents such as the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). In the Alberta context, this step means recognizing inherent rights of Indigenous nations, as well as respecting treaties 6, 7, and 8.

The second step involves reparations for Indigenous peoples in the form of Land Back, required due to the oppression their communities continue to face under settler colonialism. What Land Back means can vary depending on the context of each Indigenous community. Broadly speaking, it refers to restoring the freedom, dignity, and livelihood of Indigenous peoples, as well as demonstrating respect for the land, through proper compensation.

Once Canadians take these first steps, we can begin to build what Alook calls a "caring economy." Drawing upon Indigenous understandings of the economy, as well as feminist and labour scholarship, a care economy refers to an economic system where the highest values are reciprocity and care for the most vulnerable members of society. This requires deep investments in public services, such as childcare, healthcare, and long-term care.

The shift from the status quo to caring economies is underpinned by six principles of a Just Transition, two of which Alook described in detail. The first principle is decent work, based upon the Cree concept of miyopimatisiwin, which means "living a good life with balance between family

and work.” This requires supporting a work-life balance, recognizing the value of unpaid labour, and acknowledging the contributions of public-sector care jobs.

The second principle is solidarity, based upon the Cree concept of *sitoskatowin*, which means “coming together in mutual support.” This final principle necessitates various social movements, including the labour, environmental, and Indigenous social justice movements, to stand together in addressing structural injustices.

### ■ **Grace Brown:** *Canada Beyond Coal*



*“When Canada announced that we could phase out coal power by 2030, that gave provinces a hard deadline to plan toward ... Now the pathway to coal phase-out is clear. So, while communities may choose to take different approaches to addressing the transition, it’s clear that clear communication about the goals, pace, and pathways of energy transition measures provide certainty around which the communities can plan for the future.”*

– Grace Brown

Federal regulations adopted in 2012 began the process of phasing out coal power generation across Canada. In 2015, the Government of Alberta accelerated the coal phase-out in the process as part of the province’s Climate Leadership Plan. Through subsequent policies, Alberta is now on track to phase out coal by 2023, seven years prior to the federal government’s own target.

In her conference remarks, Grace Brown drew attention to the lessons that other governments can learn from the phase-out and how to apply these lessons to a Just Transition. Considering the scale of the transition and the impacted communities, strong federal and provincial policies are necessary to support workers in shifting away from our current extractive economy. To ensure an orderly transition and address current socio-economic inequities in the shift, governments can take the following actions:

- 1) provide good, long-term jobs for Canadians;
- 2) support the growth of alternative, local industries; and
- 3) provide financial support for a Just Transition.



Many lessons emerge when we examine the coal phase-out in Alberta. The first is that governments need to clearly communicate key targets and pathways to affected communities, providing people with time to plan their lives and adapt to the pace of change. Next, governments need to involve all stakeholder groups early in transition negotiations, to ensure they are on board with the direction being taken.

Governments must also include transition financing mechanisms in policy design, making it clear who will pay for the development of projects necessary for a transition. Finally, impacted communities should receive priority for clean energy procurement programs, with a specific focus on Indigenous-owned companies and resources. This will help keep jobs in the local communities that are disproportionately impacted by an energy transition.

### ■ **Sarah Winstanley:** *Creating a Gender-Equitable Transition*



*“The project arose from knowing that we need to centre the diverse experiences of women as we transition to cleaner energy systems in Alberta. If we don’t take action to address these imbalances while we transition, we know that the same issues will keep happening because they’re entrenched and they’re historical.”*

– Sarah Winstanley

As we transition away from extractive economies, we must take action to ensure that systemic injustices facing oppressed social groups are not replicated in the new economic systems. The fossil fuel industry is already one of the least gender-equitable sectors in the country in terms of employment and pay. For a Just Transition to work, we must address these inequities. While the renewable energy sector is better than oil and gas in terms of representation, we know this is still far from parity. Before we can move to solutions, Sarah Winstanley asserts we must understand the barriers facing women in the fossil fuel industry and how they impact our communities.

There are five barriers that women encounter in the energy sector, which are experienced throughout every stage of their careers. The first barrier is a lack of access to opportunity, in which chances for professional advancement are not extended to women. Many different variables factor into this barrier, including the low participation rates of women in STEM programs, professional networks informally excluding women, and “benevolent sexism” throughout the development of a woman’s career.



The second barrier is a lack of good jobs for women. This is rooted in a gender difference around what constitutes a good job, as women tend to require greater flexibility, a better work-life balance, and better work provisions, such as childcare. This is primarily caused by gendered expectations placed upon them in other areas of their lives.

The third barrier is an inability to advance, which is mainly driven by a lack of access to informal mentorship opportunities.

The fourth barrier is an income gap between men and women. Much of this is due to feminized roles, such as secretaries, being undervalued and underpaid, but women in similar roles to men are still likely to be paid less than their male counterparts.

The final barrier to women is the industry culture, as the energy sector remains largely dominated by a traditionally masculine “frontier” culture that excludes women and other marginalized social groups, and results in microaggressions when women are in the workplace. A Just Transition will not be possible if we cannot begin to find policies that can address these barriers.

## Q&A

## CORE THEMES

**Indigenous forms of knowledge are important for implementing a Just Transition.**

Technocratic solutions alone are not enough to respond to the impending climate crisis; in addition, they run the risk of continuing to marginalize historically oppressed communities in new economies. There are already examples of this occurring through Indigenous communities being displaced from their land or having their treaty rights infringed upon by the placement of wind turbines. This underlines a need to include local Indigenous people and knowledge systems in implementing climate solutions. Indigenous systems of knowledge can enable us to reframe the future skills needed in a transition and offer us new tools for imagining what new socio-economic structures could look like.

**Just Transitions require us to consider local and global contexts.**

If we are not careful about considering the context of how transitions happen, we can find ourselves in a new low-carbon economy that is as unjust as our current local, national, and global economies. This requires us to consider the local context and how transitions will impact workers in our own communities.

To ensure that equity is included in the energy transition, equity-seeking groups and communities should be included in the process of project development and regional planning. Otherwise, business and political leaders risk engagement and consultation becoming seen as an afterthought.

Another important step, however, is considering power relations in the global context. Wealthy countries have produced more greenhouse gases and thus contributed more to climate change, so they have a moral responsibility to help poorer countries pay for the energy transition and climate adaptation and mitigation.

## PANEL 4

### Transforming Canada's Energy Economy

The Canadian economy — particularly in Alberta — has been strongly connected to the fossil fuel industry for decades, so our transition to a net-zero carbon model is bound to be complex and resisted by powerful corporations and a considerable portion of the public opinion.

#### MODERATOR

- Shannon Daub, director of the Canadian Centre for Policy Alternatives BC Office

#### PANELISTS

- Ian Hussey, research manager at the University of Alberta's Parkland Institute
- Hadrian Mertins-Kirkwood, senior researcher at the Canadian Centre for Policy Alternatives National Office
- Lori Thorlakson, professor of political science at the University of Alberta and co-primary investigator of the Future Energy Systems project

## PANELIST STATEMENTS

### ■ **Ian Hussey:** *Alberta's Energy Transition and Economic Transformation*



*"Oil sands production growth has been decoupled from employment: as production goes up, jobs are not going up ... As a result of economic and technology trends, Alberta has 27,000 fewer oil and gas jobs now compared to 2014. Nationally, over 40,000 oil and gas jobs simply don't exist anymore. Failure to plan for the ongoing energy transition is a major threat to Alberta workers, communities, and the economy."*

– Ian Hussey

While the Government of Alberta continues to promote the oil and gas industry in the province, Ian Hussey's remarks explained how the industry is reducing capital spending and cutting jobs through accelerating automation across their extractive facilities and back offices.

Hussey explained that oil and gas automation has been happening for a decade and was sped up by the 2014 oil price crash and the 2020 pandemic. The result is the decoupling of fossil fuel production and employment, as less employees are needed to produce increasing volumes of oil and gas. The Alberta oil and gas industry employed almost 26,000 fewer workers in 2021 than in 2014, and capital investments are down by two-thirds. Yet, production has steadily increased and continues to increase.

There are reasons to be optimistic about the changes ahead, as Alberta continues to make progress toward a lower-carbon economy. One study shows that, regardless of the path taken to net-zero, Alberta's economy is projected to grow. Instead of refusing to act, Alberta stands to benefit from many emerging economic sectors if we properly plan for the transition.

Many of these opportunities are directly related to work in emerging energy sectors, such as lithium, hydrogen, biofuel production, and petrochemicals. We can also create jobs and accelerate the decarbonization of Alberta's economy if governments improve transmission connections between provinces, allowing Alberta to access British Columbia's hydroelectrical power.

## ■ **Hadrian Mertins-Kirkwood:** *The Tale of Two Energy Transitions*



*"The key point here is we can either manage the transition, where we don't actually have a lot of unforeseen job loss, or you can just say, we're going to plow ahead until oil prices crater or a government changes its mind. Then, you're going to see a huge amount of disruption. But if we actually plan it and manage it, we don't have to experience the hardship that a lot of people are worrying about."*

– Hadrian Mertins-Kirkwood

Instead of thinking in terms of a single energy transition, Hadrian Mertins-Kirkwood argues we should see it as two different transitions: one, a shift away from fossil fuels, and two, the move toward carbon-neutral and zero-carbon sectors. Once we have this framework in mind, Mertins-Kirkwood asserts that we can create and implement solutions that better meet the needs of workers, depending on their circumstance.

Thinking in terms of two transitions allows us to formulate two corresponding types of policies to support workers: “parachutes” and “ladders.” Parachutes are reactive Just Transition policies meant to minimize the harm of shifting away from fossil fuels, providing a soft landing for those who are negatively impacted. Examples of these policies include income support and retraining efforts. The other type of policy, the ladders, are proactive Just Transition policies meant to maximize the benefits of shifting to a clean economy. Examples of these policies fall under industrial policy and include green jobs creation and workforce development.

While both types of policies are important, Mertins-Kirkwood explains that ladders are more important for creating successful Just Transitions and, as such, governments should prioritize them. This is because, when the ladders are long enough, there is not a need for parachutes — the job-creation potential of the emerging clean economy is larger than the risk of phasing out fossil fuels.

If we take advantage of this opportunity, this will lessen demand for reactive policies. Parachutes are good at providing support to current workers but, ultimately, they leave people on the ground, without help to enter the new labour market. Additionally, the narrow Just Transition policies offered by parachutes can worsen inequality by only helping current workers and not helping marginalized groups grasp the real benefits of a clean economy. To accomplish this goal, governments need to invest in “ladders” of workforce development and diversification.

## ■ **Lori Thorlakson:** *Beliefs About the Future of Oil and Gas Shape Our Energy Transition*



*"There is more of an appetite for energy transition among the Albertan public than current events or our elite discourse would suggest. Overcoming opposition to energy transition really comes down to moving opinion on our beliefs about the future of the economy. I think it really comes down to answering this question: what is the growth story of the 21st century?"*

– Lori Thorlakson

In Alberta, energy transition is often posited as a threat to our livelihood and economy. This is best seen through the elite messaging of politicians and government institutions such as the Canadian Energy Centre. In her presentation, Lori Thorlakson focused upon how our beliefs about climate change and the fossil fuel industry, such as those expressed in this elite messaging, shape individual attitudes toward a Just Transition. To measure this, she and her research team conducted a survey of 2,634 Albertans after the 2019 election, examining their beliefs around oil and gas, climate change, and the future of Alberta's economy.

In her findings, Thorlakson found that Albertans are more supportive of the energy transition than that elite messaging would imply. In fact, there was a strong support for moving toward emerging economic sectors. However, this is combined with the strong idea that we should expand oil and gas, with respondents expressing great pride in the oil and gas industry as a whole.

Ultimately, what these results demonstrated is that, while beliefs over climate change matter, the most important variable influencing Albertans' attitude toward an energy transition is their beliefs about the future of oil and gas. Interestingly, this belief and pride in fossil fuels was more indicative of opposing the energy transition than actually working in the industry. As such, to overcome opposition to an energy transition, social movements must aim to move public opinion on what the growth story of the 21st century is. Until opinions change about what the future of Alberta's economy is, opposition to energy transition will remain.

## Q&amp;A

## CORE THEMES

**Breaking down the false dichotomy between the environment and the economy.**

Too often, narratives pit these two concerns against one another, positing that acting on environmental concerns is intrinsically bad for the economy. Yet, as the research presented at this conference shows, there are big economic opportunities for Albertans in emerging economic sectors. In fact, many studies have demonstrated the massive economic costs associated with climate inaction, an approach that will doubtlessly leave workers behind.

Planning and managing for the transition offers more benefits than inaction does, giving us time to prepare for the economic impacts. This is why we need to escape this polarizing debate of “environment versus the economy” and improve energy and climate literacy to empower Albertans to have more nuanced discussions about the energy transition.

**The long-term benefits of the emerging clean economy will outweigh the short-term negative impacts of the energy transition.**

While forecasted estimates vary across studies, the research literature generally indicates that the global GDP could temporarily fall by about 2% in the early stages of the energy transition. This is mostly because new economic sectors require some time to ramp up and to build new infrastructure, which is less economically efficient than using existing infrastructure. These forecasts also indicate that this small, temporary decline in global GDP will be followed by a period of economic growth that will result in global GDP exceeding the current level by the end of the century. Importantly, these negative economic impacts may not be strongly felt in Alberta, as another study shows that Alberta’s economy will continue to grow regardless of the path taken to reach net-zero (see Bataille et al. 2021).

**When people view energy transition as a threat to their identity, this can fuel reactionary movements that oppose climate action.**

This experience is best identified as “petro-populism,” and it presents an important challenge to implementing a Just Transition in Alberta. Much of this is powered by the inability of many Albertans to imagine their lives without oil and gas, something that is reinforced by the elite discourse in the province.

There are a few steps we can take to counteract this movement. The first is framing Just Transition in a positive way, as a shift that can help bring stability to many working-class families. Another step is taking the conversation beyond just fossil fuels and emphasizing the economic opportunities offered by new economic sectors. Finally, the last action we can take is implementing meaningful action now, to provide support to vulnerable communities and demonstrate the benefits a Just Transition can bring to our communities.

## PANEL 5

### Workers Leading a Just Transition

Workers on the front lines of the energy transition need to lead the discussion about how best to transform Canada's energy economy. The Canadian union movement has been instrumental in developing the concept of Just Transition and has considerable experience in its implementation in different sectors of the economy. This panel discussed the key principles and actions planned by the labour movement to support workers and their communities through the transition to a net-zero carbon economy.

#### MODERATOR

- Jamie Kirkpatrick, program manager for Blue Green Canada

#### PANELISTS

- Lyle W. Daniels, community and Indigenous director, Building Trades of Alberta
- Meg Gingrich, president of Blue Green Canada and assistant to the national director, United Steelworkers
- Ken Bondy, national representative for Unifor

## PANELIST STATEMENTS

### ■ **Lyle W. Daniels:** *Bringing Indigenous Youth Into the Economy*



*"If there are opportunities for young people, it has to be for an apprenticeship, it has to be for a career and not just [a situation where they're] used for labour ... Instead, we should try to develop our young people to become part of the system and make them part of the whole Just Transition attitude."*

– Lyle W. Daniels

Historically, Indigenous peoples in Alberta have been excluded from reaping the economic benefits of development. Much of this is due to the intergenerational trauma inflicted upon Indigenous communities by settler colonial institutions, which places them at a socio-economic disadvantage. In his role at the building trades, Lyle W. Daniels aims to change this reality through creating more opportunities for Indigenous youth to get involved both in the trades and in emerging economic sectors. This involvement is a tangible way to break down the colonial cycles imposed on Indigenous communities.



To accomplish that, we must start from a place of reciprocal relationality with the land. Indigenous peoples have always had a special relationship with the land. By learning from this attitude, we can begin restructuring the economy in ways that respect the environment we live in.

Next, we need to reject the current economic practices of exploiting Indigenous youth for cheap labour. Under the status quo, this is too often the only opportunity afforded to Indigenous peoples and it often contributes to the breakdown of communities. Instead, we need to take action to create opportunities for young people through the creation of targeted training programs and through mentorship programs. Importantly, we must ensure that these opportunities exist both on and off reserves, allowing for youth to find jobs in their communities. Without this, we risk forcing Indigenous youth to choose between staying in their communities and getting a job.

### ■ **Meg Gingrich:** *Making a Just Transition That Works for Workers*



*"The larger narrative that I hear is one where workers don't care about the environment or that they're trying to maintain industries that are really harmful. No: they just want to keep their job and have stable employment. If you don't get worker buy-in from the very first stage, [the process] can really just go astray and policies or investments that could have been good end up not getting the support they need."*

– Meg Gingrich

Progressing further into the energy transition, we must ensure that the experiences of workers are not treated as an afterthought. In her remarks, Meg Gingrich emphasized the dangerous outcomes that occur when the voices of workers are not included in creating Just Transition policies. She made this clear by pointing to the example of a steel plant in Sault St. Marie that received a multimillion-dollar investment to upgrade their plant and phase out the coal-fired steel process. Through this investment, the government hoped to create 500 new jobs, while simultaneously decarbonizing their work.

While these job creations came with job losses from people with certain skills, there was a belief this would help bolster a Just Transition. However, labour unions were not included in the consultations around the investment. As a result, the reaction from workers was deeply negative, with many opposing the investment outright. For Gingrich, this is a prime example of a missed opportunity to bring workers into discussions around Just Transition.



Workers must be involved in every level of the decision-making process so that governments and employers can ensure that their plans align with the needs of workers. When workers are at the negotiating table, they are better at securing investments that strengthen local communities, offer retraining, and create decent job opportunities. Workers are often excluded due to a false narrative that they do not care about environment or taking climate action. This is not true — workers do care about the environment but they also want to have a stable, well-paid job to support their livelihood. When we forget about this, it is too easy to leave workers behind and their needs unfulfilled.

### ■ **Ken Bondy:** *Strengthening Workers and the Need for Government Action*



*"If you are looking at Just Transition and seriously looking at making a change, and you do not have a worker involved in that discussion, then you're doing it wrong. The Just Transition process is about the impacts on workers. How can you discuss and theorize about how it's going to affect workers if you don't have those workers at the table?"*

– Ken Bondy

In conversations around Just Transition, we must not only ensure that workers are at the table but also that workers remain united. As Ken Bondy explained in his remarks, when workers are divided, whether by region, sector, or any other demographic, we weaken the collective power that we hold to advocate for bold change. It's important to ensure that workers remain in solidarity with one another, looking out for each other's interests while in negotiations, instead of securing wins for only small factions of the labour market. To make sure the most vulnerable are not left behind, we should hold townhalls and listen to the communities most affected by the energy transition.

With workers united under a common cause, it's easier to force governments to act on implementing a Just Transition. Looking at the incumbent federal government, we see nothing but slow action, with the Just Transition Act promised in 2019 remaining an unfulfilled promise.

In the past, we know that neoliberal institutions have acted to prevent governments from enacting strong, worker-centric policies that would support a Just Transition. Countering this requires that we build coalitions and demand real action from those in power. In our workplaces, this means bargaining for Just Transition provisions in our collective agreements, such as a provision committing companies to retain and retrain their employees during the transition.

From the federal government, we need a Just Transition Act but we need to go further. Governments should appoint a Minister of Just Transition to guarantee they will follow through on their promises. We also need governments to start a dialogue with employers and unions about how to best transition. Finally, governments should embrace ideas that ensure workers receive the socio-economic support they need to survive the transition. It is not enough to merely plan for workers in extractive economies to retire — we need bold plans that provide a pathway for the next generation of workers to get involved in emerging economic sectors.

## Q&A

## CORE THEMES

**We need to pressure different levels of government to move forward with bold, transformative plans.**

As Bondy emphasized in his remarks, one of the steps for the federal government should be appointing a Minister of Just Transition, as well as creating a Just Transition Commission. These steps would commit the government to enacting a bold framework and creating a tangible plan for managing the energy transition.

Beyond the federal level, municipal governments offer a strong pathway for action, due to their close community connections and proximity to their constituents. It is important that workers build person-to-person relationships with people in power and share the realities of working families with politicians. A last note is that trade unions and social movements should find ways to bring people from underrepresented communities into these conversations, ensuring that people in power take their lived experiences into account when creating solutions.

**Including workers in the discussions results in more just outcomes for all community members.**

Capitalism externalizes workers from policy-making processes while also cutting them off from one another in the process of production. The end result is the establishment of policies that do not work for communities and that amplify existing structural inequalities. When labour unions are at the negotiating table, they are able to help governments and employees understand the challenges facing their communities. This goes beyond the existing membership of unions and encompasses broader communal concerns.

One example is the labour movement's opposition to the Temporary Foreign Worker Program, which allows companies to rely on cheap, foreign labour. These workers are rarely unionized and far too often are subjected to unjust working conditions. Instead of allowing companies to continue exploiting

foreign labour, unions fight for all workers to receive well-paying, decent jobs with fair terms of work. This includes non-unionized labourers who came to Canada for work and who deserve better treatment than the practices shielded through the Temporary Foreign Worker Program.

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