

EXECUTIVE SUMMARY

As Wayne Gretzky famously said, **skate to where the puck is going, not to where it has been**. This is good advice for Alberta as North America competes with Europe and Asia for first place in the race to build new economies based upon clean energy technologies. Whether Alberta plays on the first line, the fourth line, or watches from the press box depends upon how quickly Alberta moves to take advantage of job-creating opportunities – in particular those created by the US Inflation Reduction Act – that will mostly disappear by the end of the 2020s. This Alberta Federation of Labour report describes where the puck is going and how to put it in the net.

But the pace of today's energy game is as different from the fossil fuels past as Gretzky's NHL of the 1980s and 1990s is from modern hockey, which is why the time for modest tinkering with the Alberta economy is over. And with one stroke of a pen, the USD\$369 billion Inflation Reduction Act changed everything. President Joe Biden pledged that by **2030 America will erase China's substantial lead in the manufacturing** of solar panels and wind turbines, battery storage, and many other clean energy technologies that will drive the 21st century economy. Overtaking China will require massive investments in infrastructure, supply chain development, and worker skills. The US is now taking a Team North America approach and Canada is expected to be a key player. **Alberta, as the star of our country's energy sector, will be counted upon to lead Team Canada.**

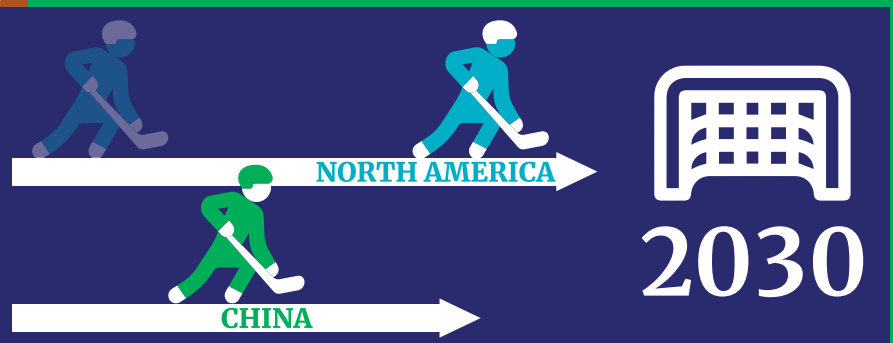
The star now needs to step up, which is why in this report the **AFL is re-imagining the provincial energy economy**. If the Alberta government, energy companies, indigenous communities, civil society, and the labour movement adopt this vision of an Alberta ready and able to compete in the brave new energy world, **the 200 000 jobs that will be created according to AFL modelling, will usher in an era of prosperity like Alberta has never seen before.**

The key to this future lies in the past with **Peter Lougheed's ideas about the role of government**. The former Premier believed in what economist Mariana Mazzucato calls the **"entrepreneurial state"** – a government willing to lead, take risks, and demand a fair return for public investment. In our view, equity and a seat at the board table are a fair price to pay when taxpayers lower risk for private capital. Lougheed used this approach 50 years ago when he created the Alberta Energy Company and negotiated a big stake in the oil sands for Albertans.

We framed the big ideas using Mazzucato's challenges and missions model. There are **seven "missions"** and **seven key policies** to help Alberta achieve those missions.

SKATE TO WHERE THE PUCK IS GOING: AN INDUSTRIAL BLUEPRINT FOR JOB CREATION & PROSPERITY

LEAD IN THE MANUFACTURING OF CLEAN ENERGY TECHNOLOGIES



HYDROCARBONS AND CO₂-BASED MANUFACTURING

MISSION 1

1. **Significantly expand** the funding for research and development of **new processes** for manufacturing products and low-carbon fuels from **bitumen and captured CO₂**;
2. Establish a **world class bitumen and CO₂-based manufacturing** sector in Alberta;
3. **Expand Alberta's world class petrochemicals** cluster, especially the production of **recyclable plastics** and other environmentally-friendly products.

ALBERTA WORLD CLASS

OIL & GAS PRODUCTION

MISSION 2

1. **Adapt oil and gas** production to the low-carbon future while lowering emissions to achieve **net-zero by 2050 or sooner**;
2. Mitigate industry's **environmental liabilities**;
3. **Preserve** as many existing **jobs** as possible.

NET-0 2050
PRESERVE JOBS

ALBERTA POWER SECTOR IN THE 2ND AGE OF ELECTRICITY

MISSION 3

2. Increase power generation by a minimum of **two to three times** current capacity;
3. Build out **east-west** transmission with other provinces while advocating for a **Western Canadian regional** electricity market;
4. **Decarbonize the grid** while expanding generation and transmission;
5. Use abundant, low-cost, clean electricity as leverage **to build and attract new industries**;
6. Invest in "wild card" electricity technologies like **geothermal**



7 MISSIONS



HYDROGEN/ SUSTAINABLE FUELS

MISSION 4

1. Significantly **expand hydrogen** production, transitioning from blue to green hydrogen **by early 2030s**;
2. Expand hydrogen's role in the **electricity system**;
3. **Continued development** of hydrogen **hubs**;
4. **Establishing a role** for hydrogen in **long-haul trucking**;
5. Establish a **sustainable aviation fuel industry** in Alberta.

2030

H₂

ELECTRIC TRANSPORTATION, BATTERIES, CRITICAL MINERALS/METALS

MISSION 5

1. Support **growth of electric vehicle supply chain** in Alberta, especially battery minerals mining/minerals refining and processing;
2. Support the **emergence of new personal and public transportation models**, especially in the province's cities where public transit already exists;
3. **Build out** provincial electric vehicle **charging infrastructure**, encourage **adoption** of light, medium, and heavy duty electric vehicles.



RETROFIT RESIDENTIAL, COMMERCIAL BUILDINGS

MISSION 6

1. **Decarbonize** Alberta's building stock, **creating** thousands of **jobs** in the construction and related industries.



INFRASTRUCTURE - NORTHERN ECONOMIC CORRIDOR

MISSION 7

1. Work **with the federal government** and other provinces to **develop** a Northern Economic Corridor, with a **focus on energy**.

THE CASE FOR (A LOT) MORE PUBLIC OWNERSHIP

POLICY # 1

An entrepreneurial state must lead Alberta's economic transformation. Equity for the Alberta government is the cost to private capital of having the state de-risk investments. Crown corporations should lead investment in the 21st century energy economy.

INVESTMENT
21ST CENTURY

INNOVATIVE FINANCING TOOLS

TAX REFORM FUNDS
TIER SURPLUSES
WINDFALL TAX

POLICY # 2

This report suggests **five sources for financing energy investment**. Budget surpluses. Windfall tax on oil and gas. Technology Innovation and Emissions Reduction (TIER) regulation. Income and corporate tax reform. Federal funds, including a new Climate Emergency Just Transition Transfer.

LABOUR MARKET POLICY

POLICY # 3

Disruption should not become an opportunity for employers to de-skill the trades and cut the cost of labour. Unions must be at the table when policies are designed. Governments **must develop a workforce strategy** that delivers on the industrial policy outlined in this report.

WORKFORCE STRATEGY

7 POLICIES

POLICY # 5

INFRASTRUCTURE INVESTMENTS

Both Canada and Alberta must vigorously invest in **new energy-related infrastructure**.

CANADA \$ ALBERTA

POLICY # 4

COMMUNITY BENEFIT AGREEMENTS

CBA's cover a variety of policy areas – employment, social procurement, the environment – and ensure that **local workers** and **communities** receive tangible **benefits from development**.

LOCAL WORKERS COMMUNITIES BENEFITS

PARTNERSHIPS

POLICY # 6

Consult and **collaborate** closely with labour and civil society organizations. **Build relationships** with **Indigenous Peoples**, which is a prerequisite for building investment and business partnerships. **Repair the relationship** between Alberta and the Government of Canada so that **our province can substantially benefit** from federal policies and funding intended to accelerate decarbonization and the energy transition.



CANADA ALBERTA

SUPPORT INDUSTRY WITH GOVERNMENT PROCUREMENT

POLICY # 7

Governments are the largest purchasers of goods and services in Canada. **Strategic procurement to help Alberta startups and growing companies to scale up** is an excellent policy tool for the entrepreneurial state to foster innovation.

AB START UP RISE WITH US

SENSE OF URGENCY NEEDED

How urgently is action needed? The energy transition is the economic equivalent of the Stanley Cup finals. Despite the disruption to energy systems both globally and nationally, however, the need to respond quickly is not fully appreciated in Alberta. From CEOs to policymakers to the media, a common narrative is that the province has at least a decade, perhaps two or three, before substantive action is needed. This report argues the opposite, that the status quo is under assault (from new technologies, global economic restructuring, government policies) and **urgent action is immediately required. Much of the work to revamp the Alberta energy economy must be completed by 2030.** In some industries, the window to act will only be open for three to five years.

Former Bank of Canada Governor Mark Carney has already warned that Alberta needs to **“act with speed.”** Economists are warning that disrupted global value chains are rapidly restructuring around the emerging clean energy economy. Will Alberta’s CEOs and the current government heed those warnings? The evidence suggests they will not.

Albertans must look to a new Team Alberta for leadership: To workers and the labour movement supported and aided by civil society and Indigenous communities.

Re-imagining what the Alberta energy economy could look like seems like a good place to start. Now it is time to act. **Alberta must skate where the puck is going or suffer dire consequences.**

