

This issue snapshot is excerpted from [Unmasking the Future](#) (2021), a scan of major current socio-economic trends and developments, at local, provincial, national and international scales, authored by James Stauch of the Institute for Community Prosperity, commissioned by the Calgary Foundation.



FLATTENING THE CARBON CURVE, Flattening the Rockies

The oil and gas industry burns up a lot of oxygen in the public conversation about the economy and the environment in Alberta. Conversely, the recent story of coal in the province has been far too under-profiled. It is a fascinating, double-edged story, of remarkable climate action success, on the one hand, and, on the other, vast planned exploitation of the eastern slopes of the Rockies.

Much as we've had to tackle the COVID curve, we also have a global, regional, and local challenge of flattening a carbon curve. With travel restrictions, closed borders and physical distancing in effect through much of 2020, the world experienced an estimated 8% reduction in carbon use. Soberingly, in order for the world to maintain levels of mean global temperature increase at 2 degrees Celsius, we must eliminate carbon emissions entirely by 2070. To achieve this, in turn, means 2020-scale decreases

in carbon use in every subsequent year from this point forward.¹²⁷ We are sitting at 411 parts per million carbon in the atmosphere now, up from 280 as an historic mean, vs. 350 deemed to be the safest maximum level.¹²⁸ Decarbonization is now an urgent global imperative. Climate change is even being felt (and measured) in Alberta. According to University of Lethbridge Professor Stefan Kienzle, average temperatures in Northern Alberta during the winter have risen 6°C since 1951, and 4°C in southern Alberta.¹²⁹ The number of days below -20°C has fallen by half, and the frequency of both heatwaves and cold spells have more than doubled.

As such, governments around the world are announcing aggressive net-zero pledges. China's unilateral commitment to carbon neutrality by 2060 means we can no longer rag the puck by using China (a larger emitter than the US, Europe and Japan combined) to justify North American inaction.¹³⁰ The Biden administration is bringing the US back into the Paris Accord. Under the "Next Generation EU" banner, 750 Billion Euros are earmarked for climate action.¹³¹ The upcoming German election, set for autumn 2021, will likely see the centrist (but climate action committed) Green party as king-maker in a coalition government, regardless of which other party wins. Meanwhile, the courts are increasingly becoming a battlefield for enforcing climate action. French PM Emmanuel Macron lost a domestic court decision drawing attention to France's lax performance reaching the Paris targets. There is a growing movement of lawyers pushing to criminalize destruction of the world's ecosystems – a crime that would be called "ecocide".¹³² Former Bank of Canada Governor Mark Carney, now the UN Special Envoy on Climate Action and Finance, is pushing for governments and market regulators to make climate disclosure mandatory.

“Alberta’s shift away from coal power should be the most talked-about climate policy story in Canada today. That it’s happened without the large increases in prices or concerns regarding reliability that were so loudly predicted five years ago is all the more remarkable.”

Dr. Andrew Leach, University of Alberta and Dr. Blake Shaffer, University of Calgary (CBC online, Oct 15, 2020)¹⁴¹

“Adults keep saying we owe it to the young people, to give them hope, but I don’t want your hope. I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. I want you to act. I want you to act as you would in a crisis. I want you to act as if the house is on fire, because it is.”

Greta Thunberg

Corporations have also turned a corner on climate change action, with many leading the way, or even pushing governments into action, such as *Uniting Business and Government to Recover Better*, a global compact of over 150 transnational companies (of which only two are Canadian). Astonishingly, corporate reporting on climate risk exposure, as part of Environmental and Social Governance (or ESG) reporting has increased nearly four-fold from 2019 to 2020.¹³³ Enbridge, for example, in addition to net zero targets, has also set new employment and governance targets for equity seeking groups.

One might conclude that Alberta’s trajectory is fundamentally at odds with all of this. That we are set to move from climate action laggard to outright climate menace. It is true that Alberta’s percentage contribution to Canada’s total greenhouse gas emissions is not only by far the highest in the country (37%), but it is in sharp contrast to Alberta’s contribution to GDP (15%).¹³⁴ Moreover, while all provinces east of Saskatchewan have either stabilized or lowered their emissions over the last decade, Alberta keeps trending upward unabated (save for COVID and recessionary effects). And oil production, this last year excepted, has increased in every preceding year going back to 2010 (remaining the crown jewel of the Canadian export market). Moreover, the Canadian Association of Petroleum Producers forecasts production growth reaching 4.25 million b/d by 2035 from 2.9 million b/d in 2018, which is actually a much revised, constrained forecast.¹³⁵ But alongside this petroleum growth trajectory are also some encouraging trendlines for climate action.

TransAlta is poised to convert the last of its coal-fired power plants next year to natural gas, four years ahead of schedule.¹³⁶ As a result, as CEO Dawn Farrell has pointed out, “TransAlta has more than met its fair share of the Paris Agreement. To date, we alone have delivered 10% of Canada’s goal of a 220 million tonne reduction for Canadians by 2030.”¹³⁷ In the last 20 years, coal has fallen from over 80% of Alberta’s energy supply to 27% in 2020. The steepest drop has been in the last 5 years. Since the Notley government announced the coal phase-out in 2015, coal-fired power use has dropped 50%. The 2015 phase-out built on the 2007 carbon pricing

scheme on large emitters brought in by the Stelmach government, adding both a “stick” and a “carrot”. The former through an indexed pricing scheme, the latter through compensation to producers. The net result is that there is very little appetite by industry to reverse the trend, and it shows that industry can respond quickly when there are clear price signals combined with new technology.¹³⁸

While this is encouraging news for climate action, there is a parallel coal story just starting to be written, and with a very different trajectory. This past May, the Alberta government rescinded a 44-year ban on coal mining on the Eastern Slopes of the Rockies, put in place by the then Lougheed government. One month later, the federal/provincial Joint Review Panel established to review the proposed Grassy Mountain Coal Project, proposed by Australian company Benga Mining Limited, determining that it has sufficient information to proceed to a public hearing, happening right now.¹³⁹ This will be the first of at least seven, and likely eventually more, proposed open pit metallurgical (non-thermal) coal mining projects proposed for the Alberta Rockies, from the Crownsnest in the south to the Nordegg/Hinton region in the north. This first project has raised serious questions about water quality, the nature and depth of support from surrounding communities, protection of Aboriginal and Treaty Rights, community economic benefits, social impacts, remediation and clean-up and sufficiency of royalty rates on coal (1% in Alberta vs. 7% in BC).

Beyond this first proposal, there are deeper questions about cumulative effects, land use planning (there are no regional land use plans for most of the eastern slopes region), as well as “free entry” mining, which is the dominant means of granting mineral tenures in Canada. “Free entry” gives the prospector (typically a mining company) exclusive right to Crown-owned mineral substances.¹⁴⁰ As Alberta is one of six provinces pushing back on legislation to enact the UN Declaration on the Rights of Indigenous Peoples (UNDRIP), and as it has passed legislation expressly forbidding protests that encumber transportation or energy corridors, the table is set for an even more acrimonious relationship between the province and Indigenous Peoples over questions of land use and resource extraction.