



Fact Sheet

# The Benefits of Re-regulating Electricity Generation in Alberta and Increasing Public Ownership Across Alberta's Electricity System

*Regulating electricity generation and increasing public ownership of electricity in Alberta will create good-paying, unionized jobs and lower consumer prices, while reducing price volatility and increasing grid reliability.*

## Summary

The three main parts of an electricity system are generation, transmission, and distribution. The generation segment is made up of power plants. In Alberta, this includes natural gas plants, wind, solar, hydroelectricity, biomass, biogas, waste heat, and geothermal. The transmission system carries electricity long distances. The distribution system delivers electricity to homes and businesses. In Alberta, each of the three parts of the system are owned and operated by a mix of private companies (like TransAlta and Capital Power) and municipally-owned public utilities (like EPCOR in Edmonton, ENMAX in Calgary, and the City of Medicine Hat Utilities).

All three parts of Alberta's electricity system used to be regulated by the Alberta Utilities Commission (AUC). But, in 2001, Alberta's generation segment was deregulated (except in Medicine Hat) and more private sector ownership was encouraged. After more than 20 years, Alberta's experiment with deregulated electricity generation is clearly a failure.

Today, Albertans pay high electricity prices, prices are more volatile, and we have the least reliable grid in Canada or the United States. Private ownership of electricity

generation has increased to 91% of total installed capacity, corporate profits are skyrocketing, and there are stagnant employment levels in the sector. The Government of Alberta needs to put an end to the failed deregulation experiment!

Alberta workers and consumers would benefit from lower and less volatile electricity prices, new job creation, and a more reliable grid if the Government of Alberta would:

- Return electricity generation to a regulated system under the AUC, like Alberta had before 2001. The AUC continues to regulate the distribution and transmission segments and that would not change.
- Promote a healthier public/private balance in the generation segment of Alberta's electricity system, like Alberta had prior to deregulation.
- Increase public ownership of the electricity system. Public ownership could be either on the municipal or provincial levels in communities who vote for either of these two options in a local referendum. A similar process happened in Alberta in the early 1900s, when Medicine Hat, Red Deer, Cardston, Ponoka, Fort Macleod, and Crowsnest Pass bought out private companies to establish municipally-owned utilities.
- Create a provincially-owned Crown corporation called Alberta Power (AP) and a provincial financing entity called Alberta Electrification Administration (AEA).

## Deregulation of electricity generation in Alberta has been a failure

*Higher and more volatile prices for Alberta residents, industry, businesses, and farms:*

In the 1980s and 1990s, when Alberta had regulated power generation, residential and industrial prices in the province increased somewhat above the average for the rest of Canada. The Alberta government deregulated electricity generation in 2001 with the promises that prices would be lower and less volatile. The opposite happened.

Alberta is consistently home to the highest electricity prices in Canada. In the deregulation period (2001-2024), Alberta's electricity consumer price index (inflation)

increased by an average of 1.8% per year higher than that of Canada as a whole or double the difference prior to deregulation. **This means that since 2001 Alberta electricity consumers – including residential, industrial, commercial, and farm electricity users – have paid about \$24 billion more for their electricity than if they had paid the same prices as other Canadians on average.**

Alberta residential consumers accounted for about \$7 billion of that total, that is an average of about \$690 per year per household for each of the 24 years. These high electricity prices are an injustice to all Albertan families but especially to the least advantaged, who spend a far greater proportion of their income on electricity than others. Since the early 2000s, volatility of prices has increased as well, making it harder for these families to plan their budget.

These price increases and volatility are not only unfair, but they are also a strain on Alberta's economic development. **Alberta's industrial, commercial, and farm electricity customers overpaid about \$17 billion since 2001 compared to the average prices paid by their peers across other provinces (industrial users paid \$13.8 billion more; commercial and farm users paid \$2.9 and \$0.4 billion more, respectively).**

This drain on the economy holds everyone back. Families lose both ways, they pay high electricity prices, and their prosperity is at risk if Alberta cannot maintain and attract companies that rely on reliable, inexpensive, and clean electricity to power their operations.

### *Privatization has increased and now only a handful of private companies own 54% of Alberta's electricity generation market:*

Alberta has a concentrated electricity generation market. More than half (54%) of Alberta's electricity generation market is controlled by just a handful of companies – TransAlta, Capital Power, Suncor, ATCO, and Heartland. TransAlta has the biggest electricity generation capacity of these companies, and its purchase of Heartland's assets is pending regulatory approval (a decision is expected in late 2024).

### *Corporate profits have skyrocketed:*

The cause of Alberta's high electricity prices are above-normal profits for the big companies that dominate the province's electricity market. In 2021–2023, because of

tight market conditions and the exercise of market power by large generators, prices spiked in Alberta well beyond those that would have been necessary to pass on higher input costs.

Prices in regulated markets in other provinces increased somewhat during the 2022–2023 global energy crisis, but not as dramatically as those in Alberta. Even other provinces that have a relatively high natural gas generation, such as Nova Scotia, New Brunswick, and Saskatchewan, who have all had increases that were much more moderate than those in Alberta. Why is this?

It is because a regulated market would have allowed firms to pass on to the consumers the higher costs of natural gas during the 2022–2023 crisis. But no more. Earnings would have been stable because they are just the difference between revenues and the cost of inputs, such as natural gas. But what we saw in Alberta was an unrestricted exercise of market power at the expense of consumers that was facilitated by Alberta’s Energy-Only market.

### *Union rates have plummeted, and employment has stagnated:*

Alberta’s electricity sector has traditionally had comparatively low union rates that declined even further during deregulation. In the late 1990s, unionization in Alberta’s electricity sector was 19% lower than the rest of Canada. By the 2020s, the gap increased to about 27%.

Alberta’s electricity sector has historically employed fewer workers than the rest of Canada. Since deregulation in 2001, Alberta’s electricity sector employed an average of 141 workers per TWh (terawatt hour), or 16.6% below the rest-of-Canada average of about 169 workers per TWh.

Workers in the electricity sector tend to have higher earnings than those in the economy generally. The ratio of Alberta electricity sector earnings to all earnings has remained steady over the deregulation period. This suggests that labour inputs (wages and benefits) are not the cause of higher and increasing electricity prices in Alberta.

### *Alberta has the most fragile grid in Canada and the United States:*

While Alberta accounts for less than 2% of electricity demand in Canada and the United States, in the last two years the province's grid has suffered the indignity of being responsible for 35% of the most severe level of Energy Emergency Alerts in Canada and the US – when blackouts are imminent or in progress, as measured by the North American Electric Reliability Corporation. This means that in recent years Alberta was 20 times more likely to issue a severe Energy Emergency Alert than other grids.

### *The UCP's proposed tweaks to the "Energy-Only" market won't fix Alberta's failed deregulation experiment*

Alberta and Texas are the only provinces/states with Energy-Only markets in Canada and the US. There are clearly major problems with Alberta's electricity generation segment, but the UCP is only proposing small tweaks to the existing Energy-Only market structure that will not result in Albertans having an affordable and reliable grid.

The UCP refuses to re-regulate power generation, and instead will only regulate price peaks so they are a bit less "peaky". This half measure may not start for 6-24 months.

In 2-5 years, the UCP may introduce a day-ahead-market (DAM). This is a common feature run by electricity system operators in other jurisdictions, along with the real-time market. The DAM is based on forecasted demand for the next day, while the remaining real-time transactions balance actual supply and demand.

In contrast to the UCP's half measures, what the Government of Alberta needs to do is re-regulate the power generation segment and encourage more public ownership across the system.

# Regulating electricity generation and increasing public ownership across the system will bring many benefits for Alberta workers and consumers

## *Lower consumer prices via lower borrowing costs for regulated utilities:*

Regulated utilities have lower borrowing costs than deregulated utilities because their revenue stream is much less risky because they are guaranteed by the regulatory compact to be able to recover their costs under the “cost of service” model. Lower borrowing costs for regulated utilities means lower prices for Albertans. This is one of the main reasons Alberta should re-regulate power generation and increase public ownership across the electricity system.

## *Regulated markets are designed to grow and can meet the challenge of doubling Alberta’s electricity generating capacity by 2050:*

In the 50 years prior to deregulation in 2001, the amount of electricity produced in Alberta increased by about 50 times. On a population-adjusted per capita basis, power generation increased by an average of 375 kWh/person per year for nearly 50 years.

In stark contrast, population-adjusted electricity generation decreased since deregulation by 35 kWh/person per year. This decrease in the rate of electrification is not unique to Alberta and it’s in part because of improved energy efficiency in all provinces and many other countries.

However, now forecasts suggest a doubling of electricity generation will be necessary by 2050. Based on population projects for Alberta, generation will need to grow at about 200 kWh/person per year for the next 25 years. That is a bit more than half the growth rate of the previous era of electrification (375 kWh/person), but a daunting challenge relative to the degrowth of the last two decades (-35 kWh/person).

It is not that deregulation generally, and Alberta's cyclical Energy-Only market specifically, cannot in theory achieve a doubling of the grid in 25 years. But it is the case that Alberta's deregulated generation market has not demonstrated that it has the structural capacity to facilitate 200 kWh/person per year growth for decades at a time.

In contrast, regulated markets were designed to grow and have demonstrated, in Alberta and elsewhere, that given the correct organic or policy-induced demand conditions, they will do so decade after decade.

### *Increasing public ownership of Alberta's electricity sector will help the province become electricity independent:*

Unfortunately, Alberta is a net importer of electricity. In other words, Alberta is electricity dependent. Electricity independence is a form of energy security and is one reason to increase public ownership across Alberta's electricity system. Public electricity investment across Canada was more than double that of private electricity investment during the 2015-2023 period. It would be much better for Alberta if our government could direct a Crown corporation to have "enough in the tank" to provide for families and industry in times of crises, not to have to depend on others.

Only 9% of Alberta's installed electricity generating capacity is publicly owned. This loss of balance between private and public ownership of generating capacity makes the provincial grid out of step with most of the rest of Canada. In contrast, Crown corporations own 63% of installed capacity across Canada. In British Columbia and Saskatchewan, Crown corporations own almost 80% of the generating capacity, and in Manitoba the Crown corporation owns over 90% of capacity.

Once they were established in their modern form by the 1960s, most of the provincial Crowns survived the political economy turn to privatization of the 1990s. A very practical reason for this longevity is that the model "works". **First**, it works because the Crowns can borrow at a much lower interest rate than an equivalent private company could, even a regulated private utility. These lower financing costs are very important in a highly capital-intensive sector such as electricity, where borrowing is high and therefore the cost of borrowing is critical. **Second**, it works

because Crowns can and do take a long-term, often generational perspective on investments that have long lead times and extended pay-back periods, such as large hydro-electric projects with 80–100-year lifetimes. Private project financing for deregulated markets does not exist much beyond a dozen years, so the private sector will not undertake such projects (not because they are not profitable, but because of imperfect credit markets or shareholder pressure over quarterly earnings). **Third**, it works because any profits can be returned to the public in the form of dividends to the sole shareholder (the province), rather than to shareholders. The province can then increase spending or return it to residents in the form of lower taxes.

### *How we can increase public ownership across Alberta's electricity system:*

There are many routes to increased public ownership in the Alberta electricity sector. Our preferred approach would require one new institution to be established and another created or reformed from an existing institution.

The first institution would be a provincially-owned Crown corporation, which we shall refer to as Alberta Power (AP). AP could own and operate distribution, transmission, and generation assets and would be subject to regulation by the AUC. Like Crowns in other provinces, it would have its own Board and employees and could issue bonds to borrow for its investments.

The second institution would be a financing and support institution modelled on the US's Rural Electrification Administration, which also had a financing function, providing federal loans for the installation of electrical distribution systems channeled through electric power cooperatives. This was the model that was introduced in Alberta in the 1940s that allowed rural co-ops to finance the construction of the distribution networks in rural Alberta. Indeed, the *Rural Electrification Loan Act* (RELA) is still in force in Alberta to this day and allows for 10-year loans of up to \$75 million to establish rural electrification associations (REAs) to promote rural electrification. The RELA could be amended to establish an institution entrusted with managing the loan portfolio and providing assistance and advice, which we shall call the Alberta Electrification Administration (AEA).



## *Democratic pathways to publicly-owned electricity across Alberta:*

Our preferred approach to increasing public ownership of electricity across Alberta is based on the principle of promoting local democracy and has two elements, depending on whether the segment refers to a brownfield or greenfield situation.

Let us start with a brownfield example of a municipality being served by either ATCO or Fortis Alberta. If the residents of the municipality were to express their desire to be served by a publicly-owned distribution company, they would have two choices. One would be to establish their own municipally-owned utility by purchasing the assets from either ATCO or Fortis Alberta using a loan from the AEA. If the municipality does not want to own and operate a distribution utility, it would ask AP to purchase the assets based on its own borrowing authority. It would work in a similar manner in the case that residents of a municipality already served by a public utility voted to purchase or acquire transmission or generation assets. They could either access financing from the AEA and maintain and operate ownership at the municipality, or they could request that AP step in.

The greenfield situation refers to new and incremental transmission or generation facilities that are required for the expansion and growth of the grid to promote the above-noted electrification objectives. In this instance, AP would compete indirectly with the private sector to be the builder, owner, and operator of those needed transmission or generation assets.

In sum, the benefits will soon outweigh the costs and would provide Albertans with lower, more stable prices, and increased reliability for decades to come.