

Alberta Energy Market



Alberta is known as Canada's energy province. With access to oil, natural gas, coal and minerals, the province has a diverse energy portfolio. However, the energy market in Alberta is changing. As part of its <u>Climate Leadership Plan</u>, its government is taking aim at coal-fired generation. Although coal-fired plants are a primary source for cheap electricity, under this plan, all pollution from coal-fired electricity will be phased out by 2030^[1].

In conjunction with these changes, last June the government capped consumer rates with a Regulated Rate Option to 6.8 cents per kilowatt-hour for a four year period under Bill 16, An Act to Cap Regulated Rates^[2]. Historically, Alberta has seen very volatile swings in rates^[3]. However, residents living in mid-size and large multi-residential buildings do not qualify for this rate protection. In the event of electricity rate spikes, multi-residential building owners and residents will bear this burden. While this move is reassuring for some consumers, it may also signal that future rate increases could be expected. Consumers should look to other jurisdictions for lessons and strategies on how to protect themselves against volatility as Alberta's energy market continues to evolve and change.

Lessons from the Ontario Market

As Alberta undergoes these changes, the province will likely follow trends seen in Ontario whose energy market has changed substantially in the past 15 years. Ontario has focused heavily on fighting climate change, investing in the renewable energy sector and introducing new government policies and programs as part of the Climate Change Action Plan^[4].





Arguably the biggest change in Ontario's energy market has been the elimination of coal-fired power, the cheapest source of electricity. The provincial government committed to phasing out all coal consumption in 2003. During this time, coal made up 25% of the province's power generation which successfully fell down to zero in 2014 when the last coal-fired plant was shut down 5. After the removal of coal, Ontario's

energy supply was split between 60% nuclear, 24% hydro, 9% gas and 7% non-hydro renewables.

This move brought many positive changes and resulted in the reduction of greenhouse gas emissions by 87% [6]. To replace the coal-fire energy supply Ontario focused on refurbishing many of its nuclear power plants and other sources of non-hydro renewables [7]. While these investments were necessary to provide a more sustainable and affordable energy system in the future, they have resulted in a significant rise in electricity prices. The average cost of power in Ontario increased by about 51% between 2004-2013, and has continued to increase by about 7-8% since then [8].

While increases to interest rates, inflation and the rising cost of fuel have all contributed to the rising cost of energy, the Global Adjustment is responsible for the bulk of the increase Ontarians have seen in recent years. The Global Adjustment is billed to all hydro customers in Ontario^[9] to cover the costs of building, upgrading and maintaining energy infrastructure, along with conservation and demand management efforts. For most consumers this fee is incorporated into their electricity bill as part of the per kilowatt hour charge, so many are unaware of just how much it impacts their costs. For example, in 2015 the Global Adjustment fees for residential and small business owners were an average of 7.9 cents per kilowatt hour. For a \$100 electricity bill the Global Adjustment makes up \$77 of the total cost^[10].

To help ease some of this pressure, in June 2017 the province introduced its Fair Hydro Plan, which reduced electricity prices by an average of 25% for residential customers while holding on any rate increases for four years, by refinancing a portion of the Global Adjustment to spread the cost of electricity investments over a longer period of time^[11].

With Alberta's plan to phase out coal by 2030, major changes and investments will be needed. In 2015 their energy generation profile consisted of 51% coal, 40% natural gas and 9% renewables [12]. To achieve the province's goal of a 30% renewables and 70% natural gas split by 2030, it will have to make necessary infrastructure investments. While Albertans may see increases in the cost of electricity as they phase out coal-fired energy, these investments will help the province create a more sustainable, efficient and affordable energy sector.



Energy Management Strategies

If electricity prices rise, it's expected that multi-residential building landlords, property managers and building owners in Alberta will look for ways to lower electricity consumption. One effective strategy is sub-metering, which provides building owners and operators greater control over operational costs, saving on one of the highest expenditures for the building.

Sub-metering measures actual electricity consumption so residents only pay for what they use, and it allows for a pay-per-use cost recovery model for owners and operators of commercial

buildings. The savings from sub-metering can be reinvested back into the building through retrofitting, or put towards addressing maintenance needs that would have otherwise been delayed.

Through a sub-metering program, tenants and residents gain a better understanding of how their behaviour drives electricity costs, motivating them to make changes to reduce their usage. A 2016 study



conducted by Navigant Consulting Inc. found that a unit converted from bulk metering to sub-metering in a multi-residential building yields annual electricity savings of approximately 40%; a number unprecedented by any other conservation program. By comparison, most report-based behavioural programs net savings in the range of 2-3%^[13].

As the energy market continues to evolve and change, both in Alberta and across the country, now is the right time to start thinking about how to create efficiencies and cost savings when it comes to electricity consumption such as sub-metering, a cost-effective solution that puts the *power* back in your hands.





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If you'd like more information about how our team can help you to achieve your energy management goals, give us a call at 1-877-513-5133 or, contact us at Client.Care@enercare.ca.

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