PEMBINA Institute

Footing the Bill

How hyperscale data centres could increase electricity bills in Alberta

Factsheet

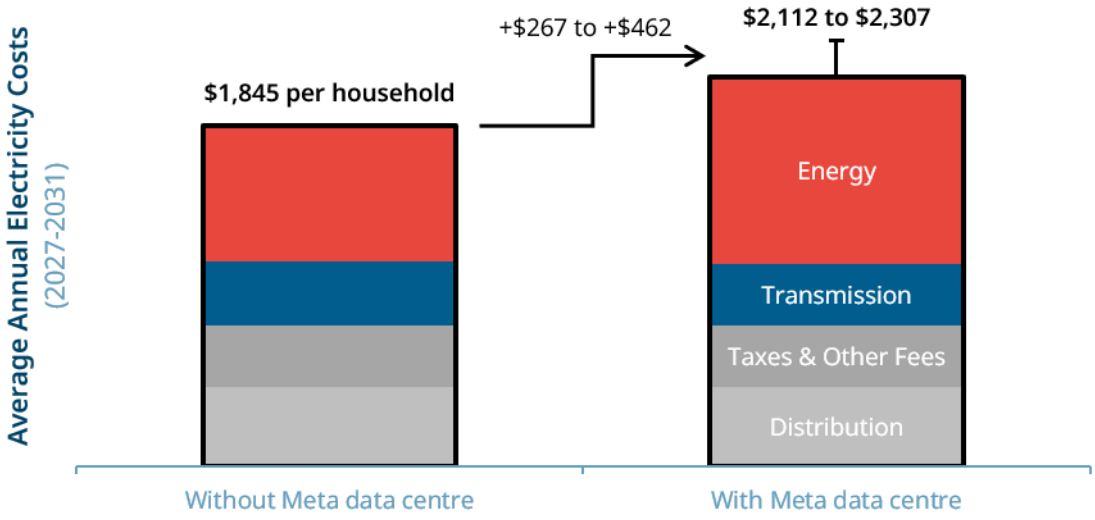
What you need to know

- Meta's data centre project near Edmonton could add up to $270–$460 to Albertans' electricity bills each year from 2027 to 2031, with the impact varying depending on each household's electricity provider and rate plan.
- For at least the first year of operations, the data centre will rely solely on Alberta's grid for electricity, using almost as much power as Calgary. Starting in the early 2030s, it will run on a combination of grid power and a new dedicated gas power plant nearby.
- The Alberta Electric System Operator and electricity companies, including EPCOR, Capital Power, and TransAlta, anticipate significant near-term electricity price increases as the data centre comes online before the power plant.
- The data centre could reduce the transmission portion of Albertans' electricity bills by up to 6%, saving the average Albertan household less than $20 per year. However, these savings are likely to be more than offset by higher energy prices, resulting in an overall increase in bills.
- These market impacts are not unique to the Meta data centre. Under Alberta's proposed "Bring Your Own Generation" rules, data centres must rely exclusively on their own dedicated natural gas power plants but may begin operating before the new generation is available.
- As more hyperscale data centres are built under these rules, similar price spikes are expected. These impacts can be minimized by meeting growing demand with new, low-cost electricity supply, including renewables.

Independent analysis conducted by the Pembina Institute finds that the new Meta data centre being built near Edmonton and its supporting power plant could significantly raise consumer energy bills, with Albertans facing sharp rate increases as soon as the data centre comes online.

The Meta data centre is on track to spike consumer electricity rates in the next couple years

The Meta data centre risks increasing an average Albertans' annual electricity bills by about $267 to $462 per household from 2027–2031.



You can find our full analysis, assumptions, and methodology in our technical backgrounder.

What is driving these rate increases?

Electricity bills in Alberta have two main components:

- **Energy costs**: These are the costs for the energy you use during your billing cycle.
- **Delivery costs**. These are the costs that help pay for the shared infrastructure, such as the transmission lines, which go from the power plant to substations, and the distribution lines, which go from the substations to your home.[1]

[1] In our analysis, we accounted for *transmission* costs since the Meta data centre will be directly connected to the transmission system but assumed little to no change in *distribution* costs.

Under Alberta's planned "Bring Your Own Generation" rules, new data centres will have to pay for their own power infrastructure and the cost of connecting to the grid. For the Meta data centre, the Alberta government estimates that this could reduce the transmission portion (i.e., delivery costs) of household electricity bills by up to 6%.

Our analysis suggests that increases in energy costs will largely outweigh the savings in delivery costs once the Meta data centre is operating until the gas power plant is complete.

If Meta is paying its fair share, why would my electricity bill go up?

While Alberta's rules require new data centres to pay the full cost of their grid connection and build new power infrastructure, they don't protect consumers from the higher rates caused by increased electricity demand before that new supply comes online.

This is an issue that experts, the Alberta Electric System Operator, and electricity companies, including EPCOR, TransAlta, and Capital Power, agree on. These companies have independently and publicly stated — in investor calls, media statements, and policy submissions — that the Meta data centre will likely substantially increase energy costs, particularly during the two years before Meta's dedicated power plant is built. In fact, some have predicted that the project could drive wholesale electricity prices as high as $100/MWh in the next two years, more than triple Alberta's average wholesale price so far in 2026.

If these prices rise as predicted, those higher costs will be passed on to consumers in the form of higher electricity rates. This means that any savings on the transmission portion of their bills will be completely wiped out by a much larger increase in energy prices.

Are further rate increases avoidable?

The Meta data centre is just one of many data centres expected to call Alberta home in the coming years. The new infrastructure promises to provide economic benefits in the form of jobs, tax revenue, and natural gas royalties. But under Alberta's current policy landscape — particularly the barriers to renewable energy — new data centres also risk increasing monthly power bills, with the Meta project being the first.

Other countries and provinces are showing that these impacts are far from inevitable. If done correctly, the inclusion of data centres in Alberta's electricity system could actually create a stronger and more affordable system for all users.