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We are paying too much for green power dreams and we are paying too little for electricity. Consumers in Ontario and across the country should pay a higher price for electricity, especially in peak periods, to reflect its environmental cost and the cost of new generating facilities.

Electricity prices have been a tricky political issue for the provinces. In May of 2002, Ontario capped prices at 4.3 cents per kilowatt hour, crippling the new wholesale market.

The province eventually ended up with the Ontario Energy Board, which regulates the electricity sector, setting prices that are not representative of the cost of peak period generation or new generation facilities. During the winter, Ontario residential consumers pay 5.8 cents a kWh on the first 1,000 kWh a month, with the rest priced at 6.7 cents a kWh.

Similarly, other provinces (except Alberta) have fixed prices for electricity that encourage wasteful consumption.

The first reason for higher consumer prices in Ontario is that the Green Energy Act is committing Ontarians to high costs for green power. The Green Energy Act authorizes the Ontario Power Authority, which buys power from producers for the wholesale market, to pay high prices for renewable power ranging from 13.5 cents per kWh for wind to 80 cents per kWh for solar power.

This expensive electricity is blended with low-cost electricity from existing facilities. This obscures the real cost of electricity, encouraging consumers to use and waste more than they would if they paid the actual price for electricity from the new facilities.

Second, consumers are not bearing the environmental cost of fossil fuel-based electricity. We can only reduce our carbon emissions when there is a price on those emissions, either from cap-and-trade or from a carbon tax. Any cap or price on carbon will translate into higher consumer costs for fossil-based energy.

Third, future nuclear facilities and plausible new hydroelectric facilities probably will cost much more than the current electricity price. Natural gas-fired electric power to produce power during peak periods is also likely to cost much more than the current wholesale price. When the consumer price of electricity is about 6 cents and new production will cost much more, we are wasting money to produce something worth less to consumers than it cost to produce.

One way to reduce our need for expensive new generation is to reduce peak electricity demand through time-of-use pricing. This pricing sets a high price during weekday mornings and/or afternoons when demand is high, and a low price at night and on weekends when demand is low.

Time-of-use pricing will reduce the need for "peak period" generation that is needed for only a few hours a week and has historically been the most expensive type of generation to operate.

Ontario is moving in the direction of time-of-use pricing, and most small consumers will be on it by the end of next year. We should go one step further and add critical peak pricing to time-of-use pricing. With peak pricing, customers pay a time-of-use price most of the time, but they are exposed to a peak price on a limited number of days a year when demand threatens to exceed supply. When excess demand is anticipated, the electricity system operator declares that the next day will be a critical peak day and the price during that period will be much higher than usual; consumers respond by cutting their consumption. Off-peak prices on other days are reduced so consumers do not pay a higher average cost over the year.

Such a system is helpful on a hot summer afternoon when air conditioners are blasting. The moral suasion of asking people to turn off air conditioners for a few hours when the system is strained is nowhere near as effective as making the cost of running an air conditioner higher. Experience has shown that peak pricing

can achieve further reductions in peak demand, cutting the need for expensive new peak-capacity generation (which is usually fossil fuel-based).

The bottom line is that current electricity prices do not reflect electricity's environmental effects or the costs of Green Energy Act policies. Reforming pricing so peak period prices reflect environmental costs and the cost of new generation facilities can move us toward an environmentally and financially responsible electricity future.

Don Dewees is an economics and law professor at the University of Toronto. His C.D. Howe Institute study [The Price Isn't Right: The Need for Reform in Consumer Electricity Pricing](http://www.cdhowe.org) is available at www.cdhowe.org.