

Solar Energy in Ontario: The cost of replacing coal and the benefits from FIT rates
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Abstract

This study examines the effects of replacing coal generated energy with solar energy. The Ontario Ministry of Energy has put out a plan to phase out all coal fired generators by 2014 to prevent greenhouse gas emissions; the dollar value of carbon dioxide emissions saved from implementing solar photovoltaic generators is evaluated. The Ontario Power Authority provides high Feed-in-Tariff (FIT) rates for solar energy to help cover its high costs, but with solar equipment cost trending downwards FIT rates are not regulated to match it. The inefficiency of FIT rates in comparison to the cost of solar is also examined. This paper takes a brief look into the effect of FIT rates on the Hourly Ontario Energy Price using a linear regression model.