

EMISSION-FREE ENERGY CERTIFICATES



**What are Emission-Free Energy Certificates?**

Emission-Free Energy Certificates (EFECs) allow customers to do their part to help the environment by encouraging the production of electric power from generation sources that do not directly emit air pollutants such as carbon dioxide. A single EFEC is created for each metered megawatt-hour (MWh) of energy generated from a unit that does not directly produce air emissions.

EFECs can be acquired along with your power purchase to provide different levels of emission-free attributes to achieve your company's energy and environmental goals. By purchasing EFECs from Exelon Energy, you acquire the environmental attributes associated with power generated from an emissions-free nuclear generating unit and will be assured that the megawatt-hours produced from these facilities have not directly emitted:

- Carbon dioxide
- Sulfur dioxide
- Nitrogen oxide

**Annual Benefit for a Customer that Purchases EFECs for 100% of Their Facility's Load**

Facility Size	100 kW	500 kW	1000 kW	5 MW	10 MW
CO <sub>2</sub> avoided (tons)	290	1,450	2,910	14,560	29,130
Equivalent Acres of Trees	60	330	660	3,310	6,620
Equivalent Passenger Vehicles Removed	50	260	530	2,660	5,330

Value shows the acres of trees and vehicles removed to achieve an equivalent annual CO<sub>2</sub> benefit of the EFECs for the specific customer size. Customer usage is based on a 60% load factor. CO<sub>2</sub> Avoided is based on 2008 PJM system fuel mix. Source: PJM EIS  
 Equivalent Acres of Trees is based on average annual carbon sequestered by US Pine and Fir forests. Source: US EPA  
 Equivalent Passenger Vehicles Removed is based on a fuel efficiency rating of 19.7 mpg and 11,856 miles driven per year. Source: US EPA

Exelon Generation's (ExGen) large emission-free generation portfolio allows us to provide numerous alternatives to meet the needs of environmentally conscious customers. ExGen has one of the largest nuclear generation fleets in the country, producing more than 130 million metered megawatt-hours of power annually with virtually no greenhouse gas emissions.

EFECs are tracked as being from an emission-free energy source by the Generation Attribute Tracking System (GATS). Emission Free Energy is defined as electric power output from a generating unit that does not directly produce any air emissions (sulfur dioxide, nitrogen oxide, or carbon dioxide) as reported in the GATS system. Eligible fuel types include new and existing: Solar Photovoltaic, Solar Thermal, Wind, Hydro, Nuclear, Tidal Energy and Wave Energy. For more information about the GATS tracking system visit: [www.pjm-eis.com/gats/gats.html](http://www.pjm-eis.com/gats/gats.html)



The GATS is a regional information system, owned and managed by PJM-Environmental Information Services, that tracks the environmental attributes of generation and supports reporting, compliance and verification requirements related to environmental compliance and related markets. The GATS also provides state agencies with verification for Renewable Portfolio Standard (RPS) policies.

*Only the direct generation process of a generating facility is considered when applying the "Emission Free" designation. All generating facilities produce greenhouse gases associated with the entire life-cycle of the facility. Life-cycle emissions include emissions associated with the construction of the plant, mining and processing the fuel, routine maintenance and operation of the plant, disposal of waste byproducts, and decommissioning.*