Local Solar, Local Savings

How to Cut Electricity Costs in Half for Public Schools Apogee and Local Governments in Frankfort, Kentucky CLIMATE &



The Opportunity

A 20 Megawatt, 150 acre solar facility could cut electricity costs in half for the City of Frankfort, Franklin County Fiscal Court, Frankfort Independent Schools, and Franklin County Schools, **saving a combined \$1.2 million** annually for local taxpayers, while supplying 100% of their net annual electricity needs with clean renewable energy.



Annual Energy Cost Savings for Public Schools & Local Governments

Total Community Savings	\$1,282,865
Franklin County Schools	\$ 507,666
Frankfort Independent Schools	\$ 61,219
Franklin County Fiscal Court	\$ 113,441
City of Frankfort	\$ 600,539

Benefits to Utility & Ratepayers

- * Reduced peak demand, transmission, & wholesale energy costs.
- * Hedging against risk of future carbon pricing.
- Reducing risk in power supply by reducing load & pressure to invest in new coal or gas contracts.
- * Reducing exposure to market & transmission price increases.

Community & Societal Benefits

- Reduced operational costs, stabilized rates, & increased financial security for public agencies & schools.
- * Public health benefits of improved air & water quality.
- * Reduced carbon emissions.
- Local economic development:
 \$25 to \$35 million investment in Franklin Co.

How to Do It

Virtual net metering would enable the City, County, and public schools to sign a Power Purchase Agreement (PPA) with a private solar developer to build, own, and operate the solar facility, with no up-front or ongoing maintenance costs to local agencies. With support from the local utility, the Frankfort Plant Board, the utility would use virtual net metering to credit participant's accounts for their share of energy produced by the solar facility, offsetting energy consumed from the utility.

PPA Rate (estimated) = 4.5 ¢/kWh

Utility Retail Rate = 8.95 ¢/kWh

Participant Savings = $4.45 \, \epsilon/kWh \implies $1.2 \, million/yr$

PPA Rate Fixed for 15 to 25 Year Term of PPA Contract.



To read the full report, visit www.ApogeeClimate.org