Lycoming County LFGTE
A Public-Private-Public Project

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Project Participants/LMOP Partners
History of Land
- Town of Alvira, until 1942
- 8500 acres taken for ammunition depot
  - 200 buildings, 150 bunkers, 10,000 employees
- 3000 acres for state game lands
- 4200 acres to FBOP
  - 1957 low security prison
  - 1990s low, medium and high security prisons
  - 4500 inmates

County owned landfill

7 PA Landfill Projects
Project Location
An Early Adopter of LFGTE

- **First generation**
  - 2 Caterpillar engines (1100 kW)
  - Started 1992
  - Ran 20 years
  - Heat recovery
Landfill gas had increased to 2200 cfm

Energy Policy Act of 2005 and Executive Order 13423 mandating federal renewables
- 117 federal prisons, 217,000 inmates
- 15% or 17 prisons sustainable by 2015

Best use of resources

Location of supply and load
One Land Owner

- FBOP owns 4200 acres
- Multiple agencies
  - Federal and State
  - Two counties
  - Two townships
Well Field Improvements
Pole Line Construction
Two Plants

- Allenwood Federal Correctional Complex
- Lycoming County and Grid
Two Power Plants
Two Power Lines
Electrical Interconnection to Allenwood
Three Entities

- Landfill Gas
- Power and RECs
Start Up

- Transition
- Success!
Celebration
Education for the Next Generation

Pennsylvania College of Technology

LIVE GENERATION DASHBOARD

LANDFILL GAS

Current Output
5,602 kW
18,054 MWh

Total Output

GREEN STATISTICS

TOTALS ARE CALCULATED ANNUALLY

Carbon Dioxide
12,963

Pine Forest
2,762
ACRES PLANTED

Cars Removed
2,474
REMOVED FROM ROAD

Homes Powered
181
TOTAL HOMES POWERED

Gasoline Saved
1,458,796
TOTAL GALLONS SAVED

GENERATION TERMS

What is a Kilowatt Hour (kWh)?
1 kWh = Ten 100 Watt Light Bulbs turned on for 1 hour.

What is a Megawatt Hour (MWh)?
1 MWh = 1000 Kilowatt Hours (kWh)

POWER TRENDS

THIS GRAPH REPRESENTS A 24 HOUR DAY OF POWER GENERATION USING A Landfill Gas Source.
A Public-Private-Public Success
Greening Our Energy