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# Renewable Energy Opportunities in the TVA/EPA Clean Air Agreements

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# Background: EPA Agreement

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- In April, 2011 the TVA Board approved clean air agreements with EPA, four states and three environmental groups
- The agreements resolve past claims of New Source Review (NSR) violations
- TVA will provide \$350 million over 5 years to fund environmental improvement projects
- These projects will assist in improving the air quality throughout the Tennessee Valley region
  - \$290 million for TVA implemented projects in energy efficiency, renewable energy and other projects
  - \$60 million to AL, KY, NC, TN for State Environmental Mitigation Projects

# TVA Environmental Mitigation Projects

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- ◆ Energy Efficiency Projects (invest \$240 million)
  - Conservation Voltage Reduction (Distributor Loss Reduction)
  - Tennessee Valley Smart Energy Communities
  - Whole Home Efficiency Upgrades
  - Commercial Custom & Prescriptive Efficiency Assistance
  - Industrial Custom & Prescriptive Efficiency Assistance
- ◆ Clean Diesel Retrofit & Electric Vehicle Projects (invest \$8 million)
- ◆ Clean/Renewable Energy Projects (invest \$40 million)
  - Waste Heat Recovery
  - EV and Plug-in Hybrid Electric Vehicle Solar Charging Stations
  - Solar Photovoltaic Installations
  - Landfill (or Wastewater Treatment) Methane Gas Capture & Generation

# Background – State Projects

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- State Funding
  - \$26.4 million to TN over five years
  - \$11.2 million/each to AL, KY, NC over five years
- During implementation the States will use their best efforts to indentify Projects that are located in TVA’s power service area or the TN River watershed
  - Preference to be given to such Projects over Projects outside these areas
- There will likely be leveraged funding opportunities for state projects
- Categories of State Environmental Mitigation Projects include the same categories as the TVA projects plus:
  - Solar, wind, cogeneration, geothermal, funding of agricultural/forestry sector use and production of renewable energy/Carbon sequestration, landfill gas, energy efficiency, building energy conservation projects, bio fuel production, etc. (Identified in paragraph 128 of the Consent Decree)

# Clean/Renewable Environmental Mitigation Projects

Project	Scope	5-Year Budget Estimates (Millions \$)
<b>Solar PV</b>	First RFP will seek proposals from eligible bidders to provide/install new solar PV modules, balance of plant, and all necessary equipment to generate 500kW of solar PV at a TVA facility/direct-serve/other government facility. Second RFP will be issued seeking project proposals from eligible bidders (level of funding & suitable site for 500 kW of solar included in proposals)	\$4
<b>Solar Charging and PEVS</b>	Will rank potential sites hosts and shared-vehicle program providers once suitable candidates are identified through RFPs. Then, sites will be identified and deployment commenced and shared-vehicle program provider identified	\$3
<b>Waste Heat Recovery</b>	RFP submitted to TVA industrial customers for WHR for net amount produced to be 5MW. Selection criteria based on: amount of cost share provided by industrial customer & content of technical proposal	\$10
<b>Landfill Gas</b>	Implemented through Renewable Standard Offer – requires application, contractual agreement, and generation. New landfill gas or wastewater treatment facilities will have option of 10, 15, or 20 year PPA. Each agreement will receive payment for generation with a TOU rate beginning from the date of the signed contract through the term	\$25