Brownfield to Solar Field: Repurposing Closed Landfills for Solar

David Adams, Wilmot Inc.
AGENDA

1. Background
2. Site Selection
3. Approach
4. Benefits
5. Project Summary
Utilities use 30% of a city’s energy
Panel prices fell 500%
30% ITC ending 2019
NASHVILLE ELECTRIC SERVICE

Nashville Electric Service

Music City Solar

• First utility-scale community solar project in Nashville
• Brownfield site north of Nashville
• Improves access of renewable energy to low-moderate income residents
Metro Water Services
Energy Management Program

• Evaluate systems at plants
• Identify capital projects & operational improvements
• Apply triple bottom line analysis
SITE SELECTION

- 5 acres per MW
- Limit shading
- Flat or south facing
- Stable ground
- Close to facility
Central Waste Water Treatment Plant
Omohundro Water Treatment Plant
**APPROACH**

**In Front of the Meter**
- Electricity sold to grid at 3 cents per kWh

**Behind the Meter**
- Used at facility
- offsetting
- power bill
APPROACH

Own/Operate
- Pay upfront
- Responsible for O&M

PPA
- Buy power from developer

PPA/Lease
- Lease equipment from developer
TRIPLE BOTTOM LINE
Taking into account social and environmental factors in addition to economics
PROJECT SUMMARY

- Selected three sites
  - Central – 3% of base load
  - Omohundro – 25% of base load
  - Whites Creek – 80% of base load
- Wrote RFP
- $6M in savings
QUESTIONS?

David Adams
dadams@wilmotinc.com