



# CITY OF MIDDLETON & MG&E SOLAR PARTNERSHIP

COW MEETING 1-27-15

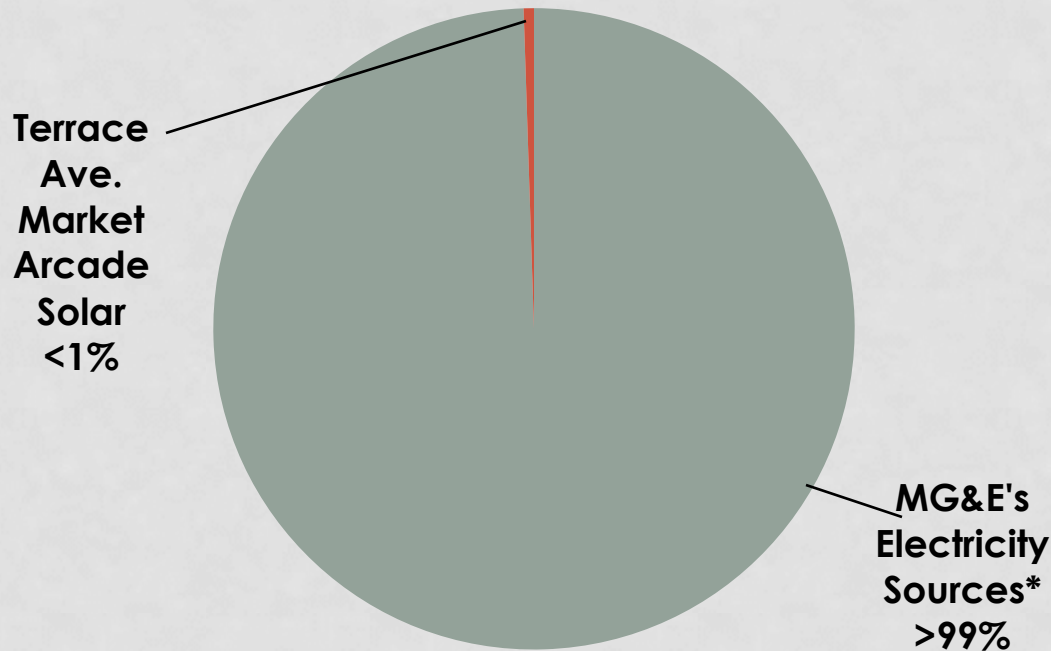


# BACKGROUND

## CITY COUNCIL 2009 RESOLUTION (25 X 25)

- In 2009 Council adopted a resolution (25x25) to support “procuring **25%** of Middleton Municipal electricity from renewable resources by 20**25**.”

### City of Middleton Municipal Energy Sources



The 2010 EECBG project will help us reach 25 x 25 by saving ~210,121 kWh / yr

Municipal usage - ~4,450,000 kWh / yr

Market Arcade solar - ~23,000 kWh / yr

\*12.3% of MG&E's annual electric generation comes from renewable sources.<sup>2</sup>

# CHALLENGES TO ACHIEVING 25 X 25

- Competition for Municipal capital budget funding.
  - Limited funding/nearly unlimited needs.
- Previously proposed solar projects payback longer than Council desired.
- Lack of incentives for renewable energy (grants and otherwise).
- 30% Federal solar tax credit unavailable to municipalities.
  - 30% solar tax credit available to MG&E.
- Logistics of current roof replacement schedules and solar installations.

# MIDDLETON MUNICIPAL RENEWABLE ENERGY INITIATIVES

- March 4, 2014, the Common Council directed staff to include solar in the construction of the Municipal Operations Center (MOC).
- Staff from Administration, Finance Dept, Public Works Dept, Police Dept, and Planning Dept met to discuss solar options.
- Discussions led to meetings with MG&E.
- Discovered synergy of solar objectives; Middleton and MG&E:
  - Middleton:
    - 25x25 & Municipal Operations Center solar
  - MG&E:
    - Expansion of solar 1) capability 2) generation 3) market place

# MIDDLETON/MG&E SOLAR PARTNERSHIP

- Creating Partnership with MG&E:
  - Targets both Municipal and MG&E solar goals & objectives.
  - Solar goals & objectives of both organizations enhanced if solar is added to Police/Court Building.
  - Provides new solar capital financing source.
  - Enables the City to receive some benefits of the 30% Federal solar tax credit, otherwise only available to MG&E.
  - Expands solar concept to include Middleton City residents, in “Community Solar”; largest such project in Wisconsin.
  - Reduces Municipal solar cost thereby shortens the payback period.

# MIDDLETON/MG&E SOLAR PARTNERSHIP

- Partnering with MG&E the City government can:
  - Get a better per kW price for a Municipal-owned solar project and a higher IRR.
  - Increase kW generation on MOC roof (typically “net metering” would limit a MOC solar project to 100 kW).
  - Produce 25% of the Police Department’s electricity needs from the solar energy.
    - Single largest Municipal building demand; 24/7/365

# MIDDLETON/MG&E SOLAR PARTNERSHIP

- MG&E staff will present 3 scenarios or options of Middleton/MG&E partnership project.
- Due to the complex project details and the limited time available tonight, please hold all questions to the end of the presentation, Thank you!

