2018 KY Distributed Renewable Interconnection Summary

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DRAFT

Data Request

- Data was requested voluntarily from Kentucky's regulated utilities, TVA, and municipal utilities in December of 2018 for calendar year 2018.

- Data request included net metering and other non net-metered renewable systems. It excludes utility owned projects.

- When submitted by the utility, biomass combined heat and power is included along with any landfill gas that is not utility owned and that has an interconnection agreement or power purchase agreement..
  - Domtar CHP (Kenergy\Big Rivers) is not included in the data summary.
  - Young Manufacturing CHP (KU) is not included in the data summary.

- Off-grid systems are not included in the data request.

- Berea, Corbin, and Barbourville municipal utilities included data for 2018.

- Data quality improved for non net-metered renewable resources.

- Ft. Knox and Ft. Campbell projects are not included in the data summary.

- Data summary represents data submitted as of January 28, 2019

Summary

- Kentucky has ~34 MW of distributed renewable resources interconnected
  - ~30% is interconnected via net-metering
  - ~70% is interconnected via a non net-metering arrangement
- By Resource Type
  - ~80% of the distributed renewable resources are solar
  - ~19% of distributed renewable resources are biomass and landfill gas
  - The remaining distributed renewable resources are small wind and hydroelectric.
- Kentucky has ~1500 distributed renewable interconnections
  - 75% are net-metering arrangement
  - 25% are non net-metering arrangements
- Distributed renewables are geographically dispersed across the state.
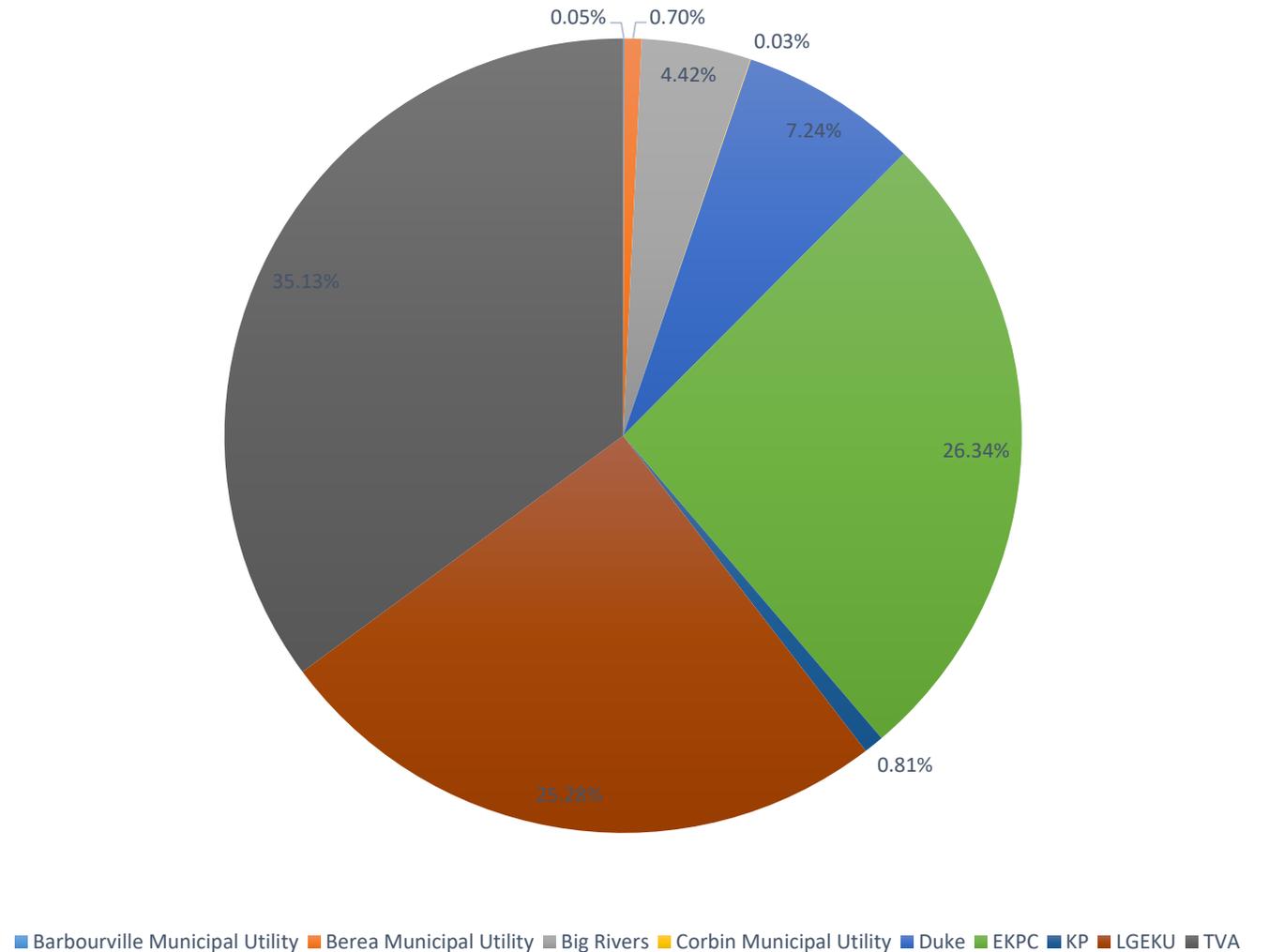
Legend

County Level

2018 Total Distributed Renewables_kW
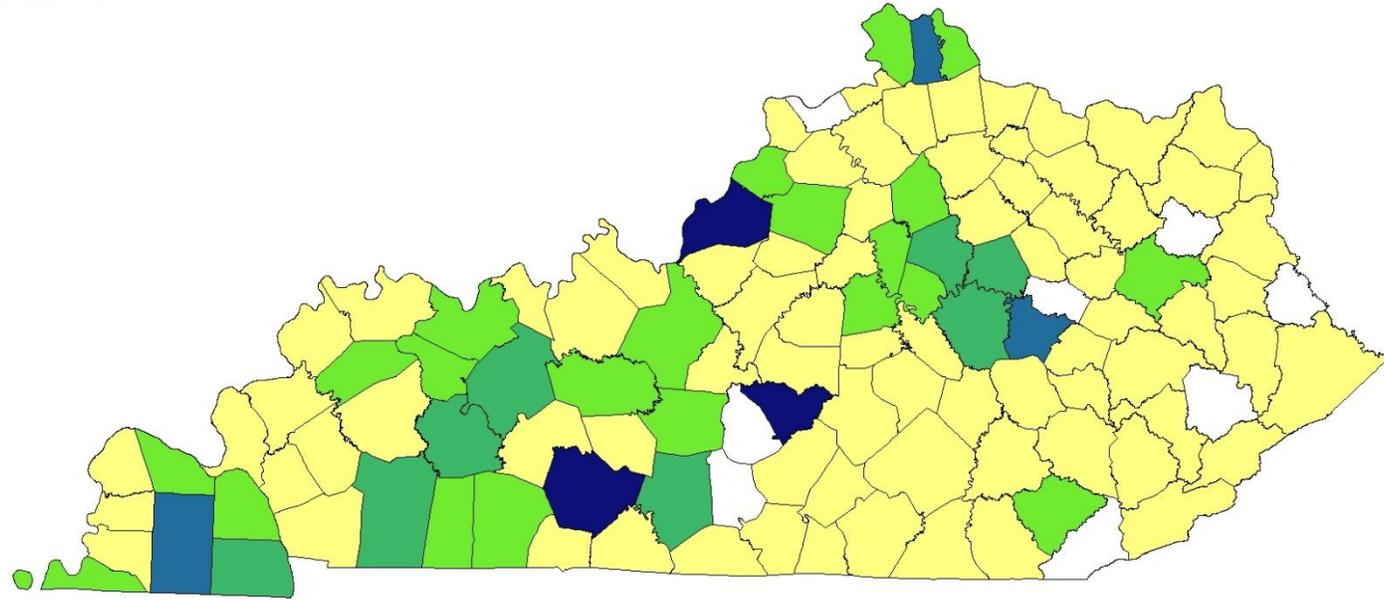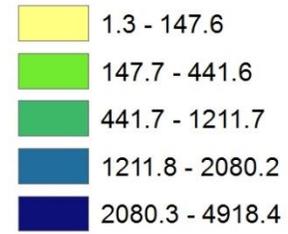
- 1.3 - 147.6
- 147.7 - 441.6
- 441.7 - 1211.7
- 1211.8 - 2080.2
- 2080.3 - 4918.4

Notes

EKCP for the first year reported their non-utility owned interconnections for 1 biomass and 1 landfill gas project.

2018 % of Installed Capacity of Distributed Renewable Interconnected Resources
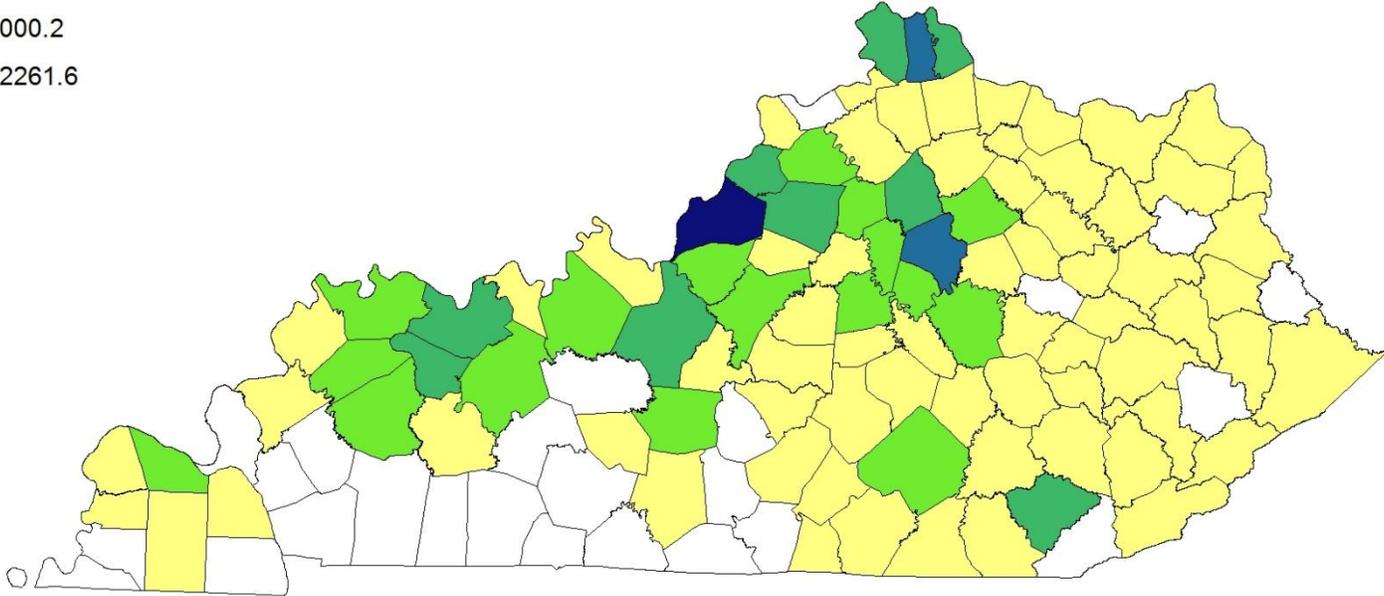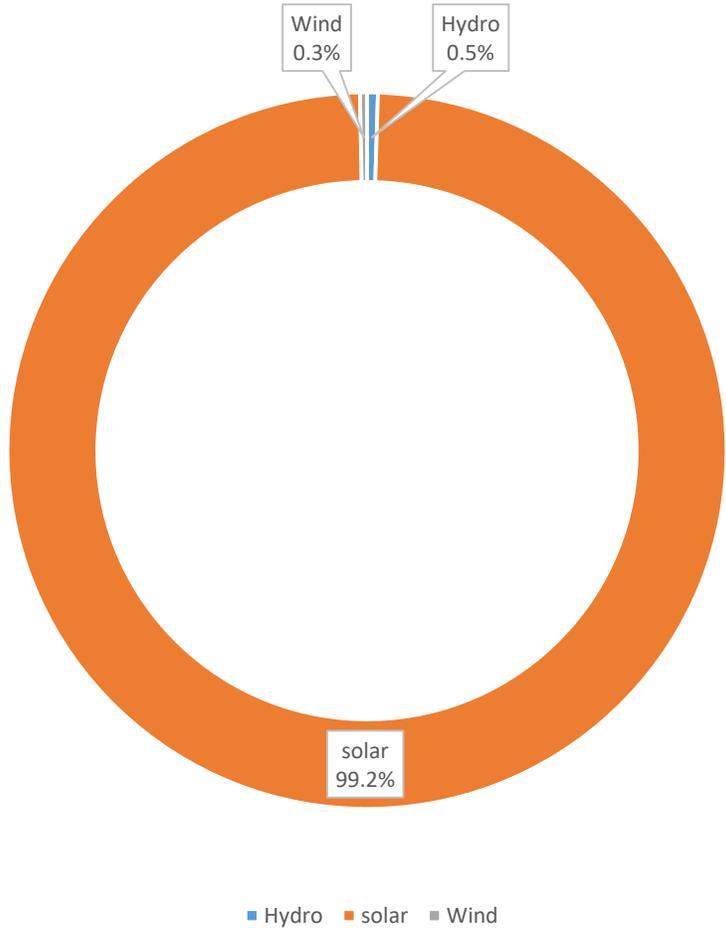
0.05%   0.70%
0.03%
4.42%
7.24%
26.34%
0.81%
25.28%
35.13%

■ Barbourville Municipal Utility ■ Berea Municipal Utility ■ Big Rivers ■ Corbin Municipal Utility ■ Duke ■ EKPC ■ KP ■ LGEKU ■ TVA

Legend

County Level

2018 Net Metering Installed Capacity_kW
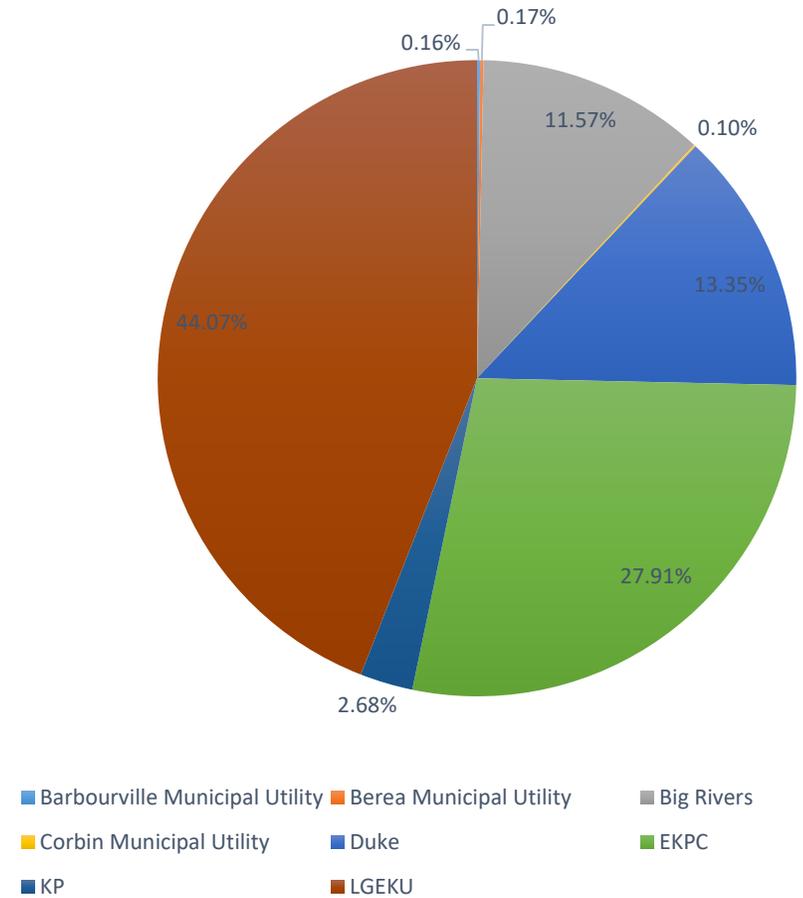
- 1.3 - 62.0
- 62.1 - 178.3
- 178.4 - 390.4
- 390.5 - 1000.2
- 1000.3 - 2261.6

2018 Net Metering Installed Capacity by Fuel Type

Wind 0.3%
Hydro 0.5%
solar 99.2%

■ Hydro ■ solar ■ Wind

2018 % Net Metering Installed Capacity

0.17%
0.16%
11.57%
0.10%
13.35%
27.91%
2.68%
44.07%

■ Barbourville Municipal Utility   ■ Berea Municipal Utility   ■ Big Rivers
■ Corbin Municipal Utility   ■ Duke   ■ EKPC
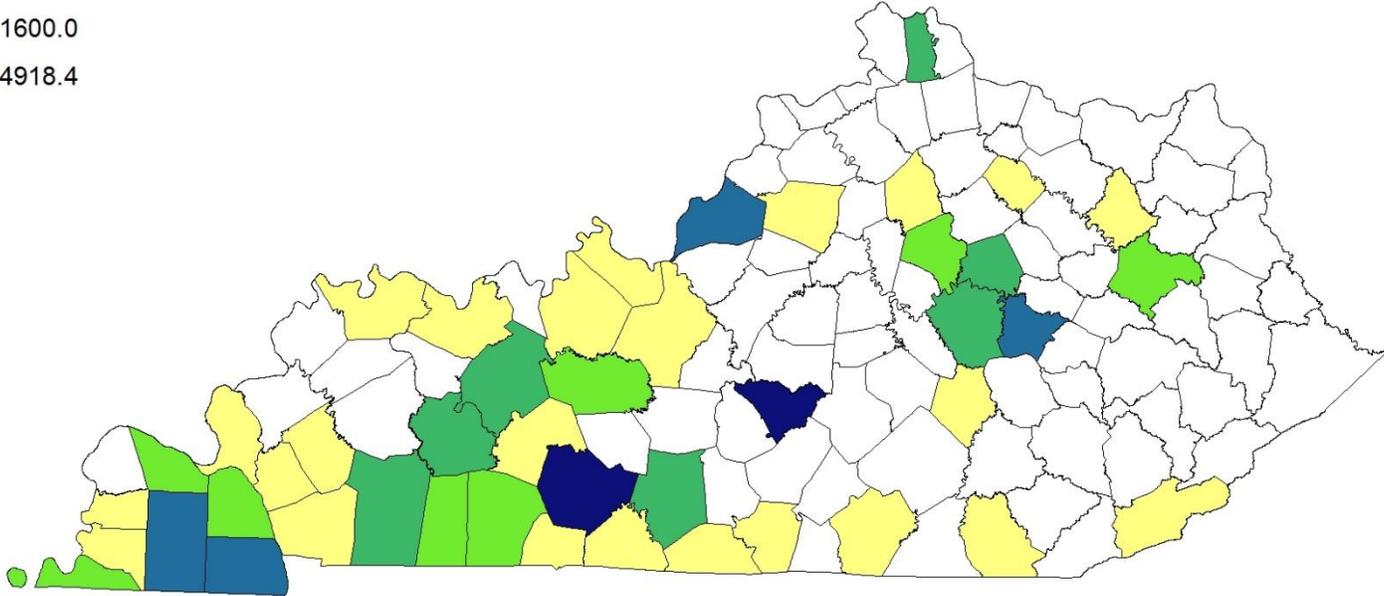■ KP   ■ LGEKU

Notes   TVA's local power companies do not net-meter but offer a buy all\sell all arrangement through the Green Power Provider Program.
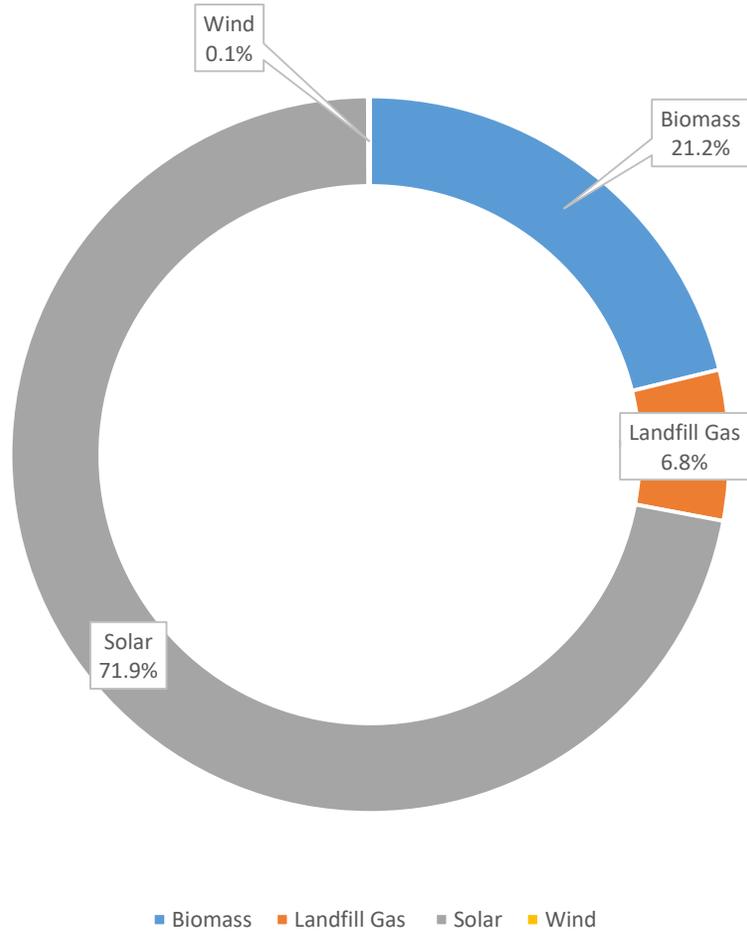
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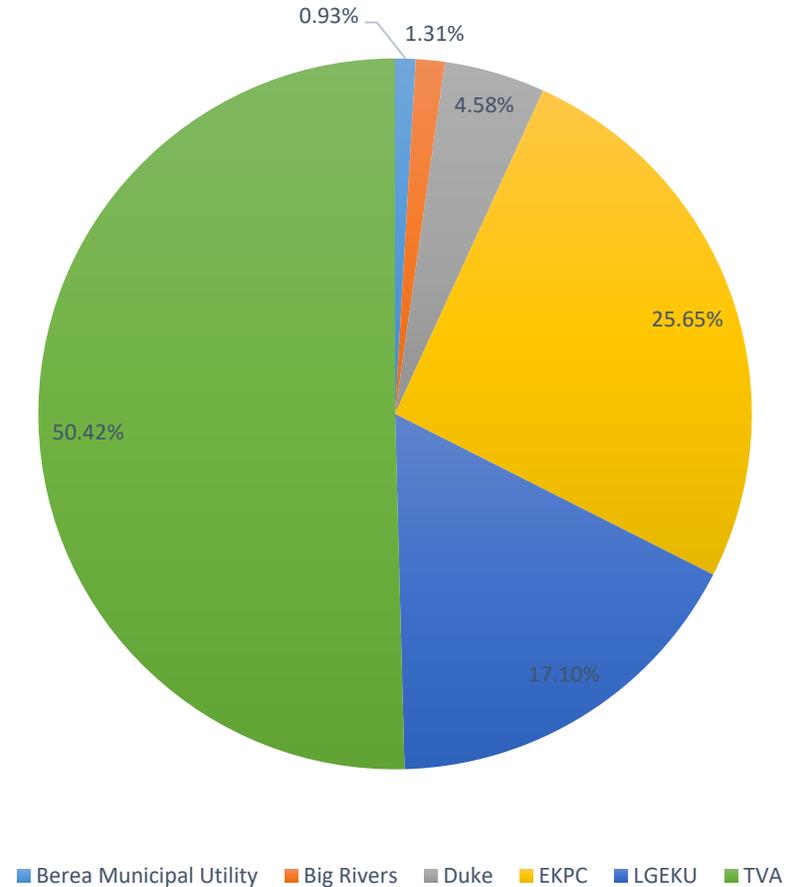**County Level**

2018 Non Net Metered Installed Capacity_kW

- 5.0 - 130.6
- 130.7 - 324.3
- 324.4 - 1080.0
- 1080.1 - 1600.0
- 1600.1 - 4918.4

2018 Non Net-Metered Installed Capacity by Fuel Type

Wind 0.1%
Biomass 21.2%
Landfill Gas 6.8%
Solar 71.9%

■ Biomass ■ Landfill Gas ■ Solar ■ Wind

2018 % Non Net-Metered Installed Capacity

0.93%
1.31%
4.58%
25.65%
50.42%
17.10%

■ Berea Municipal Utility ■ Big Rivers ■ Duke ■ EKPC ■ LGEKU ■ TVA

Notes

TVA made changes to their Green Power Provider program in recent years changing the value of the credits provided and the proportion of capacity reserved for customers.

EKPC for the first year reported their non-utility owned interconnections for 1 biomass and 1 landfill gas project

Berea Municipal Utility BMU credits avoided cost for systems above 10-kW. Systems above 10-kW DC are listed as non net metered.