



# Evergy Renewable Energy

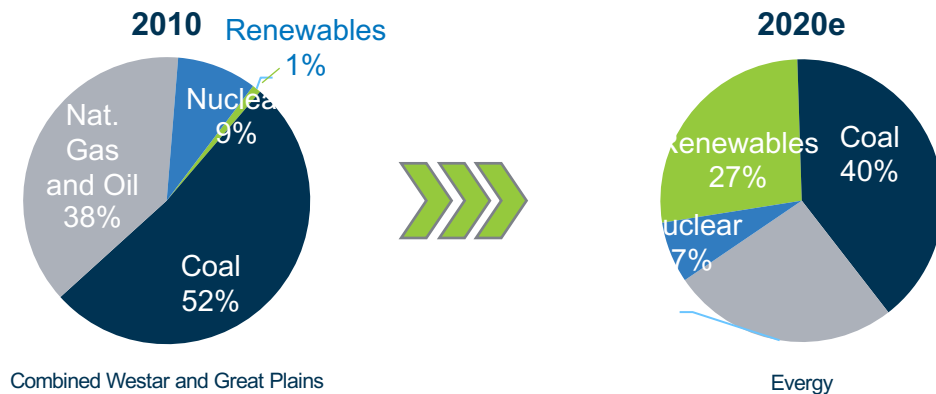
*Tammie Rhea*



# Sustainable Energy Portfolio

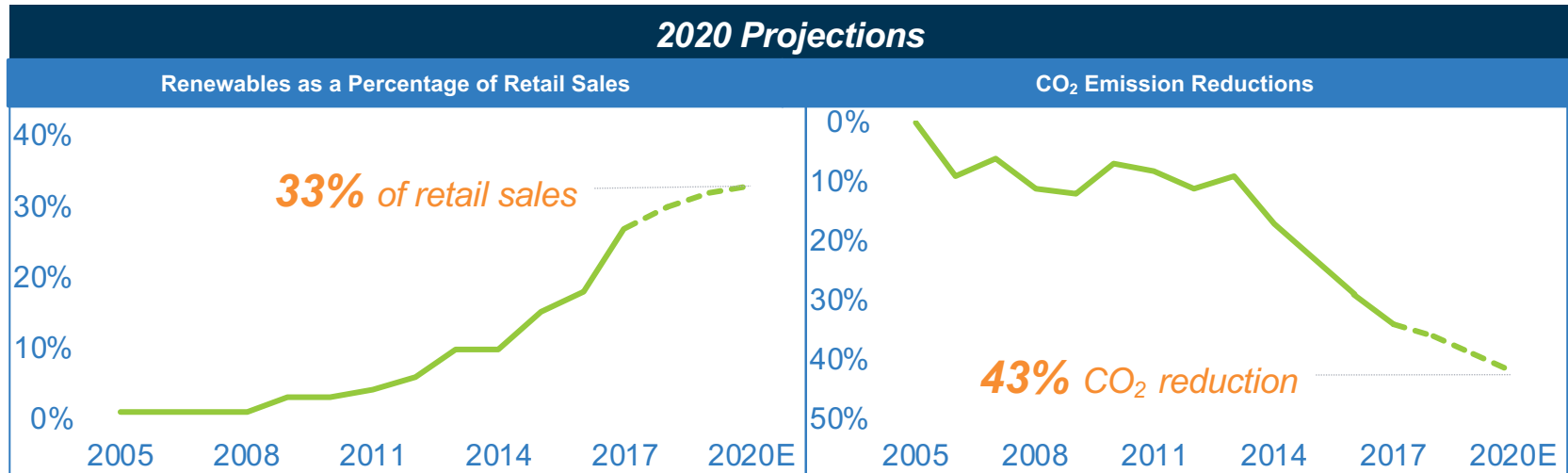
- By 2020, we expect carbon emission reductions of over 40%, from 2010 levels
- Wind portfolio will be over 3,800MW by year-end 2021
- Emission-free sources (renewable and nuclear) provide nearly half of retail customers' energy needs
- Strong platform to grow renewables and take advantage of abundant local natural resources

## Generation Capacity by Fuel Type





# Clean Energy Leader



- Well ahead of renewable portfolio standards in Missouri and voluntary goals in Kansas
  - Missouri RPS requires 15% electricity sales to customers with renewable sources by 2021
  - Kansas has voluntary goal of 20% utility's peak by 2020

# Renewable Energy

# Evergy Renewables

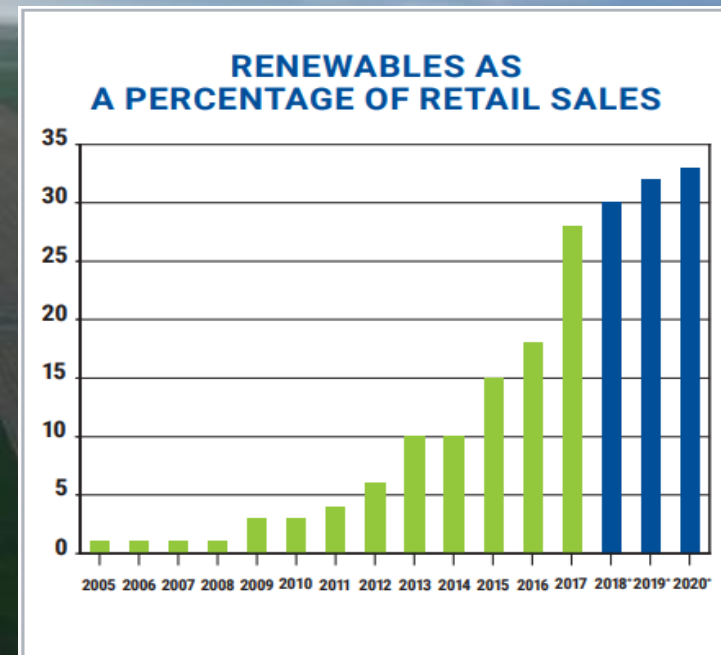
- 3,100 MW of Wind will increase to over 3,800 by 2021
- 60 MW of Hydro
- 7.2 MW of Landfill Gas
  - Rolling Meadows
  - St. Joe LFG
- 4.56 MW of Solar
- Distributed Generation
  - 97 MW of Solar
  - 1 MW of Wind



118 kW system in Lenexa

# Clean Energy Milestones

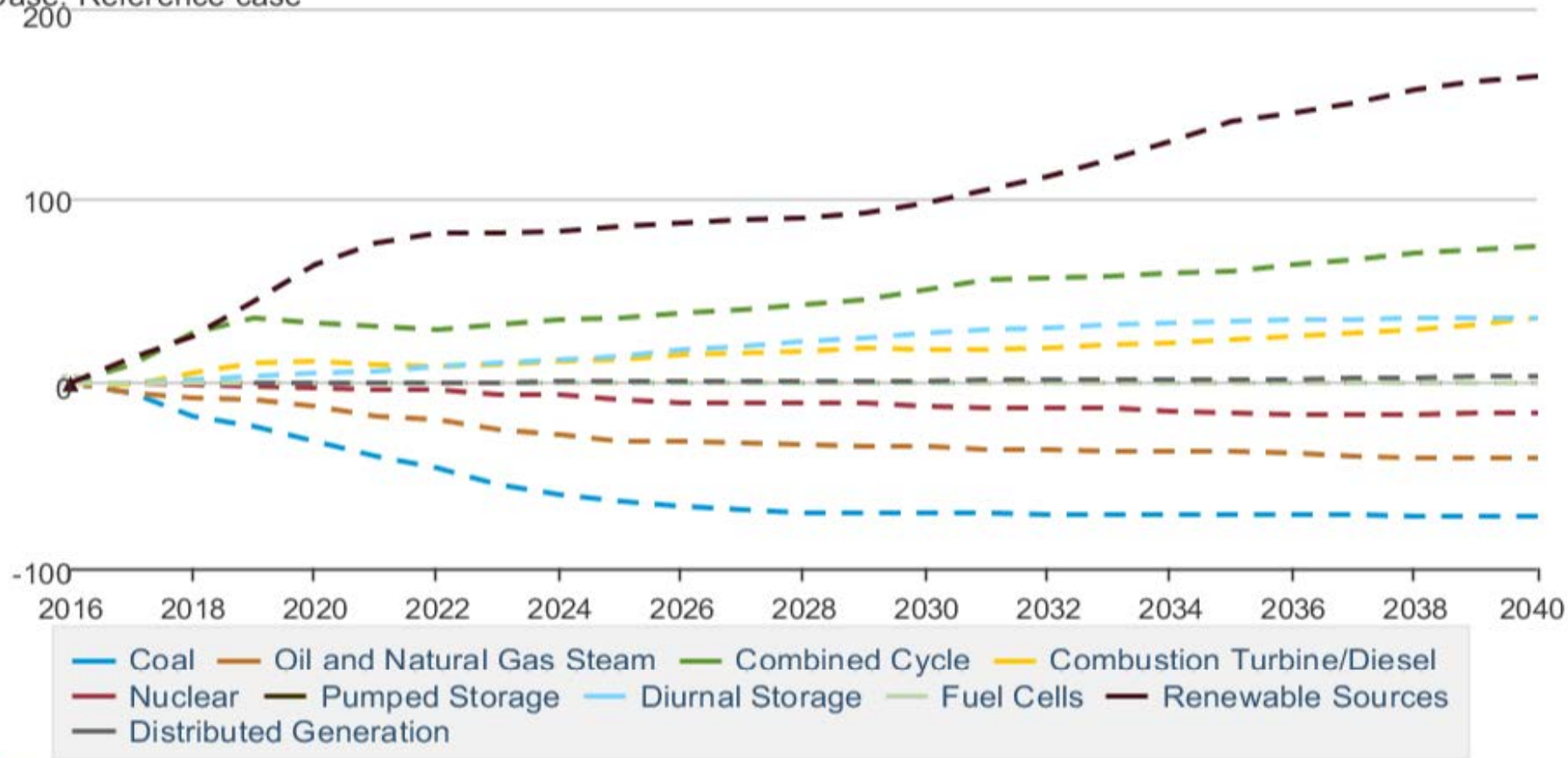
Since 2017 more than half the power to Evergy customers have come from emission-free sources---renewables and nuclear power.



# U.S. Electric Capacity Projections

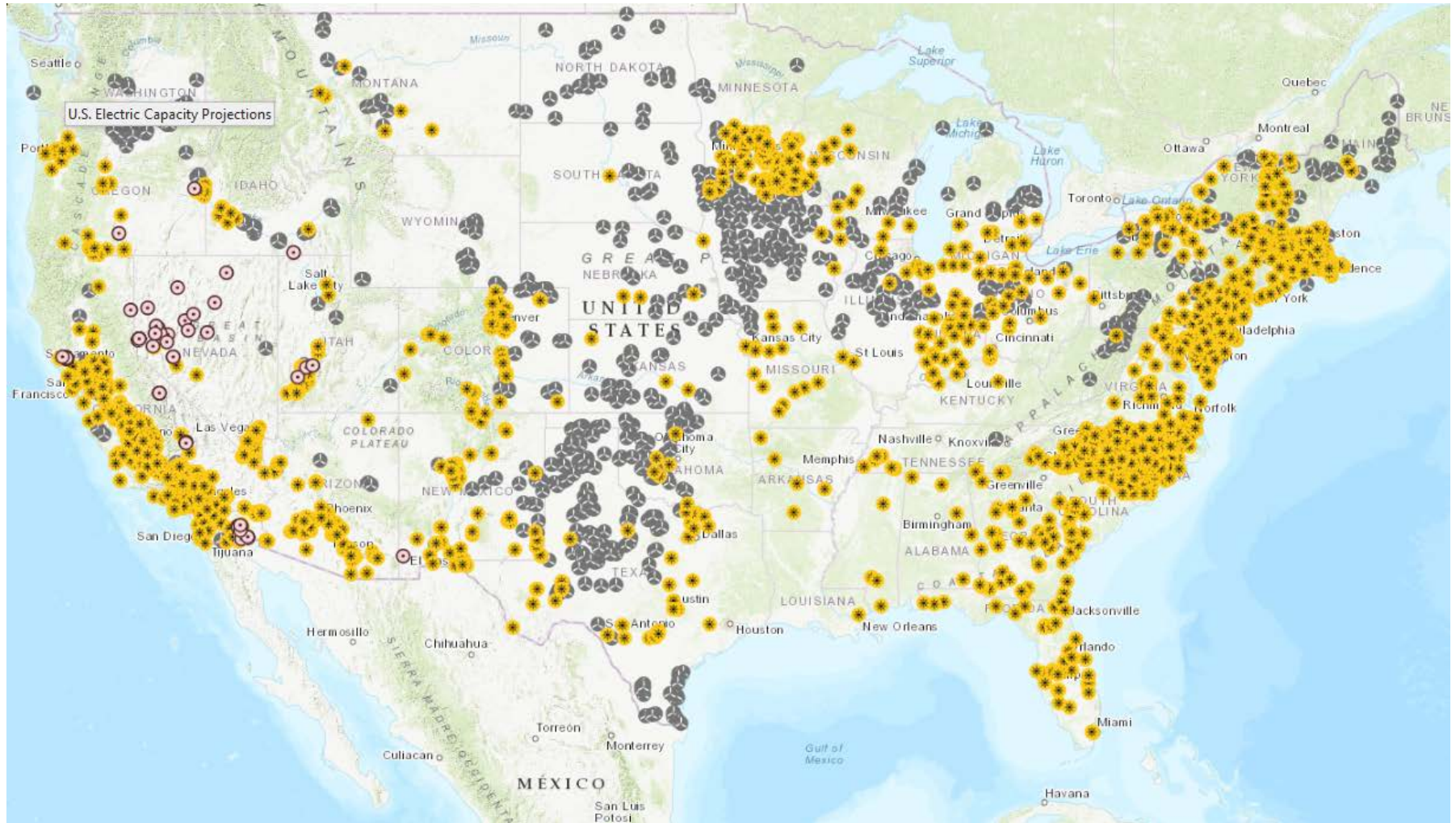
Indexed to 2016 as value

Case: Reference case





# Map of Wind and Solar Facilities



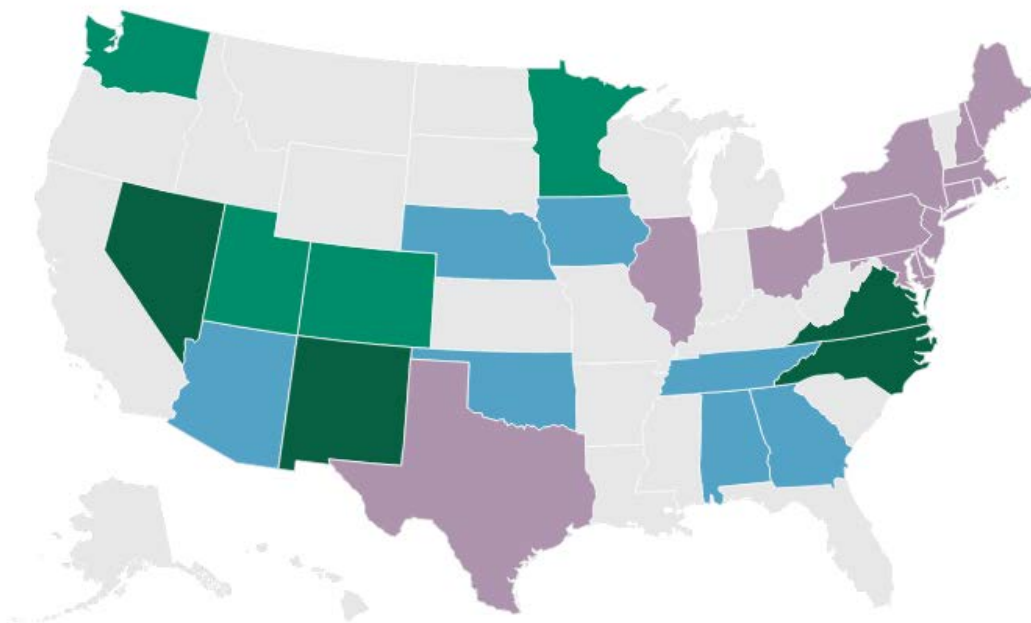
<https://www.eia.gov/state/maps.php?v=Renewable>



# Opportunity-2016

## U.S. RENEWABLE ENERGY MAP: A GUIDE FOR CORPORATE BUYERS

Where customers can buy large-scale renewable energy through the grid



### Utility Renewable Energy (RE) Deals



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# Commercial & Industrial Renewable Strategy

- Economic product
- Long term price certainty
- “Additionality”
  - Drive the addition of renewable generation
  - The ability to claim ownership of a project
- De-Risk the Virtual PPA



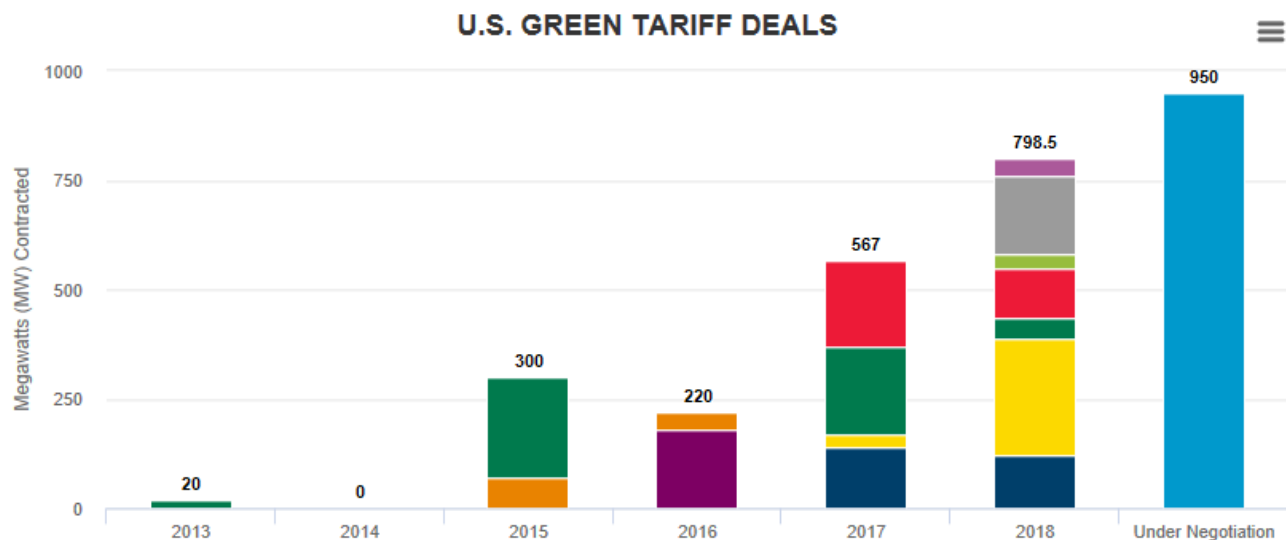


# Key Challenges

- Provide a product that benefits all customers
- Utilize best local resource
  - Benefit to local economy
- Intermittent generation vs. time energy is used
- De-Risk the product
  - Long-term price certainty
  - Congestion
  - Curtailment risk
  - Location

# Green Tariff Deals

## Grid Transformation: Green Tariff Deals



### Green Tariffs

(Click to Explore Each Tariff)

- Colorado - Renewable\*Connect
- Georgia - Commercial and Industrial REDI Schedule CIR -1
- Michigan - Voluntary Large Customer Renewable Energy Pilot Program
- Nebraska - Schedule No. 261 M
- Nevada - Green Energy Rider, Schedule NGR
- New Mexico - Green Energy Rider, No. 47
- North Carolina - Green Source Rider, Rider GS
- Virginia - Schedule MBR
- Washington - Green Direct, Sched No. 139
- Under Negotiation

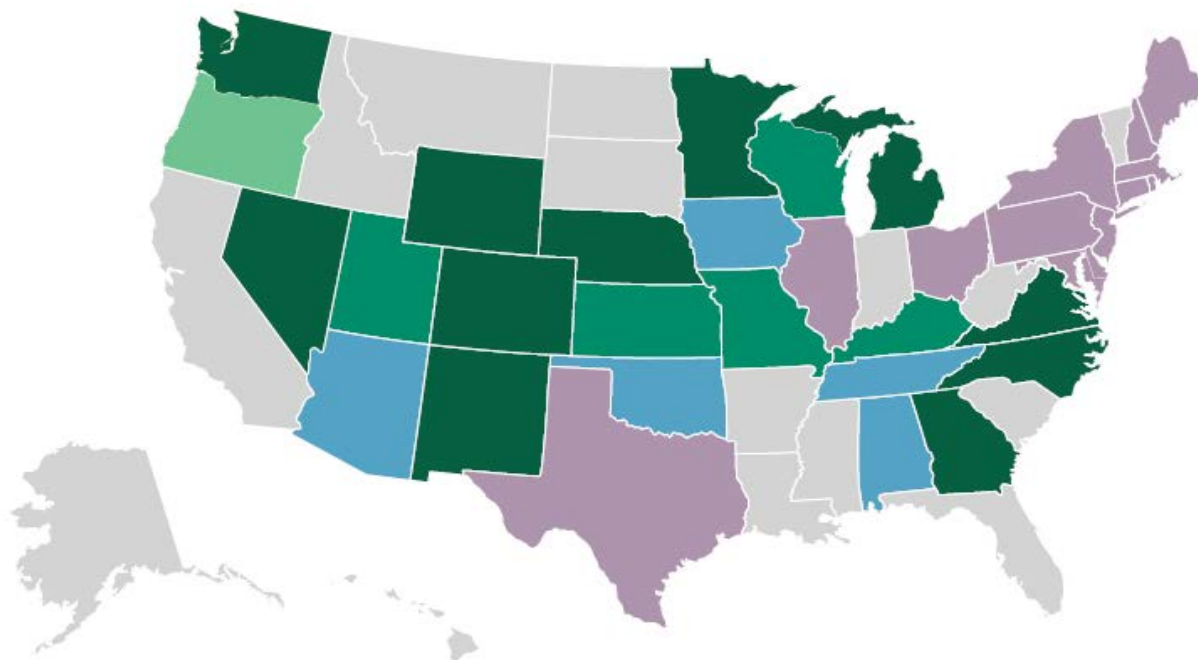


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<https://www.wri.org/resources/charts-graphs/grid-transformation-green-tariff-deals>

# Success!

## STATES WITH GREEN TARIFF PROGRAMS, OCTOBER 2018



### Utility Renewable Energy (RE) Deals



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*Note:* In states with multiple green tariffs, the green coloring indicates the furthest a green tariff has been utilized. For example, in Virginia there are five green tariffs with differing statuses; however, only one green tariff has been used to execute a renewable energy deal. The interactive version of this map includes additional information on the various tariffs provided in each state and the deals executed under each. See WRI 2017.

*Source:* WRI 2017.



# Renewable Energy Programs



# Net Metering/Parallel Generation

- Programs that compensate for energy exported to Utility
  - Net Metering offers a 1:1 kWh exchange
    - System sizing limitation based on historical usage
  - PG offers credit per kWh
    - System sizing is more flexible
- Rules are statutory based but similar in implementation
- 95+ MW of customer-owned generation
- Rebates currently available in MO



# Solar Rebates-Round 2

- Missouri SB 564
  - Pass in May 2018
- Rebates available for new or expanded systems
  - Up to 25 kW for Residential; 150 kW for non-Residential
  - Applies to all types of interconnections
- Rebate Payout:
  - \$0.50/watt- Operational before 6/30/19
  - \$0.25/watt- Operational before 12/31/23
- \$8.0M per MO jurisdiction; \$16M total made available upfront
- Business Social Service Programs

# Wind Subscription- Coming to MO

- All customers can choose up to 100% of their energy from renewable sources
  - \$.0025/kWh (add to current bill)
  - Renewable Energy Credits (REC's)

## 2019

- Over 33,000 customers signed up as of 12/31/2019
- Projected to retire 185,000 REC's

### FLEXIBILITY

There is no long-term commitment to the program, and you can elect to change your percentage of wind power at any time.

### AFFORDABILITY

The average residential customer can commit to 100% wind energy for only \$2.50 more per month. There is no up-front cost, and you can cancel at any time. Being green has never been more affordable.

### SUSTAINABILITY

Your purchase increases the environmental benefits associated with renewable energy, such as reducing fossil fuel emissions. This helps sustain the Kansas environment for the future.



# Evergy Solar Subscription Program

- Up to 5 MW of capacity
- All customers are eligible
- Offset a selected portion of energy
- Expected to be premium product
  - \$5-\$15/mo.
  - Potential for price decrease
- Local resource
- Expandable
- Current interest list is ~1000 Customers





# Evergy Renewables Direct

- Customers with load of 200+ kW; 100-200 MW available
- Offset 1-100% of energy
- 5, 10, 15, 20-year terms
- **KCP&L-Kansas**
  - Fixed Renewable Participation Charge: \$0.0XX/kWh
  - Replaces variable fuel adjustment (~\$0.021/kWh)
- **KCP&L-Missouri**
  - Customers agree to Subscription Charge: \$XX.XX/MWh
  - Resulting costs/credits reflected on bill via Renewable Adjustment
- Costs for programs will be based on chosen resource(s)
- RECs transferred customer/ retired on their behalf



# Non-Tariff Programs

- Direct Purchase of REC's
  - MGP – 3 year agreement
- Wholesale Wind – aggregate wholesale customers
- Virtual PPA – no impact to Westar bill; buyer takes full market risk



- Every advantage
  - Trusted business partner
  - Builder – Operator – Owner – Seller of power for over 100 years
  - Economies of scale
- Expand customer base through NEW partnerships
- City of Baldwin City Solar PV Array
  - 1.211 MW DC/0.980 MW AC
  - 30 year PPA



# Evergy Solar- Non Solar

- Established in 2013
  - Trusted business partner
  - Economies of scale
- 65 solar PV arrays installed
- KC Royals
  - 120 Panel system
  - Largest in-stadium solar array



Thank You