# Resources for renewable energy

## General

- U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE),
  - http://www.eere.energy.gov/
  - •
- US Energy Information Agency
  - https://www.eia.gov
  - •
- National Renewable Energy Laboratory
  - http://www.nrel.gov

## Wind

USGS map of wind facilities

https://eerscmap.usgs.gov/uswtdb/viewer/#4.08/38.84/-102.7

Bureau of Ocean Energy Management: Vineyard wind

https://www.boem.gov/vineyard-wind

# Wind maps

https://www.nrel.gov/gis/wind-resource-maps.html

# Solar

## **Solar Shingles**

https://solarmagazine.com/solar-roofs/solar-shingles/

## Maryland grant program

https://energy.maryland.gov/business/Pages/incentives/PVEVprogram.aspx

## A Maryland Homeowner's Guide for Going Solar

- <a href="https://news.maryland.gov/mea/wp-content/uploads/sites/15/2021/05/A-Maryland-Homeowners-Guide.pdf">https://news.maryland.gov/mea/wp-content/uploads/sites/15/2021/05/A-Maryland-Homeowners-Guide.pdf</a> (One page)
- <a href="https://energy.maryland.gov/residential/Documents/A%20Maryland%20Consumers%2">https://energy.maryland.gov/residential/Documents/A%20Maryland%20Consumers%2</a> <a href="https://energy.maryland.gov/residential/Documents/A%20Maryland%20Consumers%2">OGuide%20to%20Solar%20LR72dpi.pdf</a> (70 pages)

## Solar electricity by state

https://cleantechnica.com/2020/10/05/top-us-states-for-percentage-of-electricity-from-solar-cleantechnica-report/

# **Energy from the ocean (water)**

#### **OTEC Hawaii**

https://www.treehugger.com/renewable-energy/hawaii-flips-switch-ocean-thermal-energy-conversion-plant-harvesting-clean-energy-sea.html

# **Energy Efficiency**

## Dept of Energy home geothermal heat and AC

https://www.energy.gov/energysaver/heat-and-cool/heat-pump-systems/geothermal-heat-pumps

## Reflective cooling films

https://www.skycoolsystems.com http://radi-cool.com

#### **Electrification benefits**

www.Rewiringamerica.org

## **EPA Energy Star ratings**

https://www.energystar.gov

## Lighting information

https://www.energystar.gov/sites/default/files/asset/document/LBR 2017-LED-Takeover.pdf http://energy.gov/energysaver/led-lighting

## Sources for LED bulbs

https://www.superbrightleds.com https://www.prolighting.com

## **US Auto MPG ratings**

http://www.fueleconomy.gov

#### **Grid losses**

http://insideenergy.org/2015/11/06/lost-in-transmission-how-much-electricity-disappears-between-a-power-plant-and-your-plug/

## Methane emission reduction

https://www.unep.org/news-and-stories/press-release/global-assessment-urgent-steps-must-be-taken-reduce-methane

# **Trade associations**

Cleanpower (wind, utility scale solar, storage, transmission) https://cleanpower.org

Solar Energy Industries Association

http://www.seia.org/policy/solar-technology/photovoltaic-solar-electric

**Biogas** 

http://americanbiogascouncil.org/index.asp

Home geothermal

https://igshpa.org/geothermal/

# **Economics**

Costs of different types of power

https://www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2018/

Projections: What will it take for the US to get to net zero?

<a href="https://netzeroamerica.princeton.edu/img/Princeton NZA Interim Report 15 Dec 2020 FIN">https://netzeroamerica.princeton.edu/img/Princeton NZA Interim Report 15 Dec 2020 FIN AL.pdf</a> (345 pages)

# Miscellaneous

On-line magazine covering renewable energy topics http://www.renewableenergyworld.com/index.html

Corporation for Public Broadcasting energy-reporting collaborative <a href="http://insideenergy.org">http://insideenergy.org</a>

NY Times article: More Power lines or more Rooftop Solar Panels <a href="https://www.nytimes.com/2021/07/11/business/energy-environment/biden-climate-transmission-lines.html">https://www.nytimes.com/2021/07/11/business/energy-environment/biden-climate-transmission-lines.html</a>

Article on the health benefits of moving to renewable energy https://cleanenergyfutures.syr.edu