

Physics and Mathematics of Sustainable Energy

Country Explorations

College of the Atlantic

Due Friday, November 1, 2019

Instructions

- For this assignment you will choose a country or countries and find some data and make some calculations for them. Enter your results on the shared spreadsheet here: <https://docs.google.com/spreadsheets/d/1tyBvcocQURMVK4yUR4m33Uzfb04ZPGneMDxIcTwbiY4/edit?usp=sharing>
- I've listed some suggestions, but feel free to choose whichever country(ies) you wish.
- I'd recommend working with one or two other people and doing one or two countries.
- There's nothing to hand in—just post your numbers on the shared spreadsheet. If you have questions about any of the calculations, let me know and I'd be happy to take a look at what you're doing or help you find some data online.

Places to go for data

- <https://flowcharts.llnl.gov/commodities/energy>: energy flowcharts. You may encounter some new units. For example, one PJ is one petajoule which is 10^{15} joules. If you have questions about units, let me know.
- <http://www.compareyourcountry.org/climate-policies?cr=oeed&lg=en&page=2> Carbon intensities of electricity production
- <https://www.climatewatchdata.org/ghg-emissions> for emissions data
- <https://www.cia.gov/library/publications/the-world-factbook/docs/profileguide.html> for GDP, electricity access percent of electricity from nuclear, hydro, and other renewables.