

# More Capacity Factors

Physics and Mathematics of Sustainable Energy

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Figure 1: Aerial view of the Robert Scherer power plant north of Macon, Georgia. Photograph by wikipedia user Antennas. Released to the public domain. File source [AerialviewoftheRobertSchererpowerplantnorthofMacon, Georgia](#).

In 2018 the Scherer coal plant in Georgia, USA, generated 15,420,000 MWh of electricity. The nameplate capacity is 3.5GW.

1. What is the plant's capacity factor?
2. The average home in Georgia uses 1080 kWh per month. How many homes could the Scherer plant power?
3. Electricity in Georgia currently costs \$0.153/kWh. How much does the average Georgia household pay for electricity in a year?
4. Assuming that Scherer sells all of its electricity at the residential rate given above, what is Scherer's annual revenue?