

City of Baxley

SOLAR ANALYSIS



Overview

- Introduction of Baxley GA
- Estimating the Impact of Solar Power: Financial and Energy Productivity
- Water Treatment Facility
- Comparisons
- Acknowledgments

Baxley Georgia



The City of Baxley, Georgia is located in Appling County in the Southeastern part of Georgia. Rich Farm and Timber Lands, as well as numerous lakes and streams comprise the geography of the region. As county seat, Baxley is the largest city in the county and serves as a shopping and medical hub for the area. (www.baxley.org)

Confirming Financial and Productivity Projections Solar Project



City Manager Jeff Baxley asked us to compile data sets around 650kw solar arrays. Specifically we looked at the financial side of their energy needs and the capabilities of solar arrays and estimates on energy production



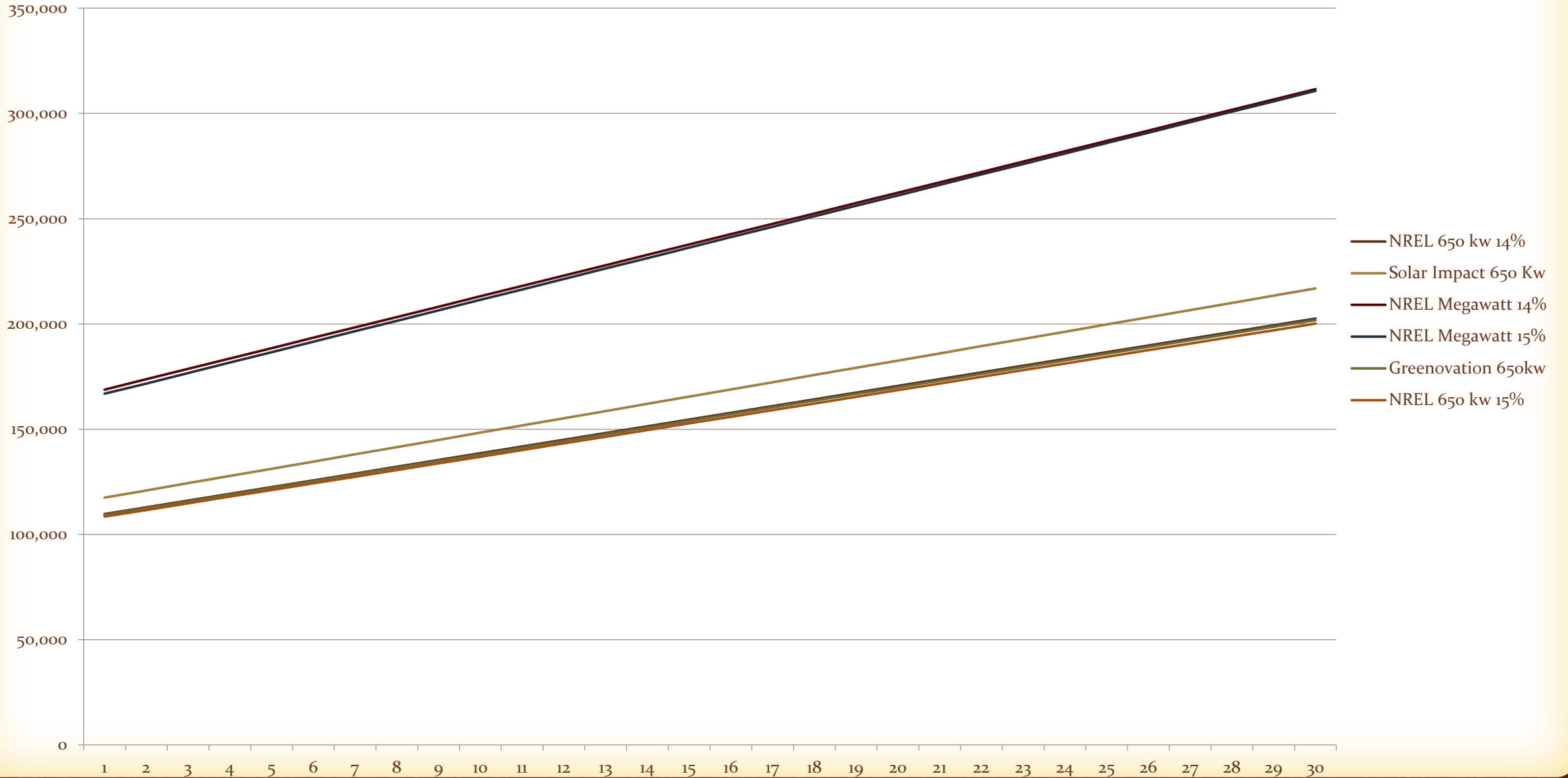


GREENAVATIONS POWER, INC.

"Physics to Finance" for Solar Energy...

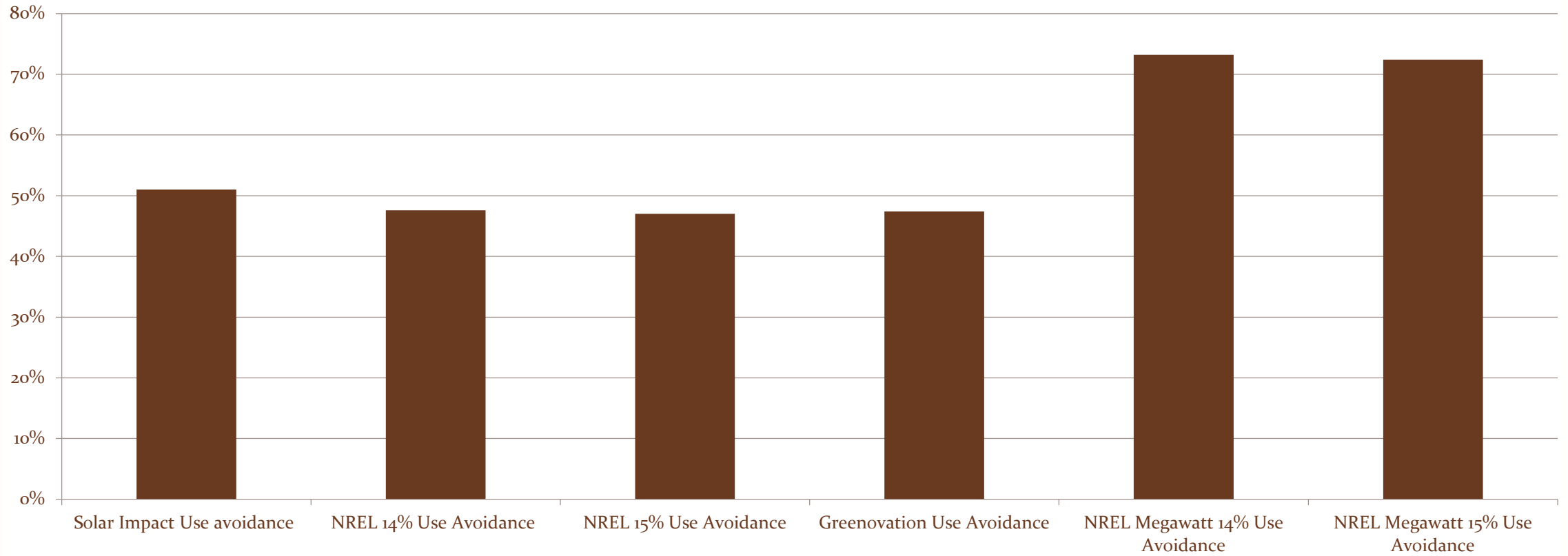


Retail Energy Generate Over 30 year period



Cost of Construction Estimates	Dollars Per KW	1 Megawatt	650 Kw
NREL	\$2.6	\$2,600,000	\$1,690,000
Ga Solar	\$2.5	\$2,500,000	\$1,625,000
Greenovations	\$2.85	\$2,850,000	\$1,852,500

Energy Use Avoidance



Limitations of Data

Lack of on-site knowledge from data sources

- NREL Data collected 19 miles south of proposed construction site
- Location of Solar Impact proposed annual kilowatt hours is unknown
- no long term data collected from our sources at the Baxley construction location

NREL PV Watt analysis has fewer variables, less flexibility but is considered too be conservative by default

Greenovations PV SYS analysis has more variables and greater knowledge of the Baxley location, greater number of variables can yield more liberal or conservative results.

The data was calculated under the assumption that the first year production would remain constant for the thirty year period; degradation of the facility was not calculated. Additionally, the data was calculated with an assumed 3% increase in electrical cost per year.

NREL and Georgia Solar cost of construction projections do not encompass all variables associated with construction