Georgia Solar Assessment

2019-22

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Georgia Solar Market Forecast

A. Georgia Power Company

I. 2019 *Approved* IRP:
   a. 2,000 MWs of Utility Scale Solar
   b. 210 MWs of Distributed Generation Solar

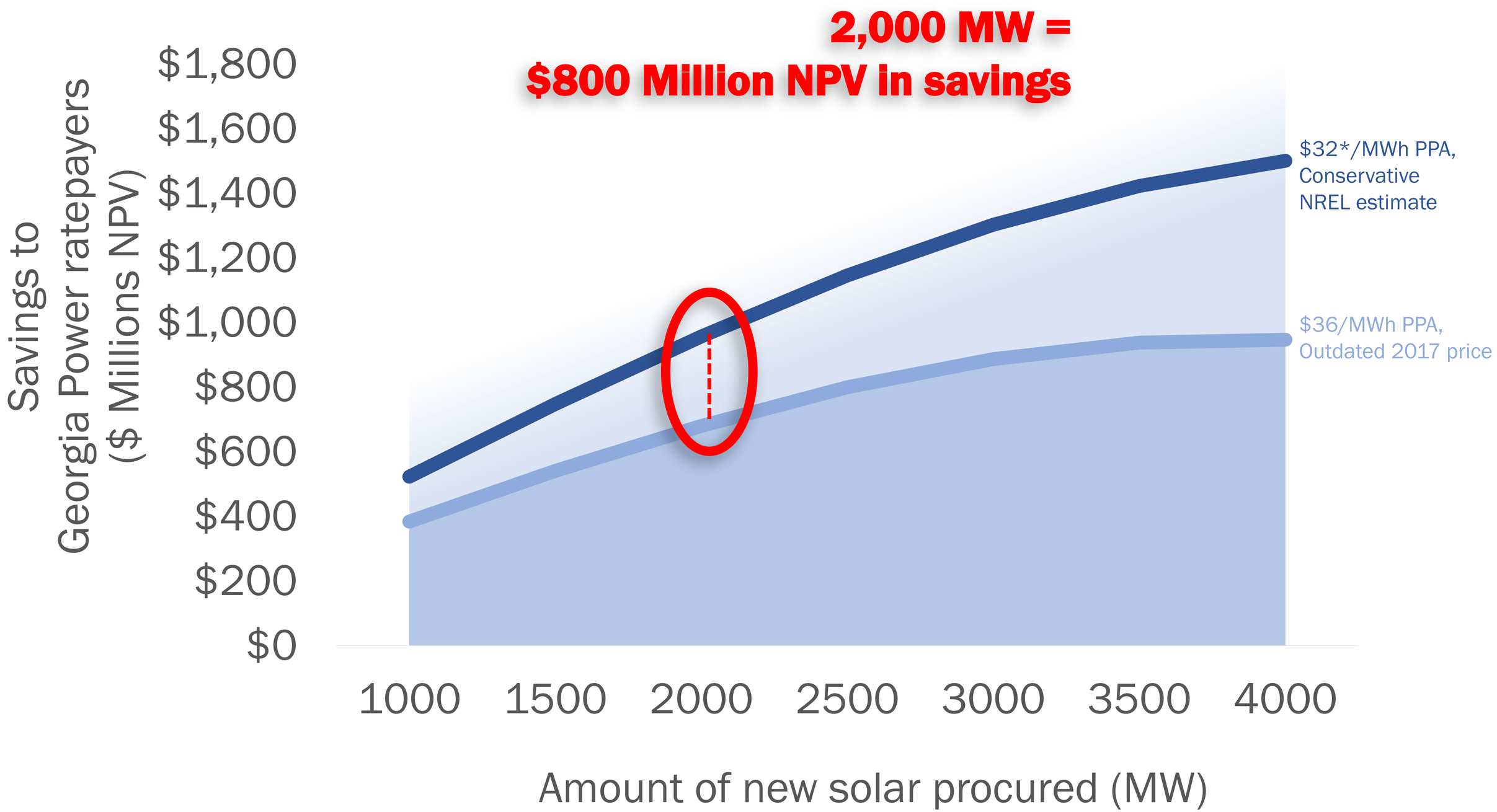
B. Electric Management Cooperatives (EMCs):

I. 2019-22:
   a. *Estimated* New MWs:
      a. 350 Utility Scale
      b. 50 Distributed Generation

C. Municipal Energy Authority of Georgia (MEAG)

I. 2019-22:
   a. *Estimated* New MWs:
      a. 300 Utility Scale

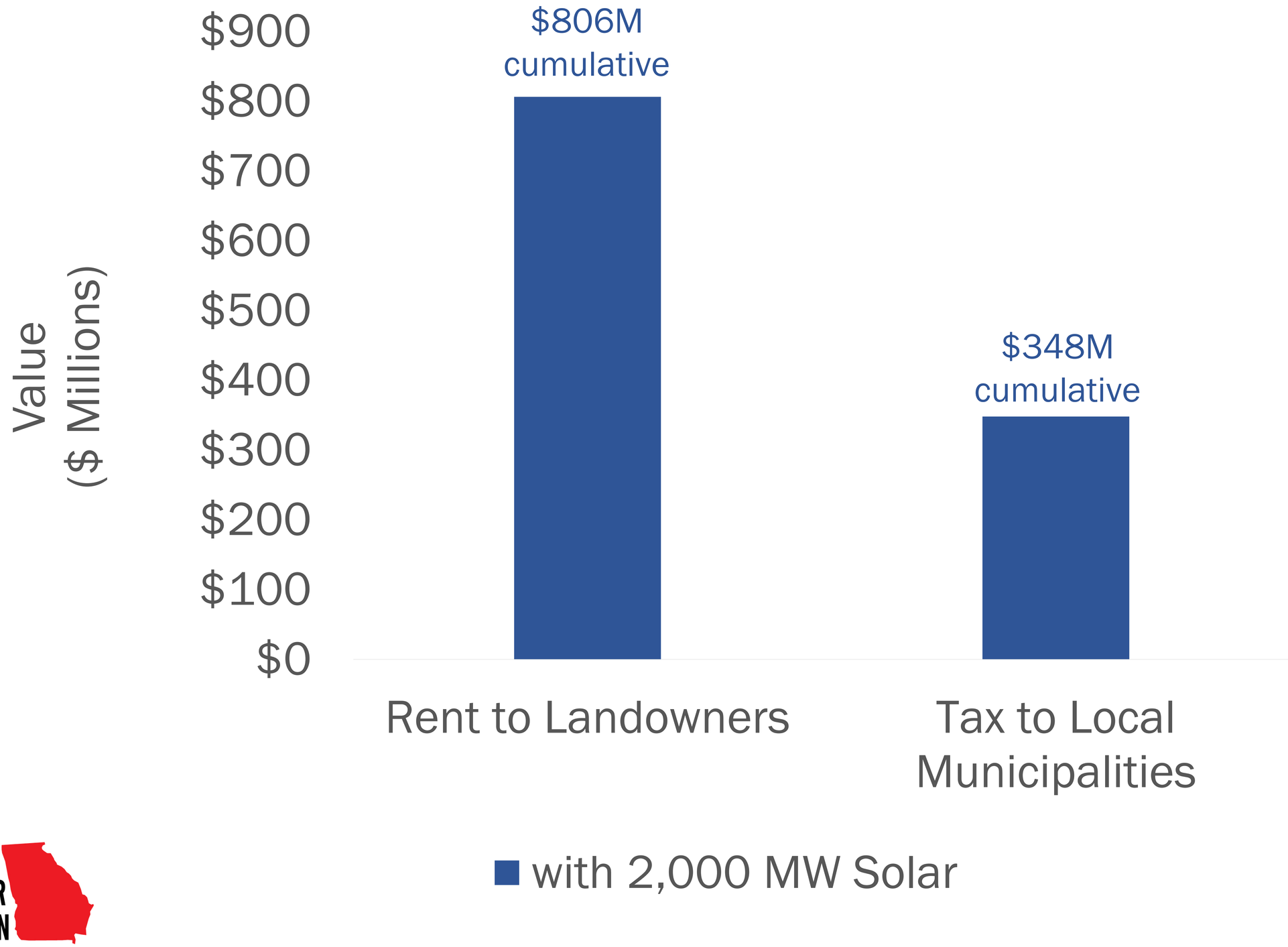
Georgia Solar IRP Economic Impact = at least $800 Million in savings to Georgia Power ratepayers



GEORGIA LARGE SCALE SOLAR ASSOCIATION

* = GLSSA projects solar price point to fall below $32/MWh in future solicitations, *increasing* ratepayer benefits.

$1.15 Billion in external economic benefit to Georgia landowners and local municipalities- *GA Power Company Only*



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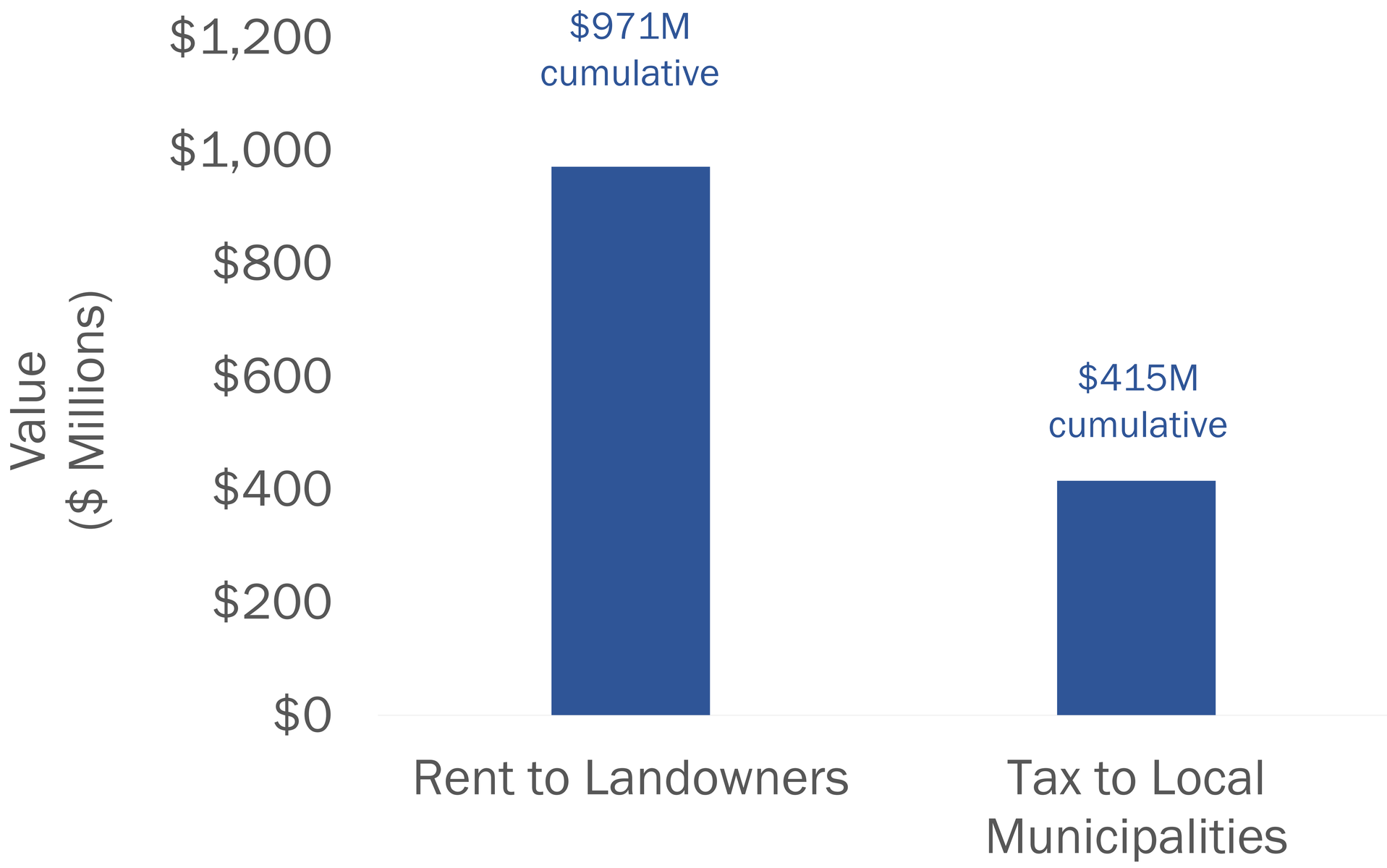
$1.386 Billion in external economic benefit to Georgia landowners and local municipalities *including EMC & MEAG*



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Georgia Solar Market Impact

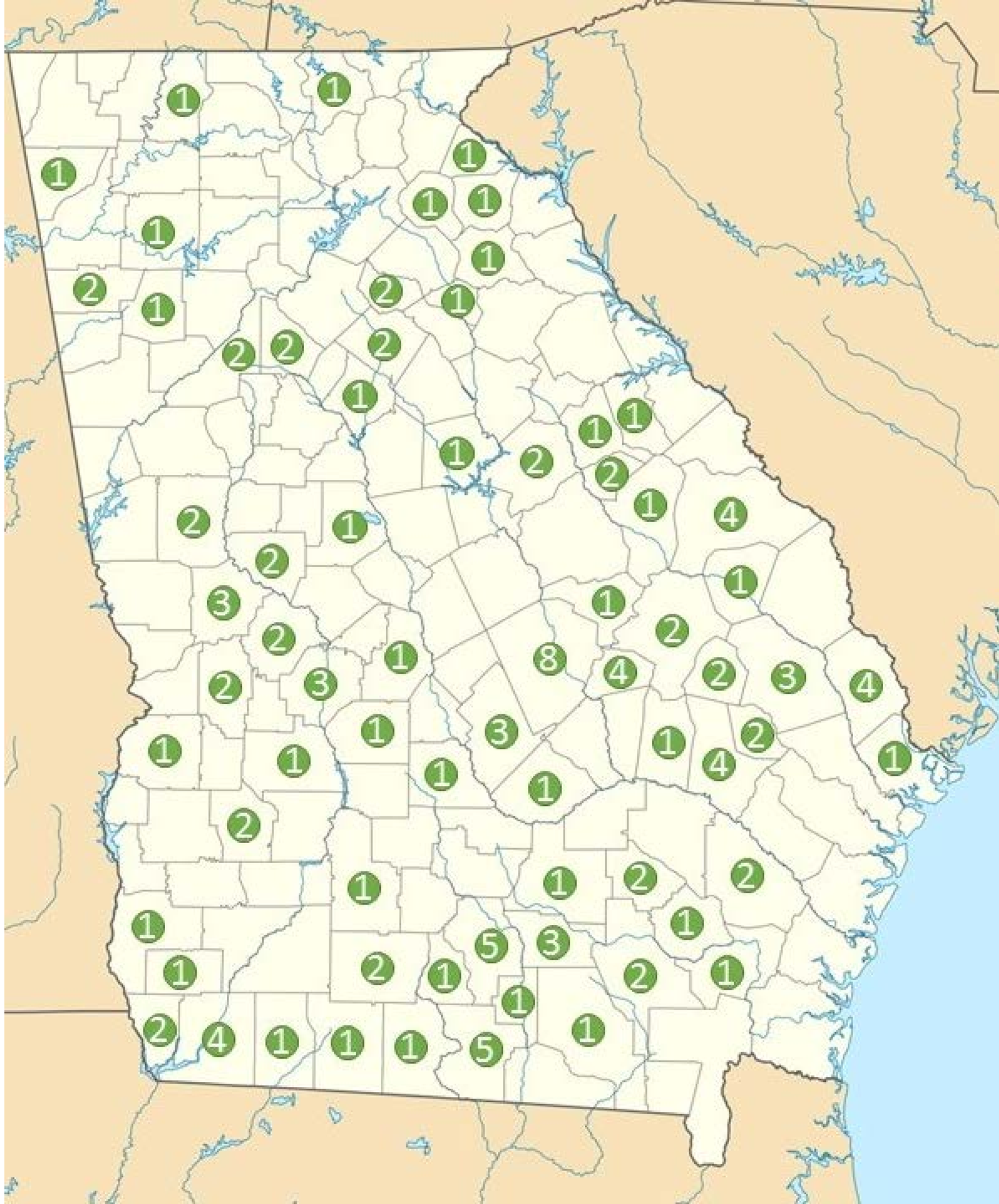
- **Industry Perspective**
- Southern Company is transitioning away from (retiring) coal because it is no longer cost competitive; gas, nuclear, solar will compromise most of the replacement generation in Georgia.
- Another 3 years of solar market expansion expected, which builds upon 5-6 previous years of growth. Skilled labor and inexpensive capital are now readily available to the GA solar market.
- Record low solar pricing expected even beyond the expiration of the federal solar tax credit.
- Georgia has become one of the most stable, competitive solar markets in the US, but permitting and zoning is an increasing concern as large projects compete for a finite number of viable project sites.
- No state-wide solar tax abatement. Rural, southern counties are in an ‘arms race’ as they compete to incentivize solar projects to their counties.

Georgia Solar Market Impact

- **County Perspective**
    - *Rural Counties*:
        - 15-20 new Utility Scale projects. Expected size: 1,000 -3,000 acres
        - 75-100 Medium Sized Projects. Expected size 20-40 acres
        - Rural Counties will begin experiencing this 3rd “rush’ of solar in the State before the end of this year
        - 12,000 MWs of projects currently in the interconnection queue
    - *Urban Counties:*
        - Utility led (supply –sided) solar will not impact urban counties except at the peripheries
        - 1-5 Medium Sized Projects projected
        - Behind the Meter (rooftop) projects will be constrained by rate plan demand charge updates in the 2019 rate case.

Distributed Generation Map of Georgia

- Smaller Projects, developed in larger number of Counties
- Projects too small to justify tax abatement
- Impacts larger number of landowners on less productive land parcels
- Does not compete with pivot irrigation systems for ‘prime Ag land’
- Most common type of solar in Georgia
- Can be difficult for local jurisdictions to permit and zone for the 1st project



Georgia Solar Permitting & Zoning

- Solar will continue to present challenges for local jurisdictions to regulate because:

  A) Solar industry is new to Georgia

  B) Multiple solar solutions available to Georgia market, which impact local jurisdictions in different ways

  C) 159 Counties in Georgia with unique systems of governance

  D) Solar applications will continue to evolve, creating new challenges for permitting as the technology improves.

  Result: Standardized solar ordinance is not possible in Georgia.

Questions