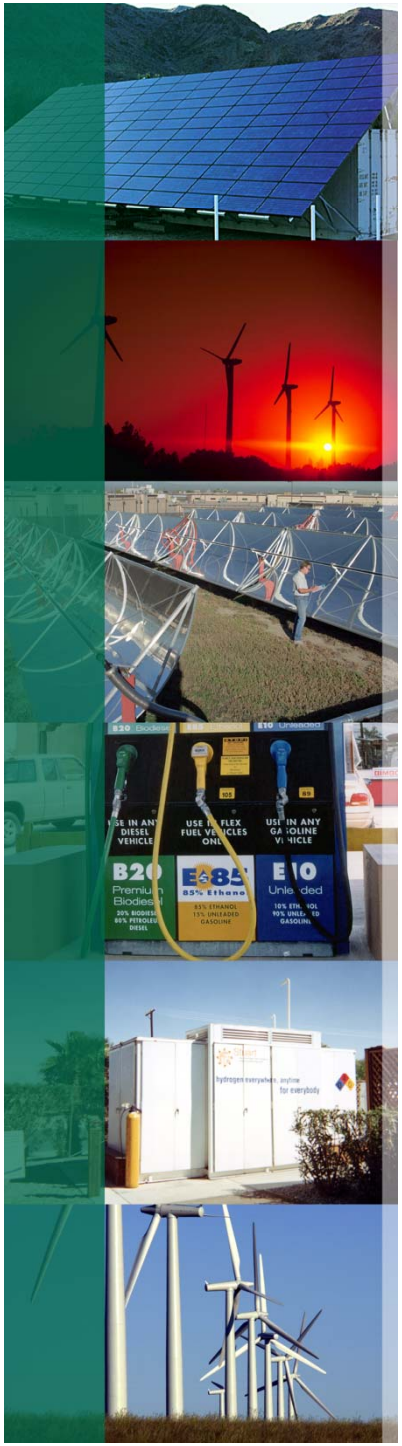

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ACCOUNTING • TAX • BUSINESS ADVISORY

Tax Incentives For Renewable Energy:

Why Not Georgia? - Keys To Successfully Financing Sustainable Energy Projects

By: Lee J. Peterson, Esq.
Reznick Group, P.C.
Atlanta, Georgia

March 29, 2010

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What gets us into trouble is not what we don't know.

It's what we know for sure that just ain't so.

- Mark Twain

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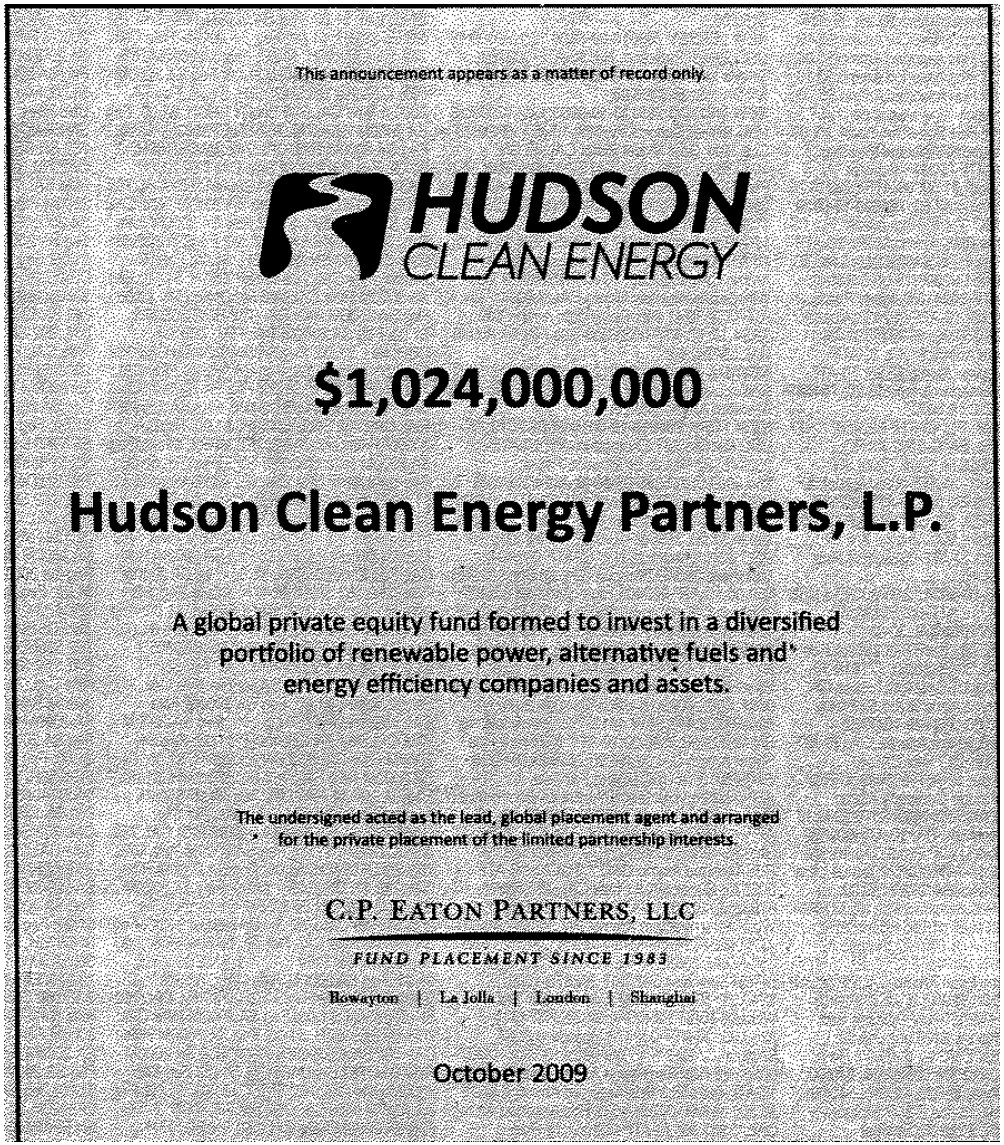
Capital Is Pooling for Utility Scale Renewables



This announcement appears as a matter of record only.

HUDSON CLEAN ENERGY

$1,024,000,000

Hudson Clean Energy Partners, L.P.

A global private equity fund formed to invest in a diversified portfolio of renewable power, alternative fuels and energy efficiency companies and assets.

The undersigned acted as the lead, global placement agent and arranged for the private placement of the limited partnership interests.

C.P. EATON PARTNERS, LLC

FUND PLACEMENT SINCE 1983

Bowayton | La Jolla | London | Shanghai

October 2009

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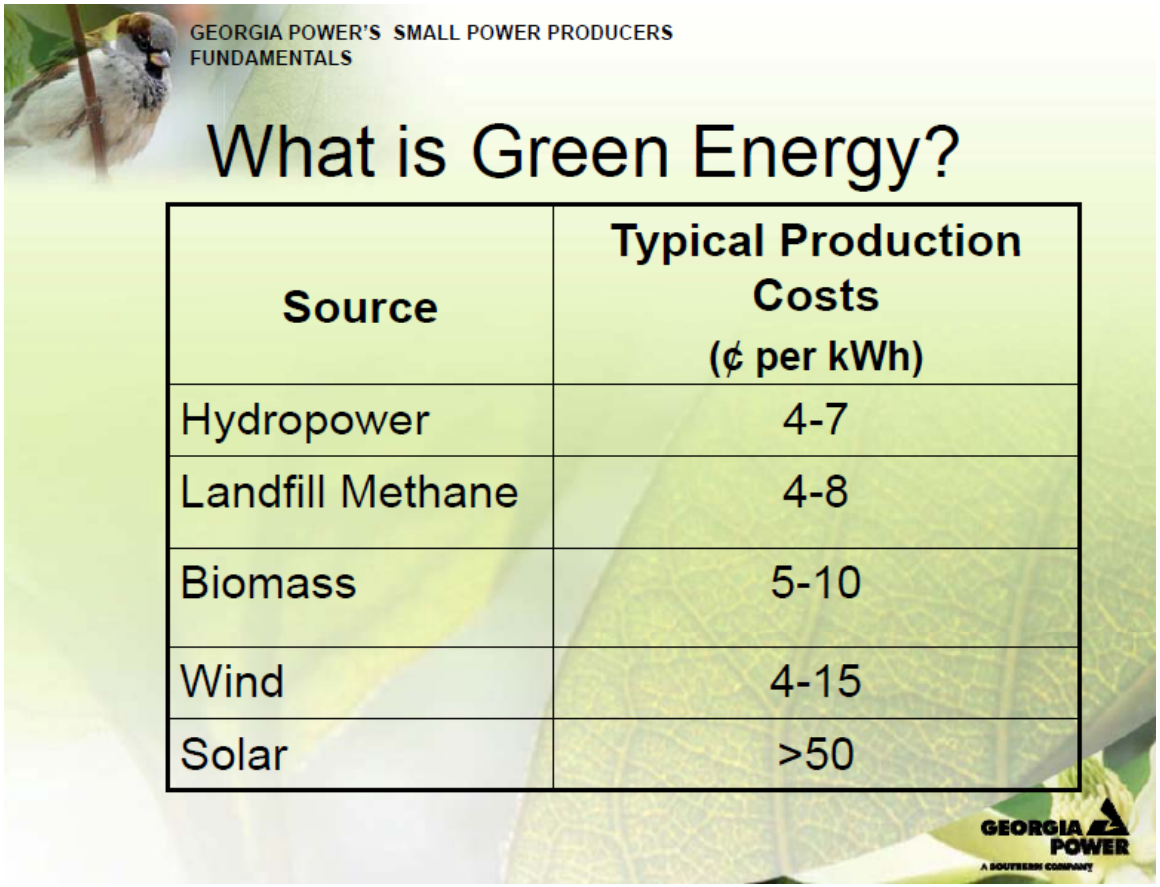
Ancient History



http://www.psc.state.ga.us/electric/QF_Wkshop-Green_Energy_4-11-07.ppt

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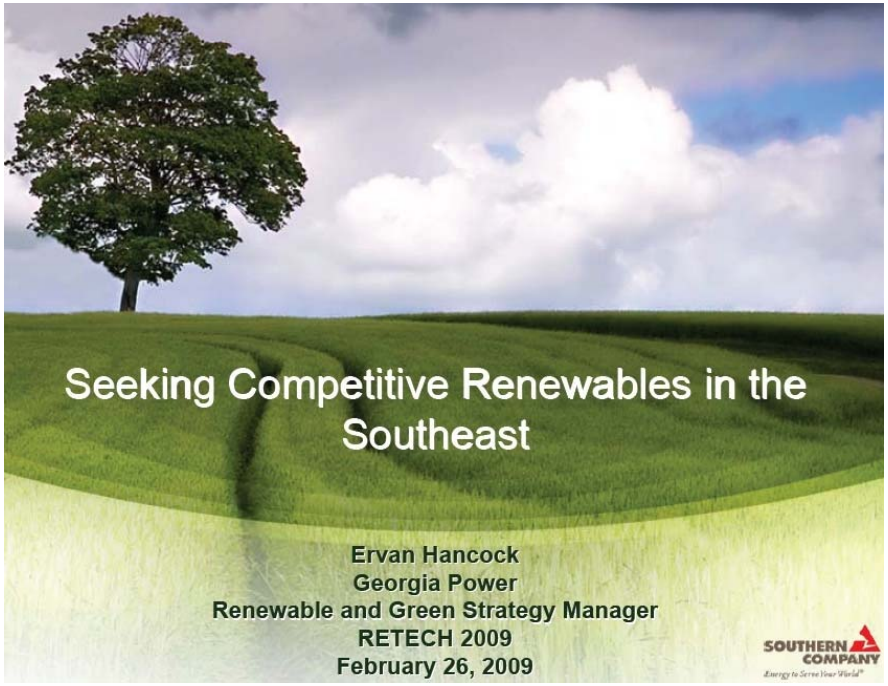
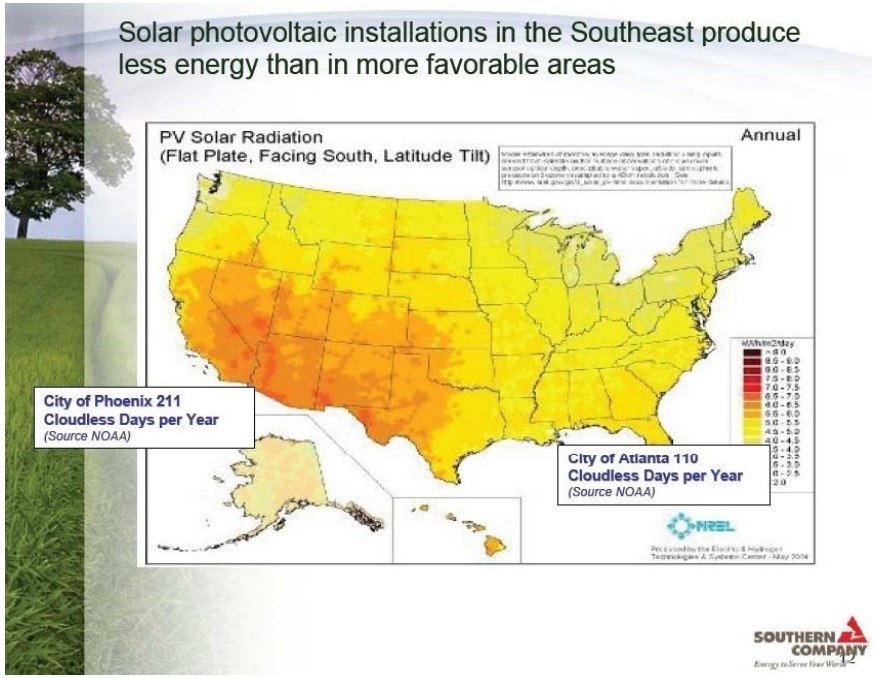
Recent Mythology





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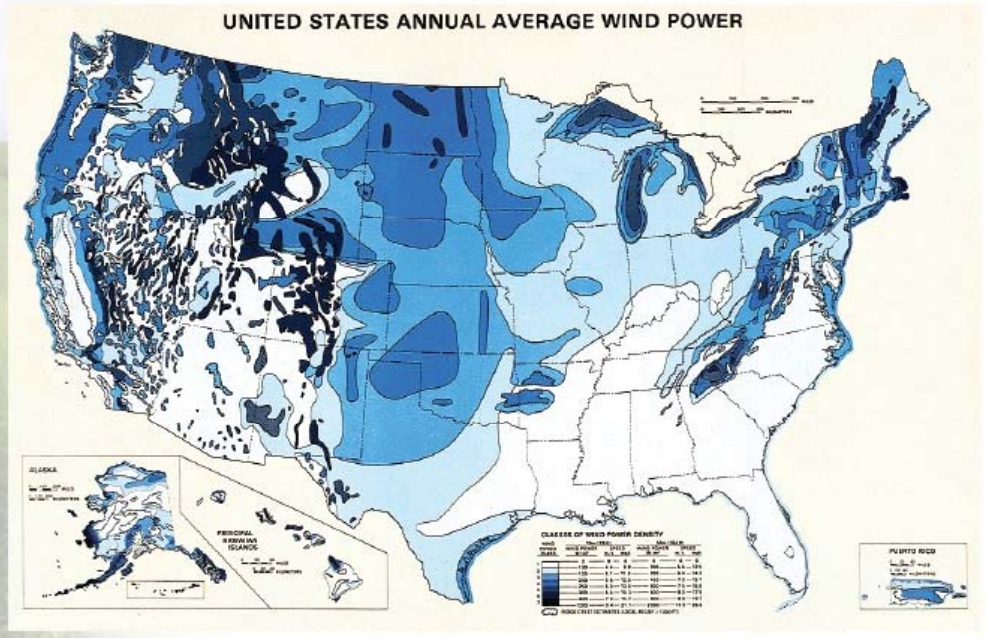
2009 Southern Company Presentation

The Southeast has almost no potential for wind energy



Darker colors represent highest winds.

SOUTHERN COMPANY
Energy to Serve Your World

13

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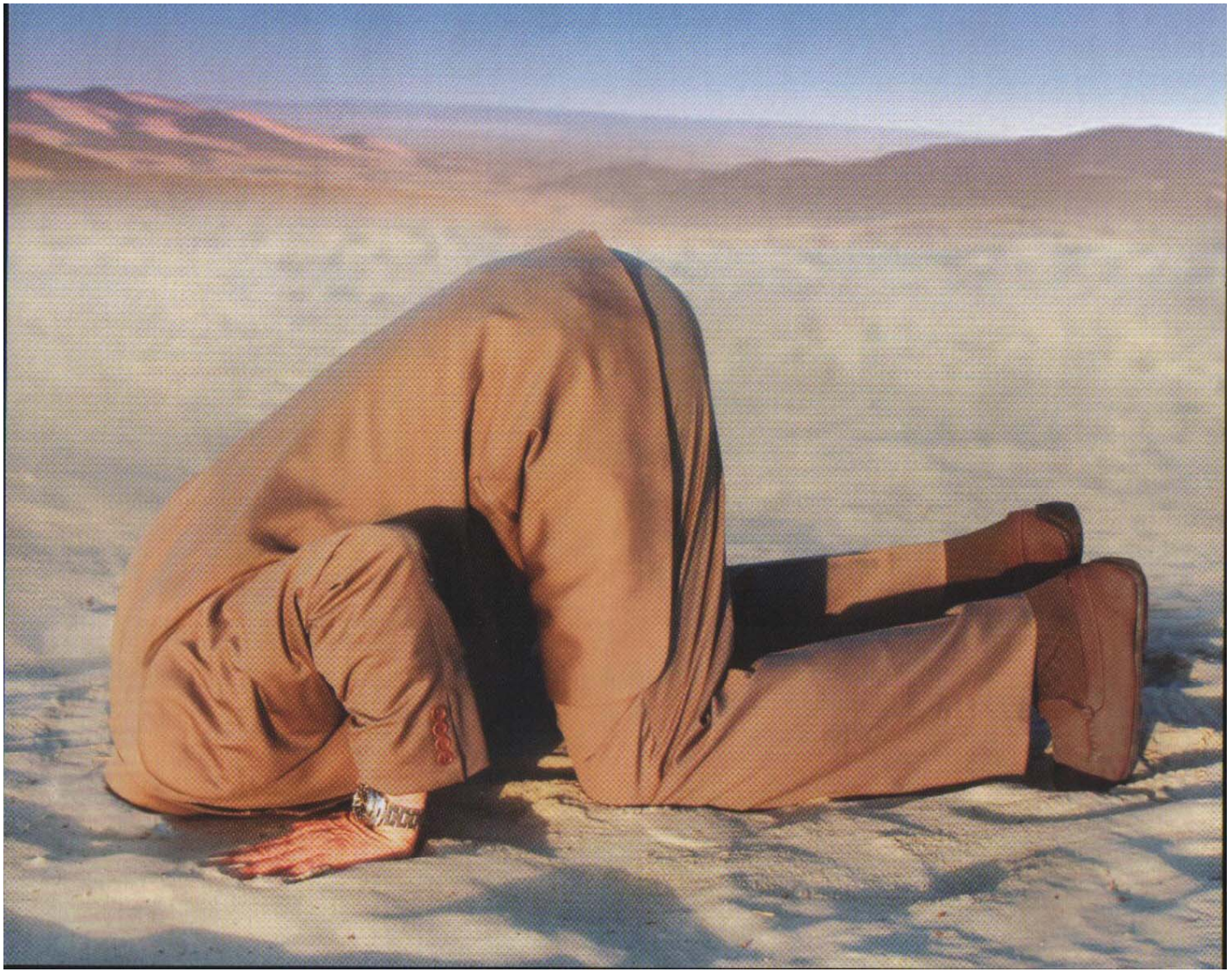

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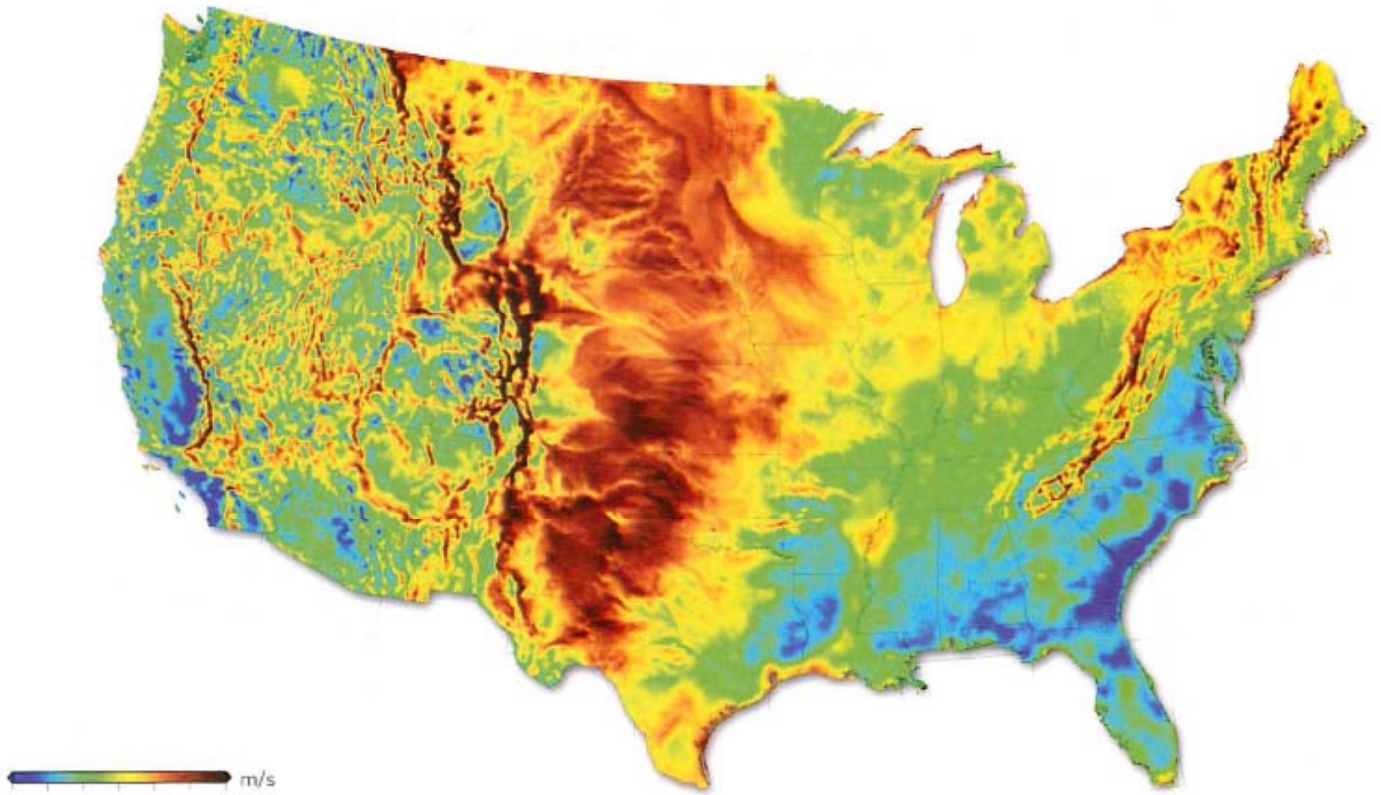
3TIER NATIONAL WIND MAP

powered by firstlook ASSESSMENT



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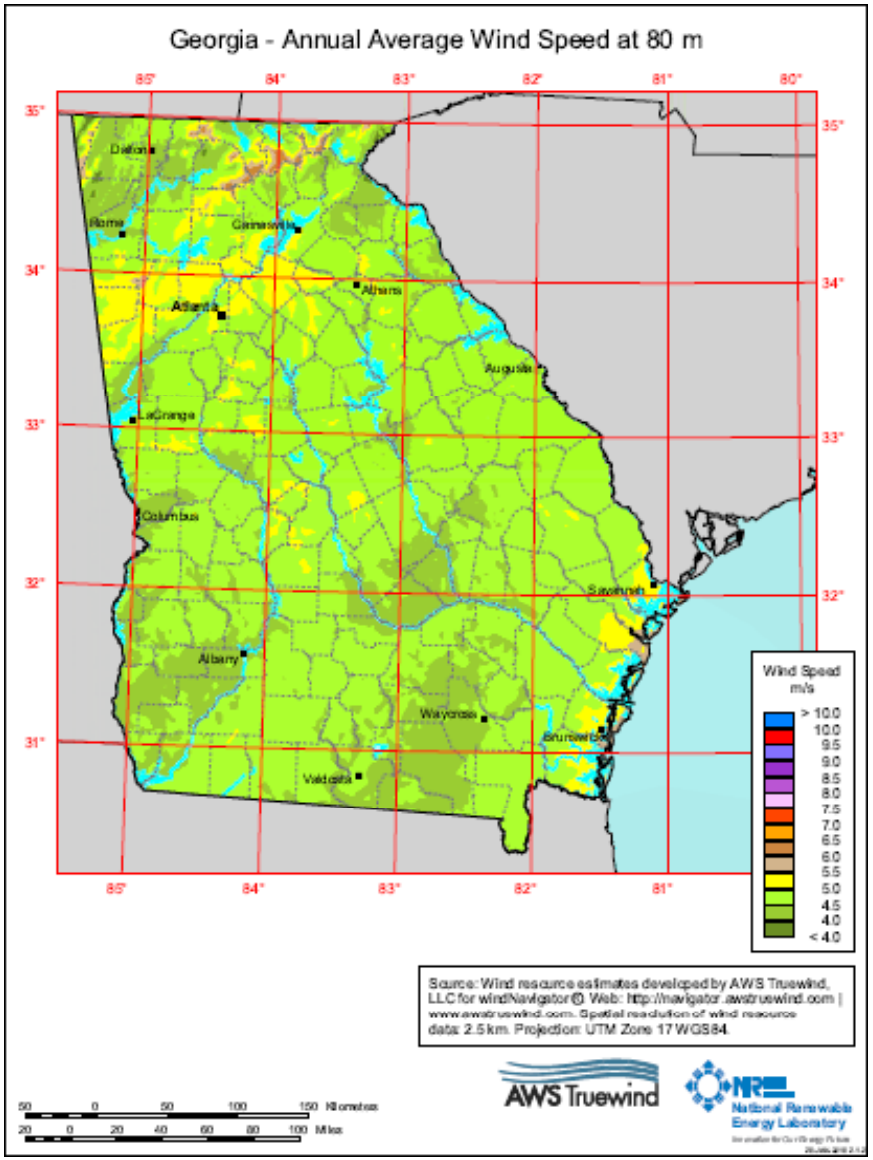
New NREL Georgia Wind Map

March 5, 2010

http://www.windpoweringamerica.gov/wind_resource_maps.asp?stateab=ga



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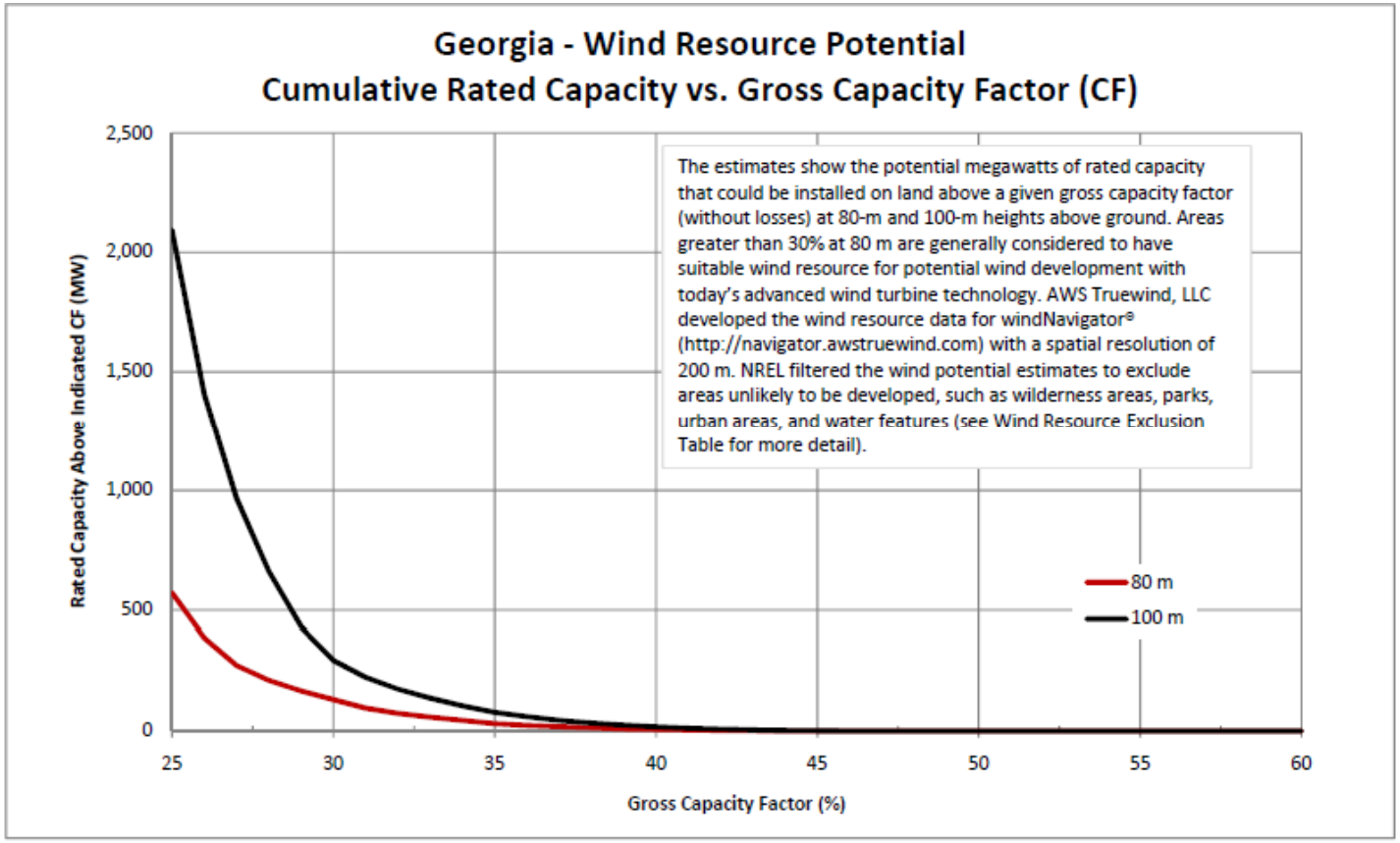
NREL Graph – Georgia Wind Resource Potential



NREL
National Renewable Energy Laboratory
Innovation for Our Energy Future

AWS Truewind

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NREL ITC/PTC Graph For Wind

Table 2. Net Value of ITC for Wind (7.5% Nominal Discount Rate)

Net Capacity Factor (%)	Total Installed Project Cost ($/kW)										
	$1,500	$1,600	$1,700	$1,800	$1,900	$2,000	$2,100	$2,200	$2,300	$2,400	$2,500
25%	-1.0%	0.4%	1.7%	2.8%	3.8%	4.7%	5.5%	6.3%	7.0%	7.6%	8.2%
26%	-1.9%	-0.4%	0.9%	2.0%	3.1%	4.0%	4.9%	5.7%	6.4%	7.0%	7.6%
27%	-2.8%	-1.3%	0.1%	1.3%	2.4%	3.3%	4.2%	5.0%	5.8%	6.4%	7.1%
28%	-3.6%	-2.2%	-0.7%	0.5%	1.6%	2.7%	3.6%	4.4%	5.2%	5.9%	6.5%
29%	-4.7%	-3.0%	-1.5%	-0.2%	0.9%	2.0%	2.9%	3.8%	4.6%	5.3%	6.0%
30%	-5.6%	-3.9%	-2.4%	-1.0%	0.2%	1.3%	2.3%	3.2%	4.0%	4.7%	5.4%
31%	-6.5%	-4.7%	-3.2%	-1.8%	-0.5%	0.6%	1.6%	2.5%	3.4%	4.1%	4.9%
32%	-7.4%	-5.6%	-4.0%	-2.5%	-1.2%	-0.1%	1.0%	1.9%	2.8%	3.6%	4.3%
33%	-8.3%	-6.4%	-4.8%	-3.3%	-2.0%	-0.8%	0.3%	1.3%	2.2%	3.0%	3.8%
34%	-9.3%	-7.3%	-5.6%	-4.1%	-2.7%	-1.5%	-0.4%	0.7%	1.6%	2.4%	3.2%
35%	-10.2%	-8.2%	-6.4%	-4.8%	-3.4%	-2.2%	-1.0%	0.0%	1.0%	1.9%	2.7%
36%	-11.1%	-9.0%	-7.2%	-5.6%	-4.1%	-2.8%	-1.7%	-0.6%	0.4%	1.3%	2.1%
37%	-12.0%	-9.9%	-8.0%	-6.4%	-4.9%	-3.5%	-2.3%	-1.2%	-0.2%	0.7%	1.6%
38%	-12.9%	-10.7%	-8.8%	-7.1%	-5.6%	-4.2%	-3.0%	-1.8%	-0.8%	0.1%	1.0%
39%	-13.8%	-11.6%	-9.6%	-7.9%	-6.3%	-4.9%	-3.6%	-2.5%	-1.4%	-0.4%	0.5%
40%	-14.6%	-12.5%	-10.4%	-8.6%	-7.0%	-5.6%	-4.3%	-3.1%	-2.0%	-1.0%	-0.1%
41%	-15.7%	-13.3%	-11.2%	-9.4%	-7.8%	-6.3%	-4.9%	-3.7%	-2.6%	-1.6%	-0.6%
42%	-16.6%	-14.2%	-12.1%	-10.2%	-8.5%	-7.0%	-5.6%	-4.3%	-3.2%	-2.2%	-1.2%
43%	-17.5%	-15.0%	-12.9%	-10.9%	-9.2%	-7.7%	-6.2%	-5.0%	-3.8%	-2.7%	-1.7%
44%	-18.4%	-15.9%	-13.7%	-11.7%	-9.9%	-8.3%	-6.9%	-5.6%	-4.4%	-3.3%	-2.3%
45%	-19.3%	-16.8%	-14.5%	-12.5%	-10.7%	-9.0%	-7.6%	-6.2%	-5.0%	-3.9%	-2.8%

Positive (and unshaded) means the ITC (or equivalent cash grant) provides more value
Negative (and shaded) means the PTC provides more value

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North American Wind Power: Volume 7, Number 1 (February 2010)

Profile: Lost Creek

Missouri's Native Son Building State's Largest Wind Project

Wind Capital's 150 MW Lost Creek wind farm, scheduled to be Missouri's largest, is the first project the company will own and operate.

BY MARK DEL FRANCO

North American Windpower, February 2010

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Outdated Thinking

Commissioner Stan Wise:

"…According to Department of Energy data, Georgia does not have abundant solar energy like that in the Desert Southwest, the wind turbine generation available in the Great Plains, nor abundant geothermal. While I support expansion of solar energy at the micro level, Georgia's humidity and low cloud cover make it a very unlikely, not to mention high cost, source for substantial production in Georgia, even when considering federal production tax credits."

http://www.psc.state.ga.us/pscinfo/bios/myviewson/wise/20090421-sw-edi.pdf (April 21, 2009)

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Times Change: Georgia Today

- PSC Chairman "Bubba" McDonald made the motion to amend the RNR program, saying, "The commission hopes to encourage more participation in the Green Energy program and further advance the development of solar photovoltaic products in Georgia ..."

- On February 18, 2010, the PSC passed 5 to 0 a new motion that boosts -- to 50 percent from 10 percent -- the amount of renewable energy that comes from solar sources.

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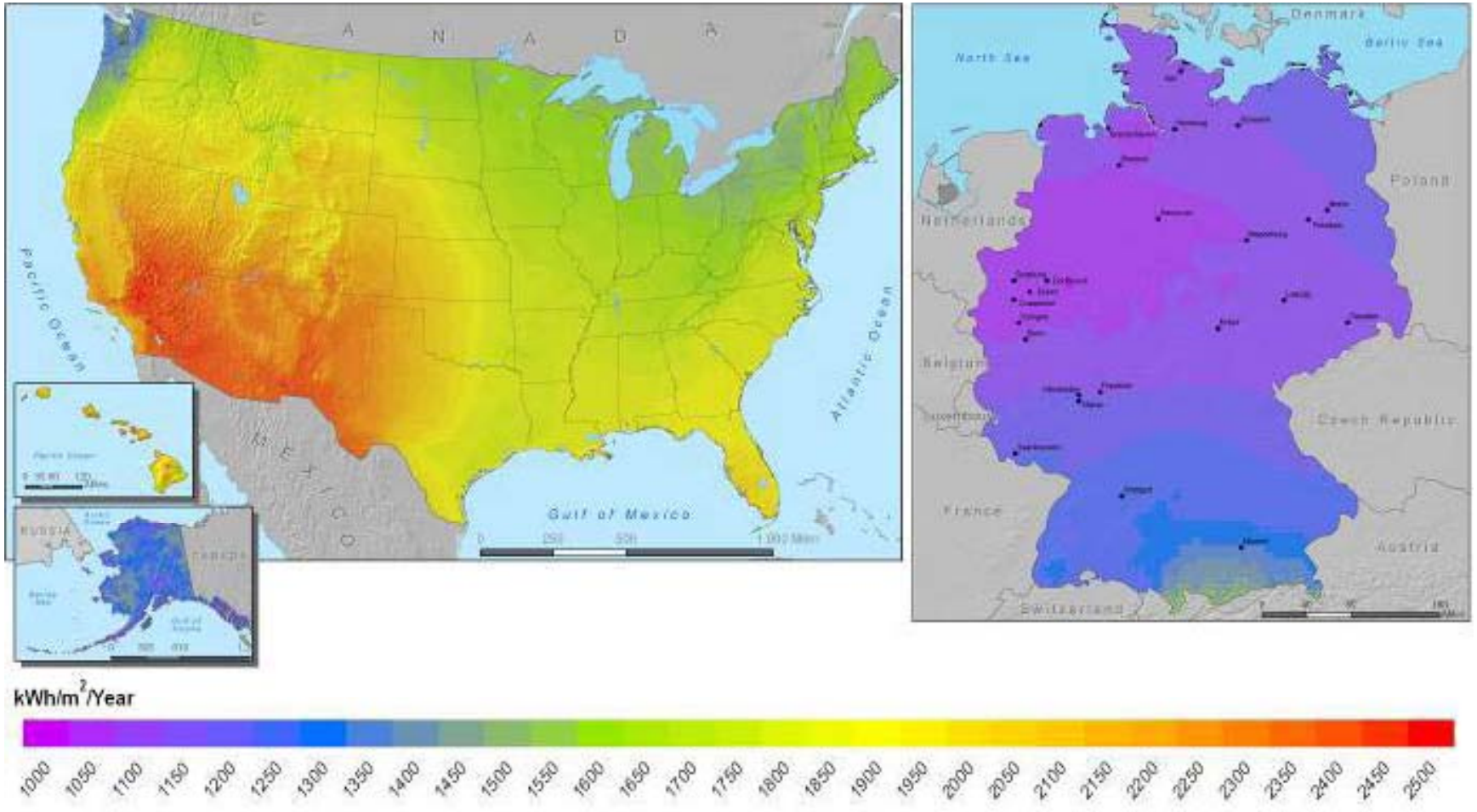
Solar Resource Comparison – U.S. v. Germany



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North Carolina – 16 MW Solar Farm

http://www.pv-tech.org/news/_a/sunedison_completes_phase_one_of_its_16mw_north_carolina_solar_farm/?utm_source=PV+Tech+-+Newsletter&utm_campaign=551023ddbe-PV_Tech_Newsletter08_02_2010&utm_medium=email

SunEdison completes phase one of its 16MW North Carolina solar farm.

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DeSoto County, Florida – 25 MW - DeSoto Next Generation Solar Energy Center

http://www.fpl.com/environment/solar/desoto.shtml

Construction commenced in late 2008 and was completed in October 2009.

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FPL Hybrid Gas-Solar Plant

The FPL Group's new 500-acre array of solar panels under construction in Indiantown last month.
http://www.nytimes.com/2010/03/05/business/05solar.html

Economic Development and Job Creation

- The Jobs and Economic Development Impacts model (JEDI) is a model that analyzes the economic impacts of constructing and operating wind projects.

- The model has application for anyone who wants to better understand how a wind project will affect a community through job creation and local revenue.

- http://www.nrel.gov/analysis/jedi/

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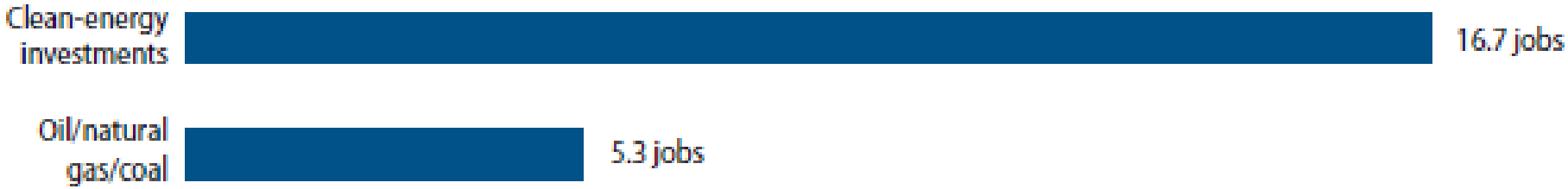
Job Creation: 5.3 vs 16.7 Jobs Per Investment

FIGURE 1

Job creation through $1 million in spending

Green investments vs. fossil fuels

Number of jobs created



The full report is available at http://www.americanprogress.org/issues/2009/06/pdf/peri_report.pdf

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Increase Ad Valorem / Sales Tax Revenues

- Effective Rate: 1 - 2.5% per annum of fair market value (FMV)

- Assume Total Development Cost attributable to personal property - $33,300,000 (10 MW solar system)

- 2% = $666,000 per year additional ad valorem
- 10 years = $6,660,000
- 20 years = $13,320,000
- 25 years = $16,650,000

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It Can Work in GA Today

- Structured finance and federal incentives
- State and local incentives surely help, but are not required.

Federal Production Tax Credit - IRC § 45 – Electricity Produced from Certain Renewable Resources





Wind (small/large)

Closed-loop biomass

Open-loop biomass

Geothermal energy

Landfill gas

Municipal Solid Waste

Marine and Hydrokinetic

Small irrigation power

Hydropower

Refined coal

Indian coal

Trash combustion

Solar (expired 2006)

Election of §48 Federal Investment Tax Credit In Lieu of Production Tax Credit

- For facilities placed in service after Dec. 31, 2008, the Act now allows taxpayers to make an *election* to have qualified property of certain qualified facilities treated as "energy property" eligible for a federal 30% investment credit under § 48.

- Power-production not critical.

- See Federal NREL Study - http://eetd.lbl.gov/ea/emp/reports/lbnl-1642e.pdf

30% Federal Investment Tax Credit (ITC): Energy Credit[1]





Fuel Cells

Microturbines

Solar

Geothermal

Combined Heat & Power

Small Wind Property

[1] Some technologies qualify for a 10% credit, or are limited based on a credit cap

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30% Federal CASH Renewable Energy Grants[1]

- Federal DOE grant amount is 30% of cost...or…
- 10% grant for qualified microturbine, combined heat and power, and geothermal ground sourced heating or cooling systems.
- Benefits are based on amount of investment, not production.

[1] Some technologies qualify for a 10% credit, or are limited based on a credit cap

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Solar Cost In General

- PV energy output is higher when the sun is direct.
- Hotter days with high demand have peak PV output.
- Energy prices are typically higher during hotter days.
- PV should not be benchmarked against off-peak prices; instead, they should be benchmarked against the utility's highest cost peaking facilities.

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Nights & Weekends
Customer Service Team

Bin #10210
241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308-3374

February 26, 2010

GEORGIA POWER
A SOUTHERN COMPANY

**********AUTO**3-DIGIT 303
Lee Peterson

Doraville, GA 30360-1430

Account No:
Promotion No: 83324

You can save money on your electric bill with *Nights & Weekends* from Georgia Power!

Dear Lee Peterson:

You can enjoy significant savings on your electric bill by making smarter choices about *when* and *how* you use electricity. If you can simply shift some of your summer electric usage – such as dish washing, laundry, and especially air conditioning – to "off peak" evening and weekend hours … you can realize considerable monthly savings.

Introducing *Nights & Weekends* from Georgia Power

Georgia Power's peak period – the time when it costs the most to produce electricity – is from 2:00 PM to 7:00 PM, Monday through Friday in the summer. *Nights & Weekends* reflects those higher costs during the peak period, which is Monday through Friday, and offers a lower price during all other hours including summer nights and weekends. When you shift some of your usage out of the peak time period, Georgia Power passes the savings on to you. Changes as simple as raising the temperature setting on your thermostat during the peak time periods often results in savings on your bill.

Save money when you **shift your usage** with Georgia Power's *Nights & Weekends*
1-888-660-5890

Nights & Weekends is designed for customers who can shift their usage during peak times in summer months. It is possible to experience a higher bill on *Nights & Weekends* if you do not shift your usage. Participation in *Nights & Weekends* is strictly voluntary. However, if you enroll in this plan, you must commit to stay on the rate for at least twelve months.

To enroll in *Nights & Weekends*, visit us online at *www.georgiapowernightsandweekends.com* and enter your account number, as well as your promotion number (shown above) when prompted. Or, if you prefer, simply complete, detach and mail the form below or call 1-888-660-5890.

We look forward to receiving your enrollment by April 2, 2010, and helping you save money and use electricity more efficiently through Georgia Power's *Nights & Weekends* program.

Sincerely,
Georgia Power *Nights & Weekends* Energy Team

© 2009 Georgia Power Co.

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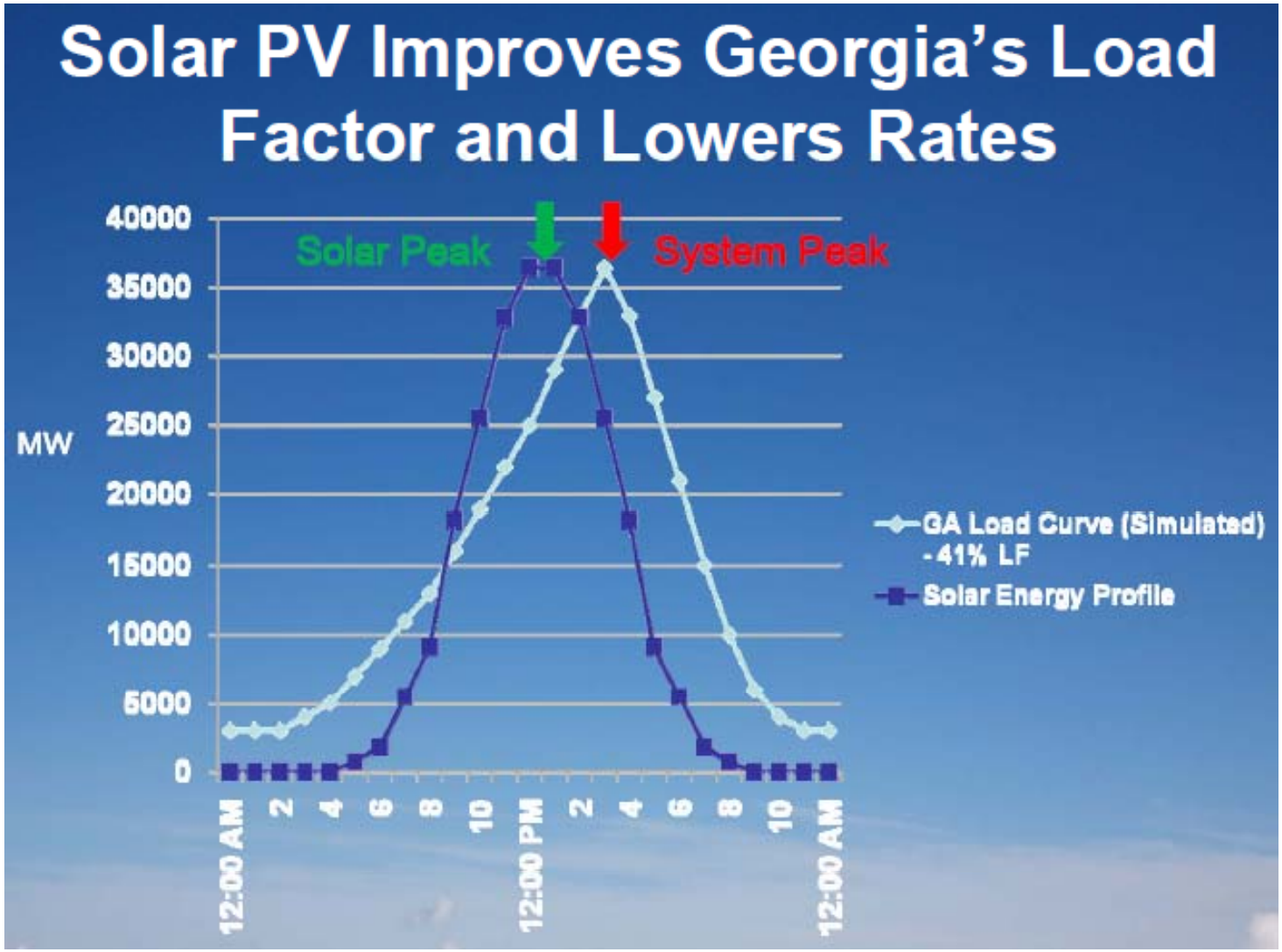
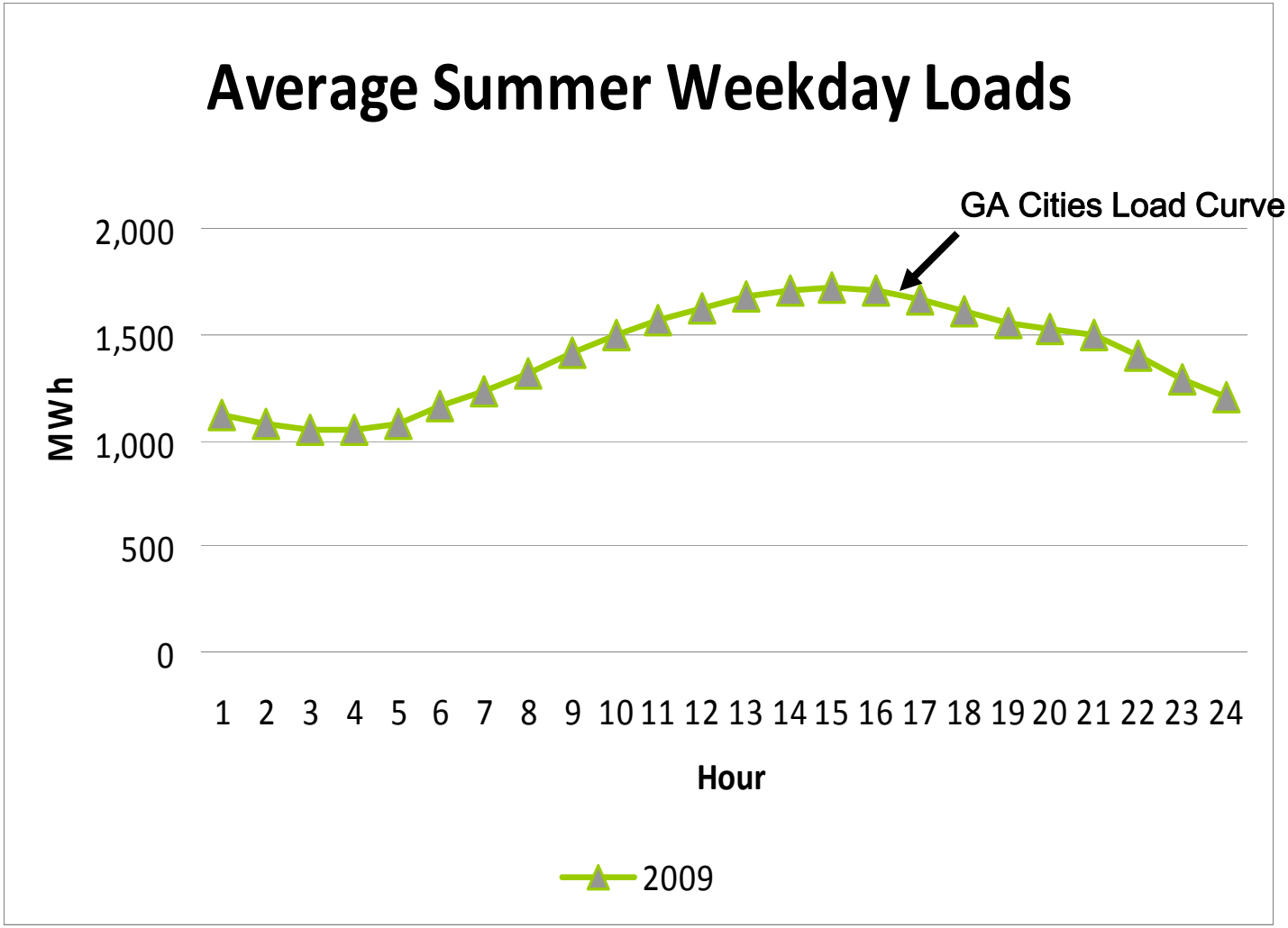
Solar PV Improves Georgia's Load Factor and Lowers Rates



Alden Hathaway, SVP Business Development, Sterling Planet

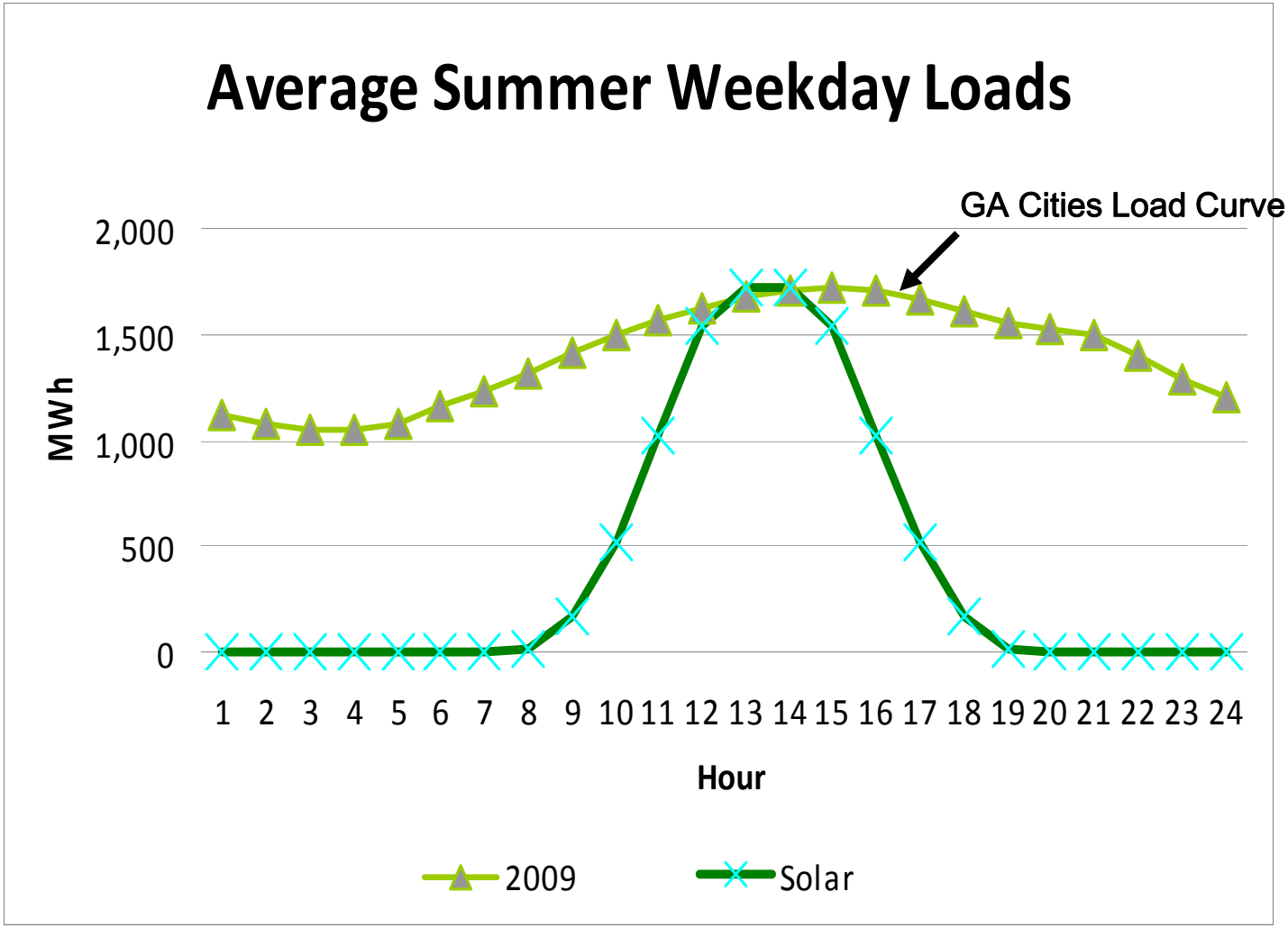
Solar PV Improves Georgia's Load Factor and Lowers Rates

Load Group
Building Business Value



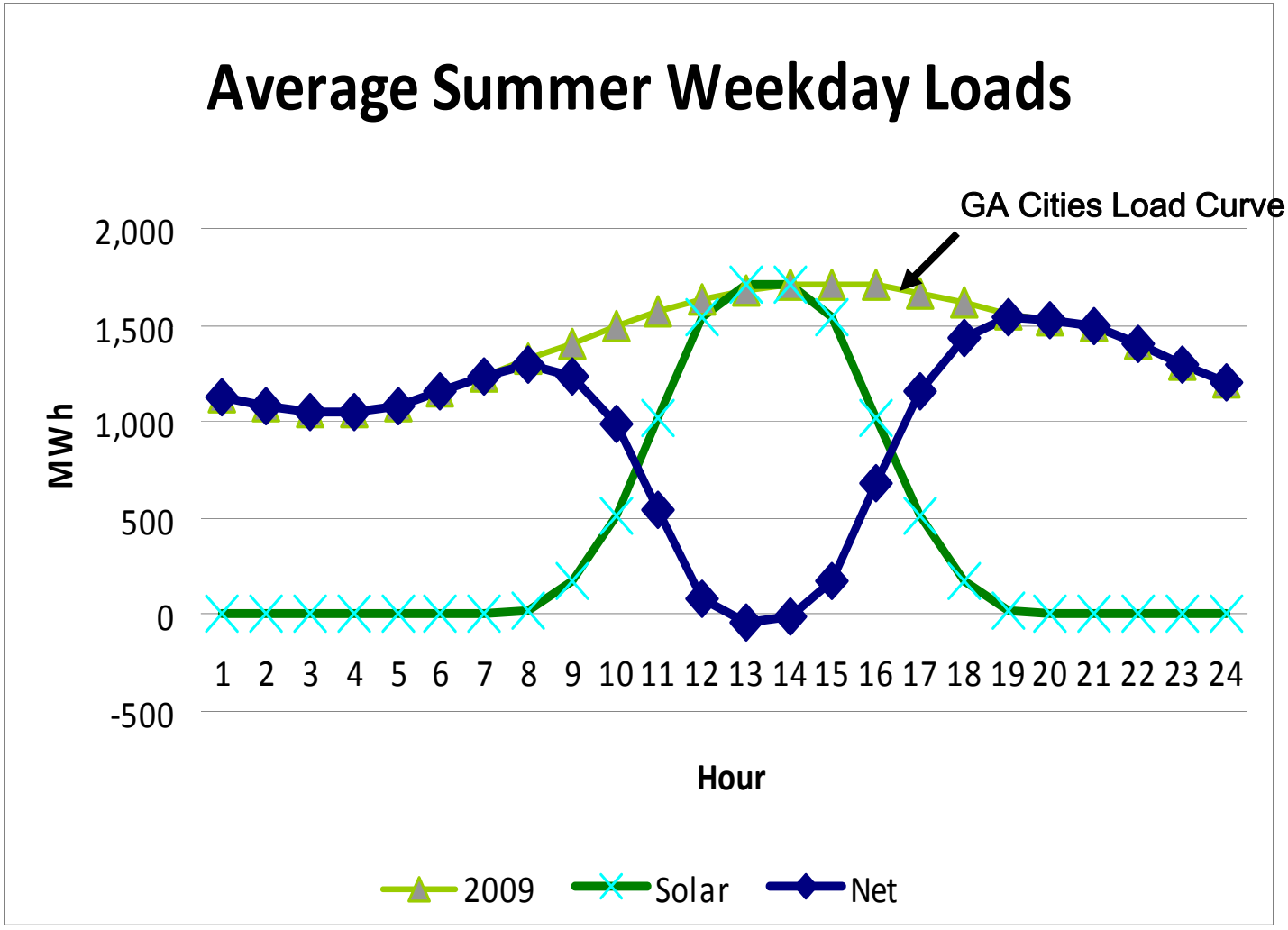
Solar PV Improves Georgia's Load Factor and Lowers Rates

Black Group
Building Business Value



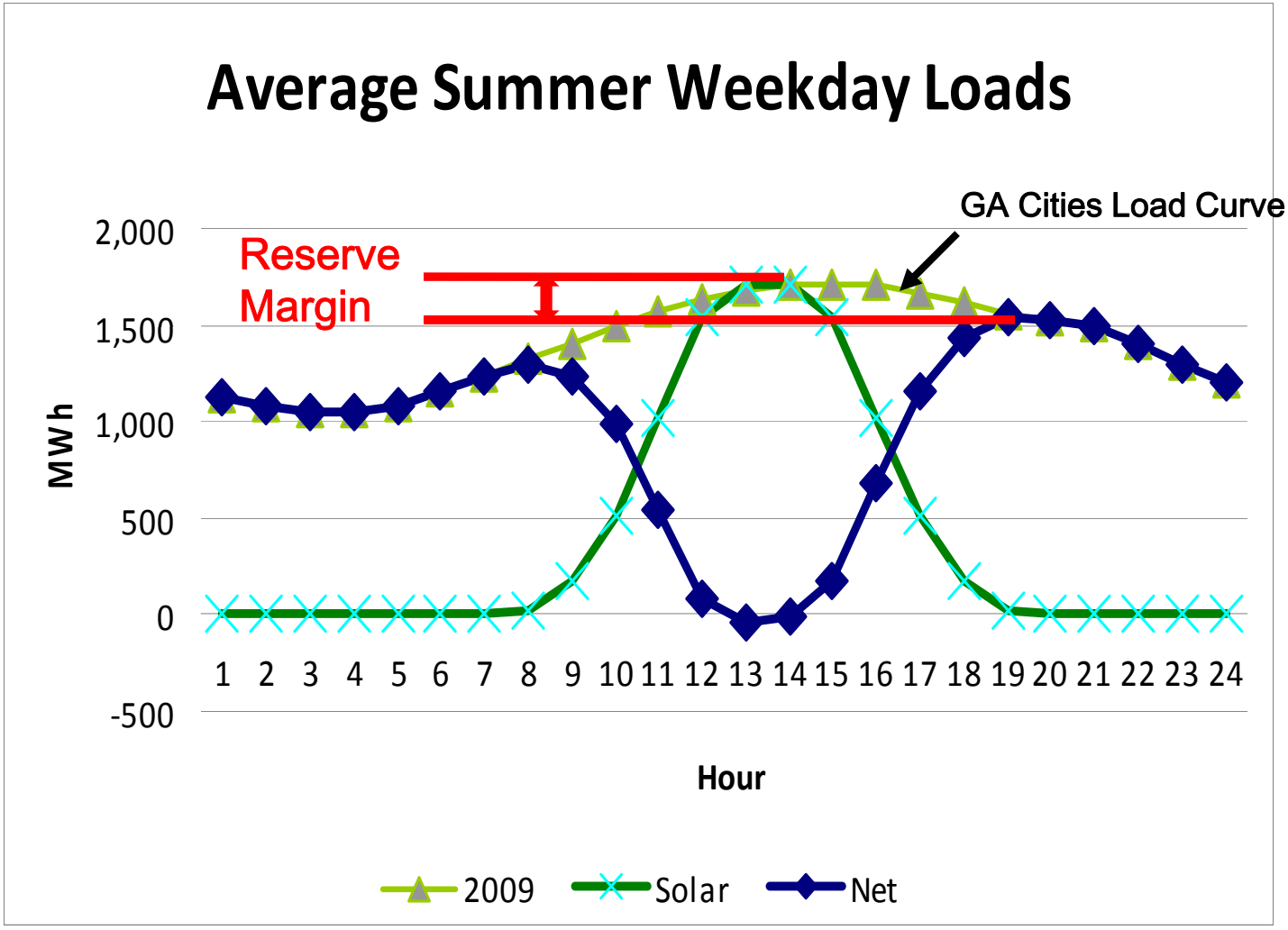
Solar PV Improves Georgia's Load Factor and Lowers Rates

Brattle Group
Building Business Value



Solar PV Improves Georgia's Load Factor and Lowers Rates

Brattle Group
Building Business Value



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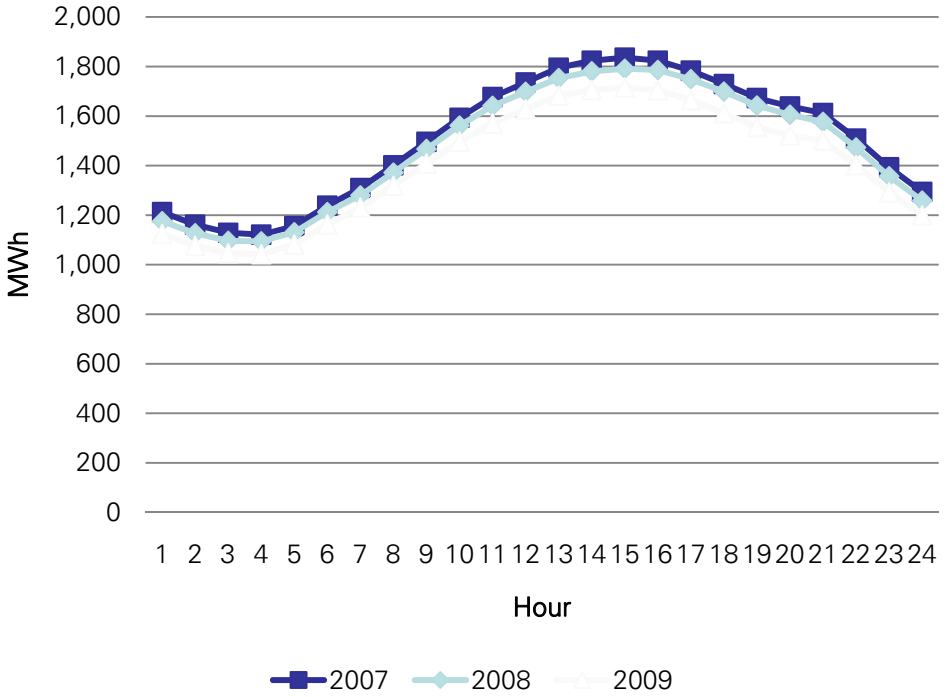
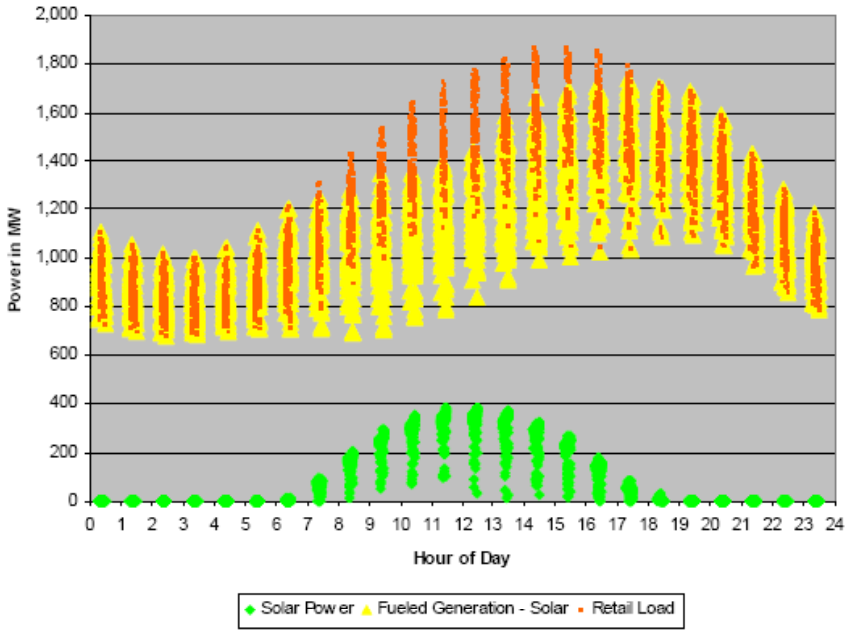
Average Summer Weekday Loads



Load Curve[1]



[1]The Load Curve graph is a graph of the TEP 2002 hourly native retail load, the hourly energy produced by 495 MW of hypothetical solar generation located at TEP's Tucson located Operating Headquarters and the effect on fueled generation demand reduction – 127 MW – from the application of 495 MW of Tucson located solar capacity. The 495 MW of solar capacity was chosen as the level needed to produce nearly 10% of the TEP annual retail energy sold from new renewable generation sources in 2002, the proposed national renewable portfolio standard. The distance the red points are spaced above the yellow points represents the amount of load the renewable resource supports. Capacity support is only provided in hours ending 08:00 through 17:00. At the typical time of peak system loads at hour ending 16:00, the solar generation resource is providing 127 MW of capacity support. http://www.greenwatts.com/docs/HansenPGDec2003.pdf

"Unburdened" Sempra Generation Example

Size	10 MW
System Cost	$ 3,700 kW
Total Development Cost	$ 37,000,000
Less ITC/Grant and Depreciation	(39%)
Net Capital/Debt	$ 22,570,000
20-Year Term at 7% - Constant Rate	
Debt Service/O&M	$ 2,370,608
Output due to 26% capacity factor	22,995,000 kWh/yr
Cost per kWh - Breakeven	10.31¢ per kWh

Additional Points

- $14.4 M tax equity = 61% loan to cost. LTV = 100% but assumes net capital is 80/20 split between lender and sponsor each making 7% return on capital to attain 100% loan to value with a 60% loan to cost.

- Revenue from carbon offsets NOT considered.

- No state tax benefits or other assistance was assumed.

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Typical Capacity Factor Scenario

Size	10 MW
System Cost	$ 3,700 kW
Total Development Cost	$ 37,000,000
Less ITC/Grant and Depreciation	(39%)
Net Capital/Debt	$ 22,570,000
20-Year Term at 7% - Constant Rate	
Debt Service/O&M	$ 2,370,608
Output due to 18% capacity factor	15,768,000 kWh/yr
Annual Capacity Credit	$134,000
Cost per kWh – Pre-REC Breakeven	13.77¢ per kWh
RECs	(1.50¢ per kWh)
Cost per kWh - Breakeven	12.27¢ per kWh

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Additional Points

- $14.4 M tax equity = 61% loan to cost. LTV = 100% but assumes net capital is 80/20 split between lender and sponsor each making 7% return on capital to attain 100% loan to value with a 60% loan to cost.

- Revenue from carbon offsets considered.
  - Current North Carolina carbon offset prices are 6¢ per kWh

    13.77 ¢ Cost to Produce Power

    - 6.00 ¢ REC Price

    7.77 ¢ per kWh Net Cost to Produce Solar Power – Utility Scale

- No state tax benefits or other assistance was assumed beyond the capacity credit.

Reducing Debt Cost With Federal New Markets Tax Credit (NMTC) and Use 30% ITC

Size	10 MW
System Cost	$ 3,700 kW
Total Development Cost	$ 37,000,000
Less ITC/Grant and Depreciation	(39%)
NMTC "B Loan" (1% interest due to NMTC)	$ 7,488,000
Net Capital = "A Loan"	$ 15,082,000
20-Year Term at 7% - Constant Rate	
A & B Loan Debt Service/O&M	$ 1,738,621
Output due to 18% capacity factor	15,768,000 kWh/yr
Annual Capacity Credit	$134,000
Cost per kWh – Pre-REC Breakeven	9.90¢ per kWh
RECs	(1.50¢ per kWh)
Cost per kWh - Breakeven	8.40¢ per kWh

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Additional Points

- Uses A-B debt structure. NMTC sourced loan $30mm allocation at $0.64/credit, 1% interest rate, 84-month term with buyout.

- Revenue from carbon offsets considered.
  - Current North Carolina carbon offset prices are 6¢ per kWh

    9.90 ¢ Cost to Produce Power

    - 6.00 ¢ REC Price

    3.90 ¢ per kWh Net Cost to Produce Solar Power – Utility Scale

- No state tax benefits or other assistance was assumed beyond the capacity credit.

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Typical Capacity Factor Scenario – NMTC and DOE Loan Guarantee/Green Bank Financing?

▪ Size	10 MW
▪ System Cost	$ 3,700 kW
▪ Total Development Cost	$ 37,000,000
▪ Less ITC/Grant and Depreciation	(39%)
▪ NMTC "B Loan" (1% interest due to NMTC)	$ 7,488,000
▪ Net Capital = "A Loan"	$ 15,082,000
20-Year Term at 4.5% - Constant Rate	
▪ A & B Loan Debt Service/O&M	$ 1,451,078
▪ Output due to 18% capacity factor	15,768,000 kWh/yr
▪ Annual Capacity Credit	$134,000
▪ Cost per kWh - Breakeven	8.35¢ per kWh
▪ RECs	(1.50¢ per kWh)
▪ Cost per kWh - Breakeven	6.85¢ per kWh

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Building Business Value

Additional Points

- Uses A-B debt structure. NMTC sourced loan $30mm allocation at $0.64/credit, 1% interest rate, 84-month term with buyout.

- Revenue from carbon offsets considered.
  - Current North Carolina carbon offset prices are 6¢ per kWh

    8.35 ¢ Cost to Produce Power

    - 6.00 ¢ REC Price

    2.35 ¢ per kWh Net Cost to Produce Solar Power – Utility Scale

- No state tax benefits or other assistance was assumed beyond the capacity credit.

Making It Work in GA: Basic Assumptions

Municipal Direct Ownership

- Utility cooperates (git ‘r done)
- Advanced tax ownership structure
- Honest cost comparisons

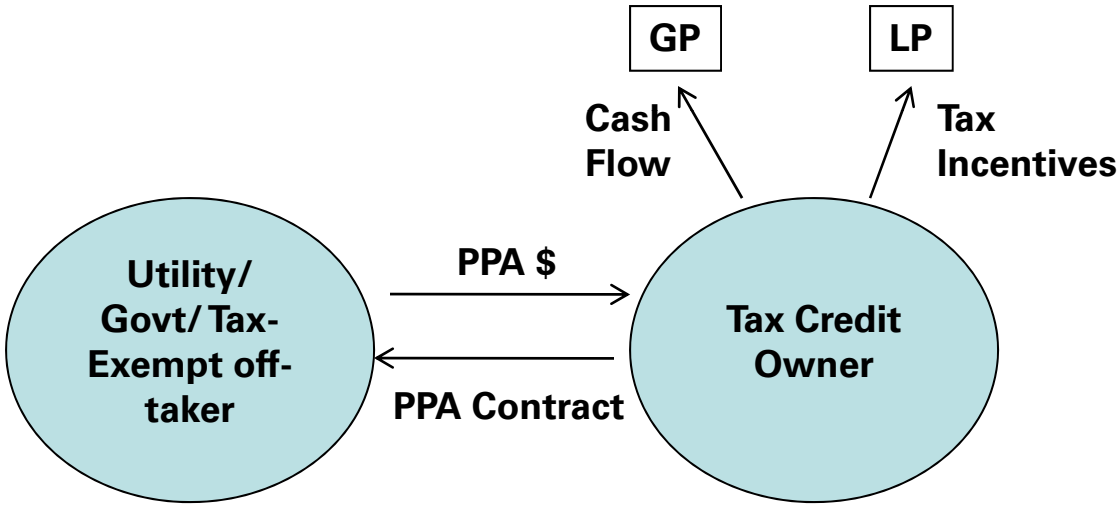
Municipal Off-Taker

- Willing to sign PPA, or
- Willing to carry for export, or
- Willing to trade power
- Honest cost comparisons

Would be nice if…

- Willing to acquire at end of tax benefit period (5-7 years)

PPA – Legal Structure Is The Key



*** Utility may acquire asset after 5-10 years from tax credit owner.**

Desire To Clarify - Territorial Electric Services Act / Georgia Cogeneration and Distributed Generation Act

- The Territorial Act states:

§ 46-3-3. Definitions

"As used in this part, the term:

(3) "Electric supplier" means any electric light and power company subject to regulation by the commission, any electric membership corporation furnishing retail service in this state, and any municipality which furnishes such service within this state.

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Current Georgia Territorial Act Law

- Attorney General Opinion 69-27: Holding an unregulated private person may sell electric energy to unregulated private users of electricity and that the sale is NOT a retail public sale.

- Territorial *Act does not currently prevent* limited PPA sales of power.

- Opinion 69-27 cites both resale PPA cases and sales of independently generated power.

Additional Legal Support

- Attorney General Opinion 71-81: Holding an unregulated private lessor may sell electric energy to unregulated private lessee and the sale is not a retail public sale and Georgia Public Services Commission has no jurisdiction over the sale.

- Citing Ops. Att'y Gen. 69-27 "This opinion states generally that the sale of energy to one's tenants is not the kind of service to the public which requires compliance with the State's laws on public utilities."

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More Legal Support

- Attorney General Opinion 72-84: Holding an unregulated private corporation may sell electricity to limited number of other industrial corporations.

- The sale does not serve a substantial segment of the public.

- Sale is "not within the jurisdiction of the [Georgia] Public Service Commission."

Territorial / Cogen. Act Clarity Benefits Everyone

- Clarification *does not mean change* in existing law.
- *Existing law allows private PPAs and leasing* of generating assets.
- 41 years of Georgia legal *precedent supports this*.

Makes Sense To Support Clarification

Immediate Benefits To Georgia:

- Renewables are a long-term hedge against fuel price increases.
- Solar reduces peak fuel costs and offsets peak loads (60%).
- Renewable energy development is about economic development in your territory $$$.
- Renewable energy development is about working-class jobs.
- Renewable energy is about your customer satisfaction.

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Clarification Is Good

- Renewable energy facilities originally owned and financed by tax credit investor/owners bring substantial property tax revenue for cities.

- In 5-10 years, the tax credit investor/owners may or may not want to sell the renewable facilities to you.

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Clarification Is Right

- The Acts were passed without contemplation of renewable, distributed generation.

- It was never the intent of the GA Legislature to quash renewable energy in any way, shape or form.

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Clarification Is Our Duty As Citizens

- The Cogeneration Act determined and declared that it is in the interest of the public to:
  - Encourage private investment in renewable energy resources,
  - Stimulate the economic growth of Georgia, and
  - Enhance the continued diversification of the energy resources used in Georgia.

- Current Georgia law may make federal climate related compliance difficult and ultimately more costly for every electrical customer.

Market Reality is Driving Clarification

- Solar prices continue to come down - “Easy” parity in 3-5 years.
- Customers demand green energy.
- Wind now being developed in “low” wind regimes.
- Movement by public authorities for improved waste management and waste to energy.

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Opposing Clarification Hurts …

- There is a growing abundance of Tax Equity for utility scale renewable projects.
- Federal 30% grant for utility scale project until 2016.
- Project Finance debt available for large projects with tax equity or with grants and even without.
- Georgia Universities seeking utility scale installs using tax incentives to reduce their capital outlay.

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Be Smart – Know Your Finance Options

- Federal New Markets Tax Credits making low cost debt available.
- Expanded bond issuing authority enabling bond finance for utility scale renewables.
- DOE Loan Guarantee or Proposed Federal Green-Bank likely to make available low cost project debt.

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It Actually Makes Sense Today …

- Even with distributed generation, the percentage of renewables will, overall be small.

- Even with lower retail sale volume, your fees, charges, tariffs and certain taxes should still be collectible by you or the taxing authority in your territory.

- Investing in renewables will positions you to meet your long-term planning which must inevitably include renewables.

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Backup Information

- Backup information is available on flash drives available for your later review.

Thank You

Contact

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