Clean Energy in North Carolina: Opportunities and Barriers

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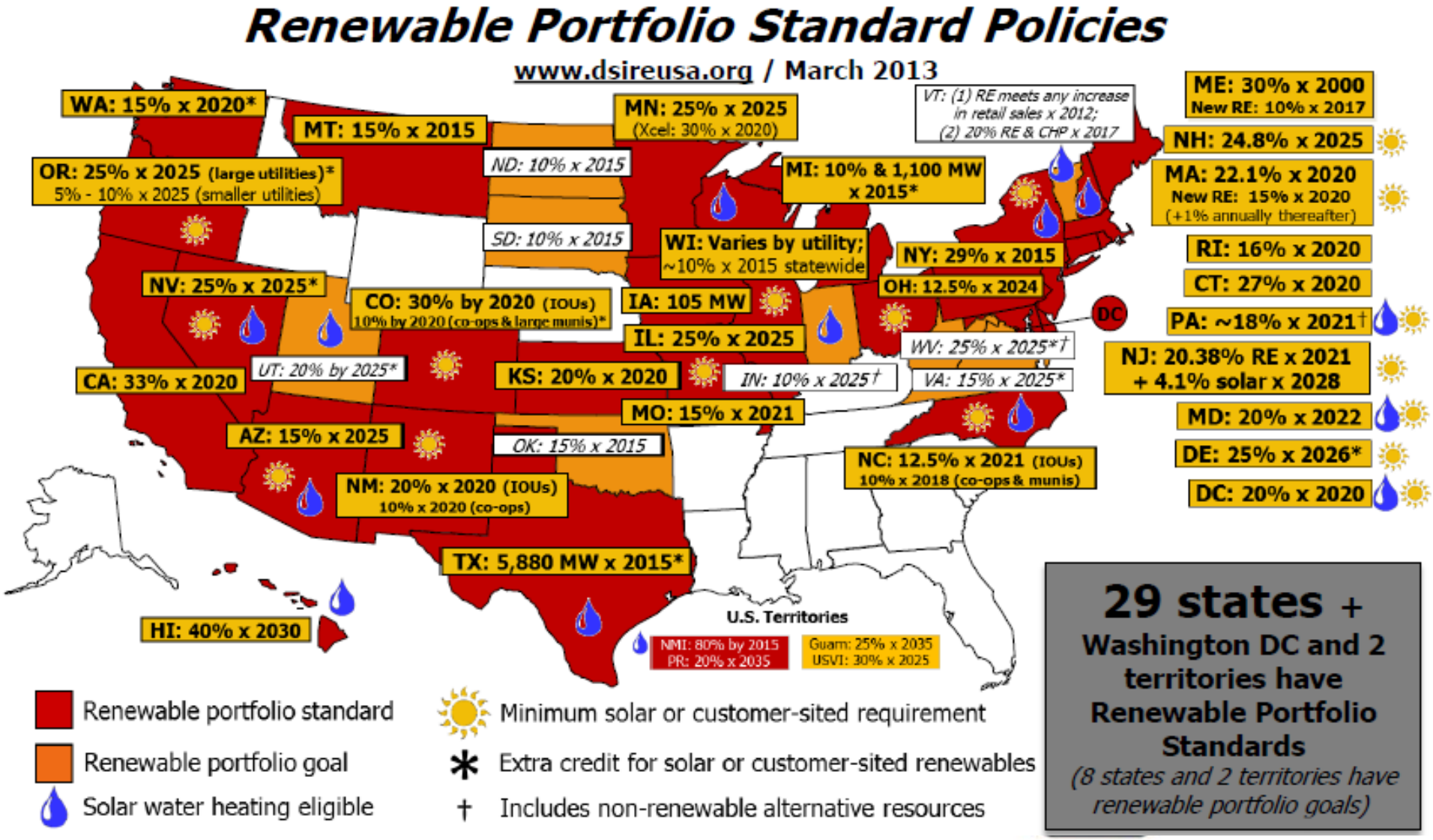
April 29, 2014

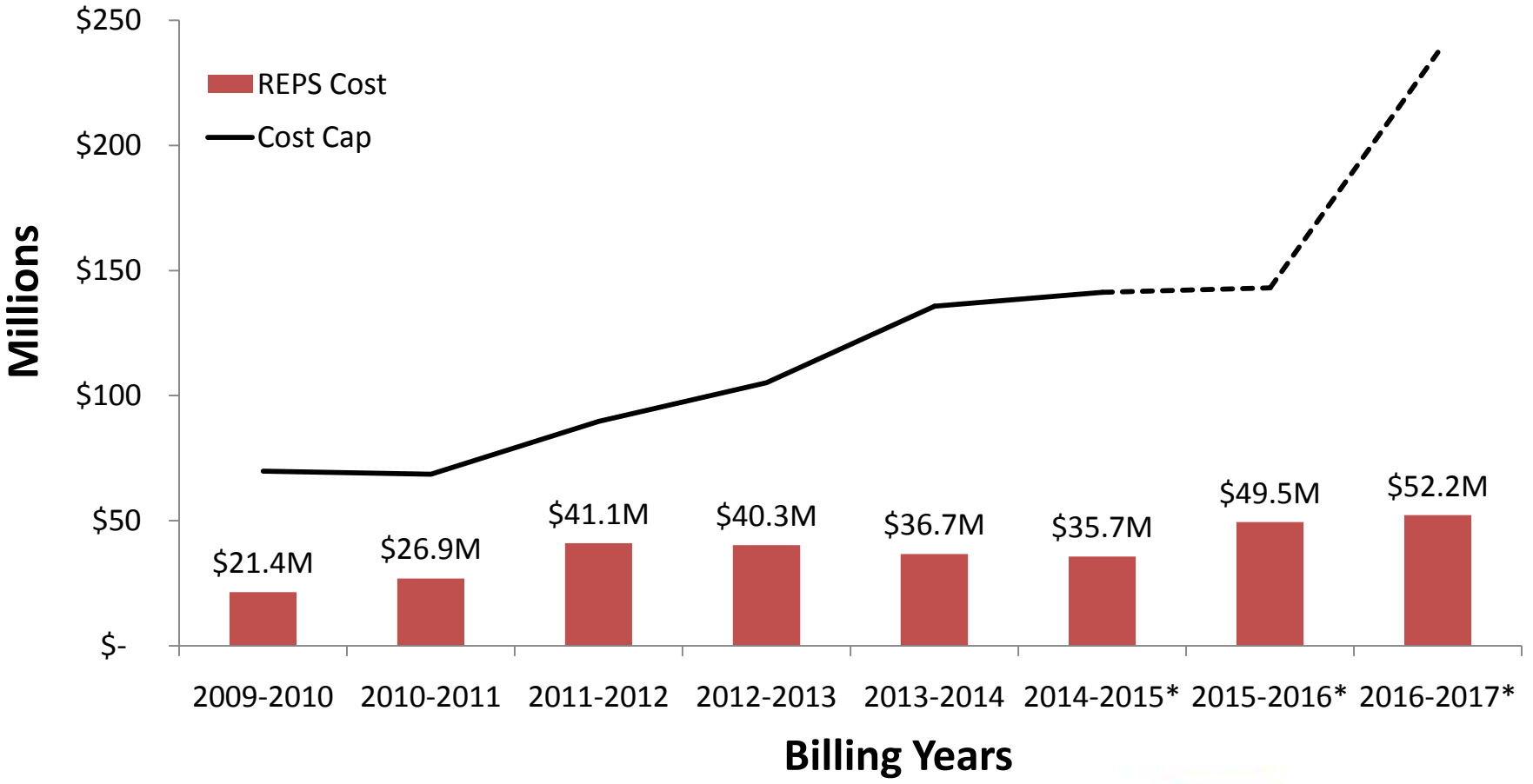
NC's "REPS" Law (aka "Senate Bill 3")

Resource: http://www.dsireusa.org/documents/summarymaps/RPS_map.pdf



29 states +
Washington DC and 2 territories have Renewable Portfolio Standards
(8 states and 2 territories have renewable portfolio goals)

Total "REPS" Incremental Costs



Source: NC Utilities Commission REPS Compliance Plan and REPS Compliance Report Dockets

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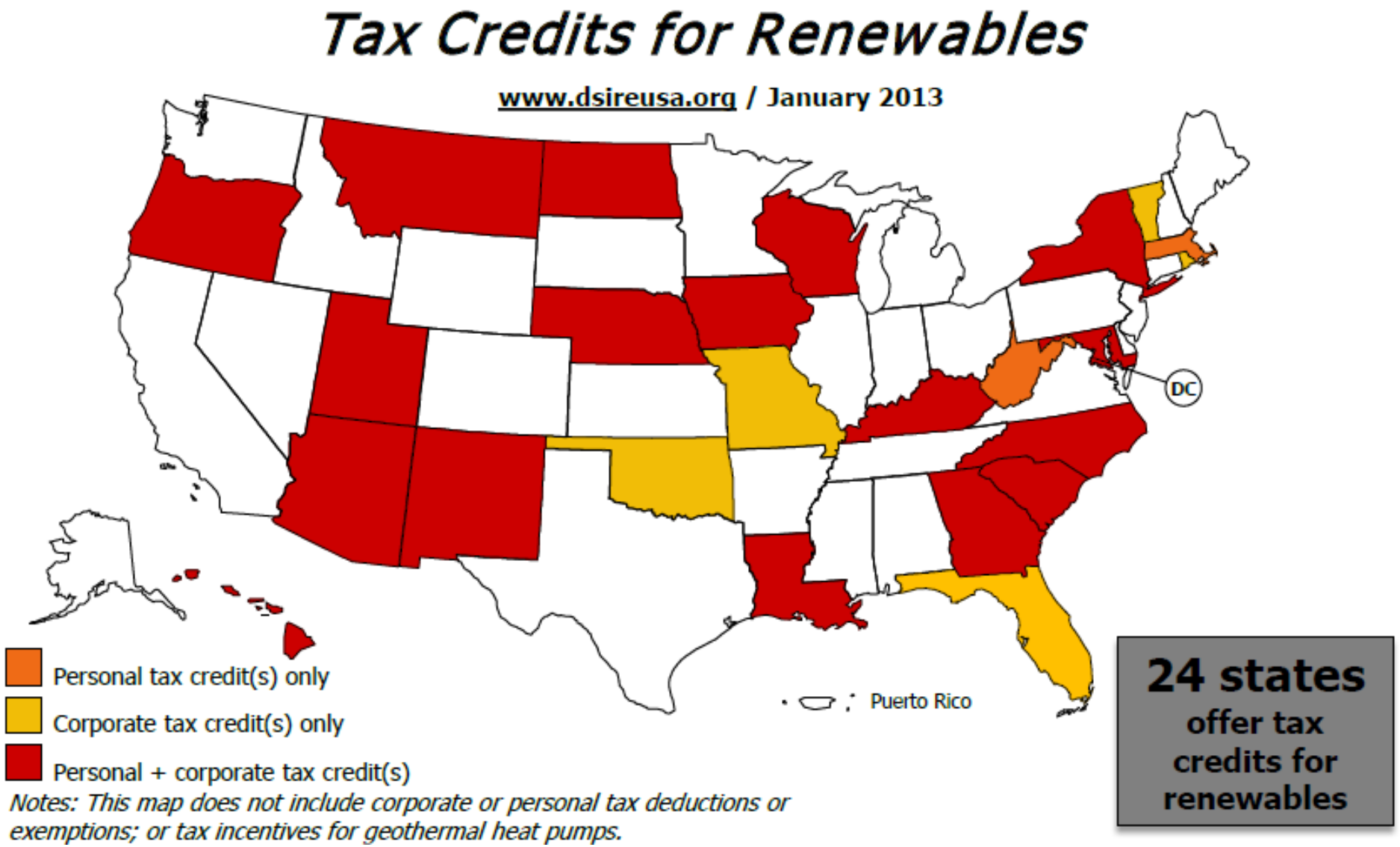
NC's Tax Credit

Resource: http://www.dsireusa.org/documents/summarymaps/TaxIncentives_Map.pdf



NC's Tax Credit = A Profitable Investment

$1.93

Between 2007 and 2013, every $1.00 of renewable energy investment tax credit taken supported $1.93 in state or local government revenue.

Source: RTI INTERNATIONAL

http://energync.org/assets/files/NCSEA%202013%20update%20final.pdf

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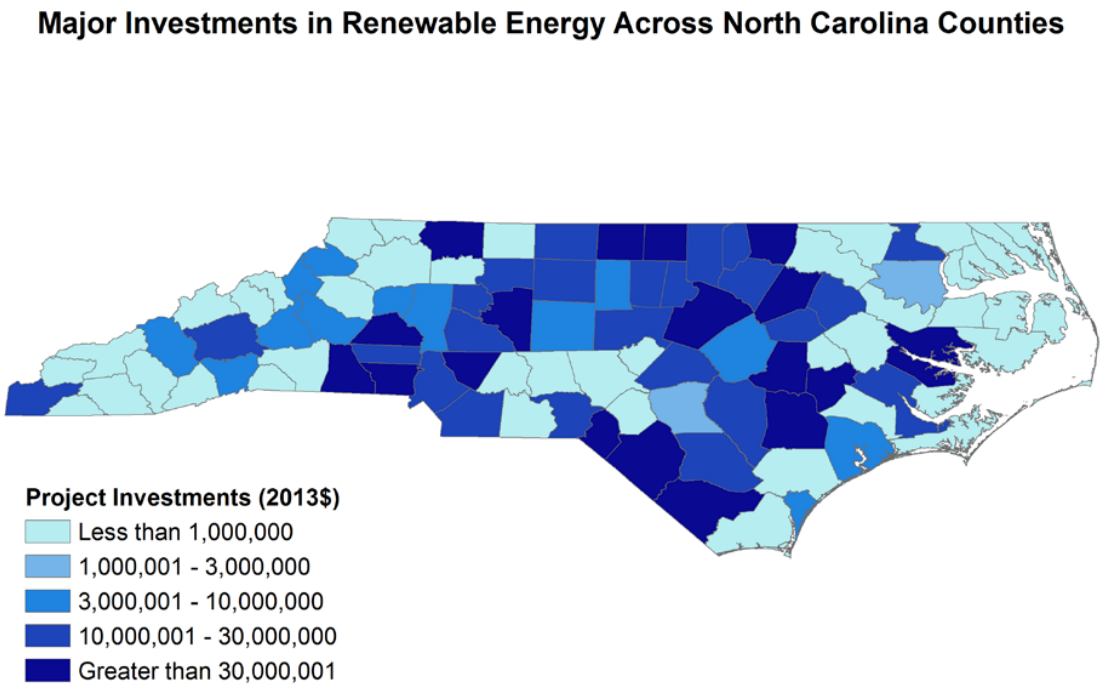
Economic Impact of NC Clean Energy Development (2007-2013)



Between 2007 and 2013, 57 of North Carolina's counties have benefitted from $1 million or more in renewable energy investments

Source: RTI INTERNATIONAL

http://energync.org/assets/files/NCSEA%202013%20update%20final.pdf

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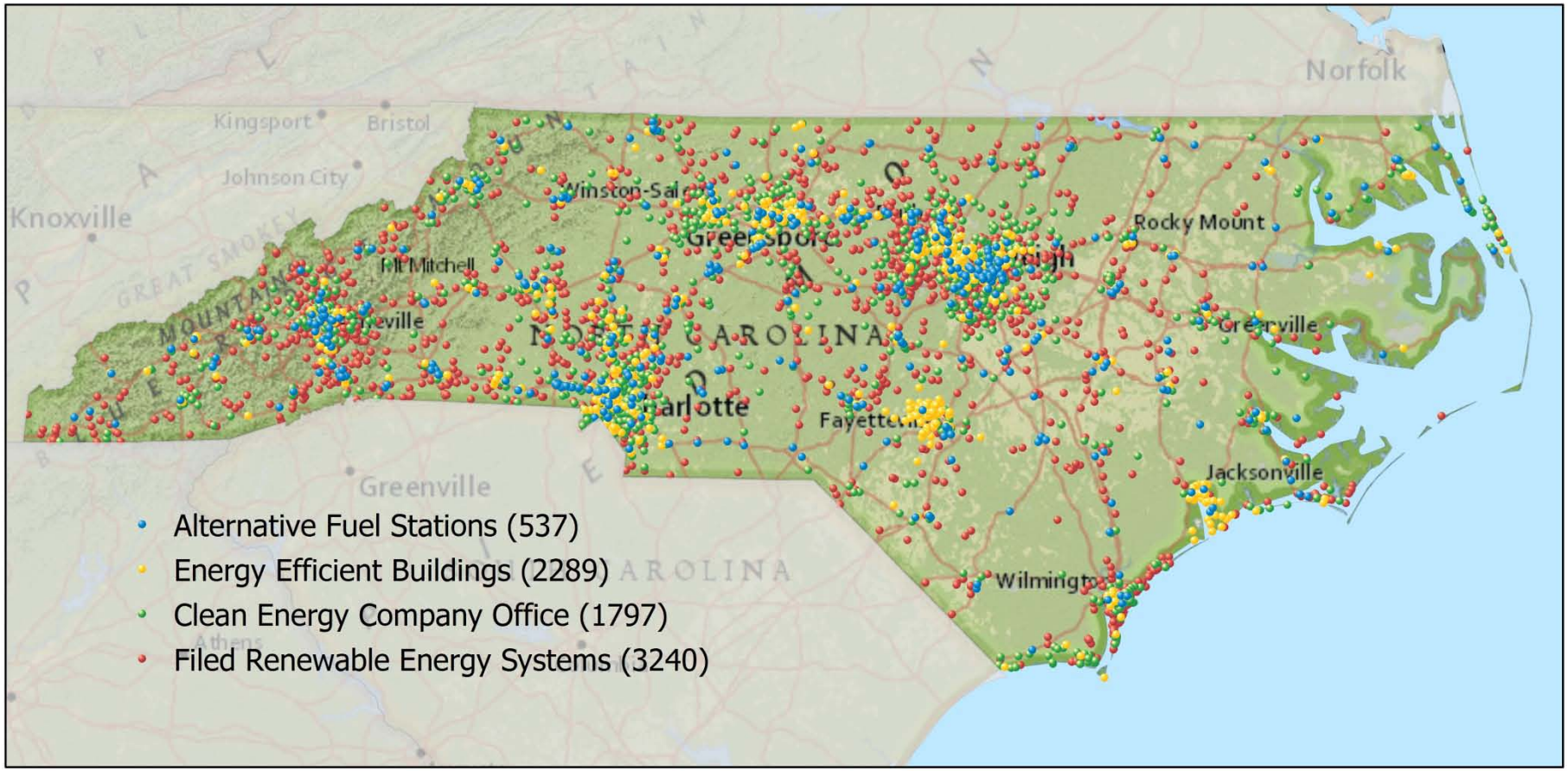
NC Clean Energy Landscape (2014)



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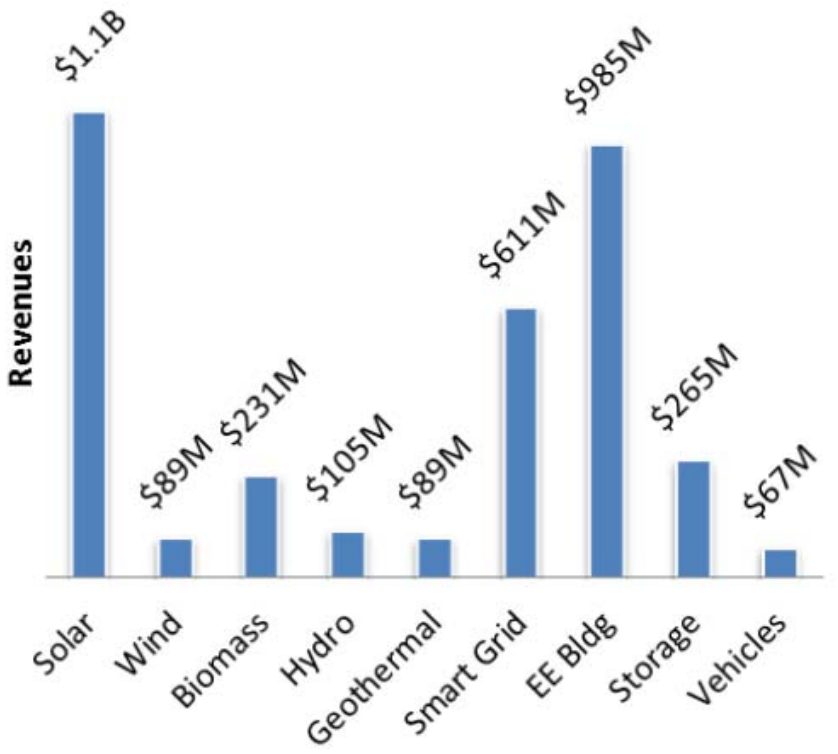
NC Clean Energy Firms – 2013 Employment and Revenues

Resource: 2013 NC Clean Energy Industry Census (January 2014)

Sector	% of Responding Firms	Clean Energy FTE	% State Clean Energy FTE
Solar	22%	2,422	15%
Wind	6%	632	4%
Biomass	9%	1,277	8%
Hydro	4%	953	6%
Geothermal	11%	480	3%
Smart Grid	4%	4,177	25%
EE Bldg	33%	5,411	33%
Storage	4%	544	3%
Vehicles	7%	678	4%
Sector Totals	100%	16,573	100%



Source: http://energync.org/assets/files/2013%20North%20Carolina%20Clean%20Energy%20Industry%20Census(4).pdf

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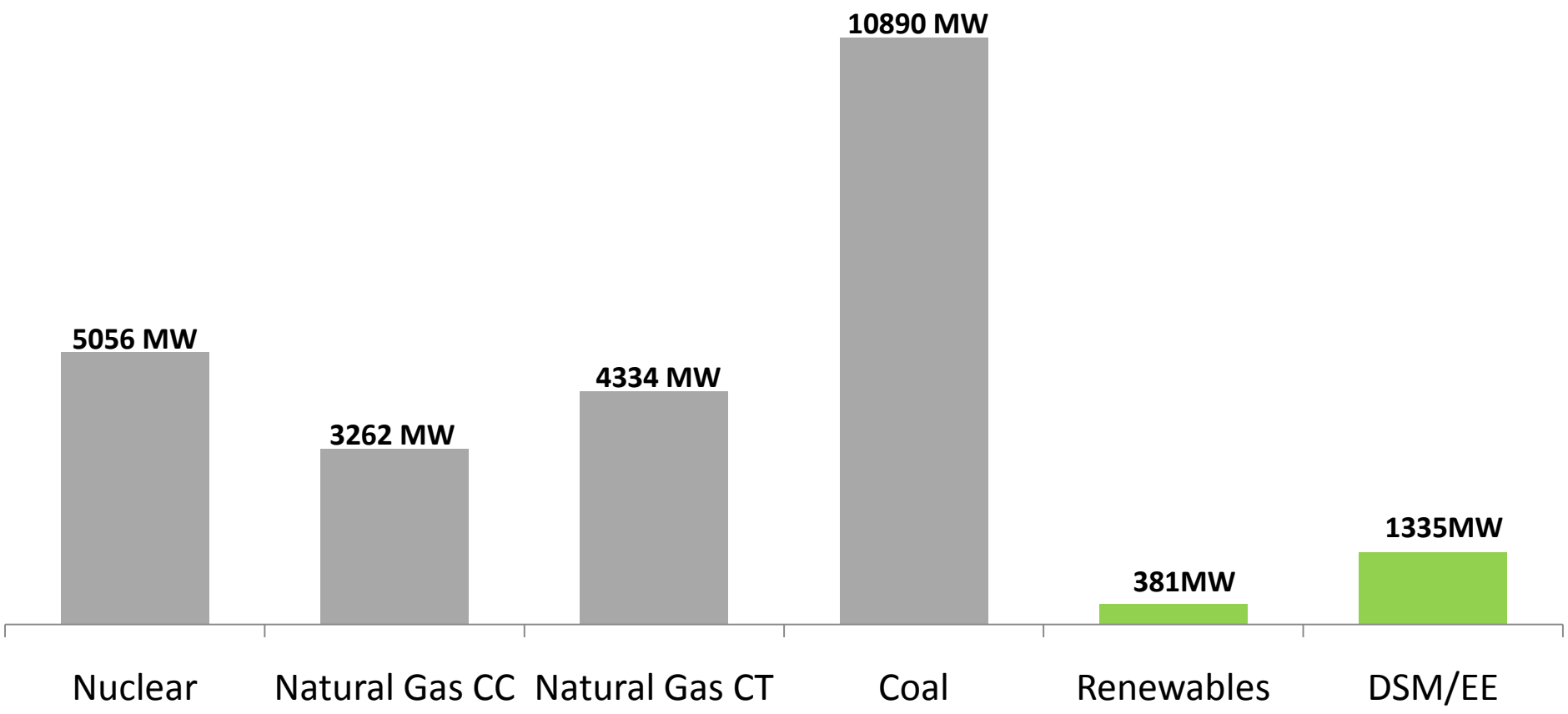
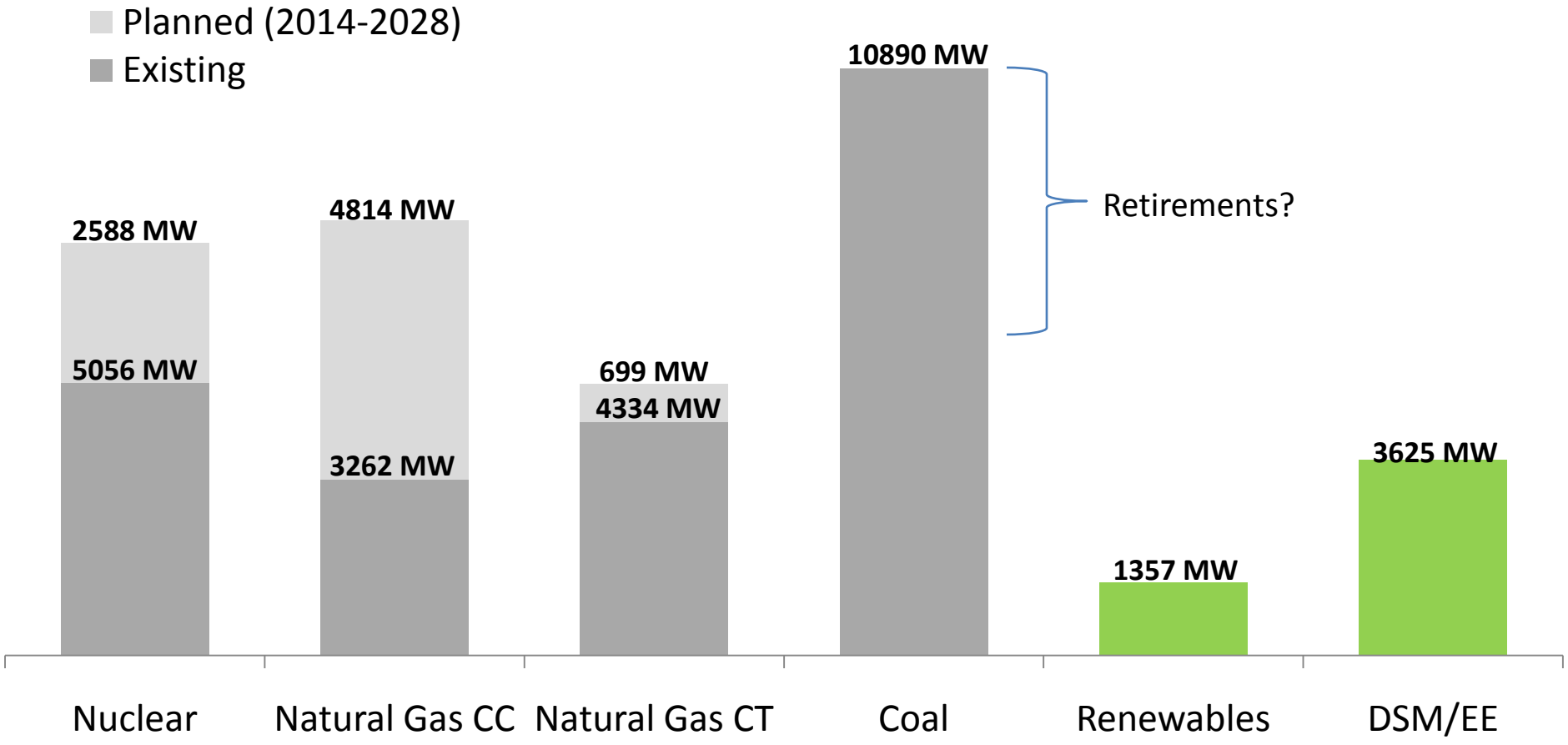
Duke Energy's NC Load-Serving Portfolio (Existing)



For GHG, 111(d) rules will affect existing portfolio.

Resource: http://www2.epa.gov/carbon-pollution-standards/what-epa-doing

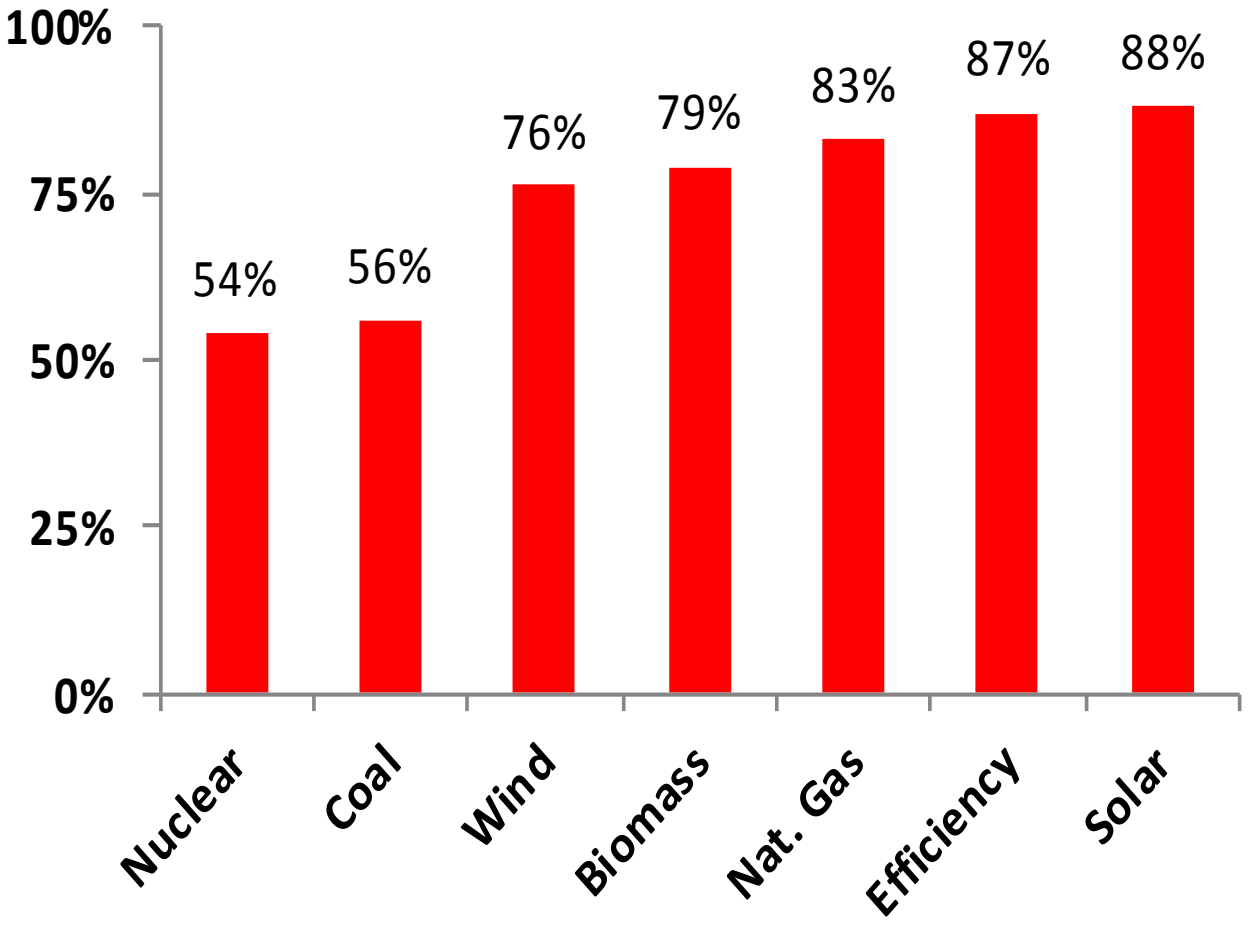
Duke Energy's NC Load-Serving Portfolio (Existing and Planned)



For GHG, 111(b) rules will affect "new sources" in portfolio.

Resource: http://www2.epa.gov/carbon-pollution-standards/what-epa-doing

Public Opinion Support in NC



Do you support or oppose using _____ to meet growing needs for energy and electricity to residences and businesses in North Carolina?

Source: 2013 Fallon Research Poll of 803 registered North Carolina voters +/- 3.45%

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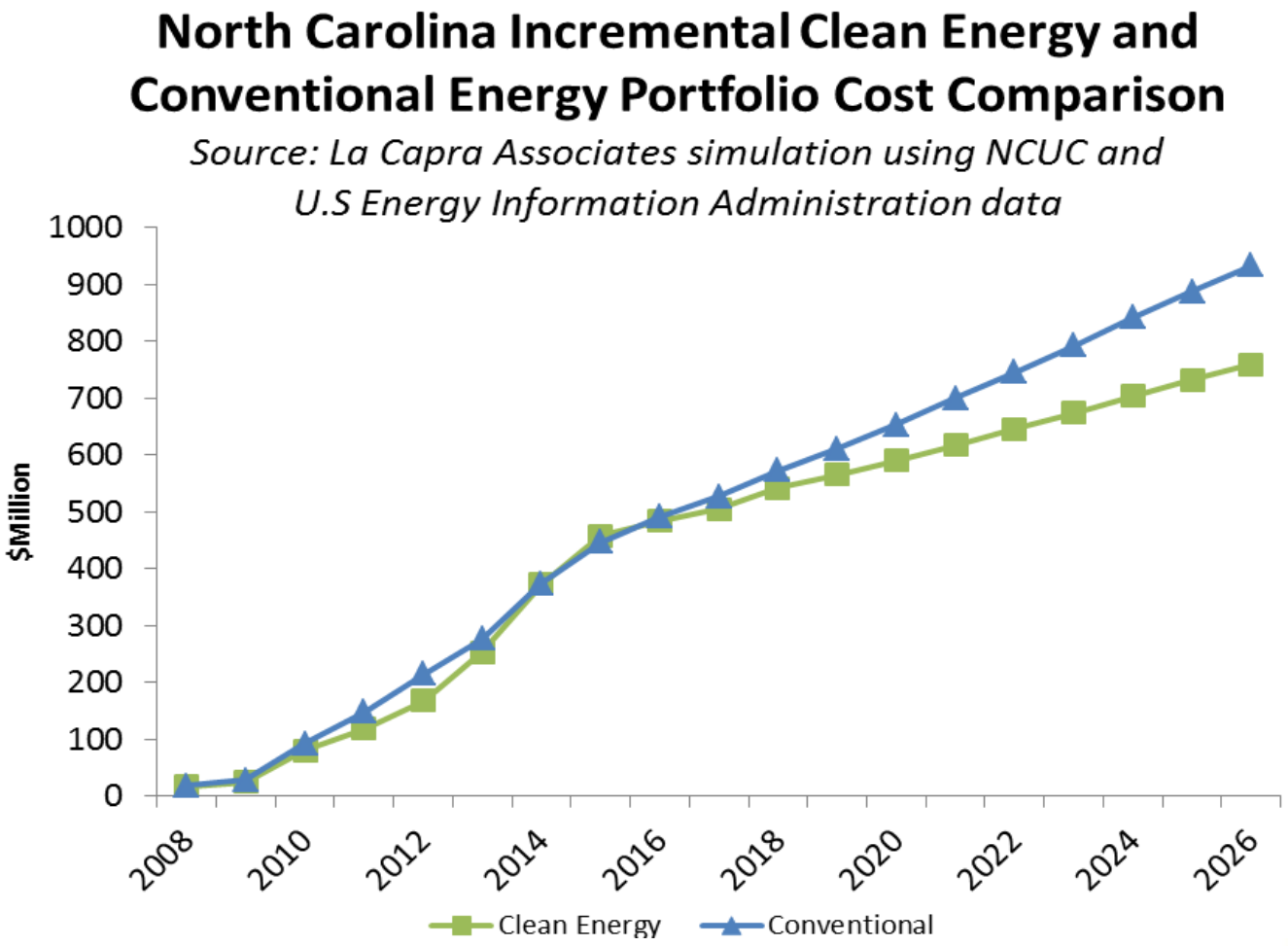
Economic Impact of NC Clean Energy Development (2013-2027)



The difference between the two "energy mix" scenarios found a <u>net $173 million NPV savings</u> associated with the Clean Energy Portfolio.

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Top Policies for Growth of NC Clean Energy Firms

Resource: http://www.cleanenergyindustry.org/snapshot/2013/north-carolina