Environmental Issues in the New Energy Era

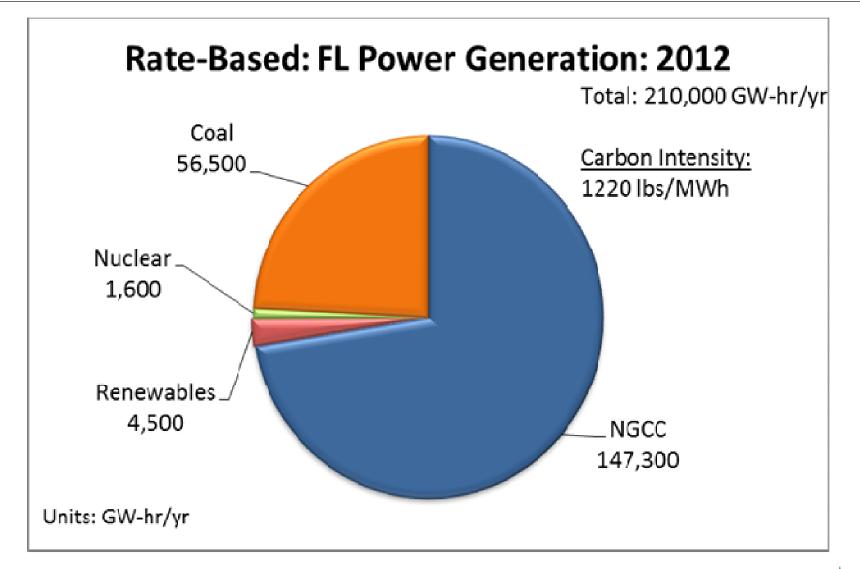
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Bob Fraser, ERM



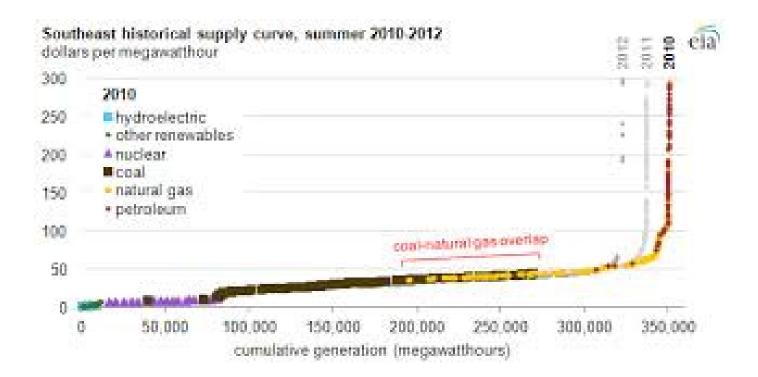
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It Takes Energy..





Why Coal was 25% of FL Generation





USEPA – No New Coal – Ever.

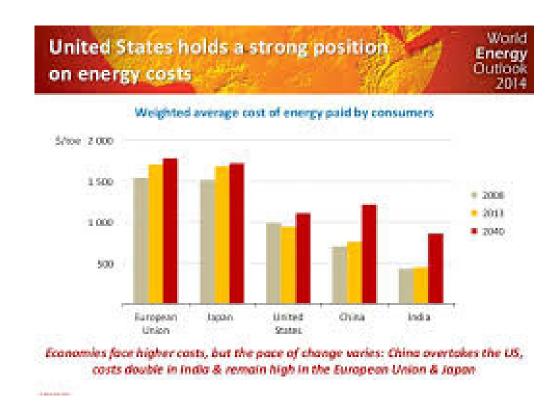




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Why is CPP a CIBO Issue?

- 1. Someone is going to pay..
- 2. Can large industrials be far behind?





Where does electricity come from?





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Where does electricity really come from?





How then should FL make up ~ 28,350 GW-hr/yr?

- Efficiency?
- Renewables
 - Wind?
 - Solar?
 - Biomass?
 - Hydro from Canada?
- New Nuclear?
- New Natural Gas Combined Cycle?
- All of the above?



Efficiency

- Existing fleet 40+ years of economic heat rate improvements
- End users subsidized efficiency portfolio standards?
- Industry?
 - Low gas cost = 5+ year simple paybacks
 - High electricity cost = CHP investments
- Residential real, permanent, verifiable?



New Renewables – Wind?





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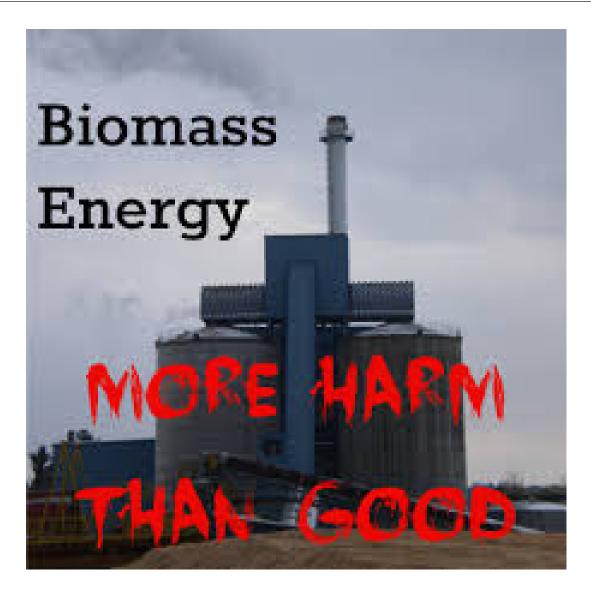


New Renewables – Solar?





New Renewables – Biomass?





Renewables - New Transmission to Bring Hydro to NE?







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New Nuclear?





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New Gas Combined Cycle?





What can CIBO members do?

- Be at the Table
- Work with State(s) to propose the least-cost State Implementation Plans
 - Least disruptive to current power infrastructure
 - Most fuel flexibility
 - Let economics (not yahoos) pick winners and losers
 - Maintain system reliability
 - Least cost to consumers
 - US industry must be able to compete with the rest of the world

