



Synapse
Energy Economics, Inc.

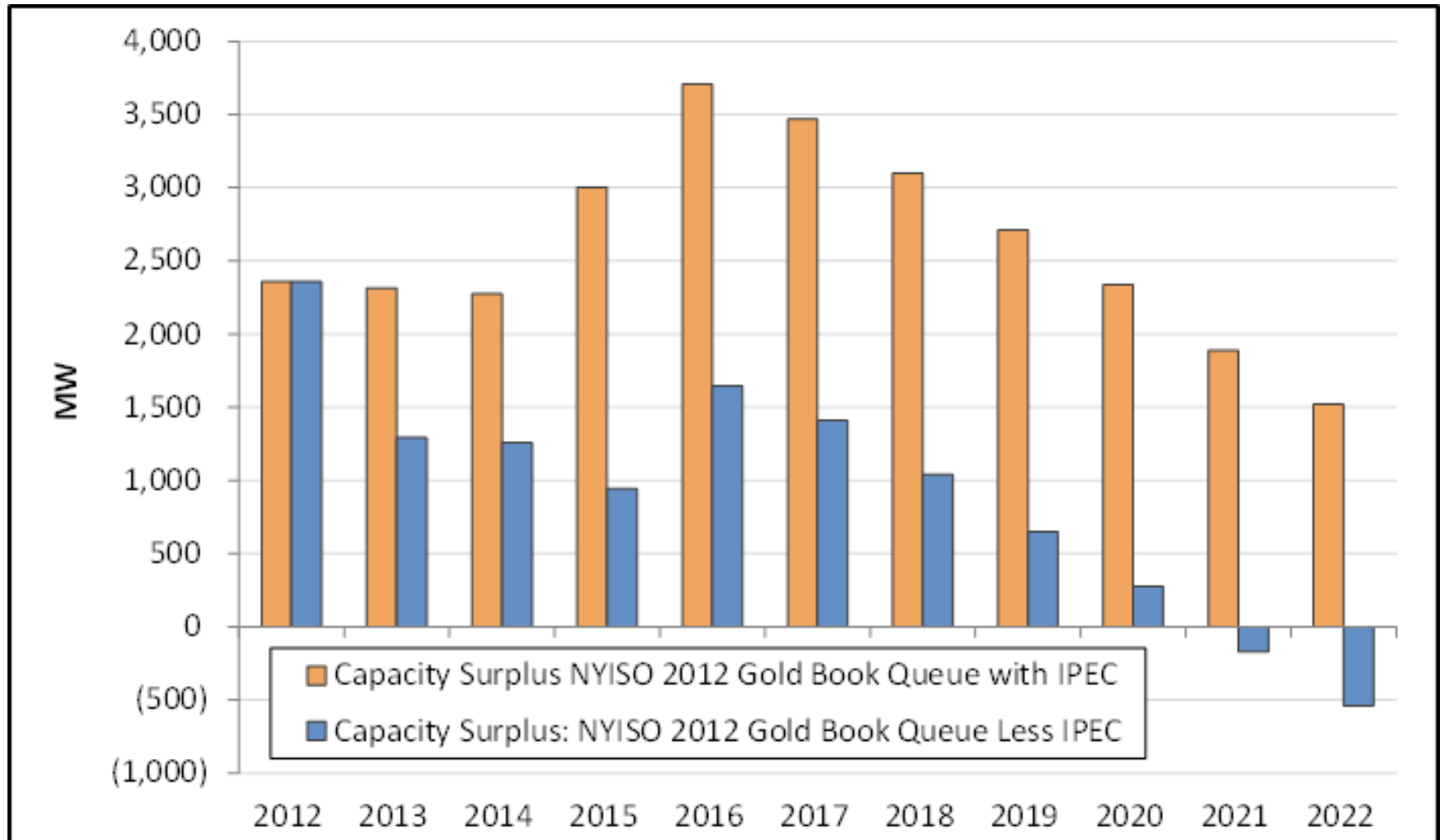
Indian Point Replacement Analysis: A Clean Energy Roadmap

NRDC and Environmental Entrepreneurs

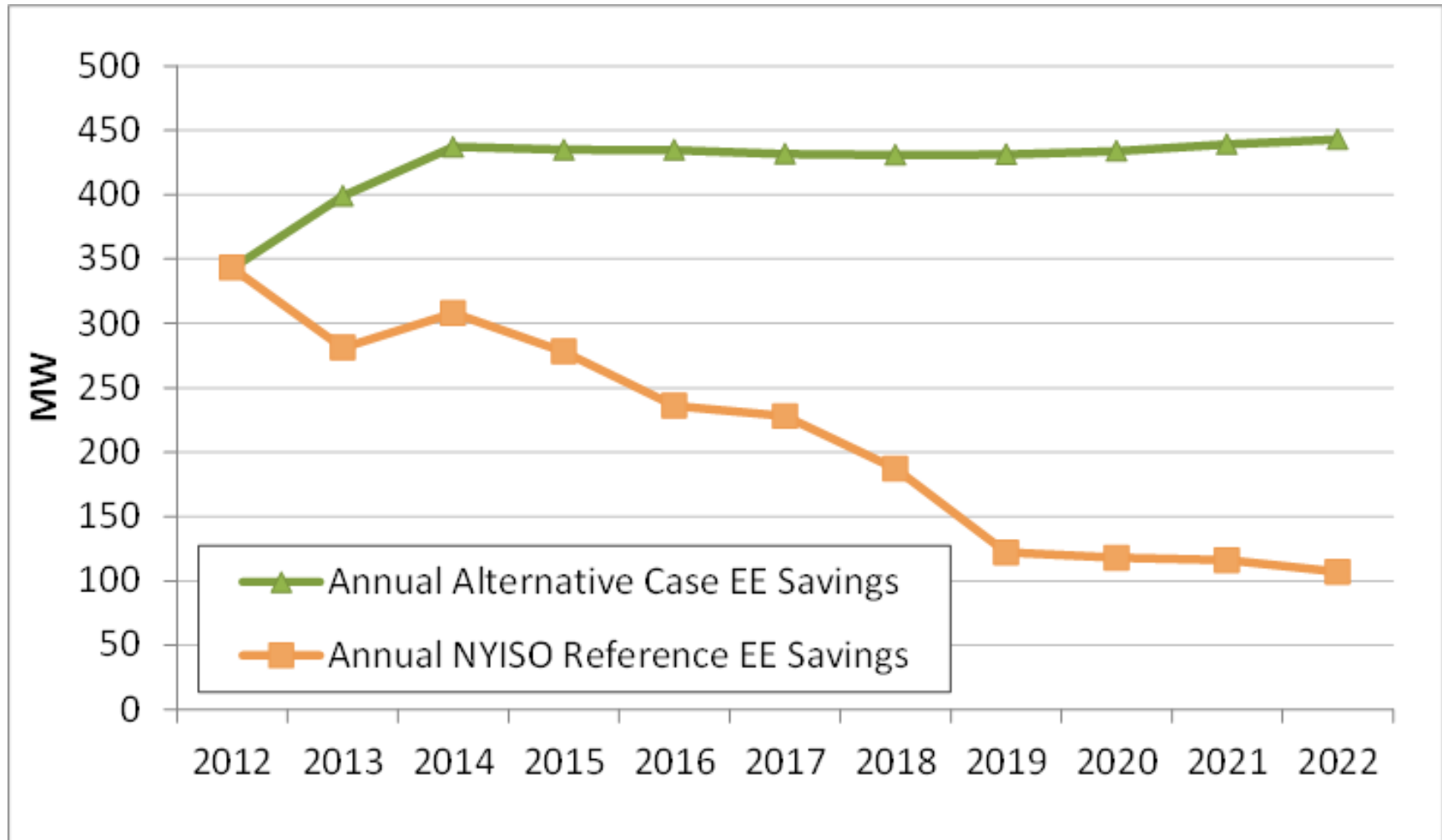
November 27, 2012

Tim Woolf

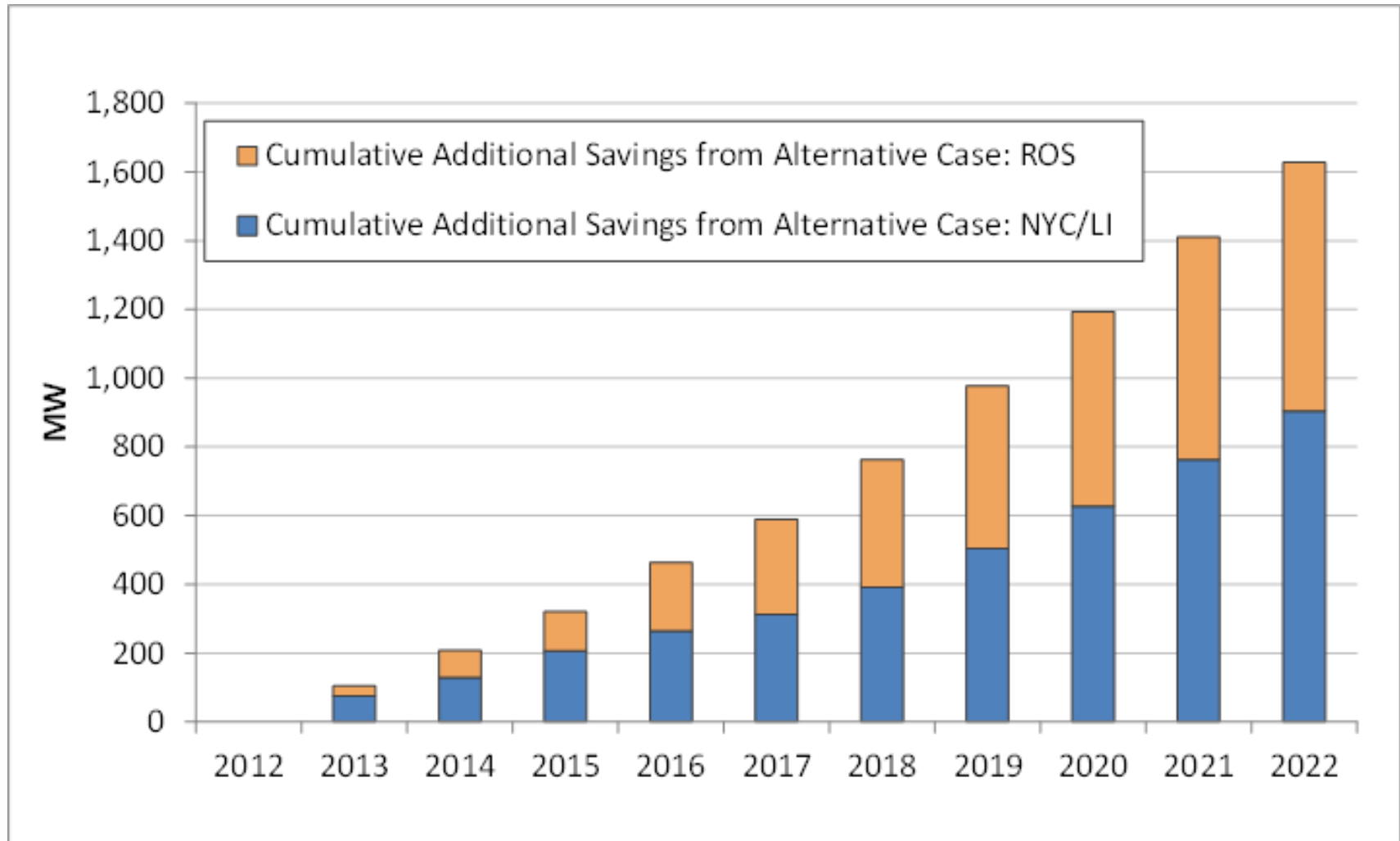
NY Capacity Surplus – With and Without IPEC



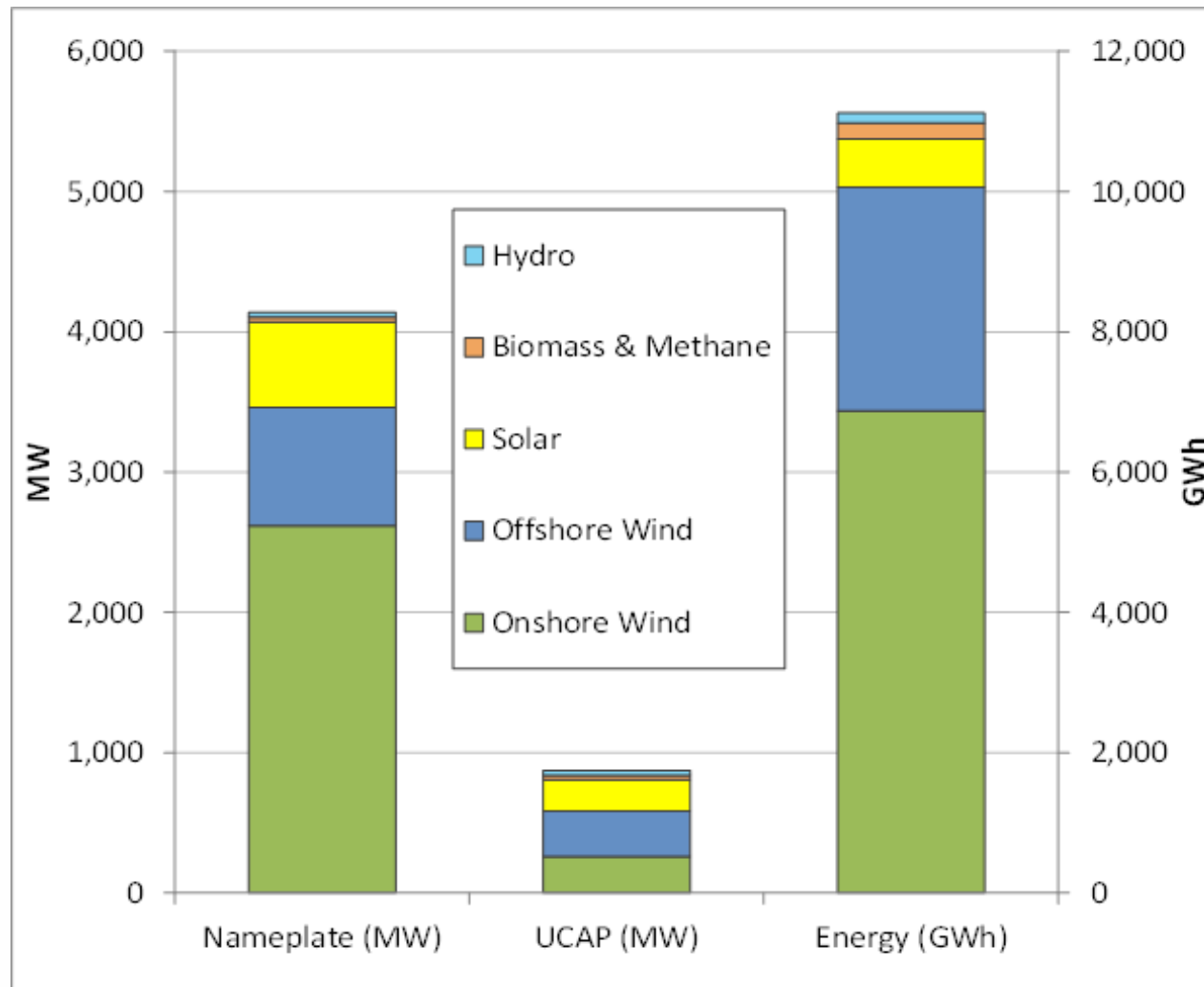
NYISO Efficiency Savings vs. Our Alternative Case



Potential Efficiency Savings: Near NYC and in the Rest of the State



Proposed Renewable Resources: From NYISO Queue, Energy Highway & NY Sun



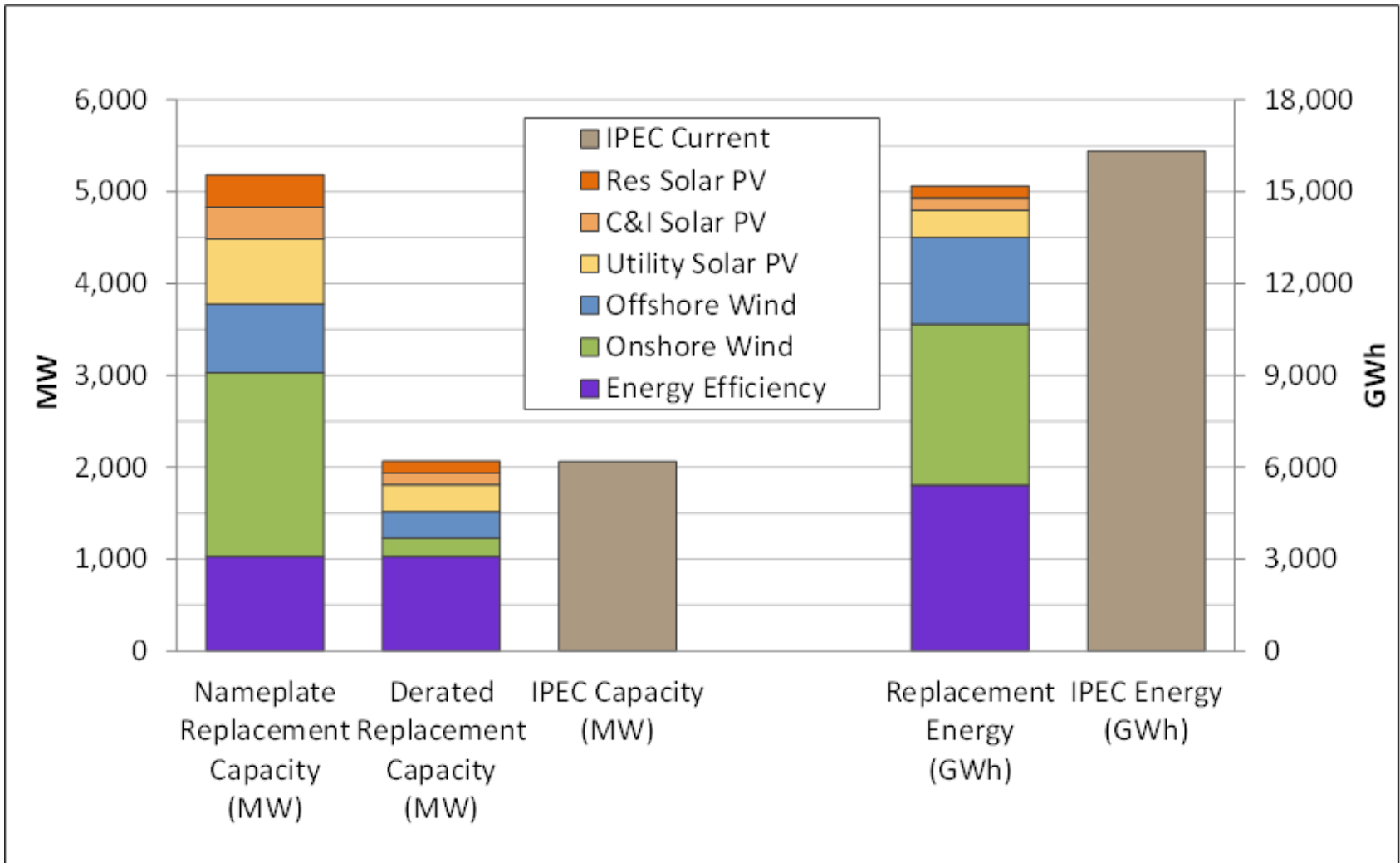
Policies to Promote Energy Efficiency Resources

- Update the energy efficiency goals.
 - Require savings of at least 1.5% per year.
- Improve the energy efficiency screening process.
- Enable the spending of the full efficiency budgets.
- Enable energy efficiency to participate in wholesale electric markets.
- Provide resources and support to enforce building codes.
- Facilitate private sector support for energy efficiency resources.

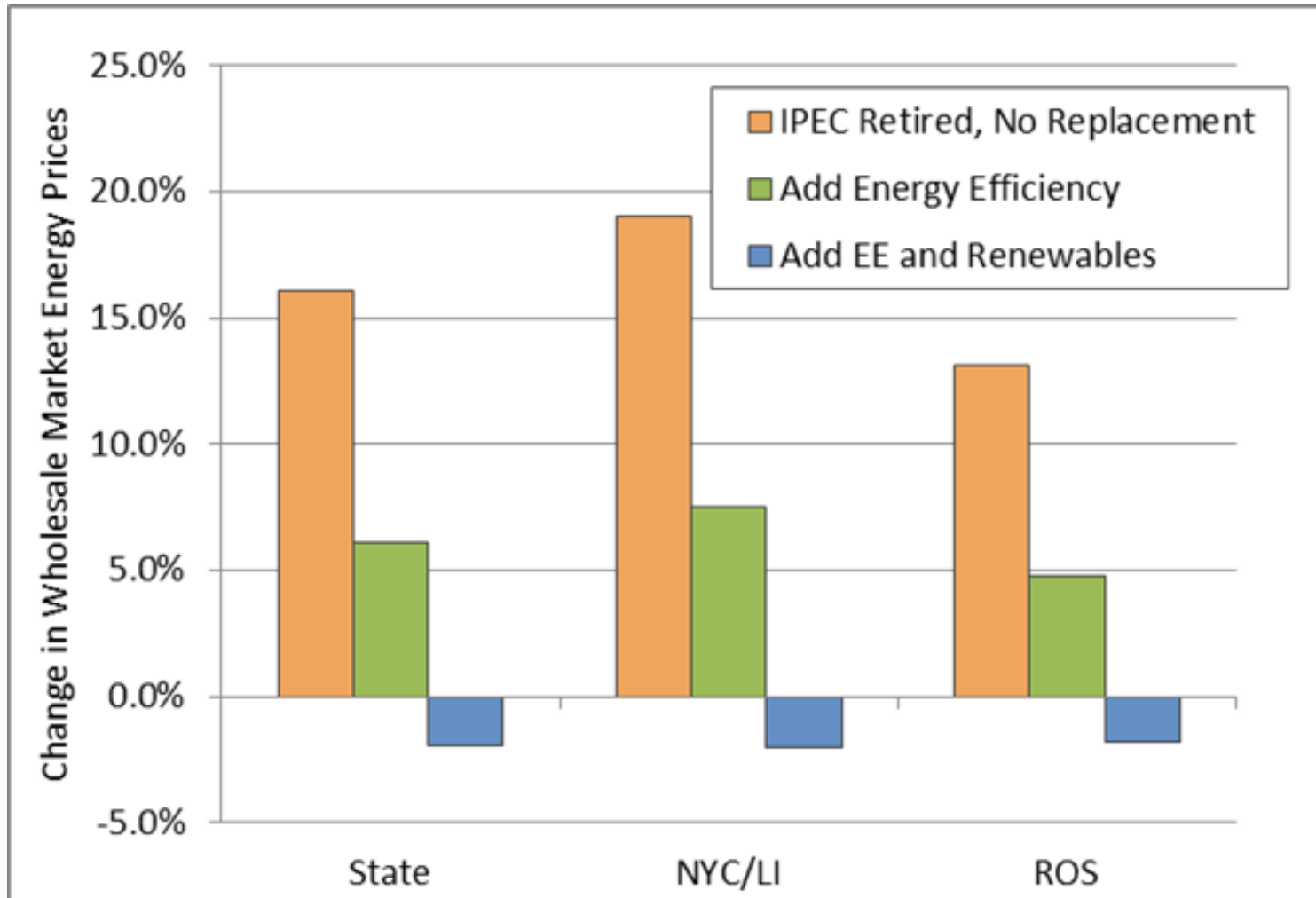
Policies to Promote Renewable Resources

- Update and expand the RPS.
 - Goal should be increased to 30% by 2016.
 - Goal should increase by 1% each year.
- Improve the NYSERDA REC solicitation process.
- Modify the RPS to support specific technologies.
- Extend the NY-Sun initiative.
- Support and expand the off-shore wind collaborative.
- Facilitate private sector support for renewable resources.

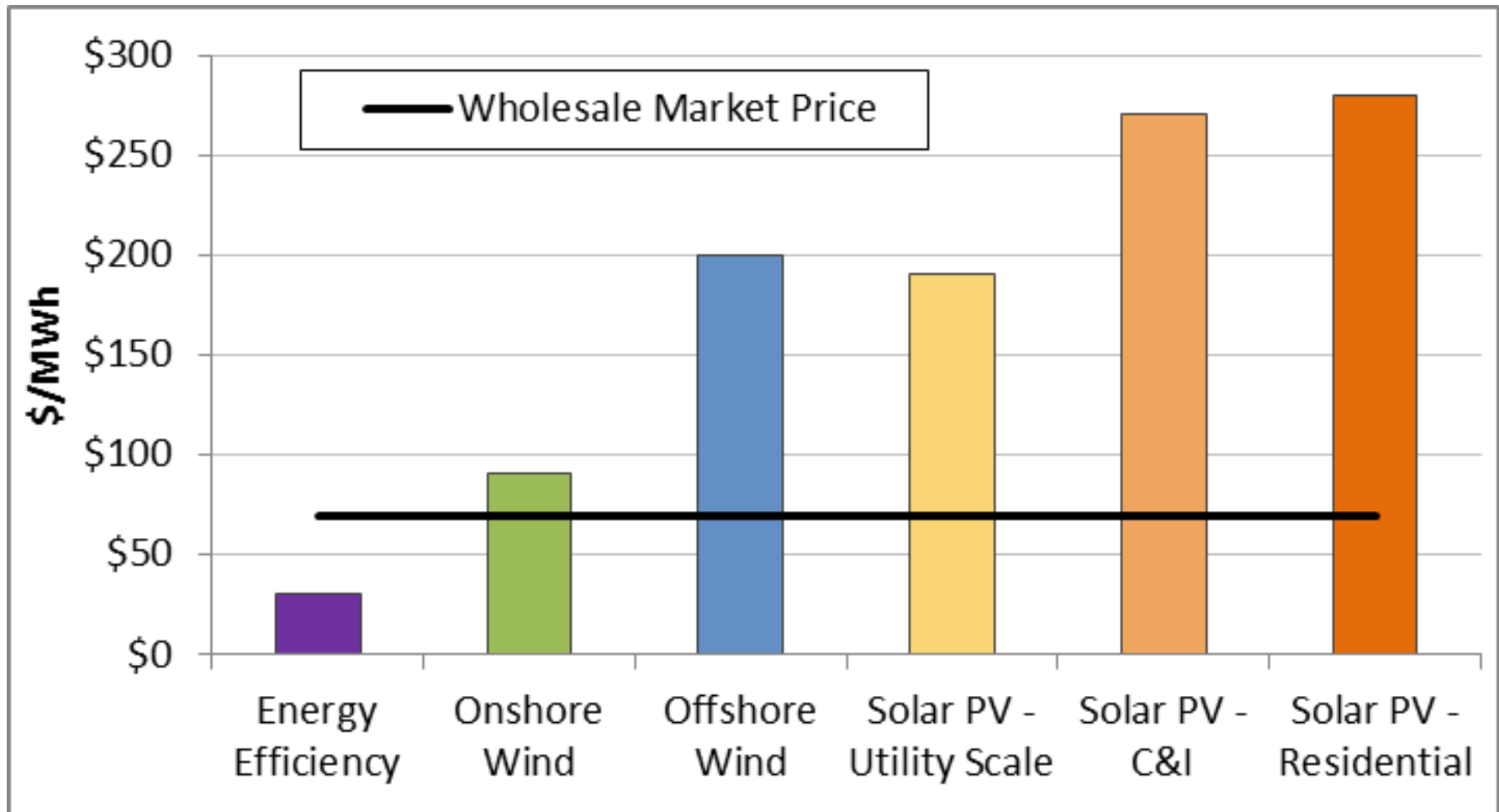
A Clean Energy Portfolio to Replace IPEC



Wholesale Market Cost Impacts



Public Policy Cost Impacts



Cost Implications of the Clean Energy Portfolio

- Wholesale electricity market costs:
 - Impact is likely to be small because IPEC energy and capacity is replaced by alternatives.
 - Roughly 2% reduction in annual market costs.
- Public policy costs:
 - Renewables result in a net increase in costs, while efficiency results in net reduction in costs.
 - Total effect is likely to be roughly 2% increase in electricity system costs.
- Retail electric bills:
 - Modest impact on average bills: roughly 1%-2% increase.