



RGGI Analytical Experience

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NYSERDA

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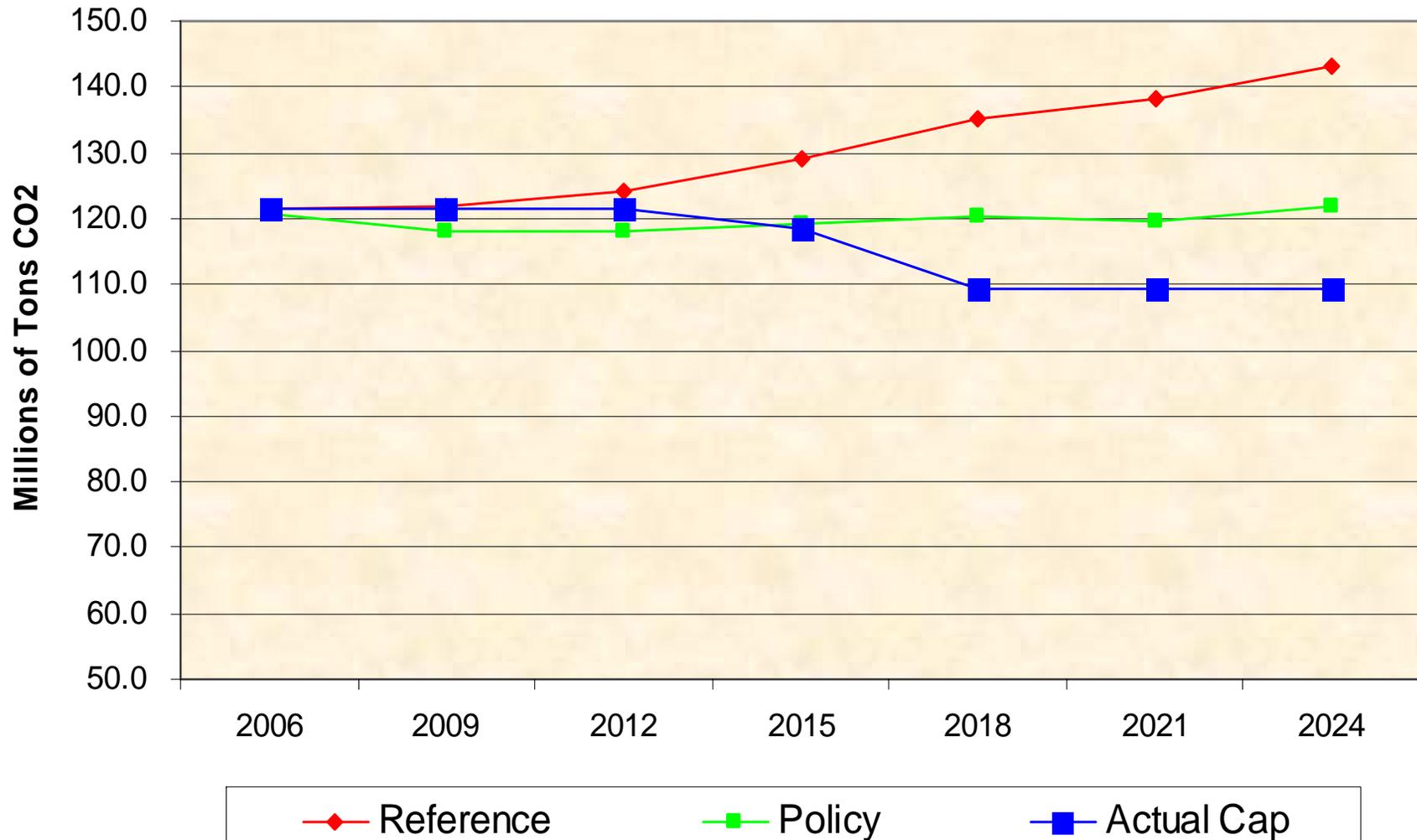
RGGI Design Principles

- Reduce CO₂ with flexible, market-based program to achieve least cost reductions.
 - Create model for federal program.
 - Maintain electricity affordability, reliability and fuel diversity.
 - Make expandable to other states.
 - Build on programs in place.
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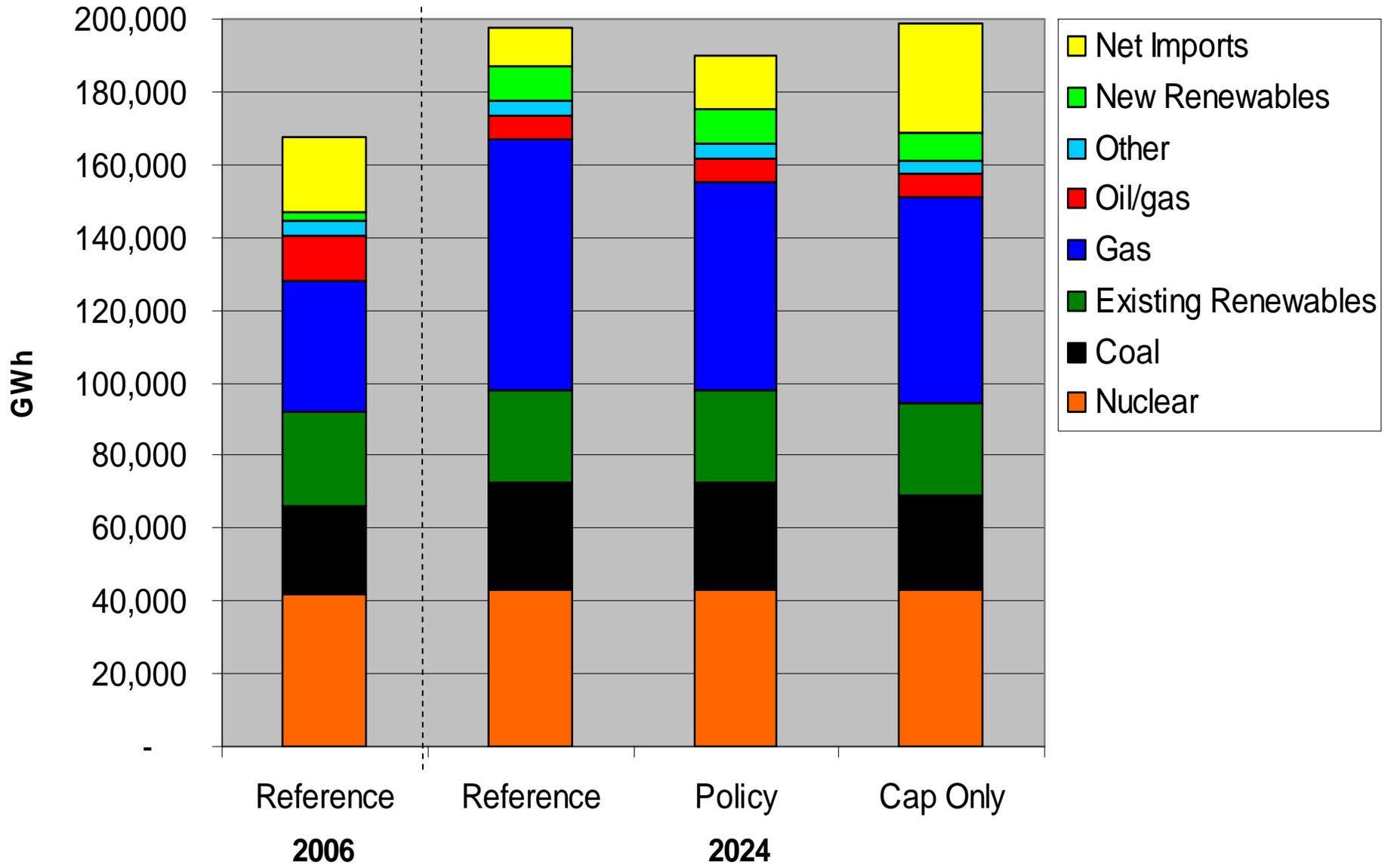
Key Elements of NY RGGI Proposal

- Carbon cap
 - Stabilize emissions through 2015
 - Decrease by 10% by 2019
- State CO₂ budgets — Based primarily on 2000-2004 emissions
- Offsets (Non-electric) — 3.3 % of allowances (approximately 50% of required reductions)
- 100% of State Budget Auctioned
 - Energy efficiency, new technologies, etc.

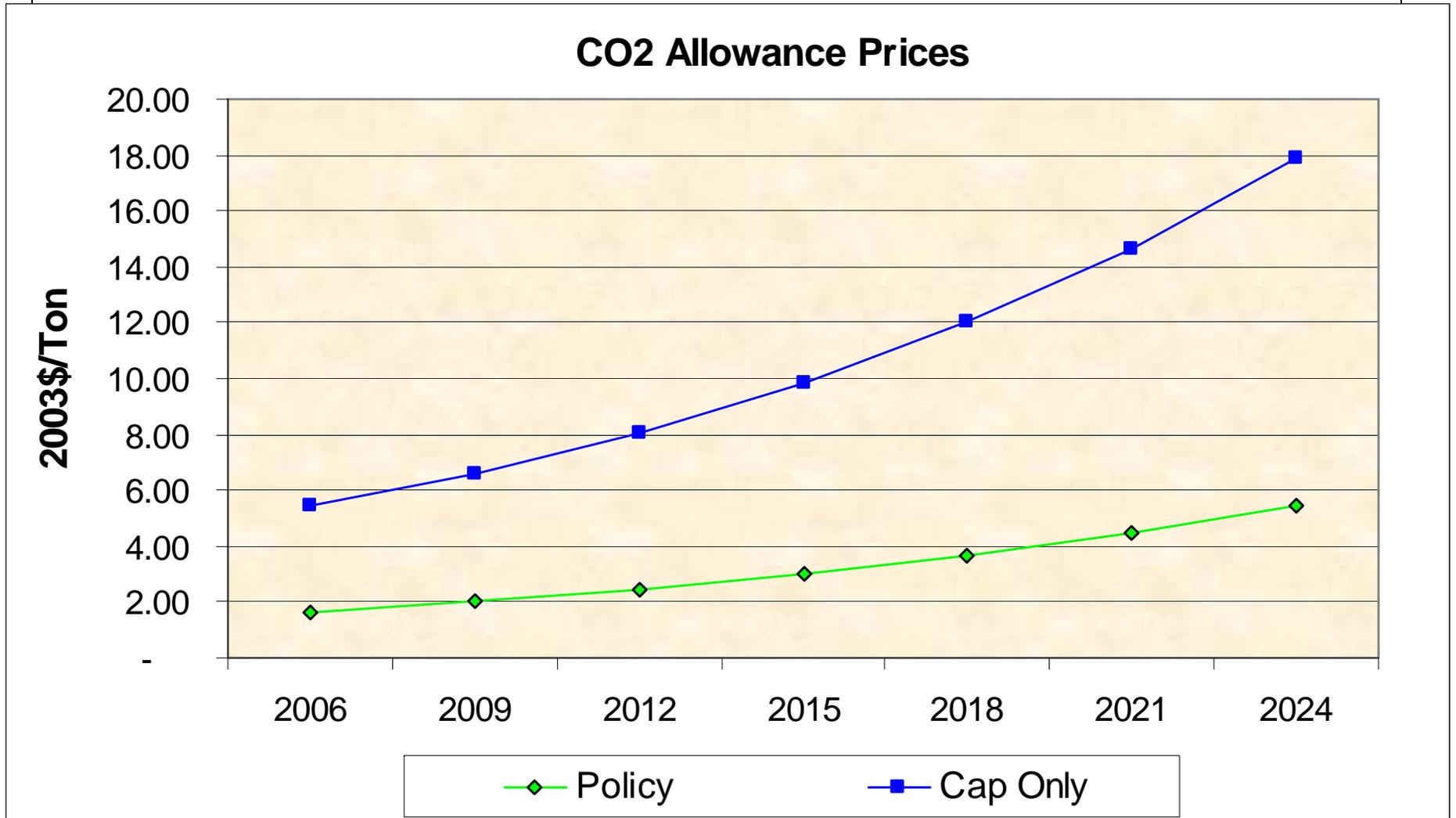
Emissions of CO₂ from RGGI Power Generation



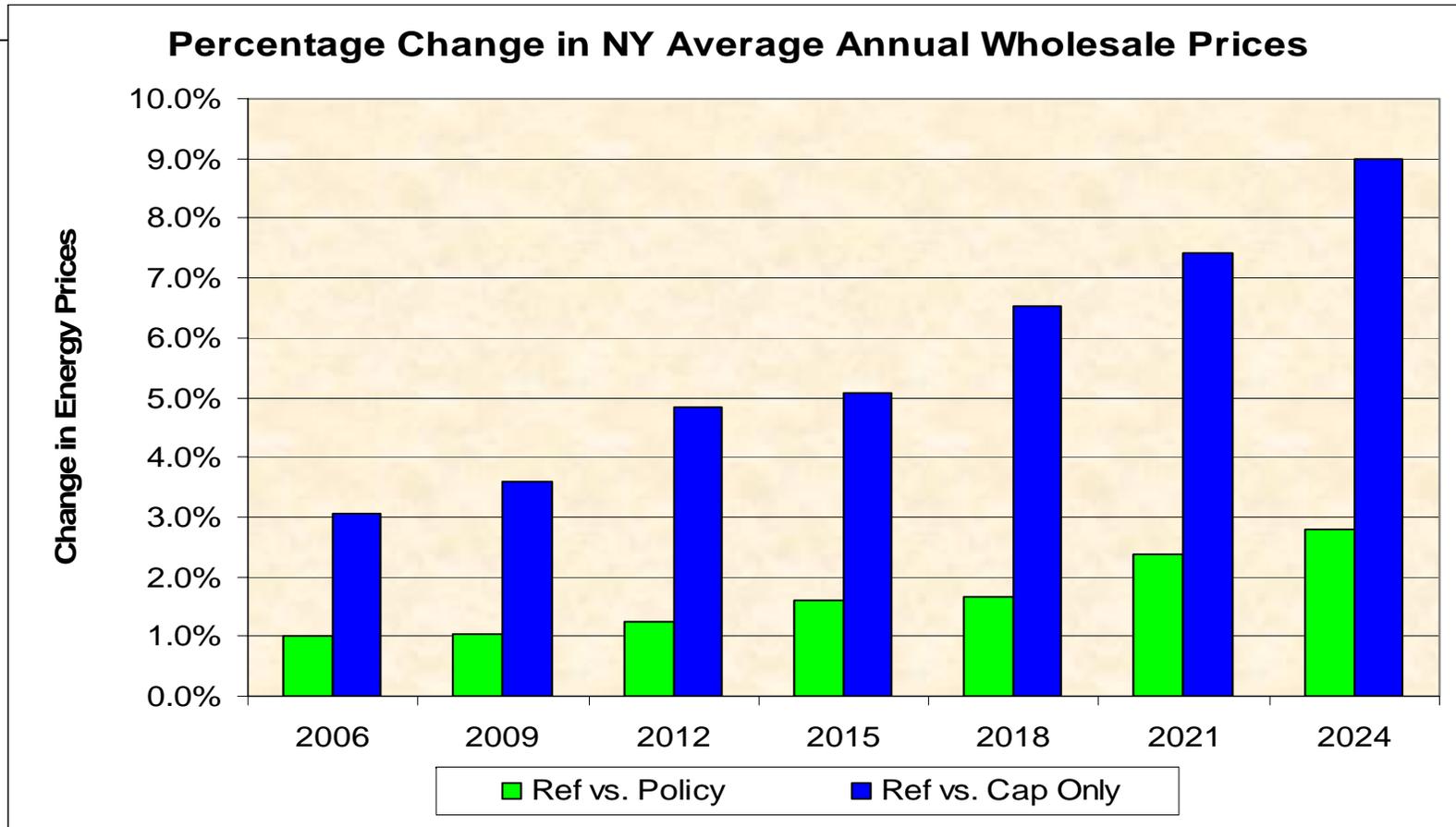
New York Generation Mix & Imports



CO₂ Allowance Prices (RGGI)



Change in Average Annual Energy Prices (RGGI)

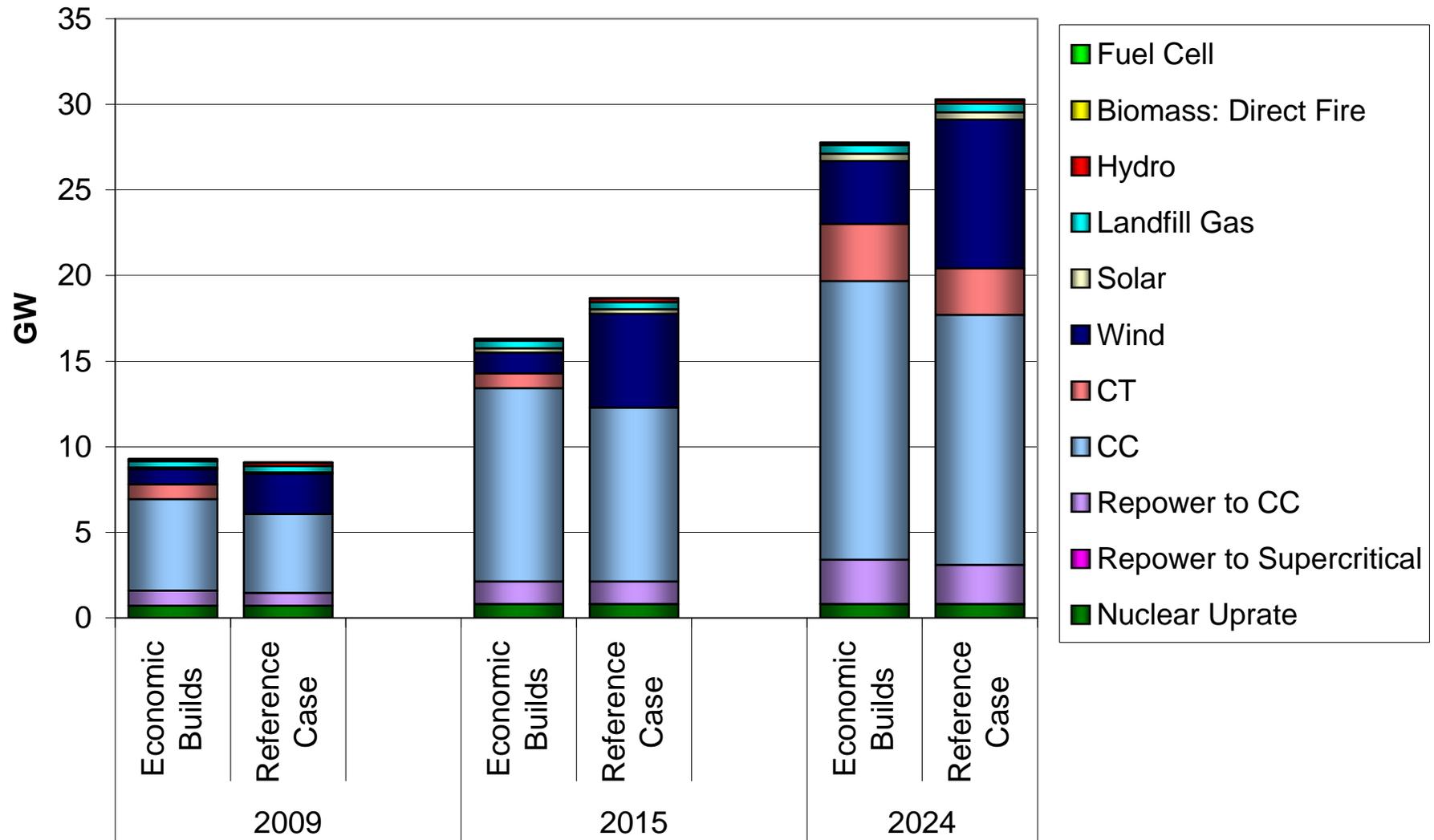


NOTE: Energy prices represent wholesale market prices and include annualized capacity prices. Note that the RGGI Package Scenario assumes that current levels of annual state expenditures for public benefit programs continue through 2025. While these types of programs cause lower wholesale prices by reducing electricity demand, they are paid for by consumers through a line item charge at the retail level, and are therefore not reflected in the wholesale price changes shown above. Current retail electricity prices already include the annual costs of these programs.

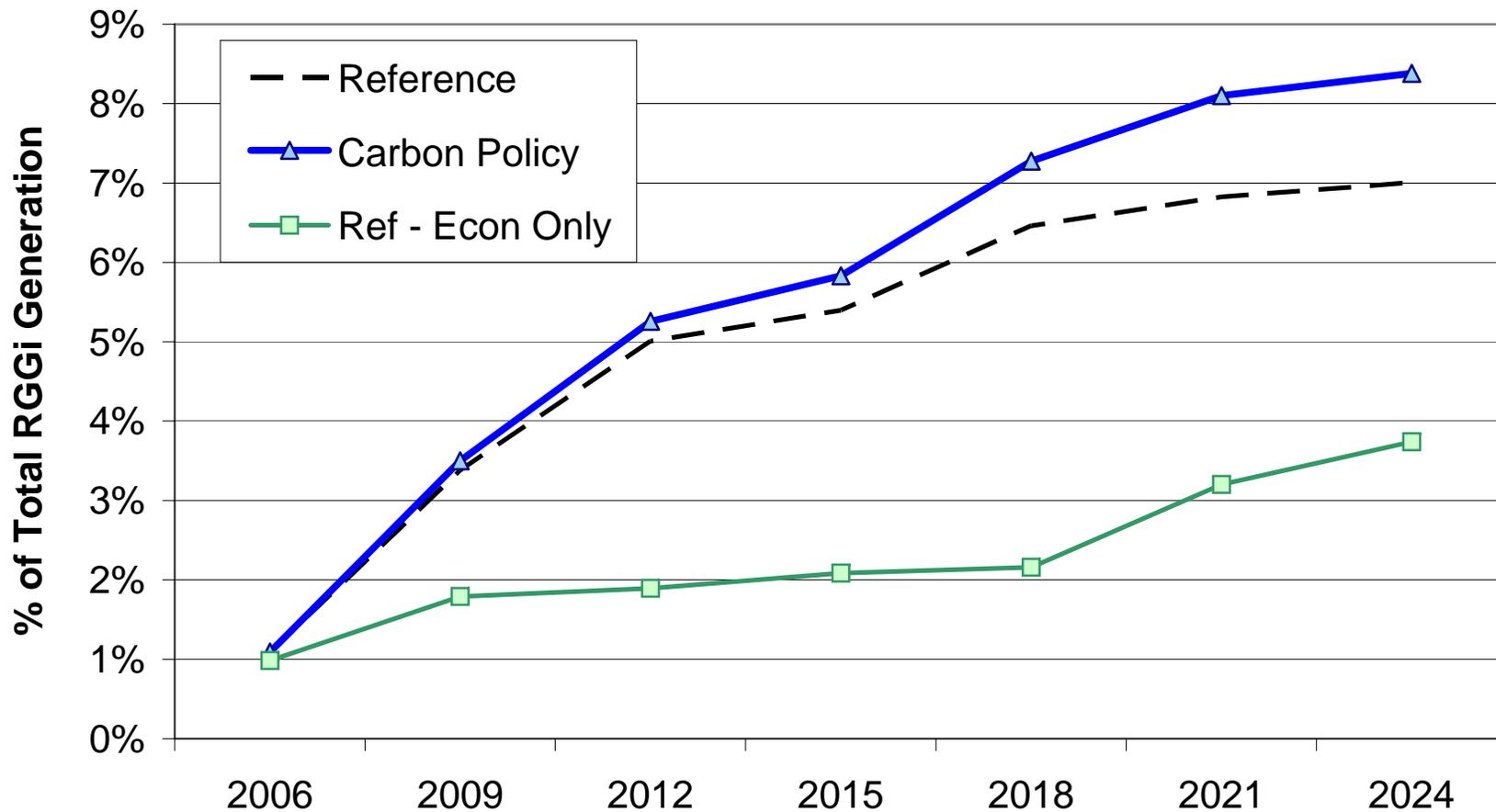
While the modeling assumes that end-use energy efficiency is implemented entirely by public benefit programs, it is recognized that energy efficiency could also be implemented by actions such as appliance standards and building codes that do not require state funding and could possibly be done at lower costs.

RGGI Regional Capacity Build Mix

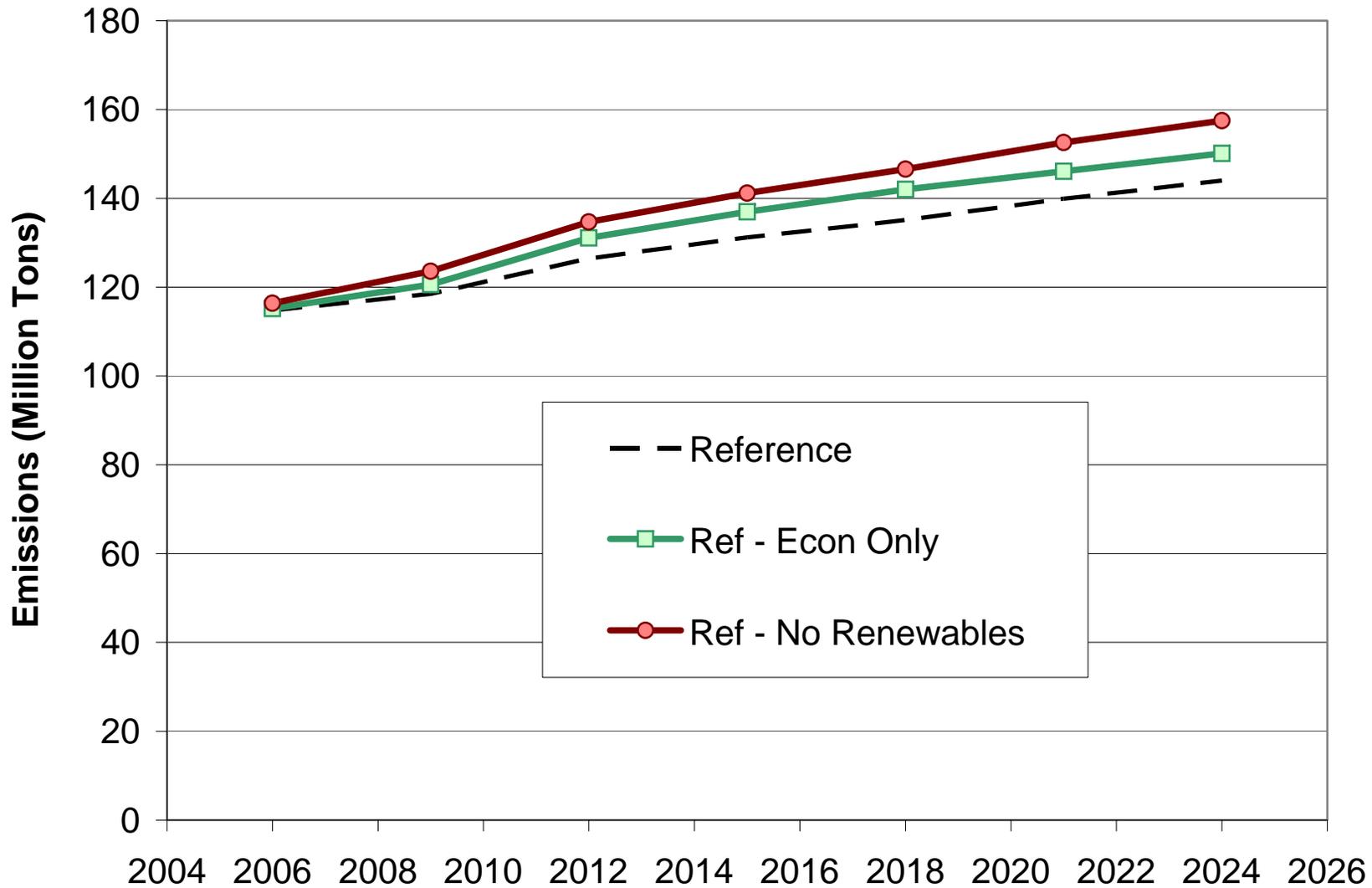
Draft Reference Case w/ RPS vs Economic Builds



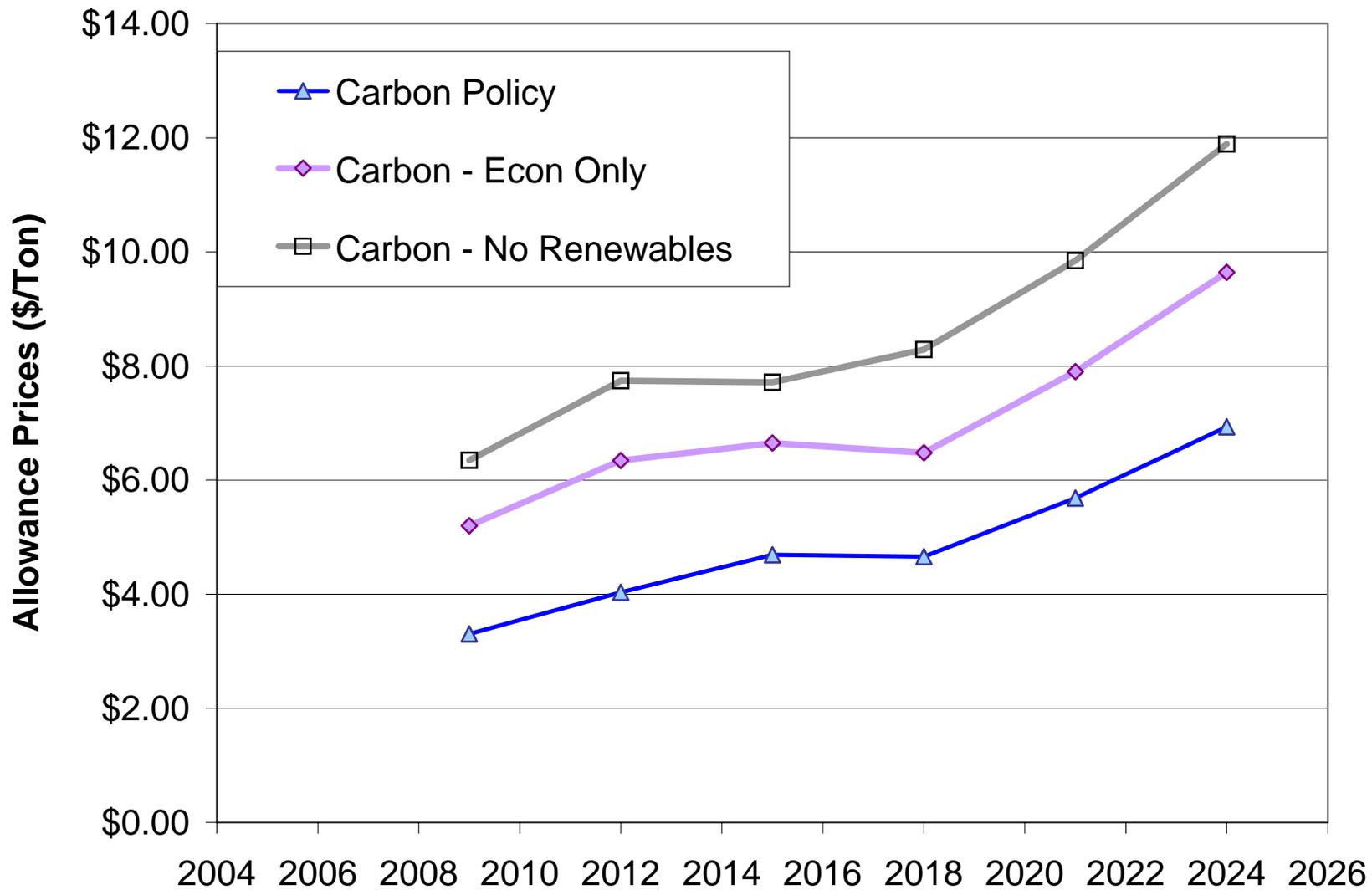
Renewable Share of Total RGGI Generation Draft Reference and Carbon Policy Case



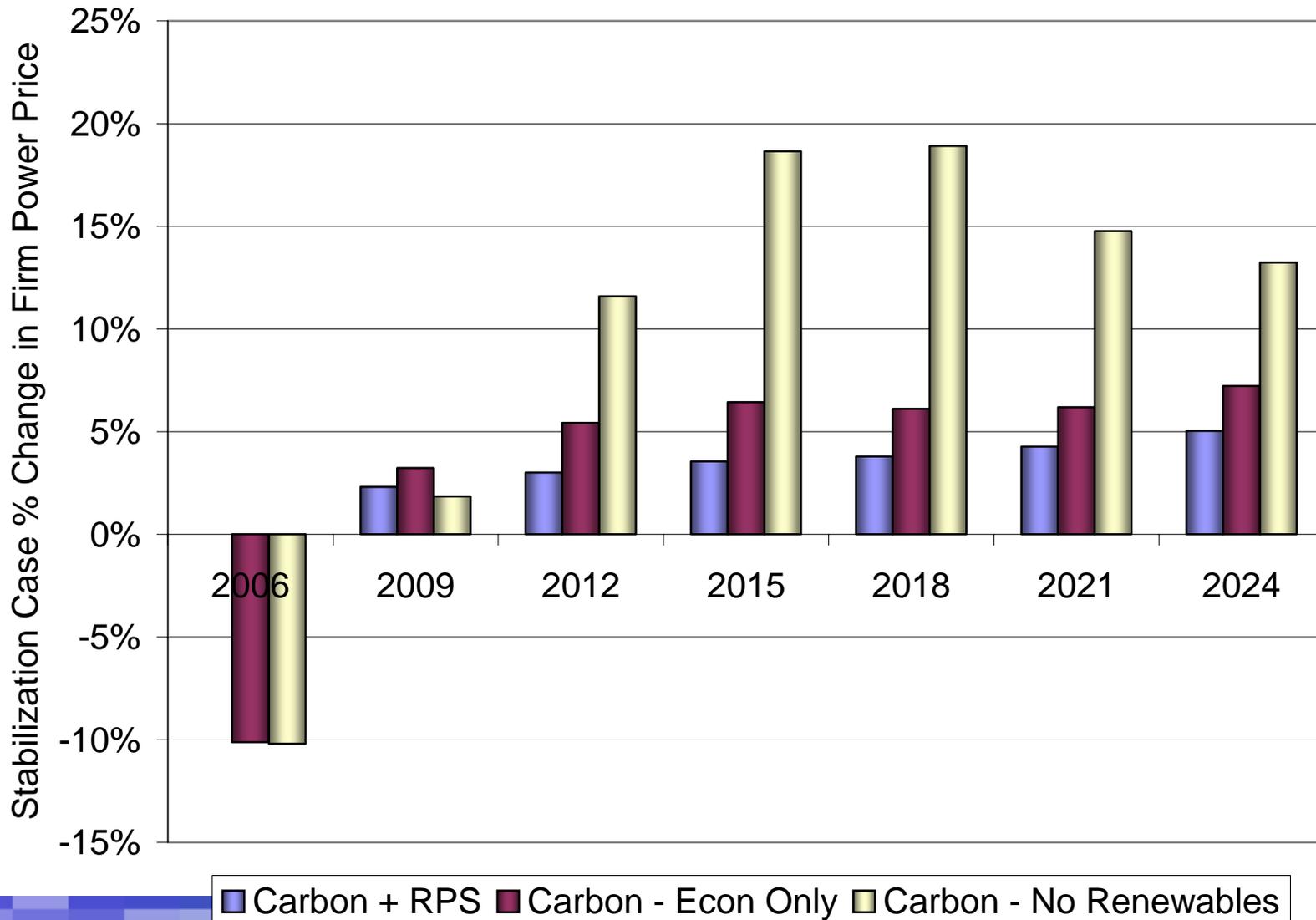
CO₂ Trajectories under RPS and No-RPS Scenarios



CO₂ Allowance Prices under RPS and No-RPS Scenarios



Firm Power Price Differences Under CO₂ Policies with and without renewables



For Further Information

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