

2017 GFOA of South Carolina: Financing Energy Efficiency Projects – Creative Financing Approaches

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Energy Efficiency Finance – Market Overview and Financial Solutions

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Governmental Entities

- Federal government
- State/local governments
- Municipal utilities
- Government authorities/agencies
 - Public housing authorities
- Waste water treatment facilities

Public Education

- K-12 public schools
- Community colleges
- State colleges and universities



Institutions

- Private colleges and universities
- Cultural institutions
- Scientific/research facilities

Healthcare (not-for-profit 501c3)

- Hospitals and medical centers
- Hospital not-for-profit Support Entities
- Medical office buildings
- Municipal hospitals
- Continuing care centers

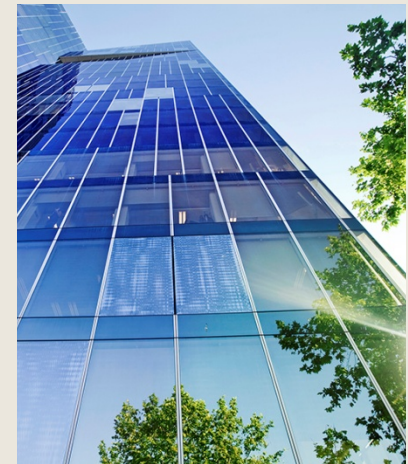


Commercial/Industrial

- Manufacturing facilities
- Commercial properties
- Commercial Real Estate

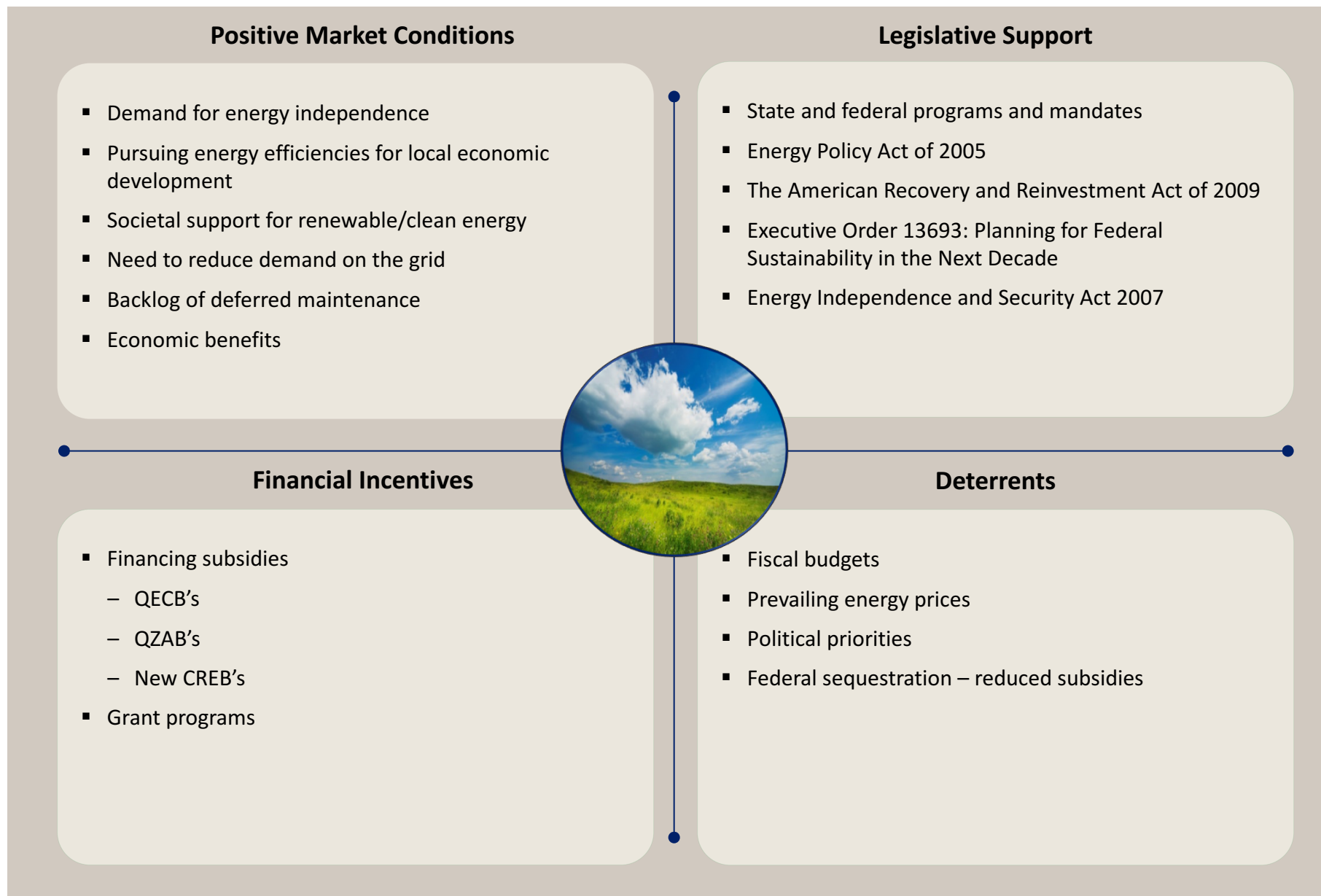
Hospitality

- Hotels



Market Dynamics

Energy Efficiency and Renewable Energy



Fundamentals

- Contracting method by which an entity procures energy savings and deferred maintenance facility improvements typically under a Guaranteed Savings Energy Performance Contract or similar agreement (an EPC) from an Energy Services Company (ESCO)
- Utility or cost avoidance savings generated from the project are typically guaranteed by the ESCO
- Savings may be measured or stipulated (agreed to between the customer and the ESCO upfront)
- Savings are generally used to cover the financing of the improvements
- Most states have passed performance contracting statutes to facilitate but also standardize EPC terms and requirements for public entities within the state
- Contract tenors and EPC requirements vary by state

Common Energy Conservation Measures (ECMs) Covered Under Performance Contracts

- Energy efficient indoor lighting
- Building control systems and occupancy sensors
- Boilers, chillers, HVAC and mechanical systems
- Central plants
- Outdoor lighting, parking lights, street lights
- LED traffic signals
- Water meters, electric meters and automated meter reading systems
- Water flow conservation fixtures
- Energy recovery systems
- Roof replacements, insulation and windows

Traditional Products

- Cash
- Tax-exempt lease purchase agreement (TELP) – municipal and 501(c)(3)
- Commercial rated debt (LIS and loans)
- GO Debt
- Tax/operating leases
- Purchase of Receivables

Non-Tax and Tax Structured Financing

- Energy/utility service agreements
- Commercial PACE

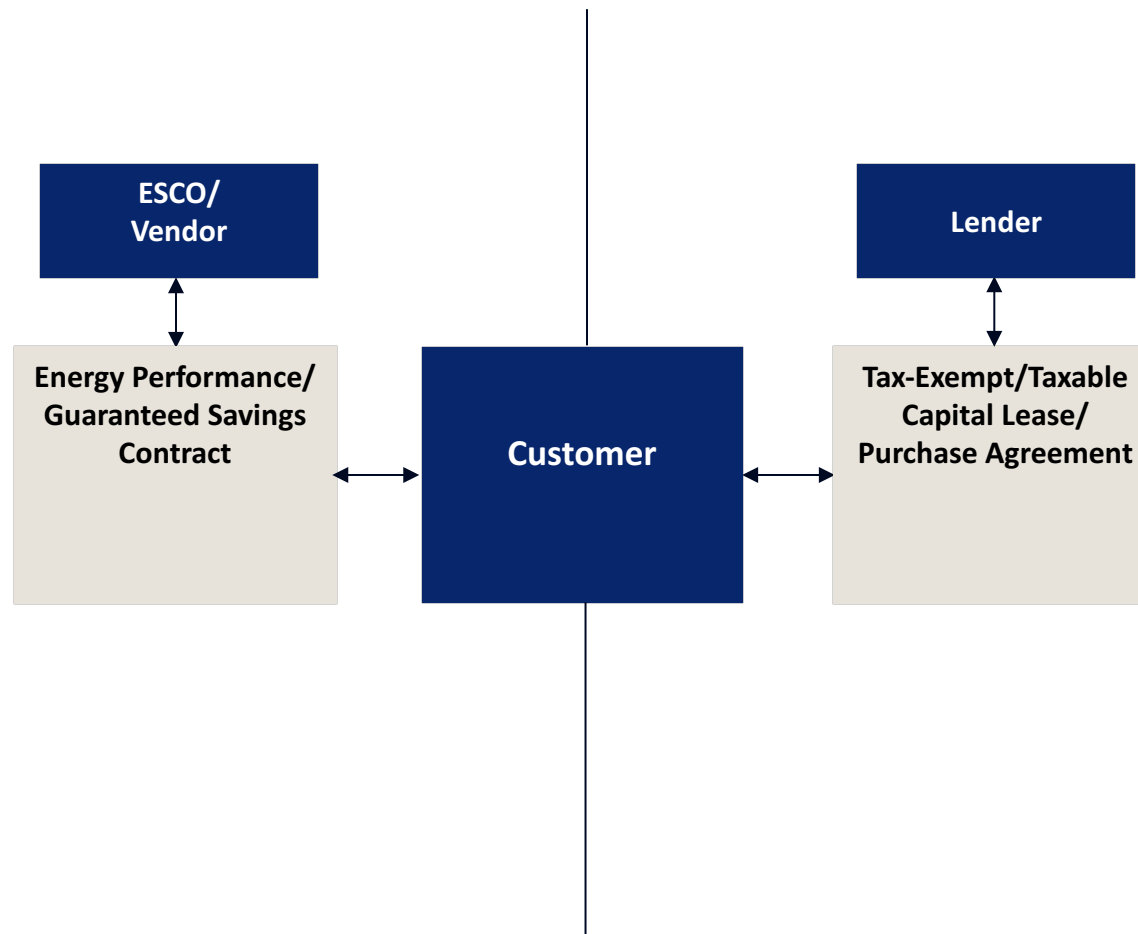
Tax Advantaged Structures

- Tax Credit Obligations provide financing incentives which reduce interest costs
 - Qualified Zone Academy Obligations (QZABs)
 - New Clean Renewable Energy Obligations (New CREBs)
 - Qualified Energy Conservation Obligations (QECBs)

Energy Performance Contracting Diagram

Financing Example Using a Lease/Purchase Agreement

The issuer's obligations under the Lease/Purchase Agreement are independent of the vendor's obligations under the Energy Performance Contracting Agreement.



Qualified Energy Conservation Obligations (QECBs)

QECBs

- \$3.2BN Program
- Capital expenditures for:
 - Reducing energy use in public buildings by at least 20%
 - Implementing green community programs
 - Rural development involving production of electricity from renewable energy resources and research facility expenditures for certain technologies
 - Renewable energy
- Allocated to the States in proportion to US population , with sub-allocations to large local governments with a population > 100,000, and the remainder allocated at the discretion of the State
- No expiration date for allocations
- Sub-allocations may be waived by large local governments
- Up to 30% of the allocation may be used for non-governmental purposes
- Carry over of unused credits
- 2% costs of issuance limitations
- Davis-Bacon Applies
- Only 70% of the posted tax credit may be utilized
- Direct Pay Option Permitted via Hiring Incentives to Restore Employment Act of 2010 – “Jobs Act”

QECB Allocation By State (sample list)

AL	\$ 48,346,000
AR	\$ 29,623,000
FL	\$ 190,146,000
GA	\$ 100,484,000
IL	\$ 133,846,000
IN	\$ 66,155,000
KY	\$ 44,291,000
MI	\$ 103,780,000
MO	\$ 61,329,000
MS	\$ 30,486,000
NC	\$ 95,677,000
SC	\$ 46,475,000
TN	\$ 64,476,000

New Clean Renewable Energy Obligations (NewCREBs)¹

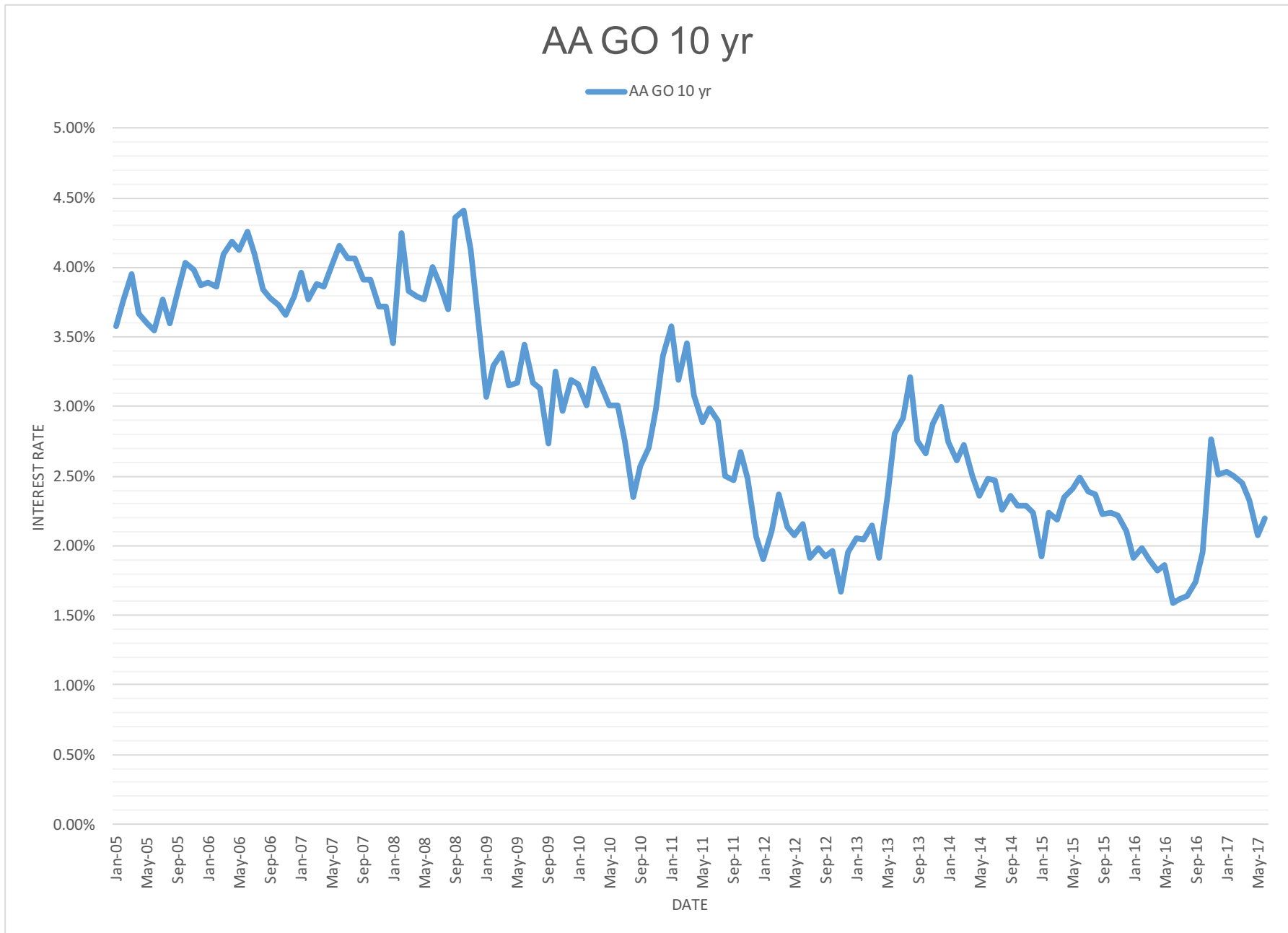
Fundamentals

- Provide funding for renewable energy projects that create electricity
 - Solar PV (not thermal)
 - Wind
 - Biomass/landfill gas
 - Small hydro
- Lender/bondholder receives a federal tax credit, which reduces the rate to the borrower/issuer
- Separate application for each project location
- Allocations are awarded from smallest-to-largest locations
- CREBs must be issued within 3 years of allocation notice from IRS

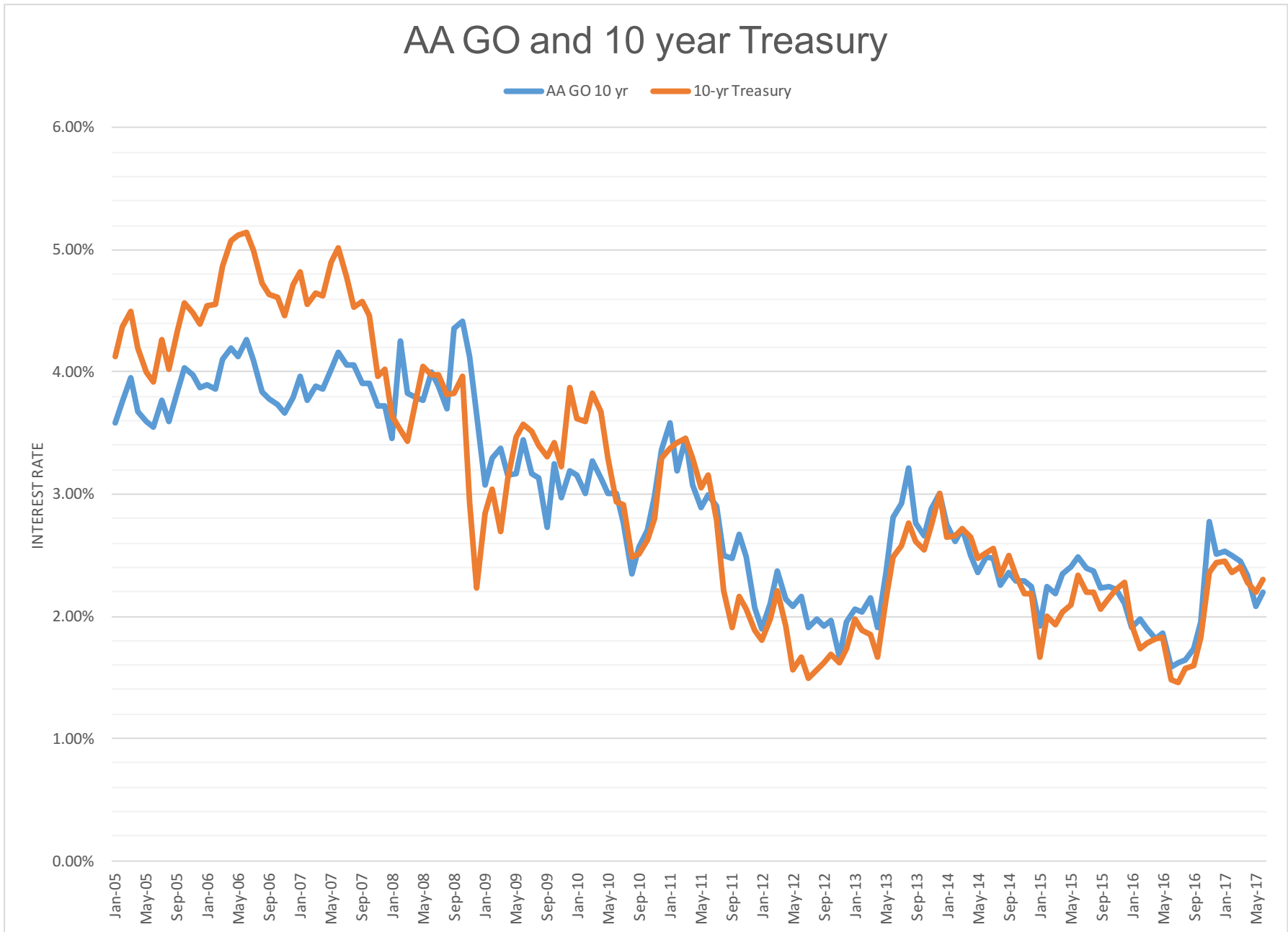
Market Rate Updates

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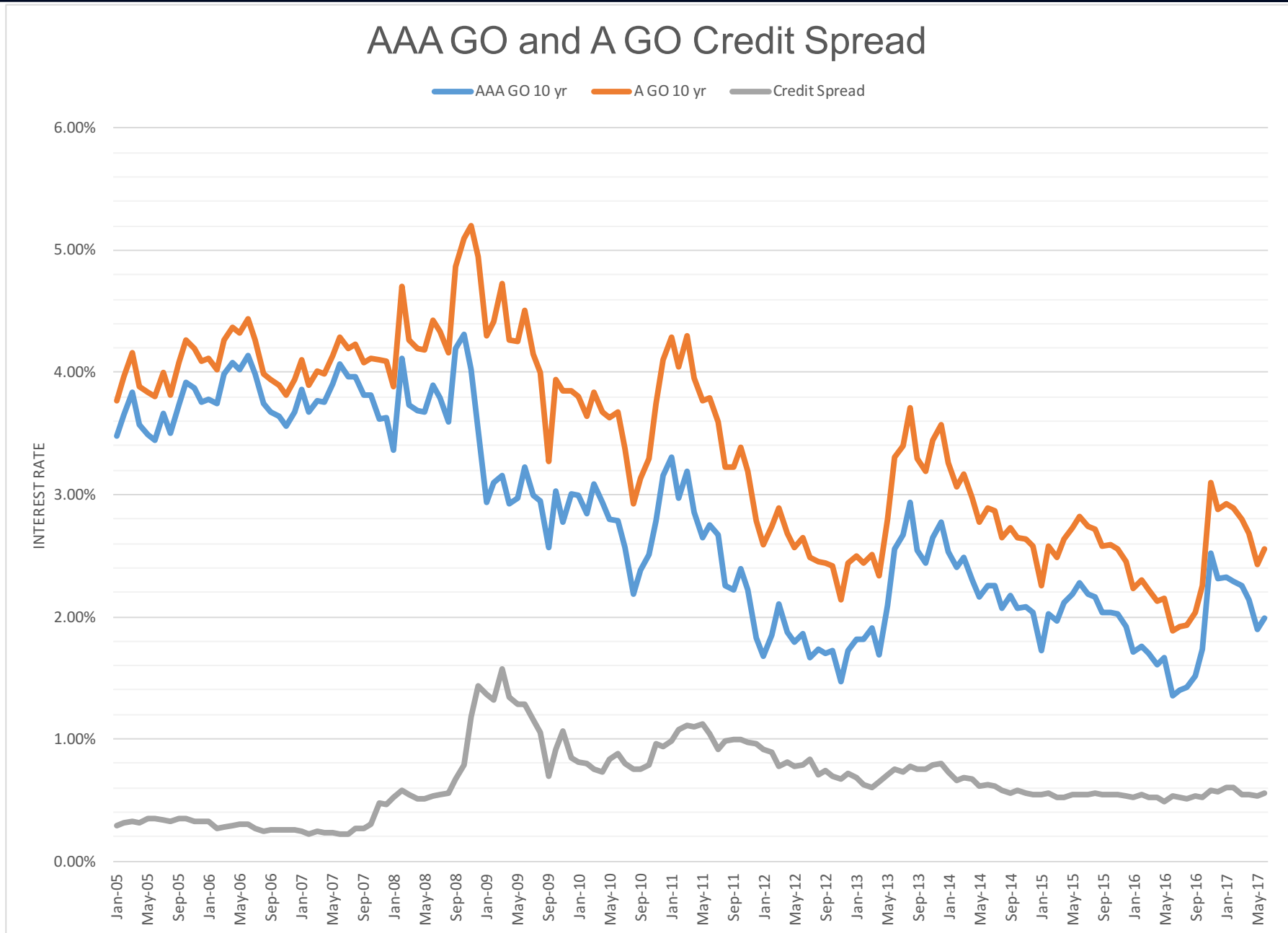
Municipal Rate Update



Municipal and Treasury Rate Update



Municipal Rate Update



Questions

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