EPA CAA Part 111(d) – the role for third-party delivered energy efficiency projects

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Expanding Energy Efficiency in State Plans

- Some states will consider a market-based, private-sector approach to energy efficiency as part of EE options
- Third-party approaches can complement utility or state programs, creating a more resilient and diverse compliance plan for Georgia
- ESCO projects provide whole building/facility reductions and leverage building systems expertise which differs from traditional utility programs
- Georgia has enabling legislation, growing experience with PC contracting, significant untapped efficiency resources.

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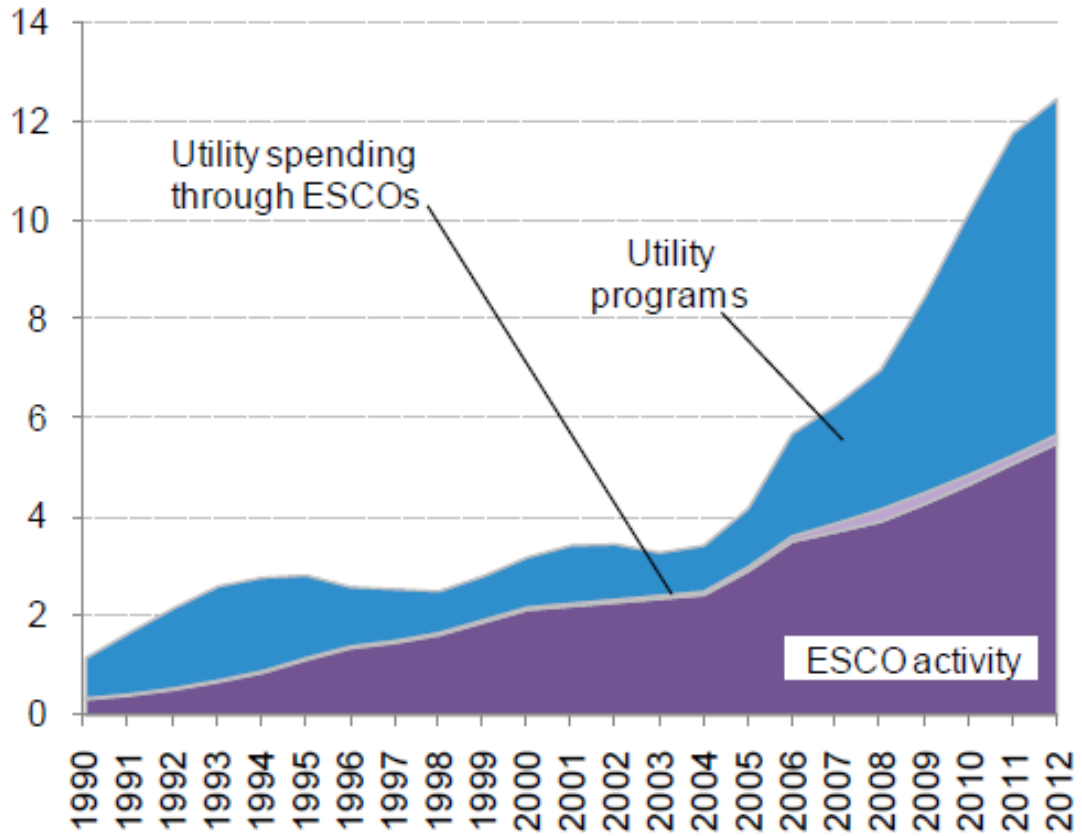
Energy Efficiency Markets: Utility and Private

Figure 120: Investment in energy efficiency through ESCOs and utility programs, categorized by program, 1993-2012 ($bn)



- ESCO and utility efficiency markets roughly equivalent in recent years
- ESPC projects access utility incentives for specific efficiency measures as part of bundle of activities on-site
- Utility incentives/support covers a small portion of overall ESPC project cost (light purple band in image)

Figure 120 from Bloomberg New Energy Finance “Sustainable Energy In America Factbook”, 2014

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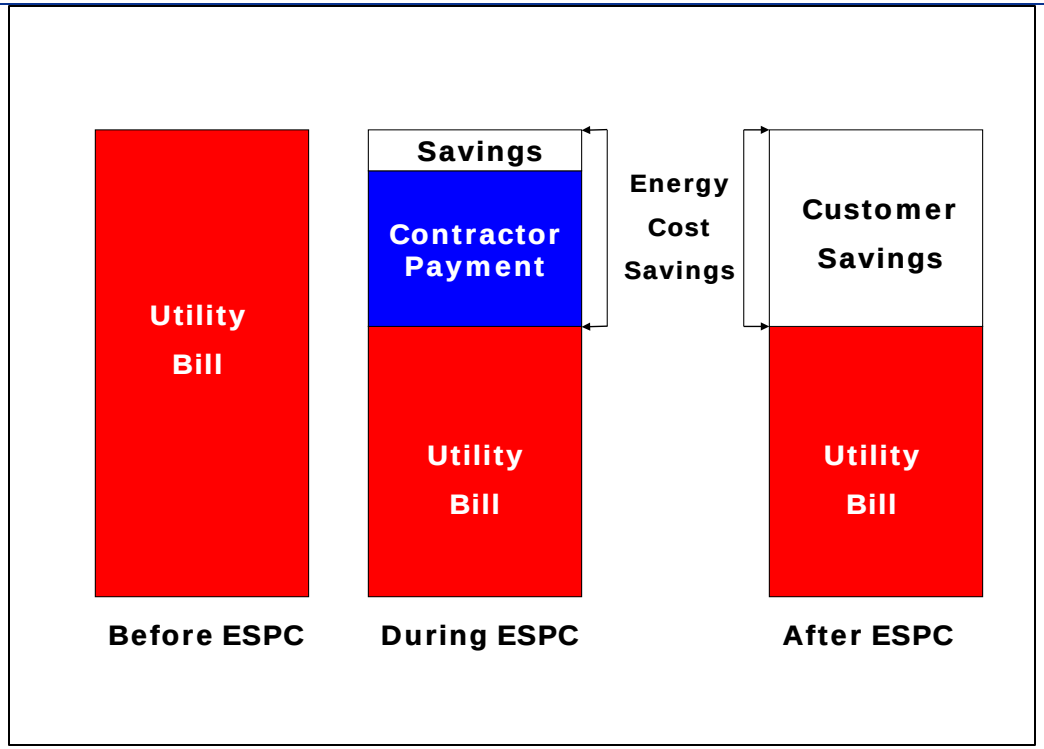
Background: How Performance Contracting Works

Before ESPC:
Owner's operational budget supports inefficient energy consumption



After ESPC:
Owner keeps all the savings after investment is paid off.

During ESPC:

- Energy Service Company designs project, arranges financing, installs and maintains new energy efficient equipment, at no upfront cost to customer
- Energy savings are measured, verified and guaranteed – periodic/annual review, some customers seek independent verification. Generally 7-15 year contracts.
- Customer pays off investment with funds saved on utility bill

Methodology decisions to scale up efficiency

Measurement and Verification:

- Project level
- Program level

Crediting: Methodologies for converting energy savings to CO2 reductions

Apportionment of credits: “ownership” of reductions

Enforceability: accountability for results

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Ten Steps to Programmatic, Market-based EE Reductions
- *Straw Man Model for Discussion Purposes Only* -

1. ***Establish/Expand Third-Party Delivered EE Program***
2. ***Include EE Program in State compliance plan***
3. ***Develop EE Projects***
4. ***Approve and Register EE Projects***
5. ***Secure Emissions Credits/Incentives for Projects***
6. ***Install and Commission Projects***
7. ***Measurement and Verify Projects***
8. ***Address Project Performance Shortfalls***
9. ***Evaluate, Measure and Verify Program Performance***
10. ***Address any Program Performance Shortfalls***

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Conclusions

EPA needs to support states by providing resources and methodologies to credit EE efforts.

Three principles should guide policy efforts:

- Environmental rigor: activities should be quantifiable, enforceable, and sustainable
- Administrative ease: crediting mechanisms should have manageable requirements and markets will expand if policy provides clear investment signals,
- Adaptability: states and EPA should do periodic review of state plans, make adjustments as needed

States should begin now to consider 1) utility programs, 2) state programs and initiatives, and 3) private sector energy and carbon reductions as part of compliance strategy.

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