



Energy Efficiency Financing as a Tool to Meet Clean Power Plan Requirements

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Finance Forum

June 1, 2015

EPA's Clean Power Plan



EPA is proposing to regulate carbon dioxide emissions from existing power plants under section 111(d) of the *Clean Air Act*.

- 17% reduction in GHG emissions by 2030 relative to 2012 levels, or 30% reduction by 2030 relative to 2005 levels
- Individually tailored state targets
- Allows for flexible approaches including energy efficiency!

Timeline of EPA Actions

- June 25, 2013 – President Obama directs EPA to begin formulating standards for existing power plants
- June 2014 – Proposed rule for existing power plants
- Summer 2015 – Final rule for existing power plants
- Summer 2016 – State plans due
- Summer 2017 – Multi-state plans due

Court challenges?

Compliance

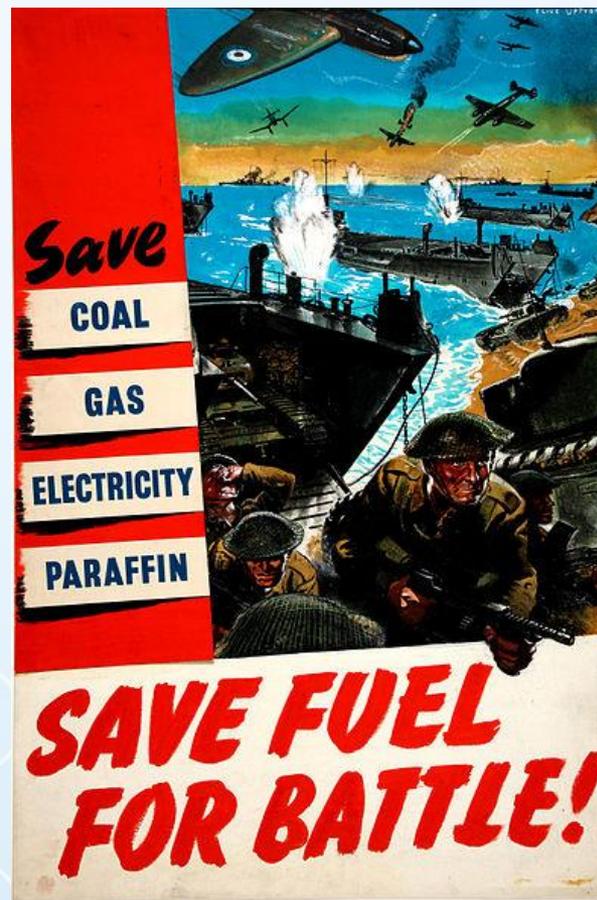
- States can include any mix of strategies to achieve targets.
- Up to each state whether or not to include efficiency as a compliance method.
- EE is a low-cost compliance option that offers a LOT of flexibility for states.

What does “flexible” compliance mean for financing?

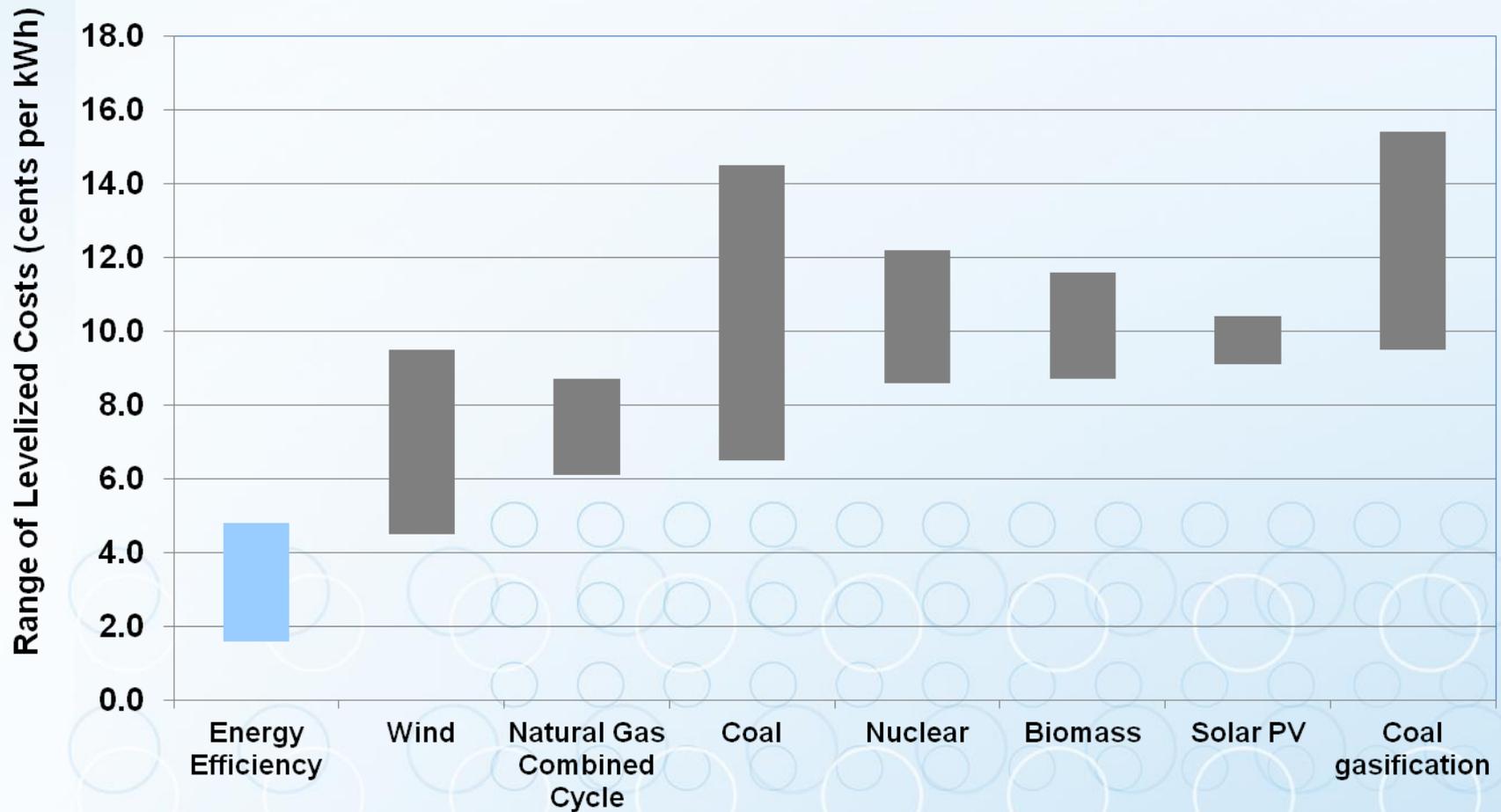


The multiple benefits of energy efficiency as a compliance option

- Low-cost and reliable resource
- Saves utility customers money
- Reduces multiple pollutants
- Boosts state economies



Comparing the costs of some compliance options



Source: Energy efficiency program portfolio data from Molina 2014; All other data from Lazard 2013.

Energy efficiency options

Residential retrofits. About half the states have energy savings mandates, but half don't and politically may be unlikely to adopt them.



Energy service companies (ESCO). ESCO market growth trends are 8.3% annually. Commercial buildings are a major untapped market.

Combined heat and power

- Hundreds of GWs of untapped potential
- Upfront cost has been a significant barrier
- Financing could play a major role



Financing as a compliance mechanism

How does it fit into EPA's requirements?

We're in uncharted territory...



How do we apply these criteria to the financing models we know and love?

Evaluate the existing program

1. Enforceable

- ✓ Is there someone “on the hook” for performance?

2. Achieves reductions

- ✓ Does the program guarantee electricity savings?

3. Quantifiable and verifiable

- ✓ How are electricity savings measured?

4. Reporting on implementation

- ✓ Is data on savings being tracked and regularly reported?

What if the financing program falls short?

Find another way!

1. Modify the existing program
 - Add data reporting requirements
 - Beef up methods for verifying electricity savings
2. Add a complementary measure
 - Couple the financing with a commitment to save X% in government buildings

Special challenges to financing as a compliance mechanism

Enforceability - It's still unclear exactly what this means, but there are lots of actors who wouldn't want to face federal enforcement.

Solution?

- States can take a portfolio approach and step in as the entity the overall plan is enforceable against.

Program uptake - It's hard to ensure savings when you can't force people to take financing.

Solution?

- Past performance may be enough. Also consider combining the financing program with some kind of regulatory hook or a commitment from the state.

Let's Practice....

Pick a program - PACE? On-bill? What else?

How does it fit within the framework we just talked about?

What should you do?

1. Understand - Determine how your program fits within EPA's framework
 - For detailed help see: <http://aceee.org/white-paper/cpp-financing-template>
2. Solve - Come up with solutions where it doesn't fit
3. Communicate - Communicate it to the right people
 - Program administrators/designers
 - Air regulators in the relevant state

Questions

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Downloadable version of 111(d) template for financing:
<http://aceee.org/white-paper/cpp-financing-template>

Related blog: <http://aceee.org/blog/2015/05/how-energy-efficiency-financing-can>

Other helpful resources: <http://aceee.org/topics/section-111d-clean-air-act>