Moving Money From Coal to Clean

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Goals of Coal to Clean

- Helping utilities modernize their generation fleets;
- Helping workers and communities when power plants close;
- Lowering power plant emissions;
- Saving customers money.

The Coal to Clean strategy

Consumers get lower energy costs via federal tax credits and securitization

- While federal tax incentives are still in place, customers can save money by replacing high-cost coal with lower cost wind and solar generation
- With low interest rates, securitization of stranded costs via customer-backed bonds can eliminate the usual spike in electricity rates from early plant closure

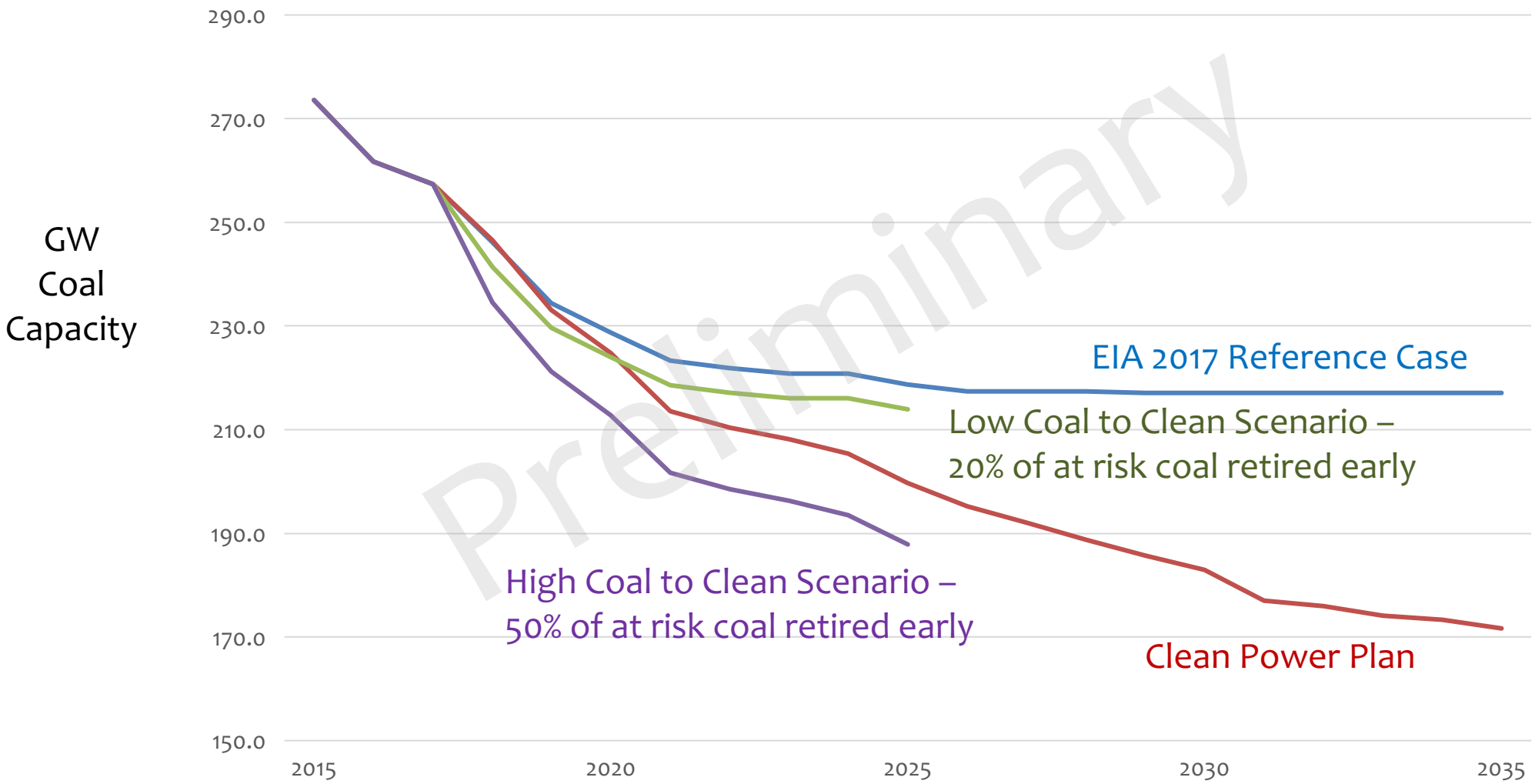
Utilities grow their business by recovering and reinvesting capital

- Utilities get immediate cost recovery from the proceeds of the securitization
- Frees up capital they can "up-cycle" into more profitable clean energy investments
- This allows them to accelerate planned retirements and spur unplanned retirements
- Reduces future risks and improves their environmental performance

Workers and affected communities get transition assistance

- Share of savings from securitization reserved for coal worker and community transition assistance
- Can get bi-partisan support in legislatures as it does not rely on state taxation on spending and is focused on providing benefits to largely rural communities

Coal to Clean can reduce emissions faster than the Clean Power Plan



Source: EIA Annual Energy Outlook 2017

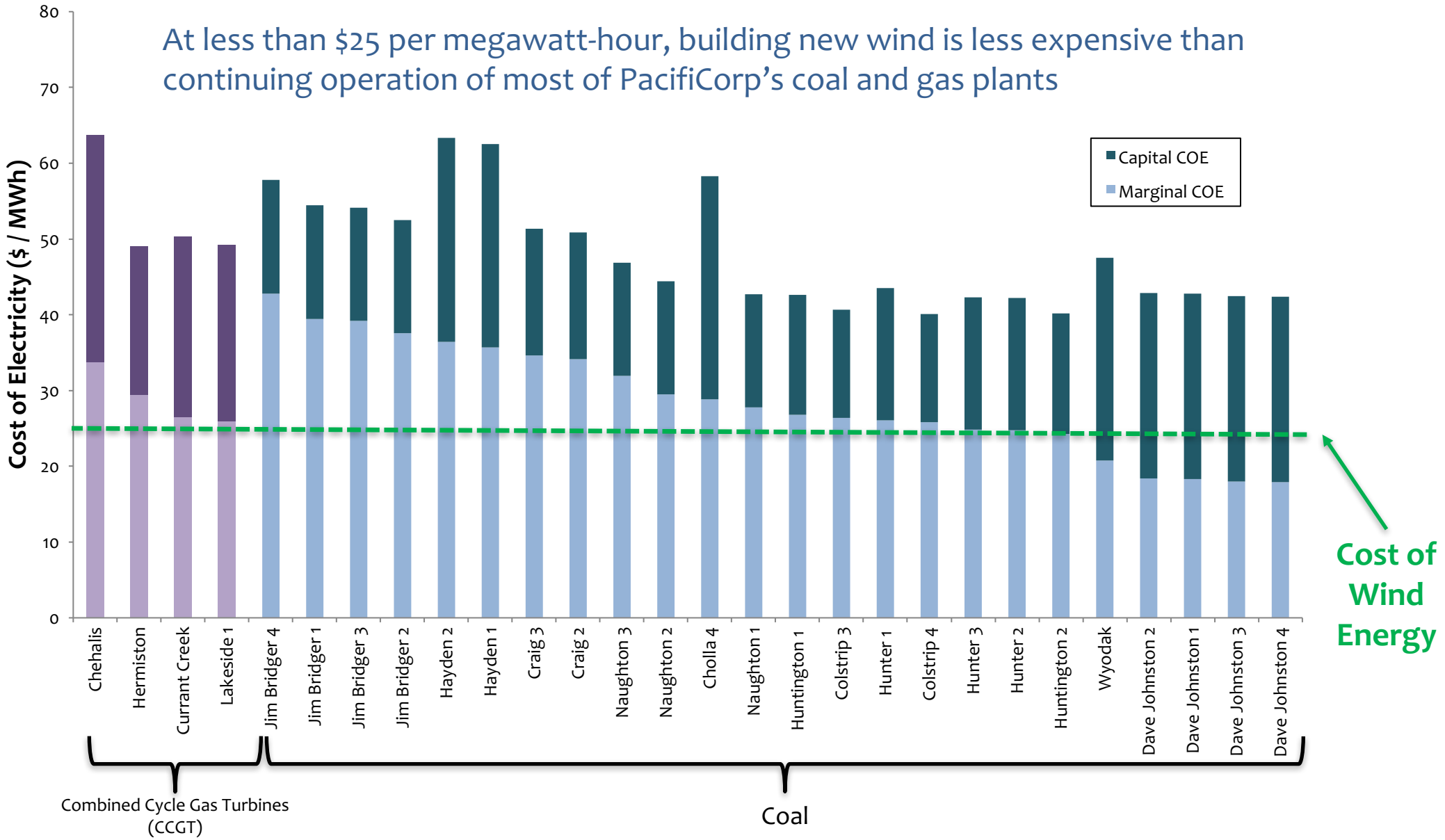
Why is this possible? Replacing older, dirtier power plants has gotten easier

- The cost is plummeting for cleaner power.
  - Wind and solar costs are now often lower than fossil costs
  - Cost of natural gas remains very low

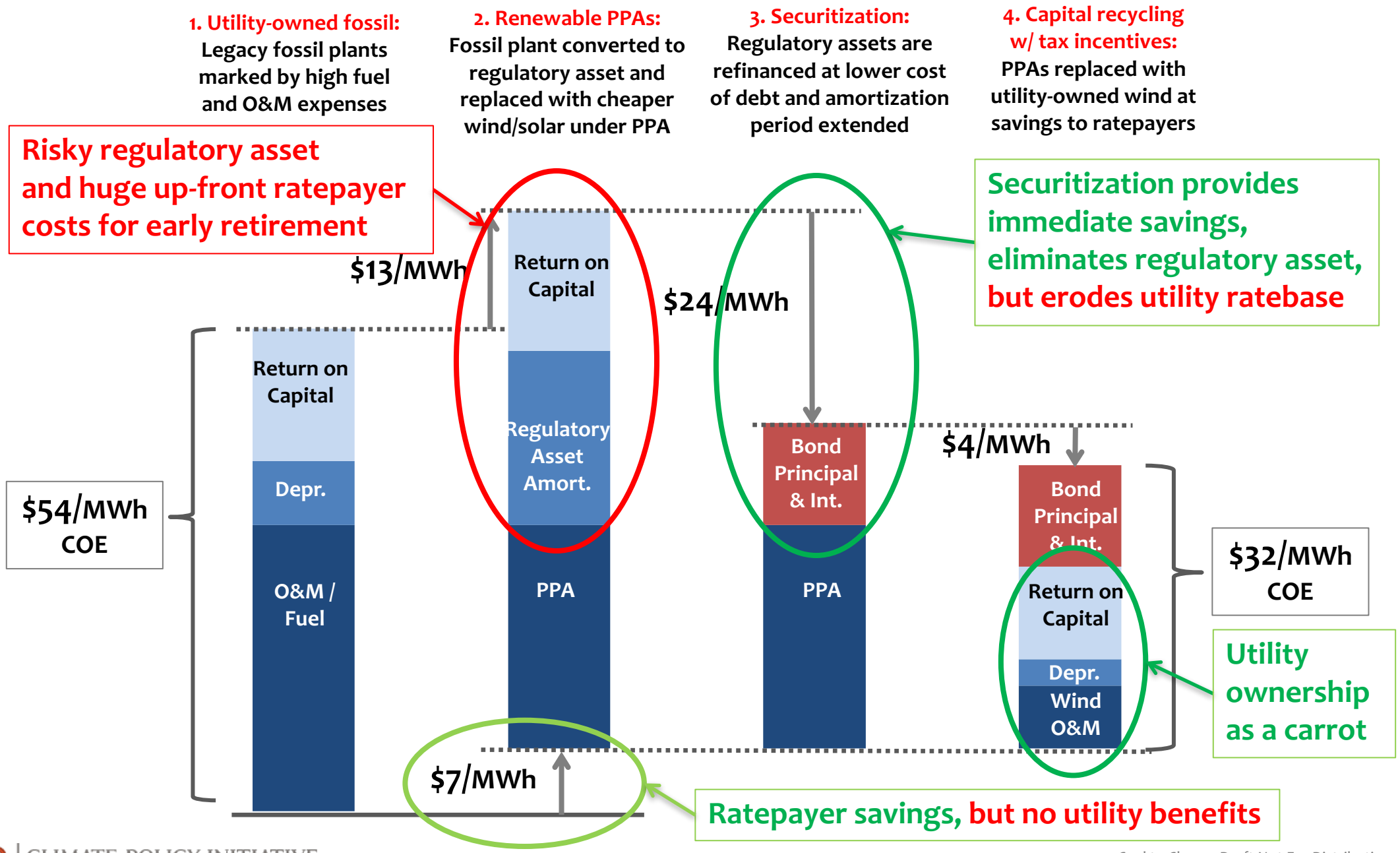
- Stricter air pollution rules are motivating plant replacement
  - New rules on SO_x, No_x, Hg, ozone and regional haze

- Some new financing options can lower the cost of plant replacement, particularly in states with vertically integrated, rate regulated investor owned utilities.

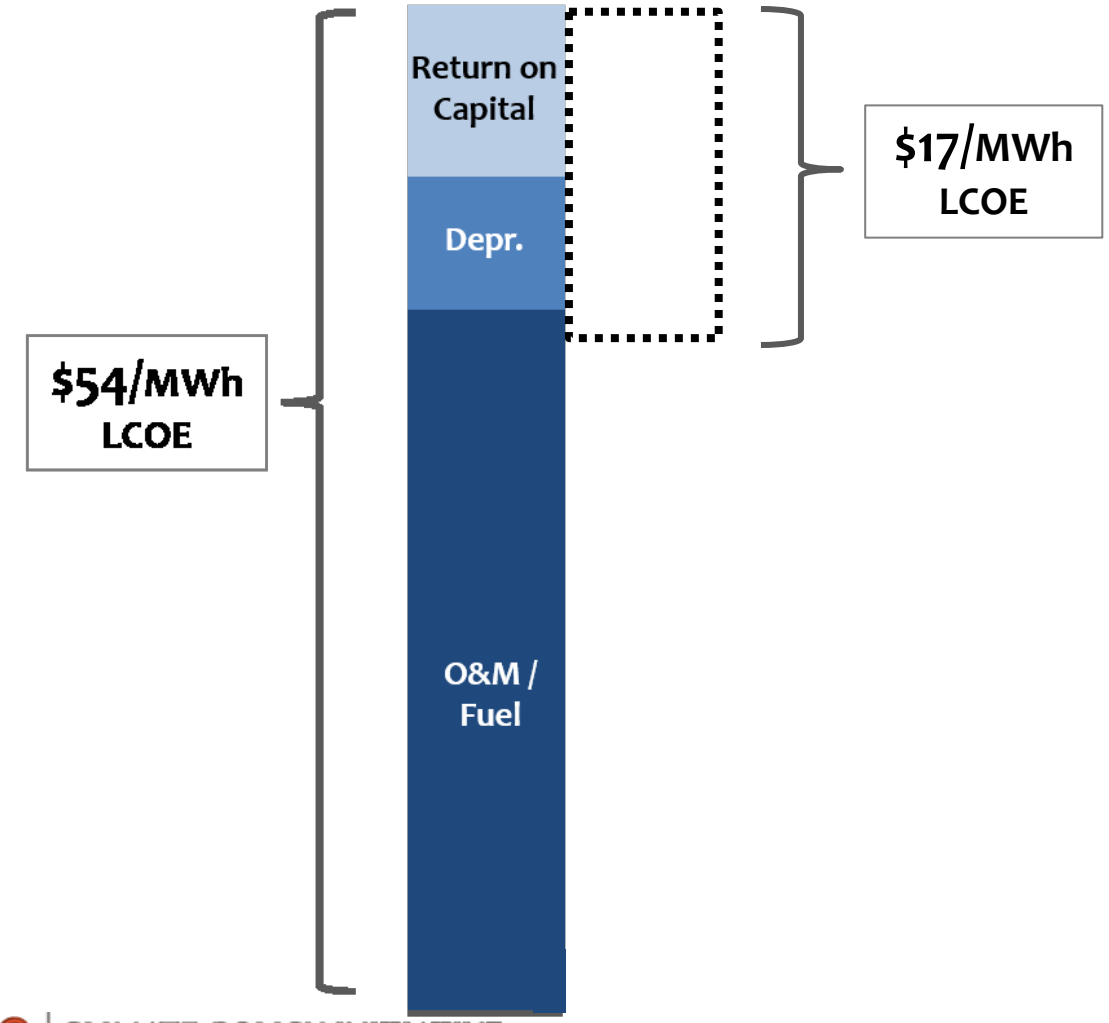
It costs less to build new clean energy than it does to keep operating old coal



We propose using securitization to unlock these benefits

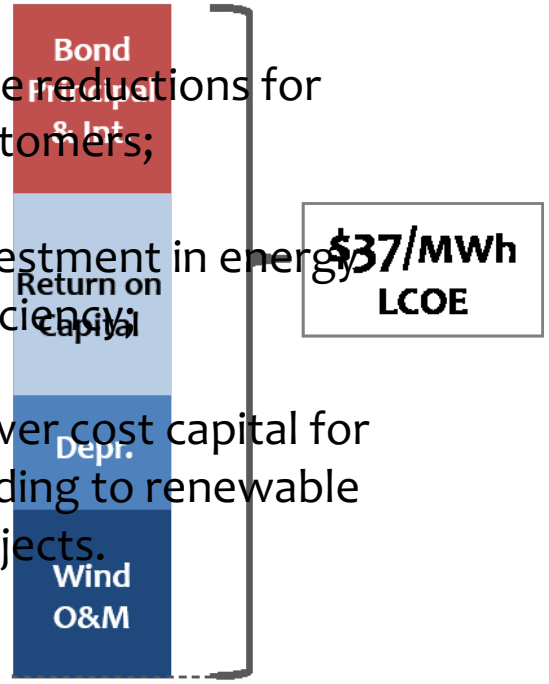


We can harness the savings to address several challenges…



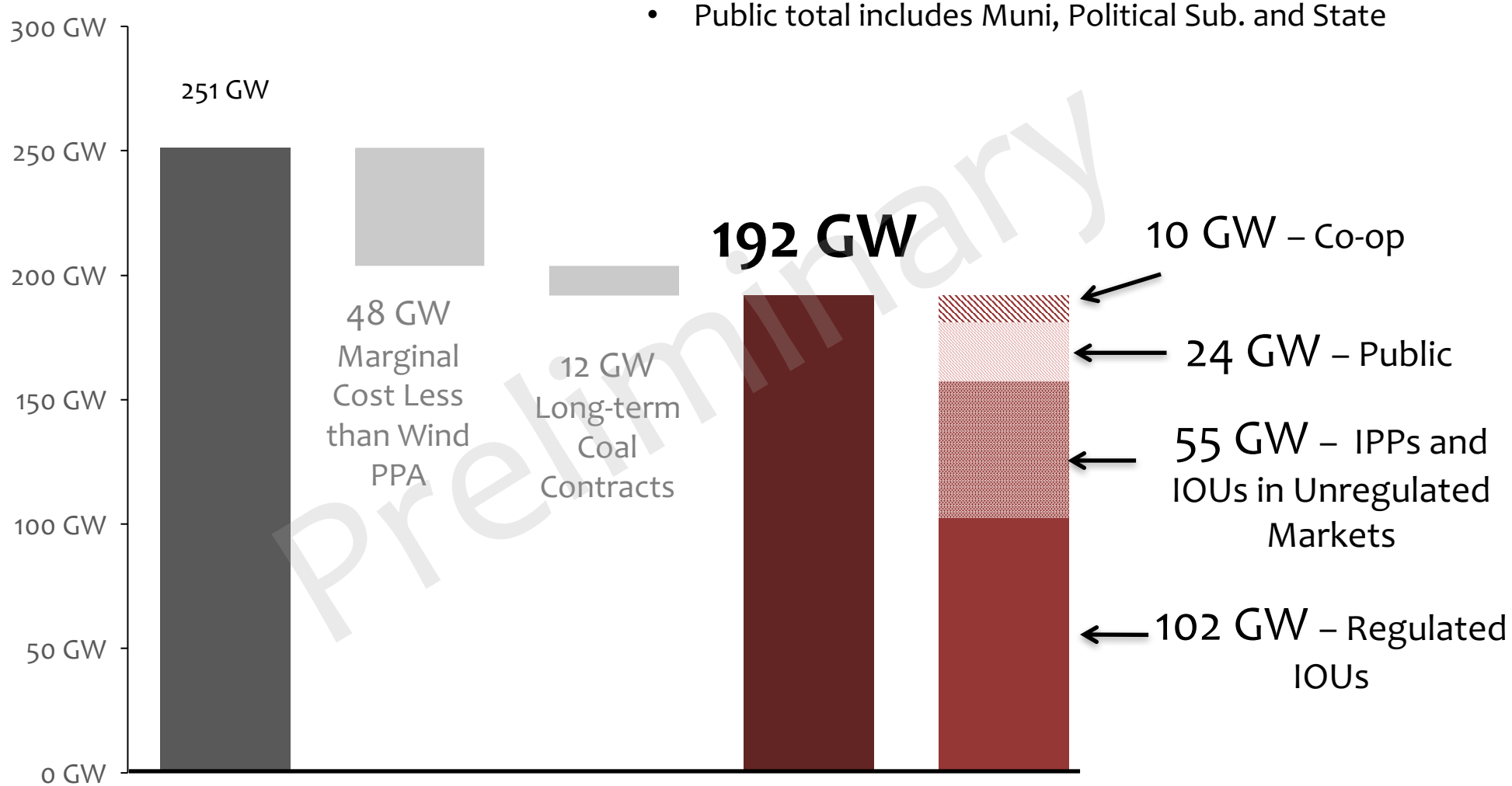
These ***SAVINGS*** can be used for several purposes, such as:

1. Assistance to workers and communities affected by coal plant closures;
2. Rate reductions for customers;
3. Investment in energy efficiency;
4. Lower cost capital for lending to renewable projects.



The opportunity is large – 192 GW Coal at Risk, 102 GW in regulated utilities, 55 GW in IPPs, 24 GW in public utilities, and 10 GW in co-ops

- Unregulated total includes IOU and IPP
- Public total includes Muni, Political Sub. and State

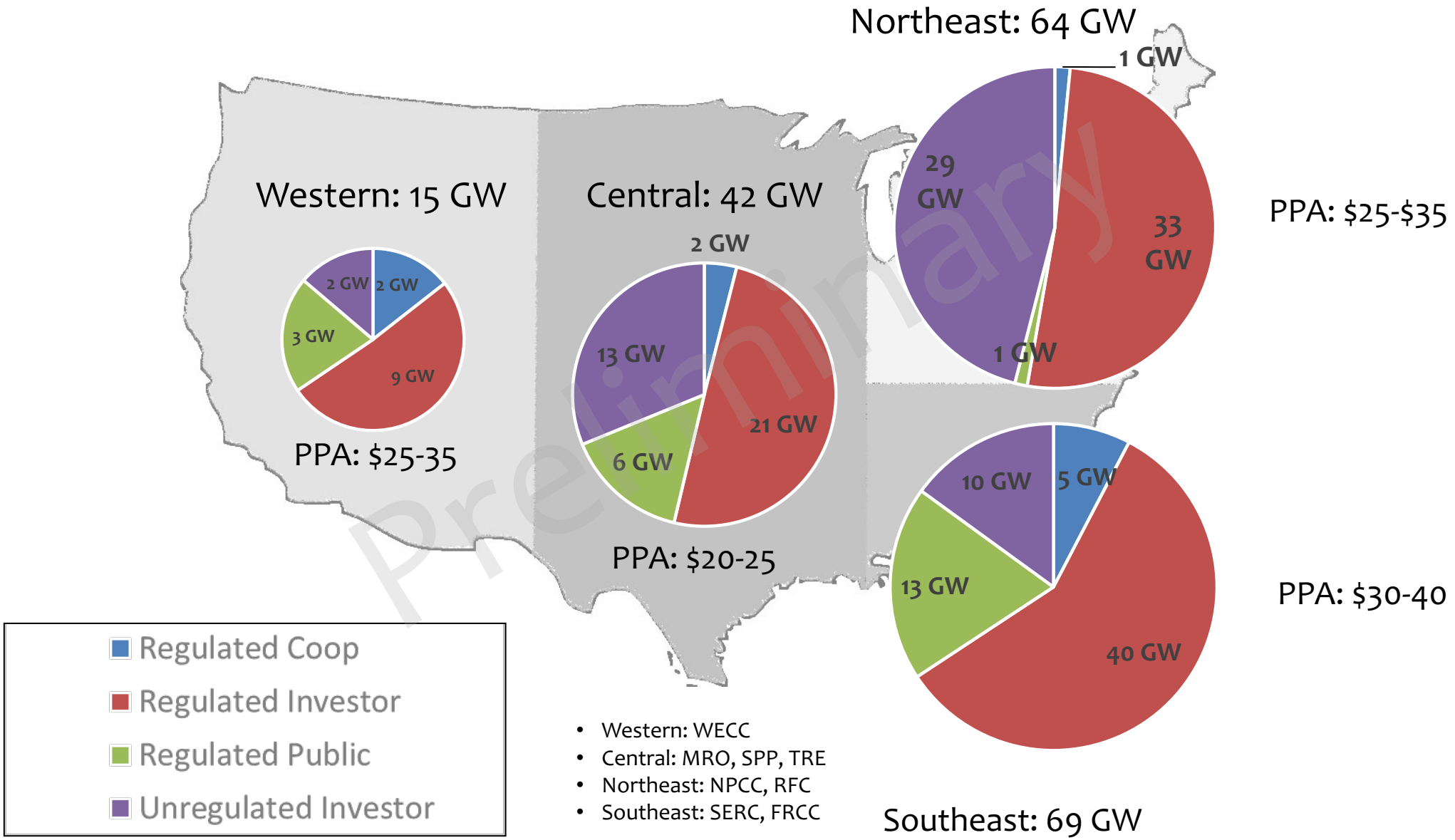


NERC Regional PPA Estimates Used

Region	*$/MWh*	*Region*	*$/MWh*	*Region*	*$/MWh*	*Region*	*$/MWh*
FRCC	40	NPCC	32	SERC	35	TRE	25
MRO	25	RFC	30	SPP	25	WECC	25

Source: EIA 860, EIA 861, EIA 923, AWEA, FERC Form 1, SEC Filings, CPI analysis

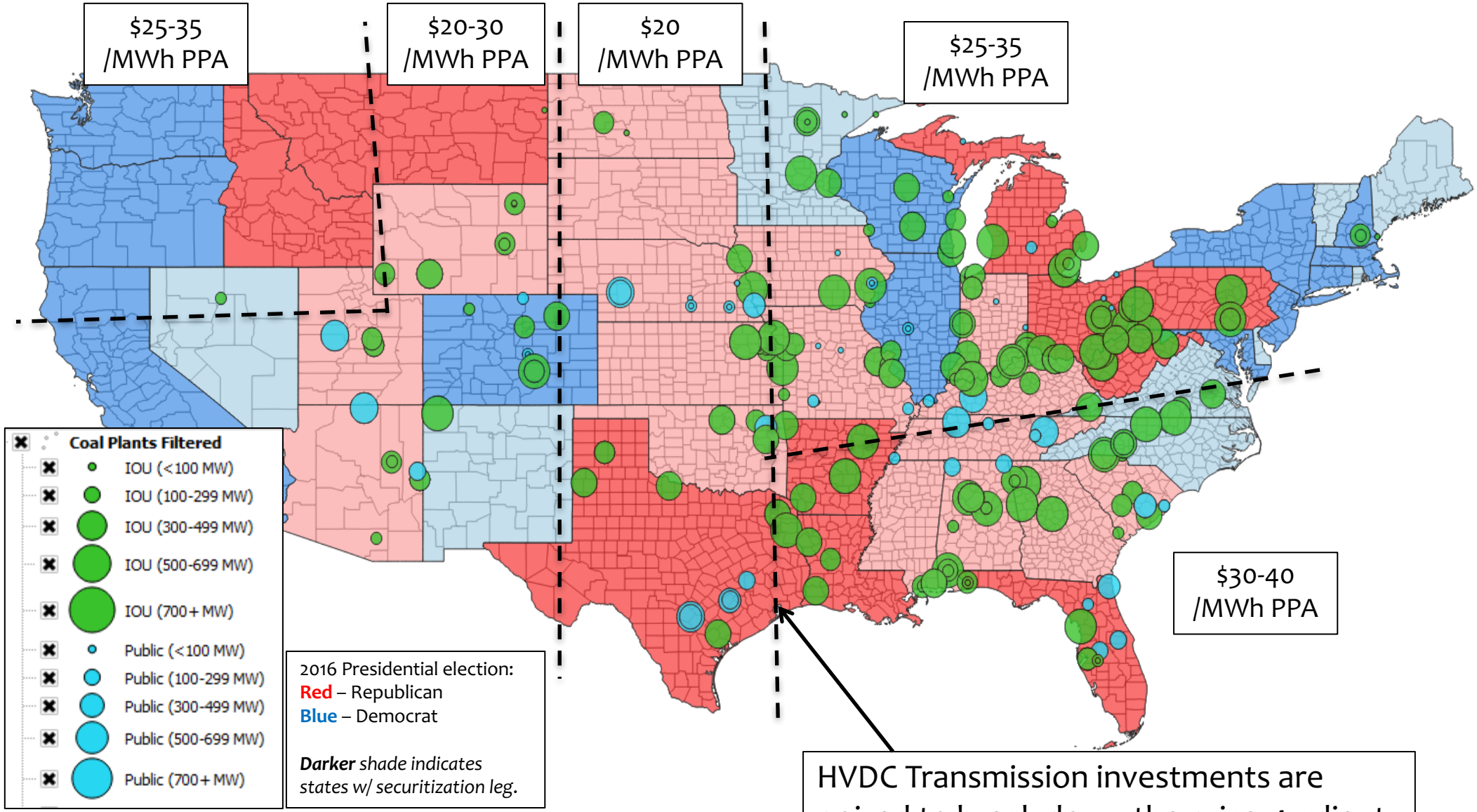
A little under half of that (90 GW) is in Coops, Public Utilities, and Restructured Markets – we need to expand our approach to address this



- Western: WECC
- Central: MRO, SPP, TRE
- Northeast: NPCC, RFC
- Southeast: SERC, FRCC

Source: EIA 860, EIA 861, EIA 923, AWEA, FERC Form 1, SEC Filings, CPI analysis

The coal at risk is concentrated in the Midwest and Southeast

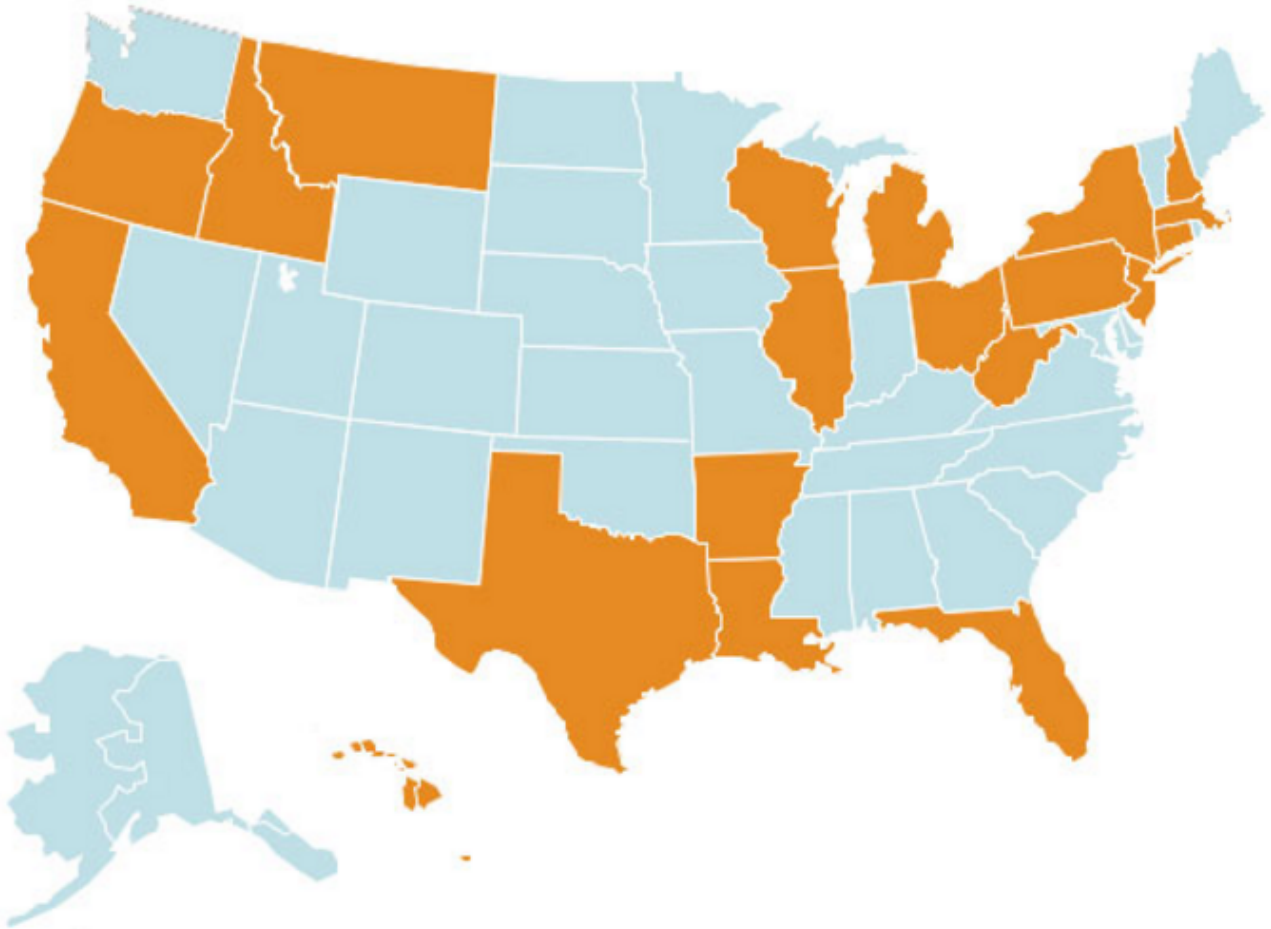


HVDC Transmission investments are poised to break down the price gradient between central wind and the southeast

Source: EIA 860, EIA 861, EIA 923, AWEA, FERC Form 1, SEC Filings, CPI analysis

Opportunities for expansion exist even without enacting legislation in new jurisdictions – but new legislation will be needed in many key states

States with Past or Current Enabling Utility Fee Securitization Legislation



Source: Saber Partners

Realizing the full potential of this opportunity requires a coordinated campaign with a national scope based on rigorous economic analysis

For Utilities

- Lobby legislators to eliminate legal hurdles and first-mover reluctance
- Show financial impact is positive without impacting system reliability
- Act as neutral ally if the utility is willing to move towards renewables

For Legislatures

- Show benefits exist for affected coal communities and ratepayers
- Control messaging to make the transition about economic opportunity
- Drive legislation forward with bipartisan support to clear path for securitization

For Regulators

- Bridge the divide between advocates, consumer groups, and the utility by providing analyses that are mutually beneficial and produce constructive outcomes
- Active engagements in proceedings to work toward desired results