Deep Dive 1.

Ensuring impact: How the Clean Power Plan affects corporate buyers' claims and leadership

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REBA
Renewable Energy Buyers Alliance

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RENEWABLE ENERGY BUYERS' PRINCIPLES
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Summary

- The Clean Power Plan does not use RECs for compliance, and will not directly affect availability of RECs. You can still buy renewables and count them (via RECs) towards greenhouse gas and RE sourcing goals.

- … But the additionality story and **"avoided emissions"** impact of your purchases changes.

- To make your purchase drive RE and emission reductions beyond policy, additional steps are needed (possible $)

Looking Ahead: increasing RPS's and CPP targets will make the regulatory surplus dimension of additionality harder to achieve.

Big Picture Question: How can voluntary actions drive more RE and GHG reductions quickly and cost-effectively?

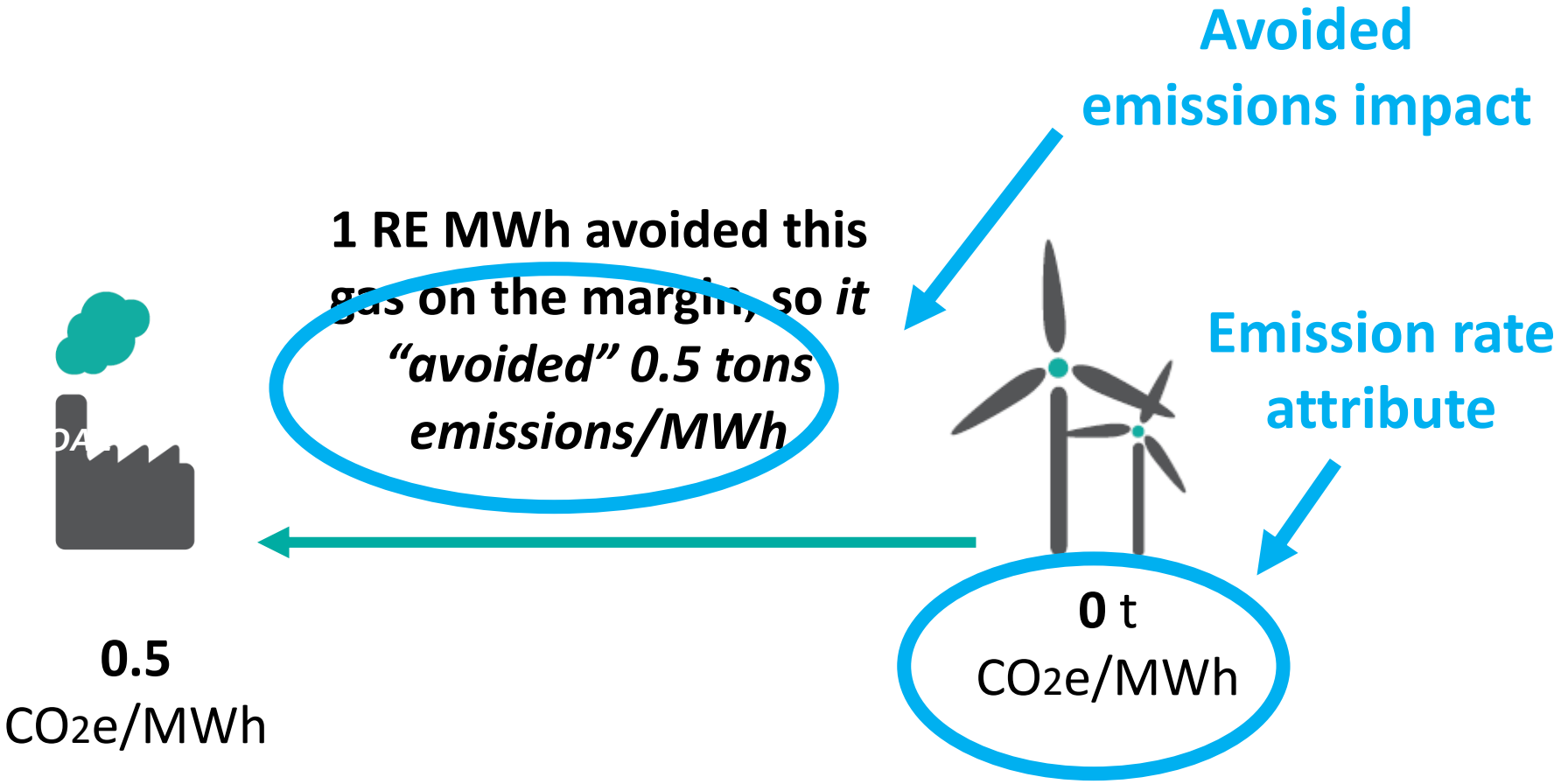
Outline

1. **What claims do RECs have today?**
2. What is the CPP and the new instruments it introduces?
3. How does the CPP impact corporate RE purchases?
4. What mechanisms help preserve regulatory surplus?
5. Looking ahead: increasing RPS's and climate regulation
6. Opportunities and possible solutions

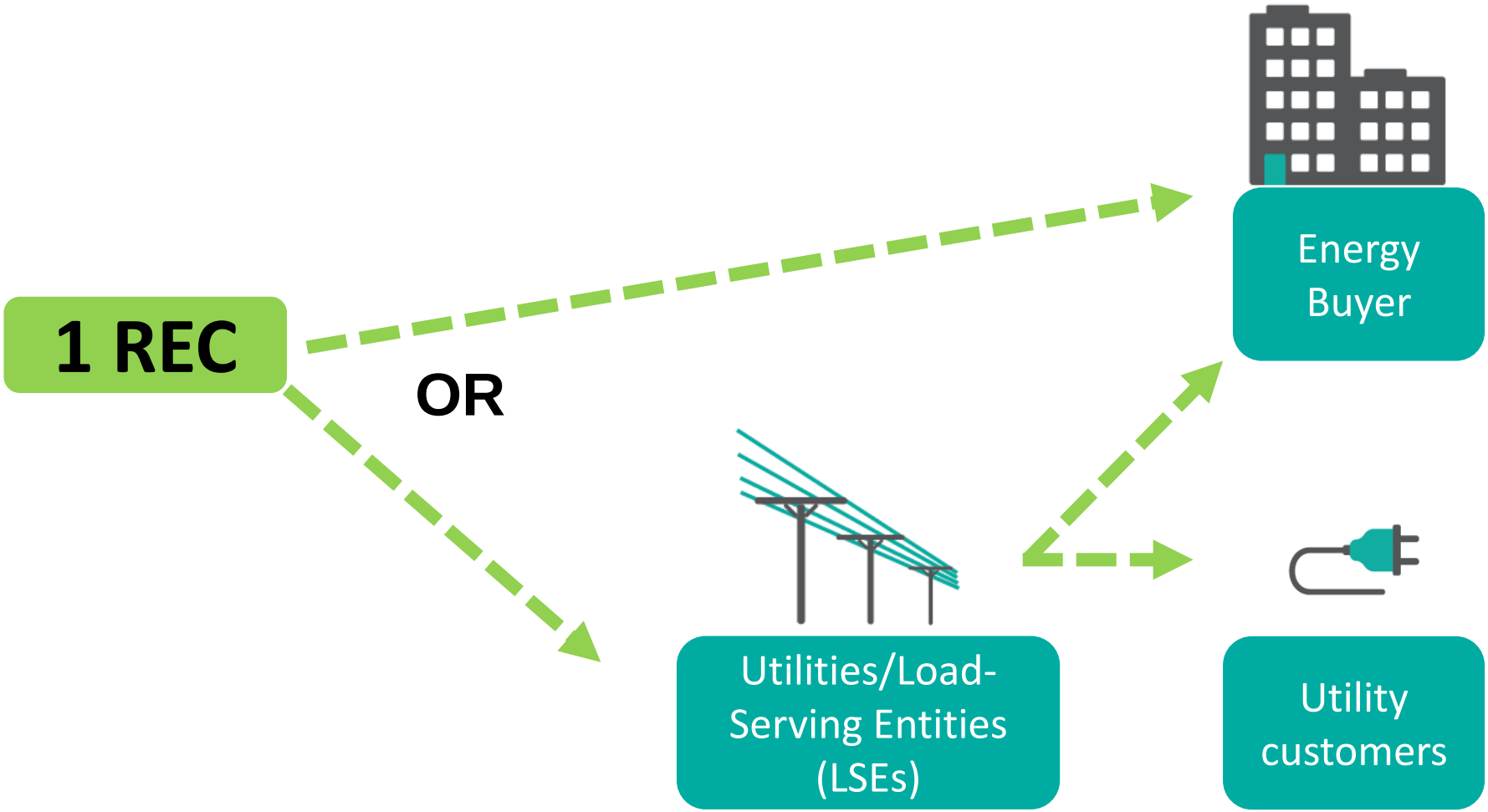
Key Features of Voluntary Renewables (RECs) Today

Renewable energy use claim	Used in renewable purchasing and goals (e.g. RE100)
Emission-rate attribute	Used in corporate greenhouse accounting in scope 2 (GHGP, CDP, GRI)
Secondary avoided emissions impact	Not used in scope 2, reported separately and in certain marketing claims
Regulatory Surplus	*Part of additionality story, having an impact*

Comparing “emission rate” (scope 2) with avoided emissions



Voluntary RECs vs. Compliance RECs



Compliance RECs should be part of supplier-specific factors that companies can use in scope 2

Scope 2 Data Options for Market-based method (in US)
1. RECs or equivalent instruments
2. Non-renewable contracts for electricity
3. Supplier/Utility emission rates
4. Residual mix (sub-national or national)
5. Other grid-average emission factors (sub-national or national) *see location-based data*

Why should we care about regulatory surplus?

- **Fairness.** Helps ensure individual actions are not carrying the burden that should be born by utilities (who can theoretically spread it out over all rate-payers)
- **Impact.** When we have weak regulatory targets, voluntary action has potential to provide additional market signal and environmental impact
- **Attribution.** A component of the **causal relationship** – that corporate demand is the reason a project is happening

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Status of the Clean Power Plan

- Implementation temporarily on “hold” until case results from district courts (June) and Supreme Court (early next year)
- Previous timeline required initial state plans this September, final state plans to be submitted by 2018
- Value for states, consumers to keep working through issues

The Clean Power Plan

By 2030, all existing coal and NGCC units will have to meet emission performance standard.

1305 lbs/MWh

771 lbs/MWh

Comparing state goals

Goal structure	Virginia	Texas
Technology-specific performance standard	 1305 lbs/MWh	 1305 lbs/MWh
State average emission rate (rate-based)	934 lbs/MWh	1,042 lbs/MWh
Total emission limit (mass-based)	27.4 million short tons	189.6 million short tons

The CPP introduces two new instruments

Emission rate credit (rate-based)

- Issued from emissions-avoiding activities, including RE
- Compliance purposes only

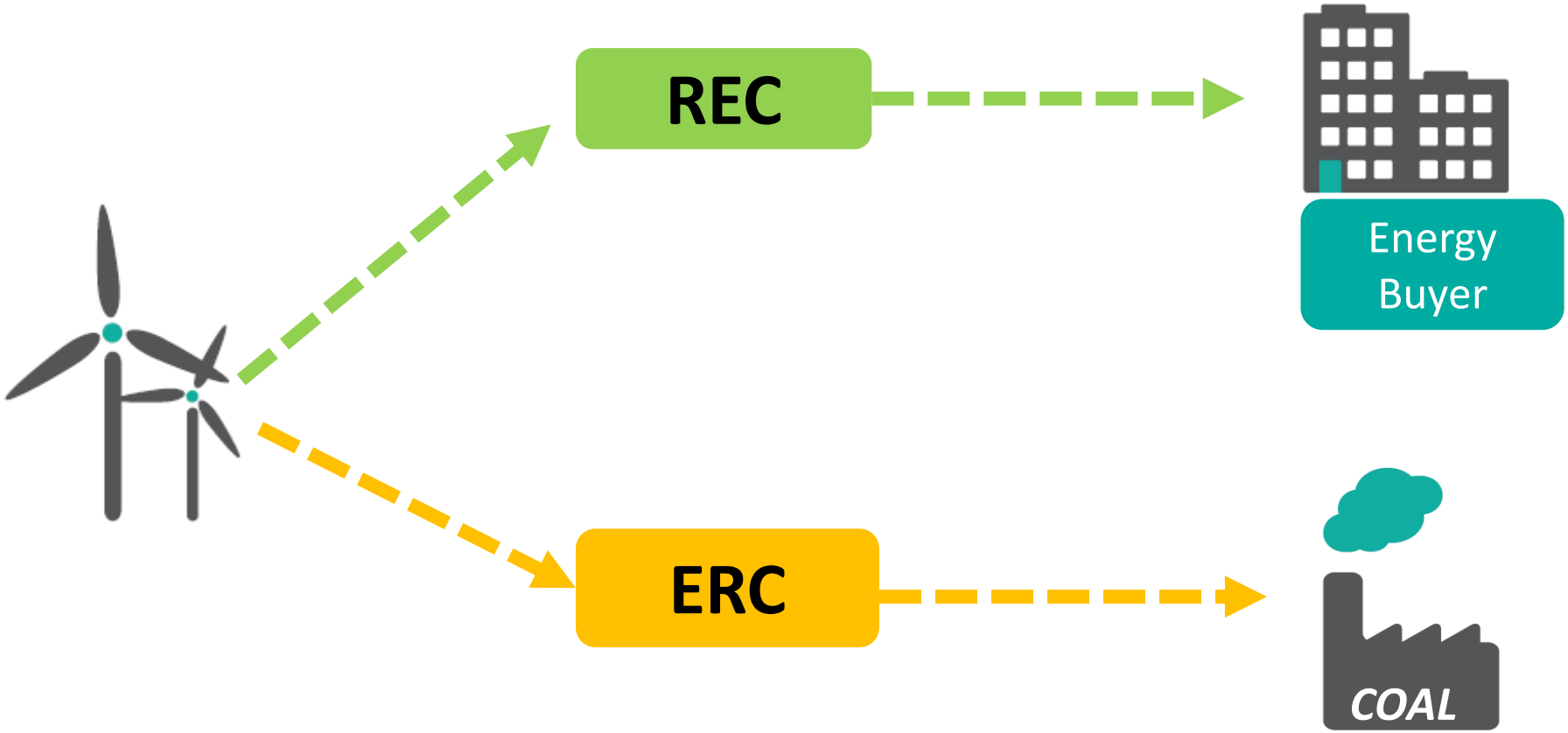
1 MWh of new RE/EE/ Nuclear = **ERC**

Allowances (mass-based)

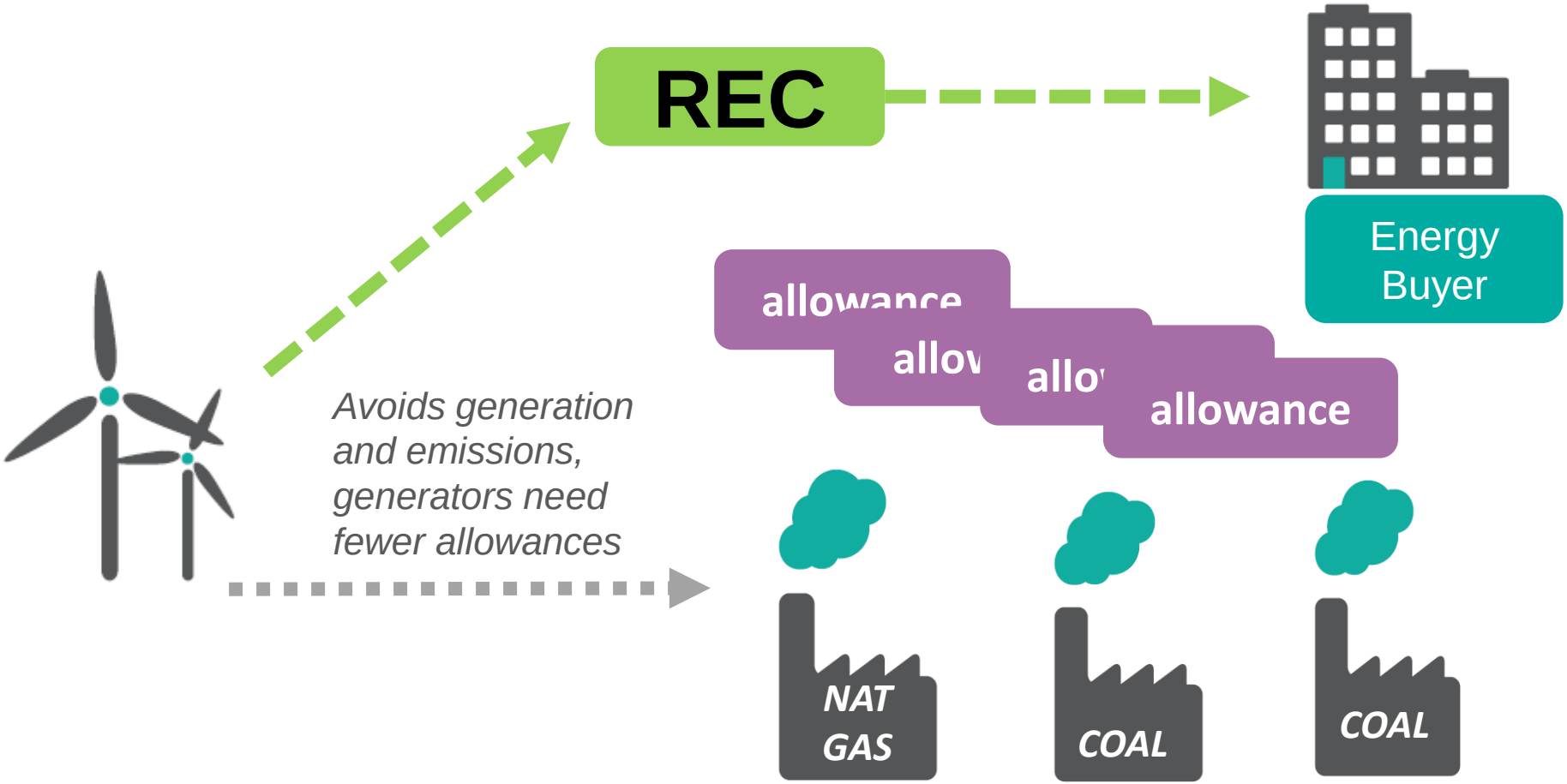
- Permit to pollute
- Not issued based on energy generation, but RE could receive allowances depending on how they are allocated

Cap at 500 tons = **500 allowances**

For RE in a rate-based state…



For RE in a mass-based state…



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BOTTOM LINE: Past, present and future RE contracts or REC purchases will no longer be surplus to regulation.

- Compliance and voluntary RECs can still be issued from RE. EPA designed CPP to be complementary to RPS's.
- Voluntary RECs still valid for corporate greenhouse gas accounting in scope 2 (CDP/RE100)
- But unless additional actions are taken, corporate RE claims (avoided emissions) and additionality story will change.

Key Features of Voluntary Renewables (RECs) Today vs. with CPP

	Today	With CPP
Renewable energy use claim	Used in renewable purchasing and goals (e.g. RE100)	No change
Emission-rate attribute	Used in corporate greenhouse accounting in scope 2 (GHGP, CDP, GRI)	No change
Secondary avoided emissions impact	Not used in scope 2, reported separately and in certain marketing claims	No longer bundled, requires pairing w/ retired ERC or allowance
Regulatory Surplus	*Part of additionality story, having an impact*	No longer surplus to regulation

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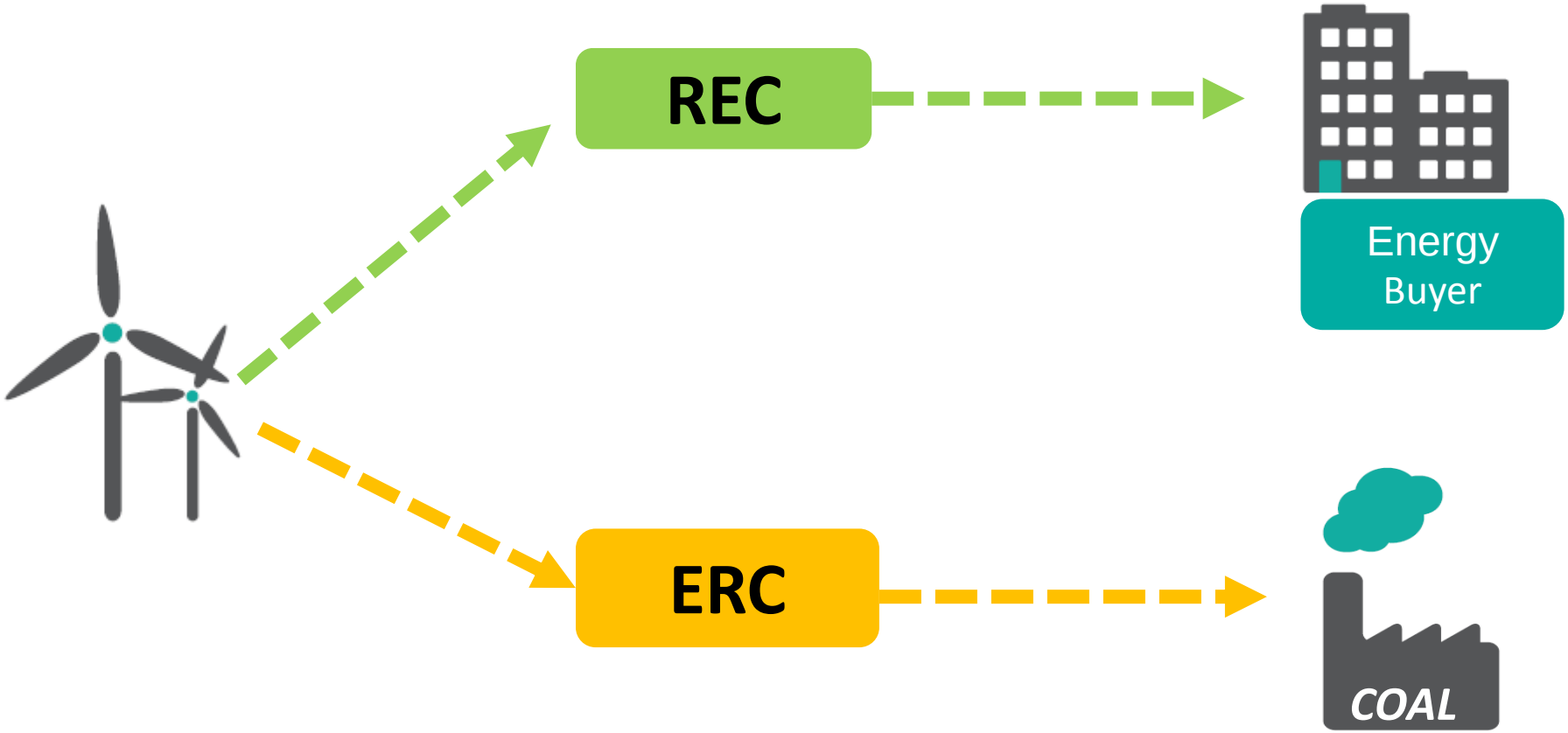
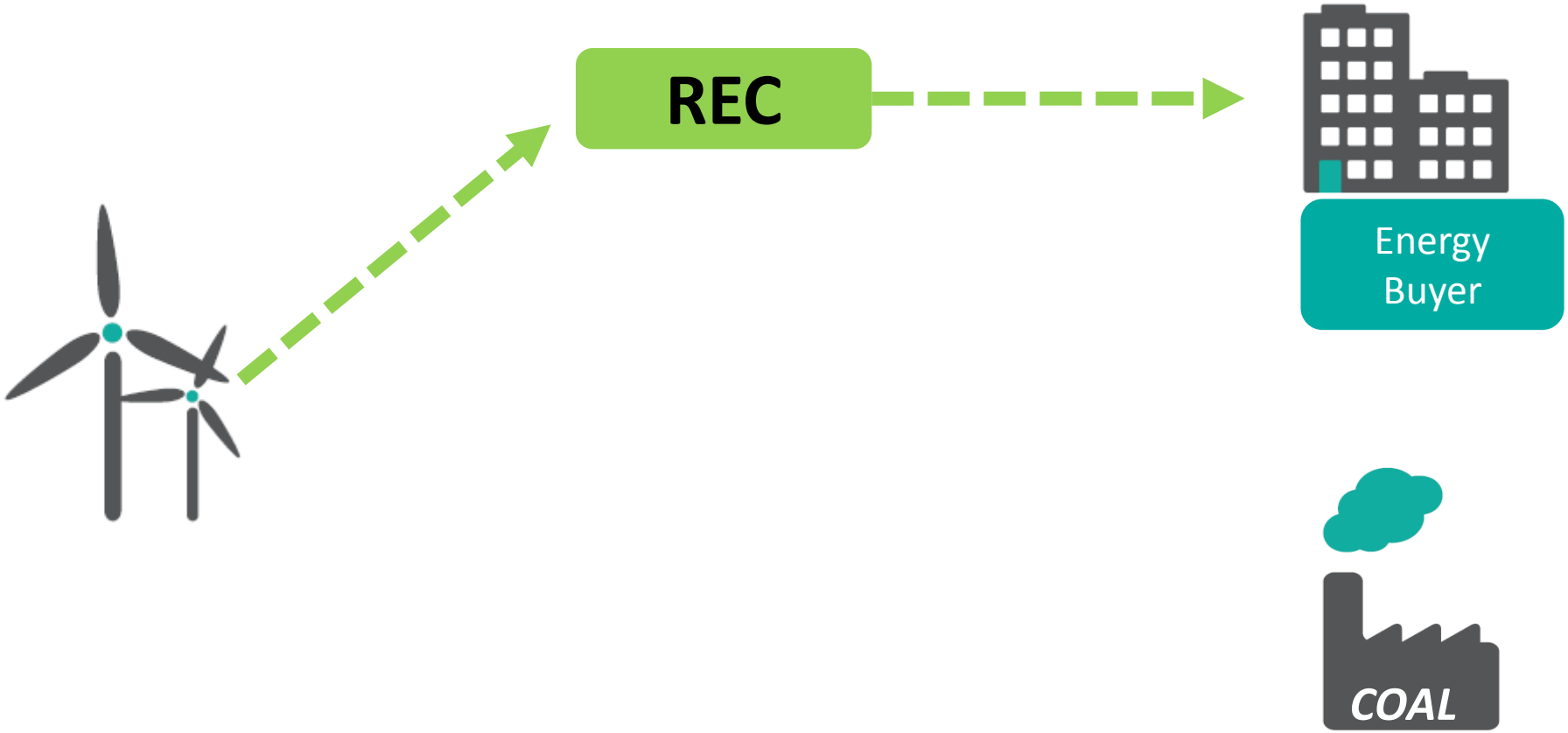
How to preserve regulatory surplus

To make **your past, present and future** RE purchases **actually reduce global emissions** and **be surplus to regulation,** you need to **retire allowances** or **retire ERCs/prevent ERC issuance**

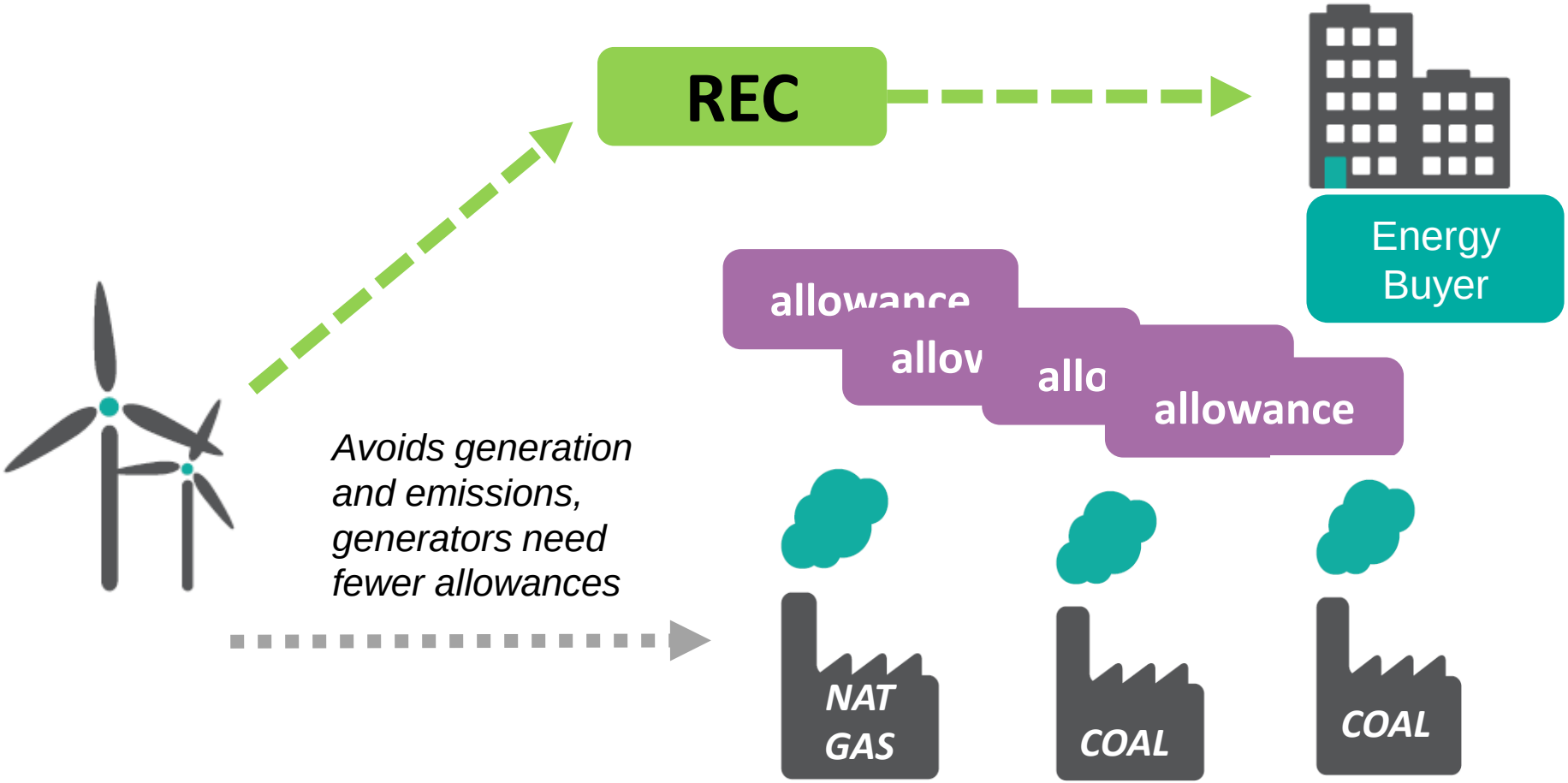
For RE in a rate-based state…



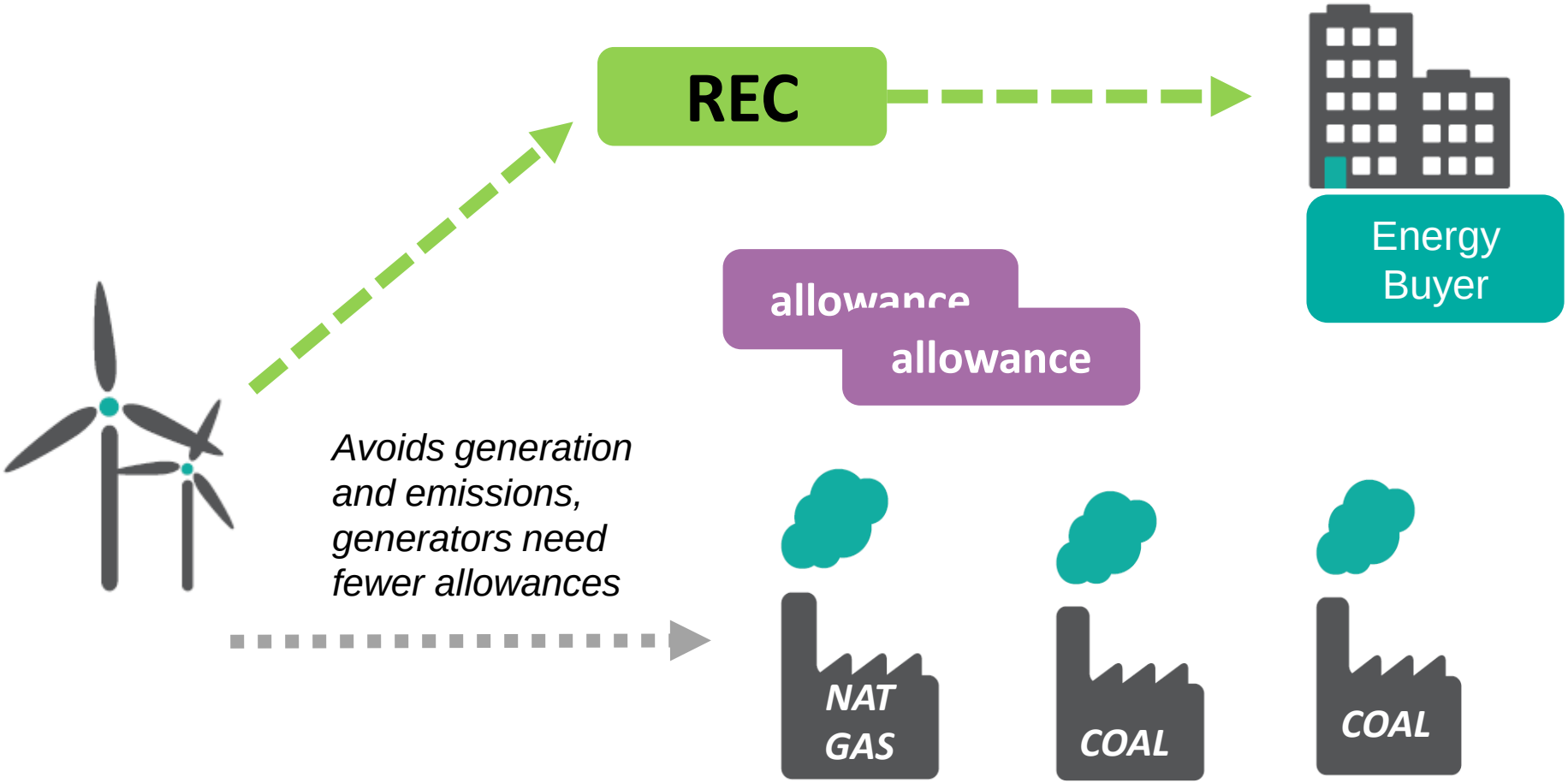
For RE in a rate-based state…remove the ERC



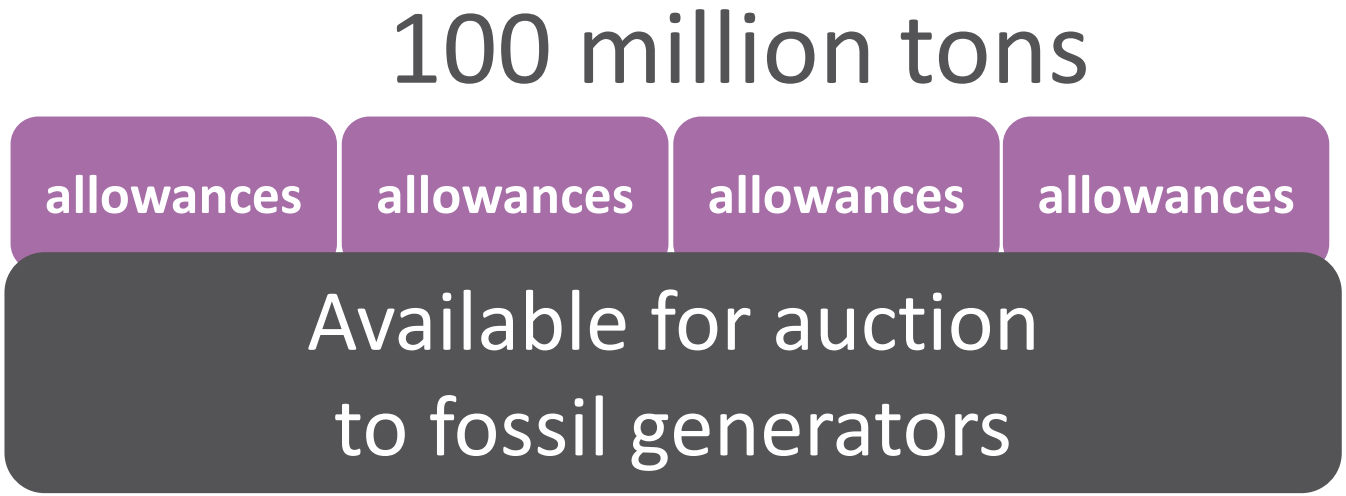
For RE in a mass-based state…



For RE in a mass-based state…retire allowances



How do set-asides for voluntary renewables work?



How do set-asides for voluntary renewables work?

1% of allowance budget set-aside for voluntary RE

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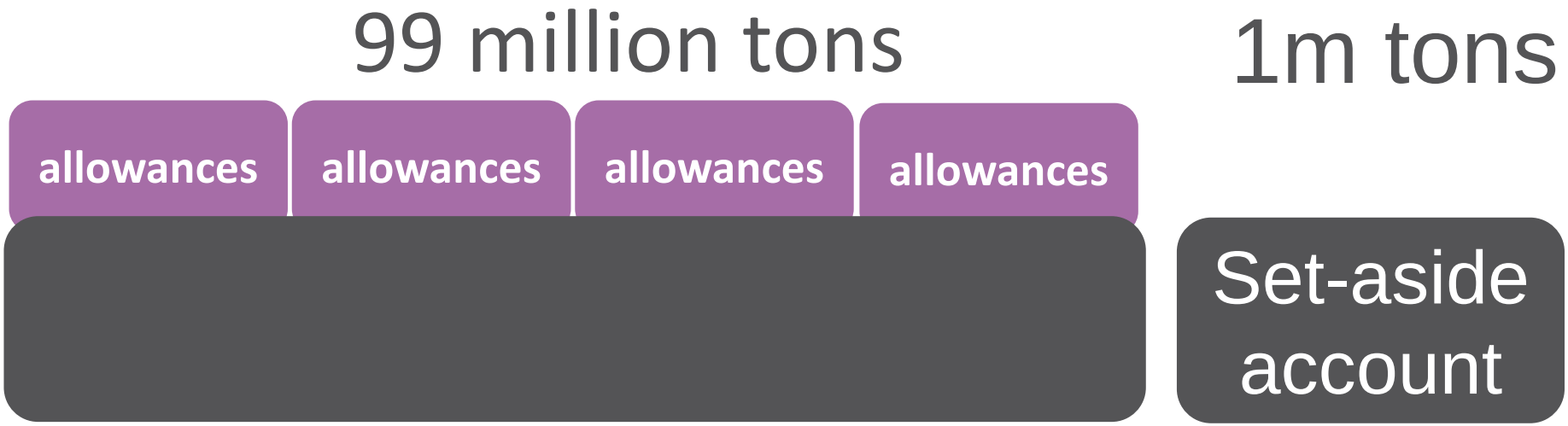
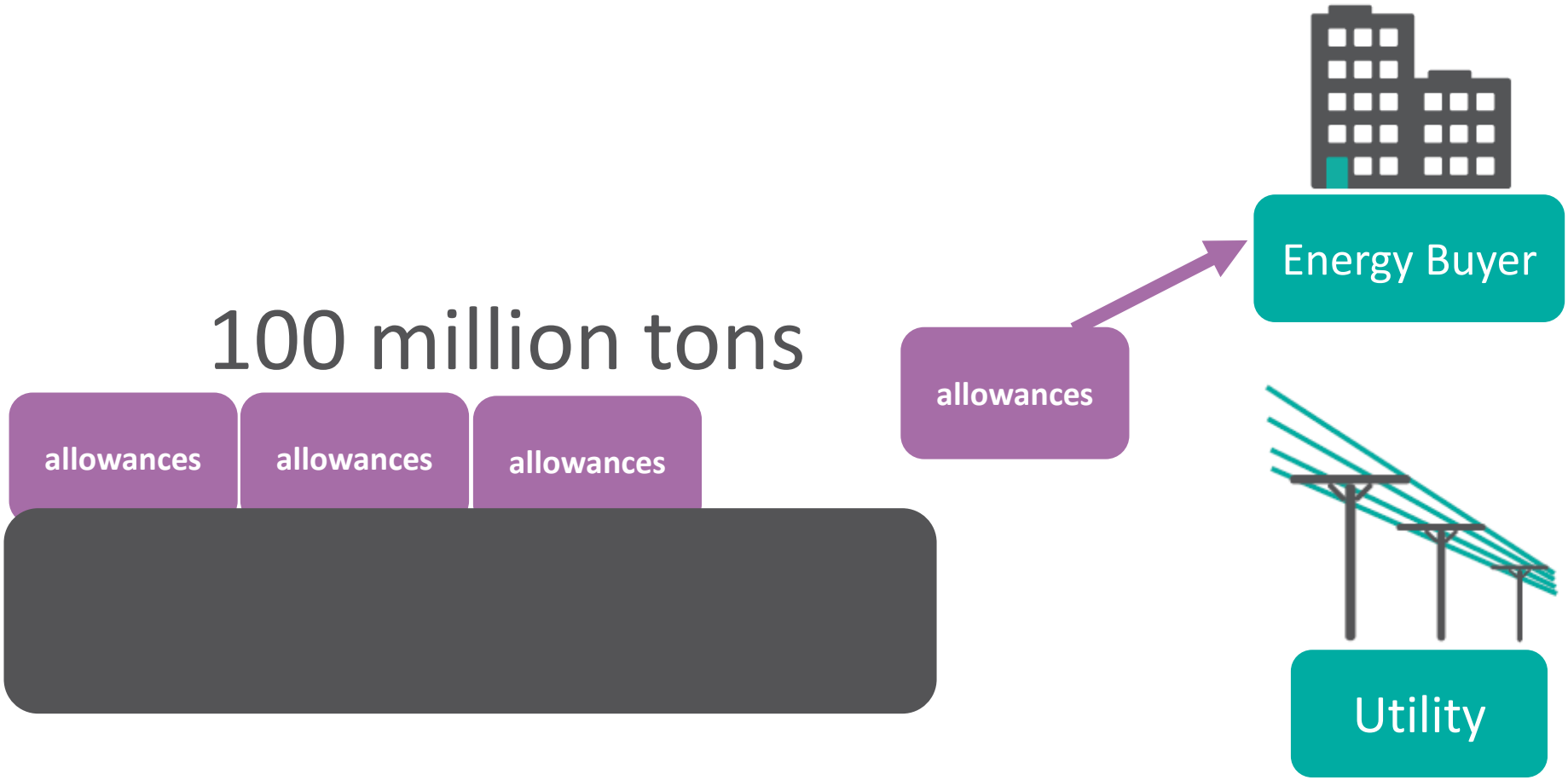
Cap now 99 m, global emissions reduced



If a state doesn't create an allowance set-aside…



Pursuing set-asides for ERCs or allowances could involve:

- **State administrative action** – state set-asides
- **Costs** – born by state, utility or consumer
- **Relationship strain**– challenging compliance priority for utility

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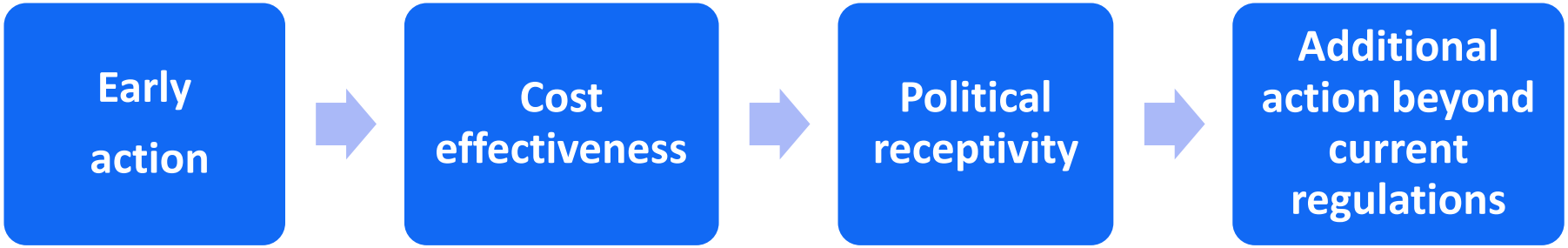
As RPS's and climate policies increase, what voluntary actions drive additional RE and emission reductions?

Regulatory target	New York	California	Minnesota	Alabama	Texas
CPP Mass reduction in 2030 compared to 2012	9.7%	+ 5% increase	20%	25%	33.5%
CPP Mass reduction in 2030 compared to BAU 2030	+10.4% increase	11%	26%	2.5%	31%
RPS target	50% by 2030	50%	26.5% x 2025 (IOUs) *31.5% x 2020 (Xcel)*	None	5,880 MW x 2015

Given the current economic and regulatory realities in the U.S., we think the recipe for decarbonization requires:



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To maximize corporate choices about regulatory surplus and reduce costs to achieve it:

1. Write into contracts **off-taker** ownership of **other regulatory instruments** like ERCs or allowances (if distributed to RE)

2. **Advocate for state-level set-asides** in states where RE projects located.

Opportunities for greater corporate-utility alignment

1. Improve and increase utility emission rate and energy source disclosure, to make it easier for companies to count utility GHG reductions and sourcing.

2. Prioritize projects that serve both corporate and utility claim needs.

3. Phased timing for compliance and voluntary action : If compliance in first goal period (2022-2024) achieved easily, increasing set-aside levels kick in.

4. More flexibility on regulatory surplus for emissions depending on state-specific CPP conditions (see Table Topic discussion)

Questions

1. How important is regulatory surplus for the CPP for you? How important is the avoided emissions claim?
2. What does leadership look like in states with high vs. low CPP targets?
3. What does leadership look like in states with high vs. low renewable or clean energy standards?

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