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Designing Emission Budget Trading Programs under Existing State Law

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Designing Emission Budget Trading Programs under Existing State Law

EPA's Clean Power Plan allows each state to determine whether affected Electric Generating Units (EGUs) must meet rate-based standards (designated in pounds of CO₂ emitted per megawatt hour of electricity produced), or a mass-based limit (measured in total tons of CO₂ emissions from affected EGUs). For states that file mass-based plans, one compliance option is an emission budget trading program. Under this option, states would issue tradable emission allowances, and require EGUs to surrender an allowance for each ton of CO₂ emitted over a compliance period.

EPA provides each state with a budget for the interim period (2022–2029) and final period (2030–2031), but otherwise gives states broad flexibility to customize their trading programs. Part I of this paper outlines three design choices under the Clean Power Plan: whether to allow interstate trading; how to distribute allowances to EGUs or other entities; and whether to require “new” sources to hold allowances.

State plans will drive Clean Power Plan compliance. A key question is whether state legislatures or state regulators will take the lead in outlining the plan design. If legislatures do not act, the agency or agencies designing and enforcing the program will act based on their existing authorities under state law. Part II analyzes existing authority to freely allocate allowances to EGUs and non-emitters, to auction allowances, and to include newly constructed sources in the program. It uses examples of specific state authority to illustrate the key legal issues.

I. Emission Budget Trading Program Design Options

Under an emission budget trading program, the program administrator distributes a limited number of tradable allowances each compliance period. Each source is required to retire an emission allowance for each ton (or other unit) of pollution it emits. The number of allowances made available by the program administrator decreases over time, assuring that regulated sources reduce their absolute emissions.

The allowance price can fluctuate, reflecting supply and demand and revealing emitters' willingness to pay for allowances. Under idealized market conditions, this allowance price is equivalent to marginal abatement costs across all emitters. By trading allowances, market participants are essentially finding the lowest cost opportunities to reduce emissions. In this way, the program is a flexible compliance option, designed to achieve pollution reductions at the minimum cost.¹

An emission budget trading program is consistent with the operations of the power sector. Generally, electric grid operators dispatch power generators based on their marginal costs. Plants with the lowest variable costs are called on first; as the system needs more power to meet demand, system operators dispatch more expensive plants. A CO₂ allowance price can easily and transparently be incorporated into each plant's marginal costs, enabling system operators to maintain existing economic dispatch procedures. For EGUs, a pollution allowance market provides a readily accessible source of compliance instruments, affording each EGU with the short-term flexibility it needs to meet the power system's demands while remaining in compliance with environmental requirements. Over the long-term, an allowance price can motivate investment decisions. As discussed below, broader allowance markets send a consistent price signal across the industry.



An emission budget trading option is also a familiar option for the power sector. The 1990 Clean Air Act Amendments established a cap-and-trade program for coal-fired power plants. The law's Acid Rain Program achieved pollution reductions faster and at a much lower cost than anticipated.² In 2003, northeastern states established a similar program for power plants and other large sources to comply with EPA's NO_x SIP call. EPA then created trading programs for power plants in nearly thirty "upwind" states through the Clean Air Interstate Rule (CAIR) and Cross-State Air Pollution Rule (CSAPR). In 2009, northeastern states established RGGI, a cap-and-trade program for CO₂ from power plants; EGUs in California have been covered by that state's CO₂ cap-and-trade program since 2013.

Mass-based trading programs are also relatively straightforward to administer. As spelled out below, states will need to make certain market design choices to establish their programs. Once a program is running, regulated EGUs assume much of the responsibility, participating in the market as necessary to comply with the cap. EPA is proposing to allow state plans to utilize EPA's Allowance Tracking and Compliance System (ATCS), which will further alleviate the administrative burden on states. This online platform has been used by EPA, states, and EGUs for other power sector emission budget trading programs.

The remainder of this section describes three design options for states to consider when designing mass-based plans: whether to allow interstate trading; how to distribute allowances to EGUs or other entities; and whether to require "new" sources to hold allowances.

A. Allowing Interstate Allowance Trading

The Clean Power Plan does not require states adopting a mass-based approach to allow EGUs to trade allowances across state lines, or even between EGUs in the same state. However, the economic benefits of trading are widely recognized, and the potential to reduce costs will likely drive states to allow trading.

In general, broader markets that link across states will improve the cost-effectiveness of the program. Trading allows EGUs with higher abatement costs to purchase excess allowances from EGUs that are able to undertake emission reductions measures at lower costs. Including more EGUs in a program by allowing interstate trading expands opportunities for market participants to find lower-cost emission reductions. In addition, a larger market improves liquidity³ and reduces the likelihood that any company will exercise market power. The ability to charge monopoly prices for allowances could be a particular concern in a single-state market where a vertically integrated utility owns most of the affected EGUs and receives most of the initial allocation of allowances.

In the Clean Power Plan, EPA has offered a few pathways for states to enable interstate trading:

- A group of states may join a multi-state plan by submitting:
 - one plan to EPA on behalf of all states;
 - a single plan describing common elements, in combination with individual state plans that address state-specific elements; or,
 - separate individual state plans that are materially consistent on common plan elements (40 CFR § 60.5750(b)).

³ Liquidity reflects an ability to transact quickly and inexpensively. As the number of buyers and sellers in a market increases, the opportunities for trade increase as well, reducing transaction costs.



- A state may also submit a “trading-ready” plan that allows EGUs covered under its plan to comply with allowances issued by other states. An advantage of a trading-ready plan is that it does not require a state to agree on common plan elements with other states. A trading-ready plan allows for linkages to other trading-ready single-state plans, trading-ready multi-state plans, and the federal plan, assuming EPA opts for a mass-based federal plan. The CPP preamble suggests a state could name states from which it would recognize allowances (§ 60.5750(d), 80 Fed. Reg. 64,892).^b

B. Developing a Methodology for Initial Allowance Distribution

While the Clean Power Plan sets each state’s allowance budget, it does not dictate to states how to distribute those allowances. EPA has proposed to provide this flexibility to states even under a federal plan; states could submit partial plans that allocate allowances, while leaving all other aspects of the federal plan under EPA’s purview (80 Fed. Reg. 65,026, 65,029).^c

In general, states have three allowance distribution options: free allocation, auctions, or some combination of the two. Under idealized market conditions, the ultimate equilibrium price of allowances reflects supply and demand in the allowance market, and is not affected by the state’s initial allocation.³

Free Allocation

Free allocation methodologies can be “backward” or “forward” looking.⁴ A backward-looking approach is fixed for the duration of the program and is based on historic activities, such as total electricity production or CO₂ emissions during a reference period. In its proposed model trading rule, EPA adopts this approach, allocating allowances based on each EGU’s share of in-state electricity production in the period of 2010 to 2012 (80 Fed. Reg. 65,016). A criticism of backward-looking allocations is that they provide incumbent emitters with an opportunity to earn windfall profits.⁵ Existing generators in competitive electricity markets can include the cost of an allowance in the price of electricity, even though they received the allowances for free,⁶ and additionally profit by selling allowances that they do not need for compliance because they are producing less than they did during the reference period.

A forward-looking allocation, also known as an updating output-based allocation (OBA), adjusts in response to firm behavior or market conditions. For example, an updating OBA for all affected EGUs could base allocations on each EGU’s production during the previous interim step compliance period. EPA’s proposed model trading rule includes two pools of allowances, “set-aside” from the primary allocation, which are distributed based on an updating OBA. The allowance set-asides provide a portion of each state’s total allowances to renewable energy generators and natural gas combined cycle units (NGCC) to incentivize these sources to produce more and minimize emissions “leakage”^d to new units that are not covered by the Clean Power Plan (see Part I.C).

^b States could run afoul of the dormant Commerce Clause if they file plans that discriminate against allowances purely on the basis of origin.

^c EPA is proposing to allow states to take delegation of the federal plan and become primary implementers. 80 Fed. Reg. 65,032.

^d States have the option of including new EGUs (those constructed after January 8, 2014) in their Clean Power Plan emission budget trading program. If a state chooses not to include new sources, it must mitigate the potential for uncap new EGUs to increase production in response to the cap on existing sources.

Whether a state uses a forward- or backward-looking allocation methodology, EGUs that participate in wholesale electricity spot markets (such as those operated by PJM and ERCOT) will offer to sell power at a price that reflects the opportunity cost of using an allowance rather than selling it.⁷ Regulators could mitigate the potential for a vertically integrated utility to earn windfall profits from its free allocation by requiring that allowance revenue be directed to consumers,⁸ such as through retail rate reductions^e or investments in energy efficiency measures. An analysis of Public Utility Commission orders in fifteen states addressing revenue from sulfur dioxide allowances from the 1990 Acid Rain Program found that regulators typically required expenses and gains to flow to ratepayers.⁹

States with wires-only distribution companies could achieve a similar result by freely allocating allowances to distribution companies based on their share of the state's load, number of retail customers, or other metric, rather than allocating them to EGUs. Because distribution companies do not need allowances for compliance, they would sell them. If required by PUCs, benefits could flow to consumers, through retail rate reductions or through a regulatory mandate to invest proceeds in energy efficiency. Investing in energy efficiency has the added benefit of reducing consumption, thereby assisting in achieving compliance.

Allowance Auctions

Collecting revenue through an auction is another mechanism for ensuring that consumers benefit from the initial allowance allocation. Under a standard auction, the state collects the revenue, which it could use for general purposes, to reduce consumers' electricity bills, or to invest in low-emission generation and energy efficiency to assist EGUs in achieving Clean Power Plan compliance.^{f,10} Moreover, auctioning allowances provides market participants with an immediate price signal about the costs of emission reductions.⁸ Providing this price signal early in the program, rather than waiting for sufficient trading activity to provide that signal under a free allocation, contributes to greater market efficiency¹¹ and can help market participants make informed investment decisions. An auction also is more equitable because it puts all participants on equal footing and prevents regulated firms from earning windfall profits.¹²

Combining Free Allocations and Auctions

A state could also choose to combine distribution methodologies; by allocating some allowances based on a backward-looking methodology, using an updating OBA to distribute others, and auctioning a percentage of allowances to reveal a market price. A "consignment auction" is a distribution method that combines free allocations and auctions and is more efficient than allocation alone.¹³ Under a consignment auction, the state allocates allowances to affected EGUs or other entities. Next, regulators either require those entities

^e A bill credit could have a perverse effect. Lower bills could lead consumers to increase consumption, and thereby raise the costs of compliance. Regulators could target bill credits to particular types of customers, such as low-income consumers.

^f The first five years of RGGI auctions generated more than one billion dollars. Each participating state has complete discretion in spending its share of the proceeds. Most of the money has been invested in energy efficiency programs and low-emission energy projects, which are projected to save ratepayers \$2.5 billion and avoid more than eight million tons of CO₂. Regional Greenhouse Gas Initiative, Inc., Investment of RGGI Proceeds Through 2013 (Apr. 2015), available at: <http://rggi.org/docs/ProceedsReport/Investment-RGGI-Proceeds-Through-2013.pdf>.

⁸ An important caveat is that in an uncompetitive auction, which is typically characterized by few participants, bidders may have a strategic reason for misrepresenting their willingness to pay and their bids may not reflect their abatement costs.

or allow them to offer or “consign” allowances to an auction. Entities that consign allowances receive a pro rata share of the auction revenue. Any entity, including one that consigned allowances, may bid into the auction to purchase allowances.

A consignment auction can provide many of the efficiency benefits of a standard auction. Compared to free allocation, a consignment auction improves market liquidity and transparency, ensures the program sends an early price signal, minimizes transaction costs, and equalizes access to market information, thus improving perceived fairness.¹⁴ A consignment auction also allows entities that do not receive a free allocation to have immediate access to the market.

While EPA’s Acid Rain Program freely allocates most allowances to EGUs based on a fixed methodology,¹⁵ the program holds consignment auctions as one of several mechanisms intended to “jump-start”¹⁶ trading. Each year, EPA withholds approximately three percent of allowances that would otherwise have been allocated to EGUs. It sells some of these allowances at a fixed price and auctions the remainder, with the proceeds flowing to the EGUs that would have received those allowances as part of their allocations. Any allowance holder may consign additional allowances to EPA’s auction and earn revenue from those sales.¹⁷ The auction played an important role early in the program by signaling price information and improving market functioning.¹⁸ The Acid Rain Program also includes a set-aside of allowances for energy efficiency and renewable energy projects.¹⁹

Stakeholders likely will hold diverse views on the appropriate allowance distribution method. While it is sensible for regulators to analyze the economic impacts of various options, the decision could ultimately hinge on other factors. It may be advantageous to choose a distribution method that builds support for the plan. Market rules could also contribute to the political sustainability of the program. For example, economists analyzing EPA’s Acid Rain Program concluded that the program’s allowance banking provisions “proved valuable to the political success of the program” because EGU owners that banked allowances during the first phase of the program “had a vested interest in maintaining the value of those banked credits and thus in furthering the program itself.”²⁰

C. Including New Sources in the Program

The Clean Power Plan applies to existing sources, defined as EGUs that commenced construction on or before January 8, 2014 (§ 60.5840). New sources are subject to different performance rates under a separate rule. The new source rule, however, does not cap overall levels of pollution, enabling the possibility that affected EGUs could comply with a mass-based plan by reducing output and shifting production to new uncapped sources. To maintain the environmental integrity of the Clean Power Plan, EPA is requiring states with mass-based plans to demonstrate how the plan will prevent this leakage from capped existing sources to new uncapped sources. EPA proposes that states could address this issue by bringing new sources into their emission budget trading programs. States that do not take this option must include plan elements, such as allowance allocation methodologies, that mitigate the potential for emissions leakage to new sources (§ 60.5790(b)(5)(ii)).

Including new sources in the program is the simplest option to mitigate the leakage potential, and it guarantees the best environmental outcome. To induce states to include new sources, EPA provides New Source Complements, additional allowances above and beyond each state’s 2030 cap that can be used by for

compliance by new *or existing* sources. Taking the New Source Complement could result in a greater number of allowances being available to existing sources, if little or no new emitting generation is built in a particular state or allowance market region, or if new NGCCs displace less efficient generators. The number of additional allowances provided to each state ranges from one to ten percent of the state's cap, with an average of about three percent.

Some states may be hesitant to include new sources in their program out of a concern that it constrains electricity generation from fossil fuels and therefore might stymie economic growth. However, EPA's existing source caps already include emissions associated with increases in generation from 2012 levels.²¹ Moreover, the notion that economic growth requires additional emissions is based on out-of-date data.

The relationship between economic growth and electricity demand has changed over time. According to the U.S. Energy Information Administration, "the growth in electricity demand has been significantly slower than GDP growth for decades," and the "long-run trend of slowing growth in electricity use relative to economic growth will [] continue."²² While more research is needed into the causes of the deviation, a recent article in *The Electricity Journal* concluded that "long-term load projections based largely on the belief in a strong correlation between economic growth and electricity may not be accurate."²³

While the correlation between economic growth and electricity consumption has diminished over the past two decades, the correlation between electricity growth and emissions growth has nearly disappeared. The U.S. electricity sector has grown considerably as CO₂ emissions have actually declined. From 1997 to 2013, total generation grew by 17 percent while CO₂ emissions *decreased* by four percent.²⁴ Power sector CO₂ emissions decreased in 30 states, including Florida, Georgia, Indiana, Kentucky, Nevada, New Mexico, and West Virginia. Meanwhile, GDP and population increased in every state, and both GDP *and* population grew at a faster rate than emissions in forty states.²⁵

For states that do not include new sources, EPA proposes two allowance set-asides that are intended to equalize the costs of new NGCCs, existing NGCCs subject to a cap, and renewable energy. EPA would provide five percent of each state's allowances to in-state renewable generators, based on each generator's pro rata share of total generation. An updating OBA to existing NGCCs would induce additional production from units subject to a cap (proposed 40 CFR § 62.16245). Providing an updating OBA to NGCCs effectively lowers the cost of NGCCs as compared to coal-fired EGUs that do not receive the OBA, which supports the Clean Power Plan's environmental goal of lowering CO₂ emissions. On the other hand, by reducing the cost of NGCC generation, the OBA could discourage reliance on energy efficiency and renewable energy as means for achieving emission reductions.²⁶ Determining the appropriate magnitudes of the set-asides is critical for maintaining the program's environmental integrity, but there are numerous uncertainties and complexities associated with the set-asides that make this a particularly challenging task.²⁷

Moreover, states that choose not to bring new sources into the program risk skewing EGU investment decisions. If not required to hold allowances, a new NGCC could have lower operating costs than an existing NGCC. This disparity could motivate investments in new plants and cause retirements of existing units. While EGU owners may capture the profits, ratepayers may be harmed if otherwise viable assets are retired prematurely or if new NGCCs are eventually subject to CO₂ limits and then treated as stranded

assets. Including new sources in the cap could avoid this outcome, while facilitating long-term planning by “provid[ing] a consistent economic signal to existing and new sources with a similar emissions profile.”²⁸

The set-asides also add administrative complexity to the program. For example, the state would need to create a registry of eligible renewable energy projects, administer a system for tracking annual production, ensure that the data is independently verified, and then award allowances (§ 60.5815(c); proposed §§ 62.16240, .16250, .16260, .16265, .16270).^h The administrative process would mimic the process required under rate-based plans for issuance of Emission Rate Credits.

II. Design Options under Existing State Law

State legislatures can enact legislation that mandates a particular type of state plan or specific plan elements. For instance, state law could require that regulators submit a mass-based plan and use a particular method to distribute allowances. Without new legislation, state regulators will determine the type of plan and set the detailed rules that will shape the market. The decision-making environment may be contentious; affected EGUs may disagree with other stakeholders about the appropriate compliance approach.

Without specific legislative guidance, state utility and environmental regulators will use existing law to design, administer, and enforce the plan. This section of the paper provides an overview of authorities for freely allocating allowances to EGUs and non-emitters, auctioning allowances, and including new sources in the program. While regulators may not have specific statutory authority to design these aspects of a state plan, they may be able to rely on broad organic authority to perform these functions. This section is not intended to draw legal conclusions about any particular state, but where possible, it provides examples of how state regulators have applied their authority to comply with other Clean Air Act rules.

A. Allocating Emission Allowances to EGUs and Non-Emitters

Regulators in many states have already designed emission allowance allocations to EGUs under another Clean Air Act rule promulgated under Section 111(d). State regulators would be using that legal authority to allocate Clean Power Plan allowances. In addition, regulators in several states subject to EPA NO_x abatement rules have used their general rulemaking authority to award emission allowances to renewable energy and energy efficiency providers. Regulators could rely on the same authority to award Clean Power Plan allowances to non-emitters.

In 2005, EPA established a national mercury emission allowance trading program for coal-fired EGUs, the Clean Air Mercury Rule (CAMR). EPA’s rule invited states to submit their own compliance plans, join a national cap-and-trade program with EPA’s default allowance allocation scheme, or join the national cap-and-trade program but submit a their own allowance allocation scheme. Many states chose to customize their allowance allocations. State regulators designed these allowance allocation plans under their general rulemaking authority.

^h Several organizations already track production from renewable generators and award Renewable Energy Certificates (RECs). These organizations are well-positioned to provide the functions required for distributing the renewable energy set-aside, though they may need to modify their procedures to comport with EPA’s requirements. See Ari Peskoe, Harvard Environmental Policy Initiative, *Emission Rate Credits in the Clean Power Plan*, at p. 5, available at: <http://environment.law.harvard.edu/wp-content/uploads/2015/08/Emission-Rate-Credits-in-the-Clean-Power-Plan.pdf>.

As examples, Arizona, Florida, Georgia, Indiana, Missouri, Nevada, and Ohio all opted to join the national trading program and to develop their own allowance allocation schemes.^{i,29} None of these states passed special legislation authorizing state regulators to implement CAMR. Although CAMR never went into effect because the D.C. Circuit Court of Appeals overturned it for procedural reasons,³⁰ state regulators' actions under that rule are nonetheless relevant. Both rules regulate EGUs under Clean Air Act section 111(d) and provide states with the option of joining a cap-and-trade program. State regulators that designed customized allowance allocation schemes under CAMR could rely on the same legal authority to authorize allocations of Clean Power Plan allowances.

Regulators in several states have acted without any specific statutory mandate to create allowance allocation programs for non-emitters, too. As examples, in response to EPA's NOx SIP Call, regulators in Indiana, Massachusetts, New Jersey, and Ohio designed programs to award NOx allowances to renewable energy and energy efficiency providers.³¹ They set project eligibility guidelines, criteria for converting energy generation or savings into NOx allowances, and documentation and reporting requirements.³² While EPA "encourage[d]" states to give allowances to non-emitters and suggested a state could allocate a portion of its NOx allowance budget to renewable energy and energy efficiency projects, EPA's rule did not require this.³³ Regulators were acting on state authority when establishing these programs.

At least three additional states (Michigan, Missouri, and Pennsylvania) offered allowances for renewable energy and energy efficiency in compliance plans for CAIR, another NOx emission program.³⁴ Again, in each state, regulators acted pursuant to their general rulemaking authority.

In the Clean Power Plan, EPA is not requiring that states award allowances to non-emitting entities. However, as discussed in Section I.C, providing allowances to renewable energy providers is a presumptively approvable method for preventing emissions leakage to new sources.

No one appears to have challenged the authority of state regulators to allocate CAMR allowances or provide NOx allowances to non-emitting entities; we found no court decisions to guide state regulators in this area. However, the examples in this section demonstrate that in the recent past, regulators have used their existing general authority to allocate emission allowances for Clean Air Act rules. Although these examples do not carry the weight of a judicial opinion, each CAMR plan included a statement that regulators had sufficient legal authority to carry out the plan,³⁵ and in at least one plan the state's attorney general provided his opinion that the environmental regulators had sufficient authority to carry out all aspects of the plan.³⁶

B. Conducting Allowance Auctions and Investing the Proceeds

Ten states — nine RGGI participants and California — currently conduct auctions for CO₂ emission allowances and spend the proceeds primarily on programs that lower emissions.³⁷ Examining their legal authorities is a useful starting point for a discussion on auction authority.

State Experience with Allowance Auctions

Six of the nine RGGI participating states (and New Jersey, a former participant) passed legislation that specifically authorizes regulators to conduct allowance auctions.³⁸ Two other states (Maryland and Vermont)

ⁱ Many states chose not to participate in the national CAMR cap-and-trade program and instead promulgated regulations that established emission limits that were at least as stringent as CAMR. Some states participated in the national trading program without modifying EPA's allowance allocations. Other states, in addition to those listed here, modified EPA's allocation scheme without pointing to CAMR-specific legislative authority.

passed legislation that does not include the world ‘auction’ but does contemplate revenue from allowance sales.³⁹ New York is the only RGGI participating state that did not pass enabling legislation. While two state residents challenged the New York Department of Environmental Conservation’s regulations implementing RGGI because, among other reasons, they were not authorized by the state Legislature, the suit was dismissed for procedural reasons.⁴⁰

In California, state law passed in 2006 (AB32) authorizes regulators to use a “market-based compliance mechanism” to reduce greenhouse gas emissions.⁴¹ Industry groups sued state regulators in 2012, arguing that while legislation authorized the creation of a trading program, it did not allow regulators to auction allowances. The trial court disagreed, finding that the statute’s instructions to “design [] regulations, including distribution of emissions allowances . . .”⁴² were sufficient. Under California law, regulators may “fill up the details” of a statute they are designated to implement. The court concluded that regulators’ choice to auction allowances was consistent with “the text and structure” of the statute.⁴³ The decision is on appeal.

Virginia was the only state that auctioned NOx allowances for the SIP Call. The state conducted only one auction, for approximately eight percent of allowances available during a two-year period.⁴⁴ A 2002 bill specifically authorized environmental regulators to conduct auctions.⁴⁵

In summary, most states that have auctioned emission allowances did so under specific legislative authorizations. While regulators in Maryland, Vermont, and California do not have specific authorizations, statutes in Maryland and Vermont contemplate revenue from allowances, which suggested auctions, while California law authorized allowance distribution. New York is the only state to auction allowances under general rulemaking authority. So far, challenges to California and New York auctions have been unsuccessful, and there has not been any litigation in other states.

For states interested in auctioning Clean Power Plan allowances under existing state law, there are three relevant questions: 1) do regulators have authority to conduct an auction? 2) May regulators allocate the proceeds to emission reduction programs or for other purposes? 3) Could auction revenue be construed as a tax that would require specific legislative authorization?

Conducting an Auction

On the first question, New York environmental regulators enacted RGGI under their general authorities to promulgate “regulations for preventing, controlling or prohibiting air pollution” and coordinate air pollution control with other states.⁴⁶ The auctions are conducted by the state’s Energy Research and Development Authority (NYSERDA). Its statutory authority allows it to “accept any gifts or grants or loans” from other state agencies, which enables it to accept allowances issued by environmental regulators, and to “execute all instruments necessary or convenient for the exercise of its corporate powers.” NYSERDA relied on these authorizations, combined with its general authority and purpose of advancing new energy technologies, to auction CO₂ allowances.⁴⁷

Other states that do not have specific authorizations to conduct auctions could look to analogous provisions in existing law. Many state legislatures have used similar language to confer rulemaking powers on environmental regulators. While NYSERDA is unique, many states have energy offices or similar agencies that direct funds to energy efficiency or renewable energy programs. Authority granted to public utility commissions could also be relevant, particularly in states where EGUs are owned by regulated utilities.

Allocating Auction Proceeds

On the second question, regulators must decide what to do with revenues resulting from an auction. Except New York, all RGGI states passed legislation to direct auction revenues to specific funds, programs, or purposes.⁴⁸ California law specifies criteria for investments of auction proceeds, directs state agencies to develop three-year investment plans, and provides that the Legislature will appropriate money consistent with the plans.⁴⁹ The Virginia Legislature directed proceeds from the NOx allowance auction into the state's general fund.

Even in the absence of specific legislative direction, state regulators may have authority to allocate revenue into programs that are consistent with their mission. For instance, NYSERDA had preexisting broad authority to invest and spend money in ways that advance its statutory purpose of developing advanced energy technologies.⁵⁰

Many states have funds that are administered by state agencies or other entities and used to finance energy efficiency programs, renewable energy projects, and other initiatives that reduce emissions from EGUs. Regulators may be able to direct auction revenues to these existing vehicles and use established procedures for evaluating funding applications and overseeing grants. Approximately thirty states have public benefit funds or similar vehicles, typically funded by utility ratepayers and overseen by public utility commissions.⁵¹ Most states also have revolving loan funds that assist in financing energy efficiency and/or renewable energy projects.⁵² In addition, several states have established other vehicles for investing in efficiency, renewables, and other energy technologies.⁵³ While the statutes creating these funds often identify funding sources, they typically do not preclude regulators from depositing funds from other sources.

Alternatively, states may be able to adapt the mechanisms they used for accepting funds distributed through the 2009 American Reinvestment and Recovery Act (also known as the Stimulus Bill). In many states, energy offices or other state authorities distributed "stimulus" funds for energy efficiency programs that operated alongside utility-run efficiency programs overseen by state public utility commissions.⁵⁴ Many of these agencies that are authorized to accept federal funds may also accept funds from other sources, and therefore may be able to administer auction revenue.⁵⁵ Yet another option is for regulators to establish a new fund for auction revenue. At least one state court has upheld the creation of funds by state utility regulators when that fund was created for a purpose that was consistent with legislative goals.⁵⁶

Distinguishing Auction Revenue from a Tax

The third legal question related to auctions is whether they could be construed under state law as a "tax," which could necessitate specific legislative authorization. In California, opponents of the auction argued that it amounted to a tax and was therefore illegal because the state constitution requires that two-thirds of the legislature vote in favor of any tax. Less than two-thirds of the legislature approved AB32.

At the trial court, California prevailed. The court concluded that, on balance, the allowance price was more like a regulatory fee than a tax.⁵⁷ Furthermore, in its analysis of whether or not the fee was valid under state law, the court concluded that the fee's primary purpose was as to further the regulatory goal of

¹ For example, NYSERDA administers the state's renewable portfolio standard by conducting a request-for-proposals for renewable energy credits (RECs) and spending funds collected by utilities to procure an amount of RECs each year to meet a target set by the state's utility regulator.

lowering emissions,^k and that the amount of the fee does not exceed the costs of the regulatory activities it supports. While typical regulatory fees merely defray the costs of regulation, the court found that this fee (auction price) supports programs that “further the [law’s] emissions reduction goals.” In that sense, the allowance price did not exceed the cost of the regulatory activities that it supports.

The distinction between a tax and a fee is broadly consequential. Approximately fifteen other states require that new taxes be approved by a supermajority of the legislature.⁵⁸ The scope of these requirements varies, and in some states the supermajority requirement could not possibly apply to an allowance auction. As examples, Florida law requires a supermajority only to increase corporate taxes, and in Michigan only a property tax increase requires a supermajority.⁵⁹ Even in states without a supermajority requirement, the tax/fee distinction may be employed to argue that an auction conducted without explicit legislative authorization amounts to an unconstitutional tax, either because only the Legislature may mandate a tax or because the power to tax is beyond the scope of an agency’s authority.⁶⁰ The distinction could also inform whether municipal, cooperative, or other tax-exempt entities can be required to purchase allowances.⁶¹

While not over, the California case suggests that states can take steps to lower their litigation risk in the face of this type of challenge. The exact legal distinctions between a tax and a fee will vary by state; however, state courts generally evaluate 1) whether the purpose is to raise revenue or achieve a regulatory goal and 2) the relationship between the amount collected and the cost of the regulation.⁶² Given these factors, regulators implementing an auction may be on more solid legal ground if they spend the revenue on programs that reduce emissions, rather than on rate relief or for other purposes.

Alternatively, implementing a consignment auction could eliminate the need to allocate auction revenue and any ambiguity about whether the auction could be construed as a tax. As mentioned in Part I.B, under a consignment auction, entities that are freely allocated allowances offer those allowances into an auction and receive a pro rata share of the auction revenue. These entities may also bid on allowances in the same auction. The auction could be administered by a third-party, which would collect and redistribute all of the auction revenue. Under this scenario, because the state neither runs the auction nor touches the funds, the only legal issue is whether regulators can establish auction rules and designate a third party to run it.

In California, regulators allow any entity to offer allowances into each allowance auction and require distribution utilities to consign to auction all freely allocated allowances.⁶³ As previously discussed, AB32 provides regulators with authority to design allowance distribution regulations, but does not specifically address distributions to electric utilities.

For other states interested in consignment auctions, one plausible path forward is inviting all allowance holders to offer allowances into a voluntary auction. A voluntary auction would be consistent with other voluntary programs, such as allowance allocations for energy efficiency and renewable energy, that regulators have created for Clean Air Act rules. Like a voluntary consignment auction, these programs advanced the rules’ pollution reduction goals and aimed to improve their efficiency. State regulators

^k Regulators argued that auctioning allowances helps the program achieve regulatory goals by: (i) increasing the cost of compliance and thereby stimulating early action to reduce emissions; (ii) equitably, transparently, and efficiently distributing allowances to new and established businesses; (iii) creating a transparent pricing signal to facilitate trading of allowances and minimize the risk of market manipulation; and, in the case of sales from the containment reserve, (iv) moderating the effect of unexpectedly short supply or high prices.

implemented these incentive programs under their general authority. Public utility regulators may be able to devise cost recovery mechanisms that incentivize utilities to consign allowances to the auction.⁶⁴

C. Including New Sources in the Program

Under the Clean Power Plan, a “new” EGU is one that commences construction after January 8, 2014. Once compliance begins in 2022, new EGUs could include units that have operated for years, as well as EGUs that will begin producing during the compliance period. To bring a new EGU into a mass-based trading program, state regulators would write the obligation to hold allowances into the EGU’s permit.

In general, state environmental regulators issue Title V operating permits that encapsulate all of an EGU’s air emission limitations. For an EGU that has not yet begun operation, regulators can include the obligation to hold Clean Power Plan allowances in its initial Title V permit. For new EGUs that are already operating, regulators can amend permits by issuing a regulation that applies to particular types of sources or initiate proceedings to revise each permit individually.⁶⁵ For EGUs that are not regulated under the Acid Rain Program, regulators can issue a general permit that amends permits of all EGUs in that category.⁶⁶

Approximately twenty state legislatures have prohibited environmental regulators from adopting specified rules, regulations, or standards that are more stringent than federal law requires.⁶⁷ Some have argued that regulators in these states may be prohibited from requiring new plants to hold emission allowances because that requirement is more stringent than what EPA requires under the Clean Power Plan.

As a threshold matter, the Clean Power Plan requires states to mitigate leakage to new sources. Including new sources in an emission budget trading program is a method for complying with this requirement, and is therefore entirely consistent with, and not more stringent than, EPA’s rule.

Even assuming a court might find the requirement “more stringent,” the requirement may fall outside the scope of a particular “no more stringent than” statute. Some state prohibitions on more stringent environmental regulations explicitly apply only to rules not relevant to the Clean Power Plan. For instance, Colorado’s prohibition applies to “indirect air pollution sources,” such as construction projects, while Pennsylvania’s prohibition applies to hazardous air pollutants that are regulated under Clean Air Act section 112.⁶⁸ Other states, such as Florida, Ohio, and Oklahoma, allow more stringent regulations if regulators provide analysis to justify adopting the more stringent requirements.⁶⁹ North Dakota and West Virginia allow for more stringent regulations if necessary to protect the environment or public health.⁷⁰

Still other states’ prohibitions apply to a “standard, emission limitation or control technology,” “greenhouse gas emission regulations,” “standards of performance,” or a “rule.”⁷¹ There is no case law on these provisions. These and similar prohibitions may apply only to agency rulemakings and not to unit-specific permits proceedings or to general permits.

Endnotes

¹ Richard Schmalensee and Robert Stavins, The Harvard Project on Climate Agreements, “Lessons Learned from Three Decades of Experience with Cap-and-Trade,” Nov. 2015, available at: http://belfercenter.ksg.harvard.edu/files/dp80_schmalensee-stavins.pdf (hereinafter, “Lessons Learned”).

² Lessons Learned, at 5–6.

³ Robert W. Hahn and Robert N. Stavins, “The Effect of Allowance Allocations on Cap-and-Trade System Performance,” 54 JOURNAL OF LAW AND ECONOMICS S267, Nov. 2011 (Hereinafter, “Effect of Allowance Allocations”); Dallas Burtraw, David McLaughlin, and Sarah Jo Szamelan, Resources for the Future, “California’s New Gold: A Primer on the Use of Allowance Value Created under the CO₂ Cap-and-Trade Program,” May 2012, available at: <http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-12-23.pdf>.

⁴ Dallas Burtraw, Resources for the Future, “Economic and Administrative Considerations for the Initial Distribution of Emissions Allowances,” Oct. 2015, at slide 6, available at:

<http://www.nga.org/files/live/sites/NGA/files/pdf/2015/1510EETMidcourseBurtraw.pdf>.

⁵ *Id.* at 14.

⁶ *Id.*; Karen Palmer and Anthony Paul, Resources for the Future, “A Primer on Comprehensive Policy Options for States to Comply with the Clean Power Plan,” Apr. 2015, p. 11 n. 10, available at:

<http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-15-15.pdf> (Hereinafter, “State Primer”).

⁷ State Primer, at 11.

⁸ Lessons Learned, at 5.

⁹ Elizabeth M. Bailey, Massachusetts Institute of Technology, “Allowance Trading Activity and State Regulatory Rulings: Evidence from the U.S. Acid Rain Program,” at 33, available at:

<http://web.mit.edu/ceepr/www/publications/workingpapers/98005.pdf> (Hereinafter, “Allowance Trading and State Regulatory Rulings”); see also Dallas Burtraw and Ron Lile, “State-Level Policies and Regulatory Guidance for Compliance in the Early Years of the SO₂ Emission Allowance Trading Program,” (May 1998), Appendix A, available at:

<http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-98-35.pdf> (finding that in 13 states, regulators passed all costs and expenses to consumers, while regulators in two states provided that costs and savings be shared between the utility and ratepayers, and three states made these determinations on a case-by-case basis).

¹⁰ State Primer, at 10 (explaining that states can distribute allowance value to three constituencies: electricity producers, electricity consumers, and the state).

¹¹ Brief of Dallas Burtraw, Lawrence Goulder, and other economists in support of respondents as *amicus curiae*, Court of Appeal of the State of California, Third Appellate District, Cases Nos. C075930 and C075954, May 15, 2015, at p. 15, available at: http://www.edf.org/sites/default/files/content/economistamicusbrief5_15.pdf (citing Hahn, “Market Power and Transferable Property Rights,” 99 THE Q. J. OF ECONOMICS 753, 753-54 (1984); Goeree et al., “An Experimental Study of Auction Versus Grandfathering to Assign Pollution Permits,” 8 J. OF THE EUROPEAN ECONOMIC ASSN. 514 (2009)).

¹² *Id.* at 10–14.

¹³ Dallas Burtraw, Joshua Linn, Karen Palmer, Anthony Paul, Kristen McCormack, and Hang Yin, Resources for the Future, “Approaches to Address Potential CO₂ Emissions Leakage to New Sources under the Clean Power Plan,” Jan. 2016, submitted to EPA as comments on the proposed Federal Plan and Model Trading Rule in Docket EPA-HQ-OAR-2015-0199 (Hereinafter, “RFF Comments”). However, a consignment auction may be less efficient than a standard auction in part because consigning firms have an incentive to overstate to regulators their need for allowances in order to inflate their initial allocations. Noah C. Dormady and Paul J. Healy, “Pollution Permit Consignment Auctions: Theory and Experiments,” Dec. 11, 2014, available at: <https://www.aeaweb.org/aea/2015conference/program/retrieve.php?pdfid=432>.

¹⁴ *Id.*

¹⁵ 42 U.S.C. §§ 7651c, 7651d, 7651e; see also Paul L. Joskow and Richard Schmalensee, Massachusetts Institute of Technology, “The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program,” at p. 18–26 (Jan. 1997), available at: <http://web.mit.edu/ceepr/www/publications/workingpapers/96003ud.pdf> (detailing allowance allocation methodologies).

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¹⁷ 42 U.S.C. §§ 7651o (requiring EPA to withhold 2.8% of allowances and establishing distribution methods for those allowances); Timothy N. Cason, “Seller Incentive Properties of EPA’s Emission Trading Auction,” 25 J. OF ENV. ECON. AND MGMT. 177, 180 (1993) (detailing auction rules).

¹⁸ RFF Comments, at 53.

¹⁹ 42 U.S.C. §§ 7651c(f).



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- ²⁶ Effect of Allowance Allocations, at S276.
- ²⁷ EPI Comments, at p.
- ²⁸ Sarah Adair and David Hoppock, Duke University Nicholas Institute, “New Sources and the Clean Power Plan: Considerations for Mass-Based Plans,” Dec. 2015, *available at*: https://nicholasinstitute.duke.edu/sites/default/files/publications/ni_pb_15-06_0.pdf.
- ²⁹ 12 Ariz. Admin. Reg. 4701 (Dec. 22, 2006) (explaining Arizona’s CAMR plan, citing ARIZ. REV. STAT. §§ 49-104, -422B, -425 as providing authority, and including the implementing regulations); FLA. ADMIN. CODE ANN. R. 62-96.480 Implementation of Federal Clean Air Mercury Rule (Sep. 6, 2006; repealed), *available at*: https://www.flrules.org/Gateway/View_notice.asp?id=2222966 (replacing EPA’s allowance allocation scheme and citing FLA. STAT. §§ 403.061, .087 as providing authority); State of Florida, Department of Environmental Protection, Order Allocating Mercury Allowances (Nov. 9, 2006) (on file with author); State of Florida, Department of Environmental Protection, Memo from Mike Sole (Dep. Sec.) to Environmental Regulation Commission (Jun. 21, 2006) (on file with author) (explaining proposal for more stringent standard, which was not adopted by FL DEP, and explaining statutory authority); M. James Grode, “Georgia’s New Clean Air Mercury Rule,” State Bar of Georgia Environmental Law Section, Fall 2007, *available at*: http://www.gabar.org/committeesprogramssections/sections/environmentallaw/upload/enviro_n_fall07news.pdf (explaining Georgia’s CAMR rule); Indiana Register Document 20080130-IR-326050116FRA (Jan. 30, 2008) (*available at*: <http://www.in.gov/legislative/iac/20080130-IR-326050116FRA.xml.pdf>) (replacing EPA’s allocations and citing IND. CODE. §§ 13-14-8, 13-17-3-4, 13-17-3-11 as authority); MO. CODE REGS. ANN. tit. 10, § 10-6.368 (repealed) (replacing EPA’s allocation scheme and citing MO. REV. STAT. § 643.050 as authority); State of Nevada, Division of Environmental Protection, Nevada Clean Air Mercury State Plan (Nov. 2006), *available in* EPA Docket No. EPA-R09-OAR-2007-1150-0002 (describing the state’s allocation methodology, citing to general rulemaking powers as authority, and stating that the state attorney general’s opinion is that regulators have sufficient legal authority to implement and enforce the plan from existing state law); Ohio Admin. Code §§ 3745-108 (citing OHIO REV. CODE ANN. § 3704.03(E) as authority).
- ³⁰ *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008).
- ³¹ 326 IND. ADMIN. CODE §§ 10-4-1 et seq. (citing IND. CODE §§ 13-14-8, 13-17-3-4, 13-17-3-11 as statutory authority); 32 N.J. Reg. 3119(a) (Jul. 31, 2000) (adopting N.J. ADMIN. CODE §§ 7:27-31 and citing N.J. STAT. ANN. §§ 13:1B-3 and 26:2C-1 et seq. as authority); OHIO ADMIN. CODE § 3745-14-01 (pointing to OHIO REV. CODE § 3704.03(E) as statutory authority).
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- ³⁴ MO. CODE REGS. ANN. tit. § 10 10-6.362 (Clean Air Interstate Rule Annual NO_x Trading Program); proposed rule in 31 MO. REG. 1769 (citing section MO. REV. STAT. § 643.050 as statutory authority); 72 Fed. Reg. 52038, 52040 (proposing to accept Michigan’s CAIR implementation plan and noting the plan allocates NO_x allowances to renewable energy providers); MICH. ADMIN. CODE r.336.1821-.1822 (relevant rules); 2007 Mich. Reg. 12 (Jul. 15, 2007) (citing MICH. COMP. LAW §§ 324.5503 and 324.5512 as statutory authority); PA. CODE §§ 145.212 and 145.222.
- ³⁵ 40 CFR 60.26 requires that state plans submitted under Clean Air Act § 111(d) show that the state has legal authority to carry out its plan.
- ³⁶ State of Nevada, Division of Environmental Protection, Nevada Clean Air Mercury State Plan (Nov. 2006), Appendix B, *available in* EPA Docket No. EPA-R09-OAR-2007-1150-0002.



³⁷ Regional Greenhouse Gas Initiative, Inc., Investment of RGGI Proceeds through 2013 (Apr. 2015), *available at*: <http://rggi.org/docs/ProceedsReport/Investment-RGGI-Proceeds-Through-2013.pdf>; California Department of Finance, California State Budget, 2014–2015, Cap and Trade Expenditure Plan, *available at*: <http://www.cbudget.ca.gov/2014-15/pdf/Enacted/BudgetSummary/CapandTradeExpenditurePlan.pdf>.

³⁸ CONN. GEN. STAT. § 22a-200c(b); DEL. CODE ANN. tit. 7 § 6045; ME. REV. STAT. tit. 38 § 580-B(4); MASS. GEN. L. c. 21A, § 22(c)(1); N.H. REV. STAT. ANN. § 125-O:8, 21; N.J. STAT. ANN. § 26:2C-47; R.I. GEN. LAWS. §23-82-5(c).

³⁹ VT. STAT. ANN. Ch. 30 §255(c) (tasking the state’s utility regulator with allocating allowances to a trustee who must act to “provide the maximum long-term benefit to Vermont consumers” per the statute’s guidelines); MD. CODE ANN. § 2-1002(g)(5) (authorizing the state’s participation in RGGI and directing proceeds from allowance sales to a specific state fund but not providing regulators with any specific auction authority). In Vermont, a PSB order instructed the trustee to conduct an auction. Vermont Public Service Board, Order re Implementation of the Regional Greenhouse Gas Initiative Auction Procedures and Disbursement of Auction Proceeds. (Jul. 18, 2008), *available at*: http://psb.vermont.gov/sites/psb/files/projects/RGGI/rggi_order_2008.pdf.

⁴⁰ *Thrun v. Cuomo, et al.*, 976 N.Y.S. 2d 320 (N.Y.S. 2013). Plaintiffs’ complaint is available at: <https://cei.org/sites/default/files/RGGI%20complaint.pdf>.

⁴¹ Cal. Health & Saf. Code § 38561(b).

⁴² Cal. Health & Saf. Code § 38562(b)(1).

⁴³ California Chamber of Commerce, et al. v. California Air Resources Board, et al., Superior Court of California, County of Sacramento, Case No. 34-2012-80001313 (Aug. 28, 2013), *available at*: http://www.arb.ca.gov/html/decision_111413.pdf.

⁴⁴ David Porter, Stephen Rassenti, William Shobe, Vernon Smith, and Abel Winn, “The Design, Testing, and Implementation of Virginia’s NOx Allowance Auction,” 69 J. OF ECON. BEHAVIOR & ORGANIZATION 190 (2009).

⁴⁵ 2002 Va. Acts 899.

⁴⁶ Department of Environmental Conservation, Notice of Adoption: CO2 Budget Trading Program. New York State Register, Volume XXXV, Issue 51, N.Y. St. Reg. ENV-28-13-00025-A (Dec. 18, 2013):

The Department has the power to promulgate “regulations for preventing, controlling or prohibiting air pollution, [including] controlling air contamination.” Environmental Conservation Law (ECL) section 19-0301(1)(a). Furthermore, in any such regulations, the Department may prescribe “the extent to which air contaminants may be emitted to the air by any air contamination source.” ECL section 19-0301(1)(b)(2). CO₂ is a gas that meets the definition of “air contaminant.” ECL section 19-0107(2). As described in the Regulatory Impact Statement (RIS), CO₂ causes “air pollution” as defined in the ECL, because it is present in the atmosphere in quantities that contribute to climate change, which is injurious to life and property in the State. ECL section 19-0107(3). Finally, CO₂ budget sources subject to the Program are an “air contamination source” as defined in the ECL, because such power plants emit the air contaminant CO₂ into the atmosphere. ECL section 19-0107(5). Moreover, it is the policy of the State “to require the use of all available practical and reasonable methods to prevent and control air pollution in the [S]tate.” ECL section 19-0103. Furthermore, the Legislature has also declared a policy “to improve and coordinate the environmental plans, functions, powers and programs of the state, in cooperation with. . . regions.” ECL section 1-0101. Consistent with this policy, the Legislature has specifically authorized the Department to cooperate with other states in its promulgation of rules and regulations to prevent and control air pollution. See ECL sections 3-0301 and 19-0301. Finally, in adopting regulations regarding the prevention and control of air pollution, the Department follows the procedures set forth in ECL section 19-0303, including that any such regulation “may differ in its terms and provisions as between particular types and conditions of air pollution or of air contamination [and] particular air contamination sources.” ECL section 19-0303(2). These provisions make clear that the Program, including the Department’s adoption of revisions to the Program, is consistent with the Department’s existing statutory authority.

⁴⁷ New York State Energy Research and Development Authority, Notice of Adoption: Create the CO2 Allowance Auction Program. New York State Register, Volume XXX, Issue 41, N.Y. St. Reg. ERD-43-07-00027-A (Oct. 8, 2008) (citing Public Authorities Law §§ 1851, 1854, 1855).

⁴⁸ CONN. GEN. STAT. § 22a-200c(b); DEL. CODE ANN. tit. 7 § 6046; ME. REV. STAT. tit. 25-A § 10109; MD Code, Environment, § 2-1002(g)(5); MASS. GEN. L. c. 10, § 35II; N.H. REV. STAT. ANN. § 125-O:23; N.J. STAT. ANN. § 26:2C-50–53; R.I. GEN. LAWS § 23-82-6; 30 VT. STAT. ANN. § 255(c)(2)(C)(F).

⁴⁹ State of California, Cap-and-Trade Auction Proceeds Investment Plan: Fiscal Years 2013-14 through 2015-16, *available at*: http://www.arb.ca.gov/cc/capandtrade/auctionproceeds/final_investment_plan.pdf.

⁵⁰ N.Y. PUB. AUTH. LAW §§ 1850-a, 1854, 1855.

⁵¹ See U.S. Department of Energy, “Public Benefit Funds: Increasing Renewable Energy & Industrial Energy Efficiency Opportunities” Mar. 2010, p. 11–14, *available at*:



<http://www1.eere.energy.gov/manufacturing/states/pdfs/publicbenefitfunds.pdf>; North Carolina Clean Energy Technology Center, Database of State Renewable Energy Incentives, available at: <http://programs.dsircusa.org/system/program> (showing thirty-three states have public benefit funds).

⁵² See Latham and Watkins LLP, “Incentives for Energy Efficiency and Renewable Energy Generation; State Revolving Loan Programs,” 2010, available at: <http://www.cesa.org/assets/Uploads/Resources-post-8-16/staterevolvingloanprograms.pdf>; National Association of State Energy Officials (NASEO), State Energy Financing Programs, available at: <http://www.naseo.org/state-energy-financing-programs>.

⁵³ As examples, Ohio’s Advanced Energy Fund supports energy efficiency and renewable energy projects. OHIO REV. CODE § 4928.61. Oklahoma law authorizes counties to set up authorities that may finance energy efficiency and distributed generation. OKLA. STAT. tit. 19 § 460.2, .4. Several Pennsylvania utilities have established Sustainable Energy Funds that support the development of alternative energy resources. 73 PA. CONS. STAT. ANN. § 1648.3(g). The the Virginia Solar Energy Development Fund has authority to accept money “from any source.” VA. CODE ANN. § 67-1501, 1505.

⁵⁴ Charles A. Goldman, Elizabeth Stuart, Ian Hoffman, Merrian C. Fuller and Megan A. Billingsley, Ernest Orlando Lawrence Berkeley National Laboratory, Interactions Between Energy Efficiency Programs funded under the Recovery Act and Utility Customer-Funded Energy Efficiency Programs: Technical Appendix (Mar. 2011), available at: <https://emp.lbl.gov/sites/all/files/lbnl-4322e-app.pdf> (describing how twelve states used ARRA funding and examining interactions with utility-funded energy efficiency programs).

⁵⁵ See, e.g., ARIZ. REV. STAT. ANN. §41-1504 B. (allowing the Department of Commerce to accept gifts, grants, or loans from the federal government, state agencies, and other sources); KY. REV. STAT. ANN. § 224.10-100(12) (providing the Energy and Environment Cabinet with authority to accept and administer funds from public and private agencies, including the federal government); MO. REV. STAT. § 640.680 (requiring Department of Natural Resources to follow certain procedures when it receives money for energy conservation projects from “other sources”); N.C. GEN. STAT. §143B-431(d) (allowing Department of Commerce to accept grants from the federal government and from “from any foundation, corporation, association, or individual”); VA. CODE ANN. § 45.1-161.3 (providing the Department of Mines, Minerals, and Energy with authority to accept funds from the federal government and from any other source).

⁵⁶ Nextel West Corp. v. Indiana Regulatory Com’n, 831 N.E.2d 134 (Ind.App.Ct. 2005) (upholding the creation of a Universal Service Fund because it was consistent with the Regulatory Commission’s legislative mandate to ensure that all customers have service even though there was no specific legislative authorization to create the fund).

⁵⁷ California Chamber of Commerce, et al. v. California Air Resources Board, et al., Superior Court of California, County of Sacramento, Case No. 34-2012-80001313 (Aug. 28, 2013), available at: http://www.arb.ca.gov/html/decision_111413.pdf.

⁵⁸ Max Minzner, Entrenching Interests: State Supermajority Requirements to Raise Taxes. 14 AKRON TAX J. 43, 56 (1999); Tax Policy Center, States with Legislative Supermajority Requirements to Increase Taxes, available at: http://www.taxpolicycenter.org/taxfacts/Content/PDF/state_supermajority.pdf. In addition, Wisconsin law requires a supermajority for increases in income or franchise taxes (Wis. Stat. §13.085) while Washington’s legislative supermajority requirement has been overturned by the Supreme Court of Washington (League of Educ. Voters v. State, 295 P.3d 743 (Wash. 2013)).

⁵⁹ Tax Policy Center, States with Legislative Supermajority Requirements to Increase Taxes, available at: http://www.taxpolicycenter.org/taxfacts/Content/PDF/state_supermajority.pdf.

⁶⁰ See Citizens’ Utility Ratepayer Bd. v. State Corp. Com’n of State of Kan., 956 P.2d 685, 708 (Kan. 1998) (holding that when the legislature delegated the power to administer the Universal Service Fund it provided sufficient standards to guide the Corporation Commission and that the surcharge is not a tax); Schumacher v. Johanns, 722 N.W.2d 37, 47 (Neb. 2006) (stating that under the state’s Constitution only the Legislature may impose a tax but holding that the Universal Service Fund was not a tax because its primary purpose was “not to generate revenue for governmental purposes, but, rather, to regulate the telecommunications industry through a rebalancing and restructuring of rates”); State ex. rel. Utilities Com’n v. Carolina Utility Customers Ass’n, 446 S.E. 332 (N.C. 1994) (holding that a statutorily created fund to facilitate expansion of natural gas service was not a tax because utility customers had no property interest in the money used to supply the fund); Voicestream GSM I Operating Co., LLC v. Louisiana Pub. Serv. Com’n, 943 So.2d 349, 361 (La. 2006) (holding that mandatory contributions to the Universal Service Fund are not a tax because the fees are not intended to raise revenue and are funding the costs of a regulatory program); Hawaii Insurance Council v. Lingle, 201 P.3d 51, 59 (Haw. 2008) (quoting the state Constitution on the state taxing power and discussing the difference between a tax and a fee); Emerson College v. City of Boston, 462 N.E.2d 1098, 1104 (Mass. 1984) (discussing the difference between a tax and fee and noting that fees are in exchange for a government service, are not charged to collect revenue, and are optional because the party paying the fee can choose not to use the service);

⁶¹ Valandra v. Viedt, 259 N.W.2d 510 (N.D. 1977) (holding that what the state argued was a fee was actually a tax and therefore the state may not collect it from residents of Indian reservations); Health Services Medical Corp. of Cent. New York, Inc. v. Chassin, 668 N.Y.S.2d 1006 (N.Y. Sup. Ct. 1998) (summarizing that charges exacted for revenue generation are generally taxes while fees are “enacted principally as an integral part of the regulation of an activity and to cover the cost of regulation,” and



holding that the state's surcharge for certain hospital services amounted to a tax, which the non-profit plaintiff was exempt from paying).

⁶² See, generally, cases cited in previous two footnotes; see also *San Juan Cellular Telephone Company, et al. v. Public Service Commission of Puerto Rico*, 967 F.2d 683 (1st Cir. 1992) ("Courts facing cases that lie near the middle of this [tax / fee] spectrum have tended (sometimes with minor differences reflecting the different statutes at issue) to emphasize the revenue's ultimate use, asking whether it provides a general benefit to the public, of a sort often financed by a general tax, or whether it provides more narrow benefits to regulated companies or defrays the agency's costs of regulation."); *Bolt v. City of Lansing*, 587 N.W.2d 264, 269 (Mich. 1998) ("Generally, a 'fee' is exchanged for a service rendered or benefit conferred, and some reasonable relationship exists between the amount of the fee and the value of the service or benefit. A 'tax,' on the other hand, is designed to raise revenue." (internal citations omitted)).

⁶³ Cal. Code Regs. tit. 17 §§ 95892, 95910.

⁶⁴ A PUC could allow utilities to retain some of the consignment auction revenue, while requiring that all revenue from other allowance sales flow to ratepayers. At least one state provided different regulatory treatment for sales of Acid Rain Program allowances depending on the source of revenue. Connecticut regulators allowed utilities to retain 15% of profits from sales of allocated allowances but to return all profits from sales of allowances through EPA auctions. Allowance Trading and State Regulatory Rulings, at 34.

⁶⁵ The Clean Air Mercury Rule required EGUs to file a request with state regulators for a Title V permit amendment. 70 Fed. Reg. 28,665 (May 18, 2005).

⁶⁶ 40 CFR 70.6(d).

⁶⁷ National Conference of State Legislatures, State Agency Authority to Adopt More Stringent Environmental Standards (Jun. 3, 2014), available at: <http://www.ncsl.org/research/environment-and-natural-resources/state-agency-authority-to-adopt-more-stringent-environmental-standards.aspx>; Andrew Hecht, "Obstacles to the Devolution of Environmental Protection: States' Self-Imposed Limitations on Rulemaking," 15 DUKE ENVTL. L. & POL'Y F. 105 (Fall 2004); Jerome M. Organ, "Limitations on State Agency Authority to Adopt Environmental Standards More Stringent than Federal Standards: Policy Considerations and Interpretive Problems," 54 MD. L. REV. 1373 (1995). While the National Conference of State Legislatures includes Utah, that state's law generally prohibits regulations that are "different" from corresponding federal regulations unless regulators "find[] that the different rule will provide reasonable added protections to public health or the environment of the state or a particular region of the state. In addition, Arizona passed a law that requires state environmental regulators to "ensure that state laws, rules, standards, permits, variances and orders are adopted and construed to be consistent with and no more stringent than the corresponding federal law that addresses the same subject matter." ARIZ. REV. STAT. § 49-104.

⁶⁸ COLO. REV. STAT § 25-7-114.2; 35 PA. STAT. § 4006.6.

⁶⁹ OHIO REV. CODE § 121.39 (requiring regulators to provide a "rationale" for a more stringent regulation); FLA. STAT. § 403.804(b) (requiring a "study conducted of the economic and environmental impact which sets forth the benefits and costs to the public" of more stringent regulations). 27A OKLA. STAT. § 1-1-206 (requiring regulators to determine the economic benefit and environmental impact of more stringent regulations).

⁷⁰ N.D. CENT CODE § 23-01-04.1; W. VA. CODE § 22-1-3a.

⁷¹ IDAHO CODE ANN. § 39-118B; WYO. STAT. ANN. § 35-11-213(f); N.M. STAT. § 74-2-5; S.D. CODIFIED LAWS § 1-40-4.1.