Marketable Permits

Committee on Regulation

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1 Marketable permits are government-created licenses\(^1\) or obligations for a specific level of a particular activity.\(^2\) While many kinds of permits can be transferred together with the sale of a business or underlying assets, marketable permits are distinguishable because they can be bought or sold independently of any real property or other interest. Categories of marketable permit programs include cap-and-trade, rate-based trading, and credit trading programs.

2 In cap-and-trade programs, regulators set an absolute limit on the total amount of activity that can take place (e.g., tons of pollutant, allowable fish catch, or number of airport landing slots). The agency then distributes permits; common practices include auctioning the permits or allocating permits based on past levels of activity. Not all permit auctions raise revenue for the government: a “zero-revenue auction” redistributes auction proceeds back to regulated entities. When auctions raise revenue for the government, they have occasionally been challenged as impermissible taxes. To reduce the chance that a permit auction is perceived by a court as an impermissible tax, agencies can emphasize the market management and distributional reasons for

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\(^2\) As there is no uniform definition of “marketable permits” across the literature, this recommendation adopts the definition as set forth by Jason Schwartz, Marketable Permits: Recommendations on Application and Management (March 15, 2017), available at https://www.acus.gov/sites/default/files/documents/marketable-permits-draft-report.pdf.
choosing auctions, such as avoiding windfalls and barriers to entry. After the initial allocation of permits, interested parties are generally free to further trade permits. Regulators may restrict the buying and selling of permits to regulated entities or may allow open access to brokers, speculators, market facilitators, and the general public. More open access can promote market liquidity and facilitate efficient price discovery.

A rate-based trading program may be similar in many respects to a cap-and-trade market, but instead of capping the total amount of a regulated activity, agencies limit the relative amount of activity per regulated entity. For example, a rate-based air pollution permit market may limit the amount of pollution power plants can emit per unit of electricity generated.

In credit trading systems, regulators set a relative goal (e.g., no net emissions increase or no net loss of wetlands) and then any covered entities seeking, for example, to increase emissions or develop over wetlands must purchase offsetting credits that are sold by third parties and verified by regulators. Credit systems can be combined with cap-and-trade or rate-based programs. For example, in a greenhouse gas cap-and-trade program, unregulated sources may be allowed to voluntarily reduce their emissions and sell verified credits on the market.

Evidence confirms that, in many regulatory applications, marketable permits allocate privileges and obligations more efficiently than traditional regulation by allowing the market to identify and prioritize the lowest-cost abatement opportunities or the highest value use of scarce resources. For example, the acid rain market reduced costs by as much as 90% versus alternatives without tradable permits, with savings estimated between $250 million and $1 billion annually. Marketable permit programs also likely incentivize innovation better than

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traditional regulation by allowing parties to come up with innovative solutions. For example, the trading and leasing of electromagnetic spectrum licenses has helped users develop novel arrangements, such as sharing channels and voluntarily accepting more interference than the Federal Communications Commission typically allowed in its direct licensing. Finally, marketable permits may reduce long-term administrative costs compared to traditional regulation. For example, the acid rain market famously achieved nearly 100% compliance with only about 100 EPA staff.

Many existing marketable permit programs have explicit statutory authority. Others have formed under implicit authority, which has sometimes been codified after the fact. Additionally, agencies have been directed in Executive Order 12,866 to assess the advantages of regulating through “economic incentives to encourage the desired behavior, such as user fees or marketable permits.”

 Marketable permits are a useful tool for agencies regulating a wide range of industries, but are not suitable for all applications. However, their usefulness in certain scenarios has prompted

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5 For example, because an air pollution cap-and-trade market puts a price on emissions but does not otherwise constrain compliance strategies, sources are free to experiment continually and develop new, unanticipated methods of low-cost abatement. And because unused permits can be sold for profit, sources can benefit the more reductions they make. By contrast, prescriptive standards frequently—and inefficiently—pick “winners” from among existing technologies: for example, regulating vehicle emissions by mandating use of certain biofuel technologies reduces the incentive to explore other, potentially better reduction opportunities, like new mass transit options. Jack Lienke & Jason Schwartz, Shifting Gears: A New Approach to Reducing Greenhouse Gas Emissions from the Transportation Section 5 (Policy Integrity Brief, 2014).


7 For an in depth look at a wide range of marketable permit programs and their authorizations, see Schwartz, supra note 2, at 7–13.

8 Executive Order 12,866, 58 Fed. Reg. 51,735 (Sept. 30, 1993). Other examples of regulatory tools drawing on economic incentives include fees, penalties, subsidies, changes in liability rules or property rights, and required bonds, insurance, or warranties. Office of Mgmt. & Budget, OMB Circular A-4 (Sept. 17, 2003).

9 Current applications of marketable permits span a broad swath of the regulatory landscape, from air pollution markets, 42 U.S.C. § 7503(c), to fishery catch share programs, National Oceanic and Atmospheric Administration Catch Share Policy, 75 Fed. Reg. 55305 (Sept. 10, 2010), to the licensing of the electromagnetic spectrum, Federal Communications Commission, Secondary Markets First Report and Order, 68 Fed. Reg. 66252 (Nov. 25, 2003). There are also marketable permit programs at the state and local level, including transferable development rights,
bipartisan support, with implementations of marketable permit programs during the administrations of Presidents Reagan, Bush (41), Clinton, Bush (43), and Obama. The recommendations that follow provide several considerations for when marketable permits are likely to be useful, features that can be included in the design of such programs to increase their efficacy, and guidelines for establishing and monitoring the market for permits to limit fraud and manipulation.

RECOMMENDATION

Establishment of Marketable Permitting Programs

1. Among the factors agencies should consider in adopting a marketable permitting program are whether:
   a. The marketable permit program is consistent with statutory language, the public policy goals of the regulation, and other relevant considerations.
   b. Agencies can clearly define the privileges or obligations to be assigned by the program and have the necessary information to set the level of regulated activity at carefully considered, deliberate levels.
   c. Agencies have sufficient resources to design and administer the program and are capable of reevaluating the appropriate target level of activity over time.
   d. There are informational challenges in discerning either compliance costs or the value of the permits to be allocated. This often occurs when the activity to be regulated is conducted by heterogeneous or small sources.
   e. The risk of unintended consequences from trading, such as the potential for highly localized problems, can be fairly and efficiently managed.
   f. Regulators are reasonably confident that a robust market is feasible. This requires interest and participation by regulated entities and requires them to have sufficient knowledge to make efficient decisions in the market.

liquor license markets, and taxi medallion auctions. This recommendation deals solely with marketable permits at the federal level.
g. There is sufficient variation across different permittees’ compliance costs or their individual valuation of the permits traded to encourage trading of permits, and the overall level of an activity matters more to regulators than the identity of the actors.

2. When an agency designs a marketable permitting program, the agency should be cognizant of the present and future resources that are required to develop and operate the program. In the case of marketable permits, the agency should consider that designing and implementing a marketable permitting program may require significant upfront costs but require fewer resources to administer once the program has been established.

3. Before establishing a marketable permit program, regulators should make sure there is sufficient legal authority to monitor permit markets for fraud, manipulation, and other abuses.

**Desired Features of Marketable Permitting Programs**

4. Agencies should establish clear expectations as to the longevity of marketable permits and the precise obligations or authorizations that they convey.

5. Agencies should consider using notice-and-comment rulemaking to establish marketable permit programs, in order to reduce uncertainty and inconsistent implementation. Where guidance or other means may be used to establish a marketable permit program, agencies should go through public notice-and-comment as a best practice.

6. When designing a marketable permitting program, agencies should consider whether their policy objective would be better served by capping the total level of activity (e.g., when a pollutant’s total emissions levels is what drives the environmental effects) or by limiting the rate of the activity (e.g., for a short-lived pollutant with highly localized effects, so that the rate of pollution from individual plants is what drives the environmental effects). During the design phase, agencies should create a mechanism for monitoring the level of activity and for subsequently adjusting the cap.

7. Agencies should consider allowing open access to the market so parties besides the regulated entities can buy and sell permits.
8. Agencies should consider instituting mechanisms for issuing additional permits or releasing reserved permits in case of emergencies that dramatically increase demand.

9. When making the initial allocation of permits, agencies should consider using auctions to prevent windfalls and barriers to entry for regulated parties, although some form of historical based allocations may be appropriate based on other factors. If auctions are not feasible, agencies should consider alternate allocation techniques, like setting aside permits for new entrants or using output-based allocations.¹⁰

**Oversight of Marketable Permitting Programs**

10. Federal agencies should provide clear guidance on trading policy to regional and state offices, when applicable. This may include providing training sessions to regional and state officials.

11. When designing a marketable permitting program, an agency should include a mechanism for oversight and establish clear criteria for verification to ensure that credits are not double-counted and constitute real offsets of the regulated activity. Depending on feasibility and efficiency, agencies should consider overseeing the program directly, making use of self-verification, or engaging third parties to verify compliance. If an agency chooses to use third-party credit verifiers, it should set standards to ensure that they are qualified, insured, and free from conflicts of interest.

12. Agencies should use available tools to limit fraud and abuse in permit markets. Regulators should adopt limits on purchasing and holding marketable permits (including a maximum number that can be held by a single party) or employ other tools to prevent monopolies, excessive speculation, and other manipulations of the permit market.

¹⁰ Often proposed in marketable permit programs that regulate electricity generators, output-based allocation allocates permits for pollution based on the amount of electricity produced by a given party, as opposed to the historical amount of pollution that party generated. This results in awarding permits to some of the cleanest producers of electricity, like renewable energy, rather than disproportionately to the most heavily polluting producers. Project on Alternative Regulation, Marketable Rights: A Practical Guide to the Use of Marketable Rights as a Regulatory Alternative 14 (1981).
13. In designing a marketable permitting program, agencies should include sanctions with sufficient deterrent effect for noncompliance and require plans for coming into compliance.

**Information Management**

14. Agencies should collect data on the operation of marketable permitting programs and consider periodically assessing both the policy effectiveness and economic efficiency of existing marketable permitting programs. Agencies should be cognizant that some of the data collected will likely be confidential and should implement procedures for handling this data appropriately.

15. To the extent feasible, agencies should release non-confidential data on permit transactions, prices, and holdings to help the public gauge a market’s policy effectiveness and to help parties make efficient decisions in the market.

16. Agencies that manage marketable permitting programs should coordinate with other agencies that have specific expertise to improve marketable permitting programs and design more efficient systems in the future. Agencies should explore formalizing agreements allocating respective responsibilities or developing standards or policies jointly, where appropriate.

17. Marketable permit regulators should develop communication policies for announcing policy changes or enforcement actions that could influence the market to prevent pre-publication leaks and information asymmetries.