



Cap and Trade 101: Sightline's Federal Climate Policy Primer—in 2 Pages

In the coming weeks, Congress will be debating and voting on groundbreaking legislation to control US greenhouse gas emissions and set in motion a new, clean-energy economy. The favored strategy is called “cap and trade,” a solution that provides the certainty that reductions will be achieved by setting emissions goals, and the needed flexibility in reaching those goals through the creation of tradable permits.

All cap-and-trade systems are not equal, however. They can be evaluated on a few basic principles that ensure maximum effectiveness and financial protection for families. Sightline Institute's policy analysis is laid out in full in "[Cap and Trade 101: A Federal Climate Policy Primer](#)." Here, in 2 pages, are the key questions that every consumer and lawmaker should ask as the policy is being crafted, as well as a quick look at legislation currently under consideration by Congress, the American Clean Energy and Security Act (also called Waxman-Markey).

WHAT IS CAP AND TRADE?

Cap and trade commits a region or country to responsible limits on global warming emissions and gradually steps down those limits over time. Setting commonsense rules, cap and trade sparks the competitiveness and ingenuity of the marketplace to reduce emissions as smoothly, efficiently, and cost-effectively as possible. In short, the “cap” is a legal limit on the quantity of greenhouse gases that a region can emit each year and “trade” means that companies may swap among themselves the permission—or permits—to emit greenhouse gases.

WHAT CAP-AND-TRADE DESIGN WORKS BEST?

Cap and trade is a tested and proven system for reducing pollution. But for maximum effectiveness, efficiency, and fairness for consumers, it requires five basic characteristics:

- 1) *It is **comprehensive** in scope.* Excluding any major sector would make the cap vastly less effective and put an undue burden on the sources that are included.
- 2) *Its point of regulation is **upstream**.* The system operates where fossil fuels enter the economy, meaning that fewer than one-tenth of one percent of businesses have any direct interaction with the system.
- 3) *Its permits are allocated by **auction**.* To prevent unfair windfall profits for big energy companies *at the expense of consumers*, pollution permits should be sold at public auctions, not given away for free. Proceeds can be invested in communities and families. Auctioning helps protect against market manipulation and “gaming.”
- 4) *Its use of **offsets** is limited, well-regulated, and shrinks over time.* To reduce the costs of meeting the cap and to encourage emissions reductions outside of the cap, polluters may pay non-regulated emitters to cut their greenhouse gases, perhaps by capturing methane gas from feedlots or by saving forests from logging. Strict oversight is necessary to ensure these reductions are meaningful in reaching our goals.
- 5) *It uses auction revenues to **protect families**.* Revenue from permits should go, first and foremost, to ease the transition to a new energy economy. Revenues can also be invested in community benefits like job training, energy efficiency, and renewable energy production, putting the nation at a competitive advantage in the growing clean-energy economy.

HOW DOES WAXMAN-MARKEY MEASURE UP?

The most significant legislation addressing energy and climate change being considered by Congress is the American Clean Energy and Security Act, proposed by Representatives Henry Waxman of California and Edward Markey of Massachusetts.

In addition to designing a system for capping and trading carbon emissions, the bill commits to clean energy development, improvements to energy efficiency, and creating green jobs—all programs that will help us reach our climate-protecting goals and reduce the financial challenges of cutting carbon pollution. The bill gets good marks on three of the five criteria above: comprehensive, upstream, and built-in protections. It is less exemplary on auctioning permits and limiting offsets.

- Waxman-Markey is **comprehensive in scope**, including essentially all fossil fuels, along with certain other measurable greenhouse gases. The Congressional Budget Office estimates that Waxman-Markey's cap would cover about 72 percent of US emissions in 2012; by 2020, it would cover 86 percent.
- Waxman-Markey **mostly operates upstream**, targeting roughly 7,400 companies, including oil and natural gas suppliers. It also regulates coal at power plants, downstream from the mines where it originates, but still fairly far upstream in the energy economy. The bill's reporting and permitting requirements would affect few small businesses and no individuals.
- Waxman-Markey initially **auctions only about 15 percent of permits**, although the percentage rises to about 70 percent by 2030. Though most of the permits are at first given out for free, in many cases the recipients must use the proceeds from the sale of the permits to benefit consumers through rebates and other public programs. In the years leading up to 2025, some 55 percent or more of permits will go to ensuring climate fairness by easing the burden of energy prices. Unfortunately, the bill also initially gives 7 percent of permits to coal and oil companies, which means windfall profits for these businesses, but phases out these free permits by 2030.
- The bill caps carbon emissions at 17 percent below 2005 levels by 2020, gradually lowering the cap to 83 percent below 2005 levels by mid-century. However, it allows for a **substantial use of offsets**: 2 billion tons split between domestic and international projects that promise to reduce greenhouse gases. That means offsets could be used to meet the bill's reduction goals until the early 2030s. Put another way, the amount of greenhouse gas emissions from permit holders could actually rise for more than a decade, if polluters purchased the maximum allowable offsets.
- The bill includes **built-in protections for American families** in two ways. In its early years, it gives 30 percent of permits to electric utilities and requires that after they're sold, the revenue is given to their customers in equal, lump-sum payments. Utilities using power from more-polluting fuel sources, such as coal, will get more free permits so their rebates will be higher. Starting in 2026, Waxman-Markey begins cutting checks directly to all legal US residents. By 2030, 70 percent of permits will be auctioned and the proceeds flow back to residents as rebates: 15 percent specifically for low-income families (approximately \$161 per adult in 2012 and potentially growing over time) and 55 percent as equal rebates for legal residents. Low-income families receive both payments. Waxman-Markey also dedicates a small percentage of permit revenue to worker training programs and to fund renewable power and energy efficiency in buildings.

The legislation represents a step in the right direction. It could be improved to better protect the climate and American families by strengthening the cap; reducing the number of permits given away and increasing the amount auctioned; and by reducing and better defining the use of offsets.

FURTHER INFORMATION

For more in-depth information, analysis, and data sources on the topics discussed here, please see Sightline Institute's paper "[Cap and Trade 101: A Federal Climate Policy Primer](#)" (June 2009). And see www.sightline.org/climate for Sightline's most recent work on fair, effective climate policy.