

## CAP AND TRADE 101 A FEDERAL CLIMATE POLICY PRIMER

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### Summary

The same fossil-fuels roller coaster that is whiplashing our economy is also overloading our atmosphere with carbon. Fortunately, the same actions that will curb greenhouse gas emissions will also let us break through to a clean-energy economy—an economy that ends our addiction to oil and other dirty fossil fuels. If we are to seize this opportunity, however, a change is required: We must stop treating Earth's atmosphere as a free dumping ground for pollution. The key to making polluters pay for emissions is a system known as “cap and trade.” A cap-and-trade system enforces an economy-wide limit on greenhouse gas emissions; sets realistic goals for reducing emissions over time; sets commonsense rules of the road; and harnesses the creativity and dynamism of the market to achieve these goals. All cap-and-trade systems are not equal, however. We can judge them on a few basic principles that ensure maximum effectiveness and financial protection for families. Cap and Trade 101 lays out the key questions.

In 2009, the US Congress is debating a sweeping new clean-energy policy. The American Clean Energy and Security (ACES) Act proposed by Representatives Henry Waxman of California and Edward Markey of Massachusetts and passed by the US House of Representatives creates a national cap-and-trade program. The act also spurs clean energy in many other ways. This primer evaluates ways of designing a cap-and-trade system, including the Waxman-Markey bill and other approaches under consideration in the US Senate. Climate policy that works is built on three principles: efficiency, effectiveness, and fairness. To satisfy these three criteria, Sightline recommends a particular cap-and-trade design: one that is comprehensive, operates upstream, is auctioned, limits the use of offsets, and has built-in protections for families. Here's what these terms mean.

**Comprehensive.** Cap and trade should cover all measurable emissions of greenhouse gases to ensure an efficient, economy-wide transition away from carbon-based fuels.

**Upstream.** For simplicity's sake, cap and trade should operate as high as possible in the supply chains for fossil fuels—as close as is convenient to the point at which fossil fuels enter the economy. This approach means that far fewer than one-tenth of one percent of businesses will have any direct interaction with the cap-and-trade system. Cap and trade does not create any paperwork for families or small businesses.

**Auctioned.** Permits to emit greenhouse gases should be sold at frequent public auctions, not distributed free—“grandfathered”—to historic polluters. Auctioning prevents windfall profits for energy companies, allows the proceeds of the auctions to serve the public interest, and prevents market manipulation and “gaming.” Grandfathering the privilege to pollute would take money

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<sup>1</sup> Full report at [www.sightline.org/research/energy/res\\_pubs/cap-and-trade-101](http://www.sightline.org/research/energy/res_pubs/cap-and-trade-101)

from low-income consumers and give it to the predominantly wealthy shareholders of energy companies. Of course, political pressures make free distribution attractive to policymakers. If permits are distributed for free, lawmakers can minimize the negative consequences by requiring that recipients who later sell their permits dedicate the sale revenue to benefiting the public.

**Limited offsets.** Offsets offer an alternative to carbon permits for meeting cap-and-trade goals. Offsets certify that whoever bought them paid for carbon-cutting efforts undertaken elsewhere, in sectors or places exempt from the cap. Offsets can be an effective part of climate policy if they are strictly limited, well-defined, and closely regulated.

**Built-in protections.** Revenue from auctioning cap-and-trade permits should go, first and foremost, to compensate families for the burden of expensive energy. The revenue can be distributed in various ways, including:

- (1) **Cap and Dividend.** A full rebating of all auction proceeds equally per person.
- (2) **Cap and Rebate.** Rebating certain auction proceeds to low- and moderate income families.
- (3) **Cap and Caulk.** Dedicating a share of proceeds to upgrading the energy efficiency of housing.
- (4) **Cap and Invest.** Investing a share of auction proceeds in green-collar-job programs—giving disadvantaged families a chance to gain from the new opportunities of the clean-energy economy.

Each of these varieties is a form of cap and trade. Trading affects how firms comply with the program, while “dividend,” “rebate,” “caulk,” and “invest” simply describe how the revenue is distributed. Carbon tax shifting, commonly discussed as a rival policy to cap and trade, is actually more a complement than an alternative. A carbon tax shift combines fees on greenhouse-gas emissions with dollar-for-dollar reductions in other taxes. British Columbia’s carbon tax shift, implemented in July 2008, is a model policy that other jurisdictions would do well to emulate. It can be readily integrated into cap and trade in the form of an auction “reserve price” to create a hybrid policy that is stronger than either a carbon tax shift or a cap-and-trade system individually.