

Distribution of Allowances under the American Clean Energy and Security Act (Waxman-Markey)

The U.S. House of Representatives passed the American Clean Energy and Security (ACES) Act on June 26, 2009 by a vote of 219-212. The ACES Act includes a cap-and-trade program designed to limit emissions of greenhouse gases in the United States. This policy memo presents an overview of how emission allowances are distributed—the extent to which they are auctioned or freely allocated and the policy objectives achieved by their distribution.

Why Are Allowances Valuable?

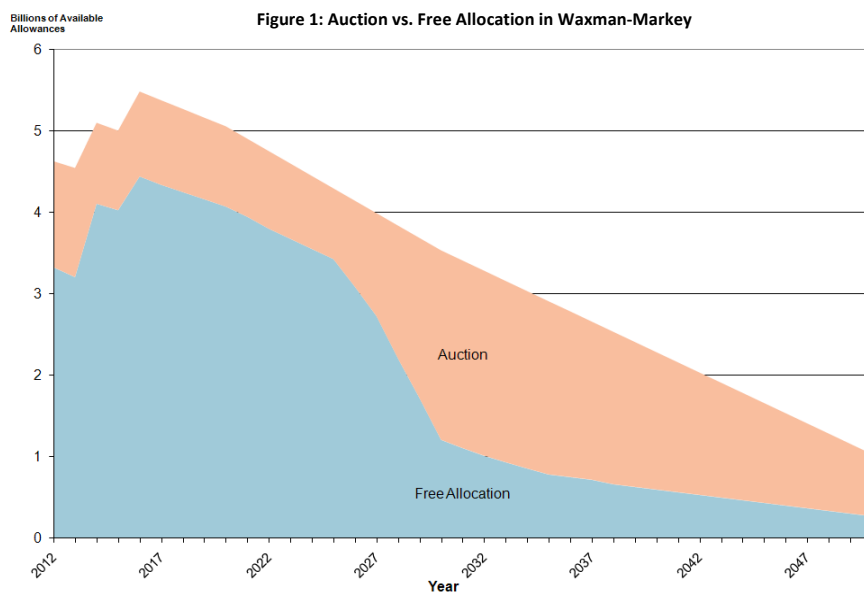
Under a cap-and-trade system, a “cap” or limit is placed on the amount of greenhouse gases that can be emitted and this cap declines over time. Emission permits, called allowances, are created annually in amounts equal to this cap. The holder of an allowance can legally emit one ton of carbon dioxide (or its equivalent for other greenhouse gases) into the atmosphere. By limiting and reducing the number of allowances over time, the forces of supply and demand result in a market for allowances which, in turn, produces an allowance price.

Regardless of the allowance price, the environmental objective under a cap-and-trade system is set by the total number of allowances issued. From an environmental perspective, the price of the allowances is irrelevant, as is whether the allowances have been freely granted or auctioned.

Auctions v. Free Allocation

Allowances are valuable, and whether or not these allowances are auctioned or distributed free of charge, policymakers must decide how best to distribute that value. For example, if the policy goal is to level the playing field for energy-intensive industries that face competition from countries without comparable climate policies, this could be done by either auctioning allowances and providing these companies with the resulting revenue, or by giving these companies free allowances. Under either approach (auctions or free allowances) the same amount of value could be provided to the same companies. Thus, the key issue is really the purpose for which auction revenue or free allowances are distributed and not whether allowances are auctioned or freely distributed.

In the ACES Act, a large percentage of the allowances are provided for free in the early years of the program (See Figure 1). For example, through 2026, 75 percent of allowances are freely provided for a wide range of uses. Over time fewer allowances are distributed free of charge and more allowances are auctioned. Over the life of the program, (2012-2050), 40 percent of the total available allowances would be auctioned and 60 percent would be distributed free of charge.



Uses of Allowance Value

Regardless of whether allowances are auctioned or freely provided, the more consequential issue is the purpose for which the value of the allowances is used. Under the ACES bill, allowance value is used to meet a range of policy goals, including: to provide rebates for low and moderate income families; to offset higher costs to consumers (residential, commercial, and industrial) of electricity, natural gas and heating oil; to spur deployment of commercial-scale carbon capture and storage (CCS) technology; to support other domestic and international technology programs; to safeguard the competitiveness of energy-intensive, trade-exposed industries (including aluminum, paper and glass, among others); and to support domestic and international adaptation programs.

The largest slice of the allowance pie, approximately 58 percent, goes to consumers (See Figure 2 for a cumulative breakout by category over the entire program). This slice is made up of three large components. About 23 percent of allowances are given to local electricity and natural gas distribution companies, primarily in the early years of the program, with the stipulation that the value is passed on to consumers to offset higher energy prices. In addition, consumers benefit from another 15 percent of the allowances, which are auctioned annually and the value provided in the form of payments to low and moderate income families. Finally, 20 percent of the total allowances are provided to consumers in the form of a climate change dividend, mostly in the latter years of the program. The next largest cumulative amount, about 15 percent, goes to support technology (CCS, renewables, advanced autos, etc.), and the third largest (8 percent) goes to protect the competitiveness of energy intensive industries.

The ACES bill also provides for a shift over time in how allowance value is used. In the early years there is a heavier emphasis on enabling and easing the transition to a low-carbon economy by protecting consumers, workers, and communities and spurring technology developments. This shifts over time to more resources being returned directly to households through a climate change dividend.

Conclusions

The use of allowance value under a cap-and-trade system provides an important means of managing the transition to a clean energy economy. How the value of the allowances is distributed to meet various policy goals is significantly more important to the policy debate than whether they are auctioned or allocated freely. Under the ACES Act, most of the allowance value is used to protect energy consumers from the impacts of higher costs and to provide incentives to advance the development and deployment of low carbon and energy efficient technologies.

Figure 2: Cumulative Distribution of Allowances (2012-2050)

