Frequently Asked Questions: Cap-and-Trade

For the first time in history, the US House of Representatives passed, on May 26, 2009, a piece of climate legislation that aims to reduce global warming pollution, the Waxman-Markey American Clean Energy and Security Act (ACES - H.R. 2454). The central mechanism of the 1400-page bill is a cap-and-trade system that aims to cut carbon emissions more than 80 percent by 2050.

Many business leaders have unanswered questions about cap-and-trade and Waxman-Markey – in particular the potential impact on their ability to remain competitive globally. In an attempt to provide some context for corporate decision makers, Clean Air-Cool Planet has surveyed our partners and developed this document to outline the risks and opportunities.

How should my business compare a cap-and-trade system and a carbon tax?

- **Cap-and-Trade can prioritize both price and environmental certainty.**

A cap-and-trade system's main mechanism allows carbon-emitting sources to trade a limited number of emissions permits under a particular cap, or reduction target. Because the number of permits available is limited, a cap-and-trade system guarantees a certain amount of emissions reductions overall.

A carbon tax, on the other hand, puts a fixed price on each unit of carbon emitted and relies on that set price to encourage firms to reduce their emissions. The price is set so that it will achieve the desired amount of reductions according to economic models, although there is no certainty that the desired amount of reductions will take place. Cap-and-trade prioritizes emissions reduction certainty while a carbon tax prioritizes price certainty.

Cost-control Solution: Price collar
Clean Air-Cool Planet's preferred means of providing cost control is to put a "price collar," a combined floor and ceiling price, around the projected price of emissions permits. **This guarantees a range of price certainty by preventing extreme price points on both ends of the spectrum.** Furthermore, by increasing the collar price over time, specific emission reduction targets could be reached via particular projected price points. Therefore, cap-and-trade with a price collar provides both quantity of emission reductions and price certainty.

- **Cap-and-Trade is cost effective and economically sound.** The economics of a cap-and-trade system are efficient and effective, guaranteeing carbon reductions at the lowest cost, and enabling businesses that reduce their emissions cheaply to sell extra allowances to others, reducing the costs of compliance. This cost-effective market mechanism already controls acid rain (SO_2 pollution) in the U.S.

- **Cap-and-Trade is politically viable**. Cap-and-trade is the carbon-reduction mechanism used in the legislation passed in the House of Representatives in May. It is now being considered in the Senate and has the support of the Obama administration, making it currently a more viable policy solution than a carbon tax. A domestic cap-and-trade system could allow the United States to link up with international cap-and-trading systems, helping ensure global reductions in CO_2 needed to protect the world from the climate crisis.

What happens to energy prices under the Waxman-Markey cap-and-trade system?
Today, basic supply and demand causes fossil fuel prices to rise or fall without warning. This will likely continue in a system where pollution has a price tag. A well designed trading system, however, encourages efficiency, innovation, and least-cost solutions. In the long term, this reduces the demand for carbon-based energy, makes emerging clean technologies increasingly competitive, and helps keep the price of energy down or at least stable by decreasing demand across the economy.

The House-passed bill provides rebates to electricity customers through electricity distribution companies. This ignores the reality that any climate change proposal affects carbon-related costs generally, not just electricity purchases. Instead of encouraging customers to reduce electricity use, these rebates subsidize electricity consumption because the rebates come in the form of reductions in bills rather that direct payments to households and businesses. Concerns about volatility that could translate into high prices for electricity and other goods and services are legitimate, but these concerns are best addressed through the price collar and revenue recycling through lower taxes, not electricity rate rebates.

Are there business groups that actively supported Waxman-Markey?
There are many business coalitions that supported the Waxman-Markey bill. One is the Climate Action Partnership, or USCAP, a coalition of industry and environmental groups, some of whose members receive free allowances under the legislation. The members of a newly formed group, Business for Innovative Climate and Energy Policy (BICEP), have come out in support of the Waxman-Markey bill by calling on Congress to strengthen it further.

Why is business support crucial in the fight for climate legislation?
The impact of climate legislation on the economy is a key concern and members of Congress look to the business community for leadership on this issue. Many corporations have come forward in support of strong climate legislation, assuaging the fears of many members of Congress. Support from small businesses and corporate groups could be the deciding factor in whether many Senators and Congressmen support cap-and-trade.

How will the Waxman-Markey climate bill impact the Regional Greenhouse Gas Initiative (RGGI) trading system?
The Regional Greenhouse Gas Initiative (RGGI, pronounced Reggie) is a cap-and-trade system established by state officials in many Northeastern states. For power plants only, RGGI set a cap on carbon emissions and established a trading system in the region. The Waxman-Markey bill temporarily prohibits states from running their own cap-and-trade systems, but any entity holding RGGI allowances can trade them for federal allowances. Under Waxman-Markey, this preemption will expire in 2017, allowing states to then adopt or re-adopt a cap-and-trade system.

Will my business get free emissions permits under current climate legislation?
Not unless your business is oil refining, natural gas or electricity distribution, auto manufacturing, or an energy-intensive, trade-sensitive enterprise. The system of allowance allocations in the Waxman-Markey bill is complex and has been a contentious point during Congressional consideration.

Cost-control Solution: Revenue Recycling
A cap-and-trade system that auctions off pollution permits is widely regarded as having economic, fiscal, and equity advantages, as opposed to free distribution. Clean Air-Cool Planet recommends recycling the revenue generated by permit auctions through the tax code. For example, **payroll taxes and/or corporate marginal tax rates could be reduced to offset higher costs incurred by the cap-and-trade policy**. Revenue recycling through the tax code is the most economically efficient way to get money back to the American people, providing a stimulus in every pay period. Businesses then benefit directly and through increased consumer

The compromise reached in Congress at this point gives away approximately 85 percent of the emissions permits and auctions off the remaining 15 percent. The following is a snapshot of where allowances would go under the current bill in the year 2020. The bill gives about 61 percent of the permits to companies and corporations[1], including:

- 2 percent to oil refineries;
- 5 percent to merchant coal plant operators;
- 5 percent to commercial-scale power plants employing carbon capture and sequestration;
- 6 percent to natural gas local distribution companies (LDCs), which must pass the value of these allowances on to ratepayers so that gas bills don't rise;
- 13 percent to "energy-intensive trade exposed industries" such as paper, glass, steel, and other similar heavy industries;
- 30 percent to electricity local distribution companies (LDCs), which must pass the value of these allowances on to ratepayers so that electricity bills don't rise.

The determination of how many of these permits are given to a specific company comes from a formula spelled out in the bill, using factors such as emissions output, percentage of product cost that comes from energy usage, and amount of energy production. The bill

[1] These percentages are approximate, and a few programs that are given free allowances at the beginning of implementation are not listed here, but this is a rough breakdown of how emissions permits are allocated under Waxman-Markey.

also gives out about 24 percent of the permits to a variety of methods for investing in a clean energy future and adapting to the consequences of climate change.

The bill auctions off the last 15 percent of allowances available with revenue going to federal low-income consumer rebates.

What sort of businesses are directly regulated by Waxman-Markey and will be forced to buy and sell emissions permits?
Under Waxman-Markey, "covered" entities that are required to procure and submit allowances include refineries, utilities that produce and/or distribute power from combustion of fossil fuels, and industrial facilities that emit more than 25,000 metric tons of carbon dioxide equivalent (CO_2e) per year. The bill also requires EPA to set performance standards for uncapped sources that emit at least 10,000 tons annually.

Policy Solution: Upstream and Economy-wide Regulation
Since carbon is so entrenched in today's economy, there are many sources of greenhouse gas pollution. **To guarantee that the cap-and-trade system takes advantage of the cheapest opportunities to reduce emissions, it should extend to all sectors of the economy.** The Waxman-Markey bill covers an estimated 85% of the economy, with some large agricultural operations regarded as the largest exempted emitters. Clean Air-Cool Planet believes regulation should be "upstream," as close to where carbon first enters the economy as is practical and efficient – including natural gas regulation at the well head. **This approach guarantees the fewest points of regulation, minimizing costs.**

What else is in the Waxman-Markey bill besides cap-and-trade?
The Waxman-Markey bill is a comprehensive energy bill and the cap-and-trade program is only one element of the energy reform undertaken in the legislation. The bill has a few main goals beyond capping global warming emissions:

- **Clean Energy** – The bill creates a renewable electricity standard (RES) requiring states to achieve at least 20 percent of their electricity from renewable sources or energy efficiency savings by 2020. It also includes performance standards for newly permitted, coal-fired electric generating units.
- **Energy Efficiency** – The bill has a title that promotes efficiency across all sectors of the economy through a program of constantly updated building codes, vehicle emissions standards, industrial efficiency standards and others.
- **International Discussions** – The bill sets the stage for the United States to negotiate on a global climate treaty by offering money for clean tech transfer, international adaptation measures, and reducing deforestation.

What is the estimated cost of allowances and how are they projected to change over time?
There are different estimates about the potential prices of emissions allowances under the Waxman-Markey cap-and-trade system, and there is uncertainty about the total cost of the program. EPA estimates that allowance prices will rise to $25-$35 per ton of CO_2 equivalent by 2030 and $70-$90 by 2050.[2]

[2] EPA Analysis of the American Clean Energy and Security Act of 2009, H.R. 2454 in the 111th Congress, 6/23/09