Cap and Trade: The Dark Side

Cap Carbon, Defeat Carbon Initiatives

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Visit the dark side. \rightarrow

Warning

Europe has a cap. Obama has promised a "cap on carbon" for America. And, in December, the U.S. will advocate one for every country in the world.

If accepted, caps will work to limit carbon. But they have one enormous consequence that has been overlooked.

> A carbon cap will subvert every other carbon-saving policy and everything you do to save extra carbon.

The Dark Side Is Dangerous

A cap will give a powerful argument to all those who oppose climate policies. This will help them defeat at least some good carbon-saving initiatives.

This is one reason James Hansen (Al Gore's climate adviser) may well be right that cap and trade "will practically guarantee disastrous climate change."

But There Is a Way Out

A carbon cap has a "good twin" (p. 12). The dark side can be avoided while keeping the beneficial market-based power of a cap—but not the cap itself.

What is the dark side? \rightarrow

What Is Cap and Trade?

(Skip this if you know.)

It's a plan to limit carbon dioxide emissions.

The Cap

Cap and trade can work in many ways, but any way it works, it has the same dark side. So I will explain the simplest cap-and-trade scheme.

The cap has two parts: (1) A rule about who must have a permit for carbon. (2) A limited number of permits issued each year. The limited number is the cap for that year.

A simple rule would say that coal-burning power plants and refineries must have permits for all the carbon they use or sell. This is strictly enforced by fines, so they will comply.

The Trades

Each year, the government auctions off the limited number of permits.

Later, if some refinery or coal plant doesn't have enough permits, it can buy more from another company. At a high-enough price, someone will sell. That's a trade. And, if someone has extra permits, they can sell them—another trade.

If the cap is working, it will make refineries and coal plants cut back production (to avoid fines).

But cutting back production hurts profits so they will try hard to buy more permits from each other. But the cap will hold.

What is the dark side? \rightarrow

What Is the Dark Side of the Cap?

It stops you from saving carbon.

The need for permits keeps emissions down. That's the good side of the cap. But permit trading keeps emissions up to the cap.

Keeping emissions up is the dark side.

Turn off your light to save carbon? The dark side of the cap won't let you. Yes, your light will go off and use less carbon. But the dark-side force will make sure someone else uses more carbon to completely cancel out your carbon savings, as I will soon explain.

Where was it discovered? →

The Discovery of the Dark Side

German Wind Turbines Save No Carbon

Spiegel Online notes, "Experts have known about this situation [a dark-side deception] for some time, but it still isn't widely known to the public."

"Dear Daniel, sorry, but the renewable energy law won't do anything for the climate anyway." That's from an internal e-mail obtained by *Spiegel* from Germany's Green Party.*

Germany's wind and biomass generators saved 120 million tons (!) of carbon in 2008—in Germany. But *Spiegel* tells us:

"Despite Europe's boom in solar and wind energy, CO₂ emissions haven't been reduced by even a single gram [of carbon]. ... German wind turbines... simply allow Eastern European countries to pollute more."

The Dark Side will Stymie Congress

The European cap just turned Germany's \$4 billion a year renewable subsidies into subsidies for East European coal burning and other carbon emissions.

The U.S. Congress is about to pass a "Renewable Electricity Standard" that will cost billions in higher electricity rates. But, just like in Germany, it will not save even a single gram of carbon under the new carbon cap.

... one more point, then the explanation.

Can you make a difference? \rightarrow

* www.spiegel.de/international/business/0,1518,606763,00.html

You Can't Make a Difference

You buy a hybrid so the other guy can buy an SUV.

Suppose we have a national carbon cap.

Suppose you decide to help out and buy the best hybrid car on the market. That saves no carbon.

The dark side of permit trading just takes your carbon saving and makes it easier for someone else to own an SUV.

The SUV owners will wave to you as they drive by. They're saying, "Thanks for making gas cheaper so I could afford my SUV."

The rude ones may just laugh.*

Explanation: How the dark side works →

^{*} And don't think they won't. There is already a web site mocking people who buy carbon offsets.

The Dark Force Revealed

Here's how it works.

The Dark Force in Germany

Step by step, this is how the dark force is working today in Germany:

- **⇔** Wind generators make clean electricity.
- German coal plants burn less coal, so the owners have unused carbon permits.
- They sell all their extra permits.
- Some go to other German businesses and some to Poland, Slovakia, and other places.
- **⇔** Polish and Slovakian plants burn more coal.
- Every extra permit gets sold and used by some business to emit more carbon.

How does it control your carbon savings? \rightarrow

The Dark Force and You

Here's how it works against you.

Industry, Not Consumers, Controls Carbon

A cap controls industry (they must have permits).

- They won't supply/use *more* carbon than the cap (to avoid stiff fines).
- They won't supply/use *less* carbon than the cap, because selling carbon is profitable and they will snap up every available permit and use them all.
- \Leftrightarrow So carbon emissions = total permits = the cap.

This is true whenever a cap is working and forcing industry to cut back emissions.

Since all consumer emissions are controlled by capped industry, total emissions will equal the cap no matter what consumers try to do.

But How Does the Force Work in Detail?

The details are complicated, but they are guaranteed to work by the big-picture analysis at the left.

For those who like details:

- → You buy a Hybrid and use less carbon (gasoline).
- Some refinery sells less gas, needs fewer permits, and sells its extra permits.
- Selling extra permits, drives down their price.
- The business that buys the permits will use them.
- Since the permits cost less, the business can cut the price of their carbon-based product—electricity, gasoline, etc.—to make sure it sells, and the carbon get emitted.

Is there some trick? \rightarrow

Is this Some Kind of Logical Trick?

No.

Hiding from the Truth

It's natural to be upset. But, better to find out now than when it's too late. Here are some ways I've seen people try to avoid facing up to the dark side.

- The wind turbines will save so much carbon that not all the permits they freed-up will be sold.
- If so, the wind subsidies have saved so much carbon that the cap is not needed and not working.
 Only a working cap wields the power of the dark force.
- ⇔ This logic is perverse; pay no attention.
- ↔ No. It's just logic—best to keep your eyes open.

- Without the dark side we'd save a little more carbon once in a while, but not enough to matter.
- No, we would save more carbon all the time. Compare a cap (which has a dark side), to a carbon tax (which does not). Compare:

A carbon cap with \$30 permits, to

A carbon tax set at \$30 per ton.

Say half the country is willing to put in extra money or effort to save extra carbon.

- A cap will discourage them, so they will do less.
- A carbon tax will not discourage them, so they will save extra all the time.

The other half will save the same under a cap or a tax because they only think about the \$30, and that's the same either way.

Is there any other harm? \rightarrow

Harms Good Standards

Building, Appliance, and Fuel-Efficiency Standards

Under a Cap, Efficiency No Longer Saves Carbon

Before appliance standards, refrigerators will built to waste a lot of energy, because we didn't know how much they used.

A carbon cap won't fix that problem. And it's not supposed to. So we need appliance standards.

But one of the biggest selling points for appliance standards has always been how many coal-fired power plants are saved by efficient refrigerators.

But, since a cap reverses every ounce of carbon saved by appliance standards, that selling point will be lost.

The Danger to Standards

Appliance manufacturers have often blocked standards. Taking away one of their selling points (fewer coal plants) may tip the balance against them.

The remaining argument for standards is that they save consumers money. But in the world of politics, it may not win the day.

CAFE fuel-economy standards will still save oil, but will no longer save carbon.

Building standards will make saving carbon cheaper but will no longer save carbon.

Taking a way one of their main benefits will weaken the support for all standards.

Does the dark side cause fights? →

Causes Fights

Coal versus Oil Under a Cap

Let's Save More Coal

Typically, those concerned with climate think it's more important to save coal carbon than oil carbon.

So they will say, "build more wind, that will save coal." But the cap will cause others to use more coal and more oil.

The **net** effect is to use less coal but **more oil**.

Those concerned with energy security will say, "Wait a minute, those wind turbines are hurting energy security."

And they will be absolutely right.

No, Let's Save More Oil

Those concerned with energy security think it's more important to save oil carbon than coal carbon.

So they will say—tighten CAFE standards, and subsidize ethanol and plug-in hybrids. But the cap will cause others to use more oil and *more coal*.

The **net** effect is to use less oil but **more coal**.

Those concerned with climate will say, "Wait a minute, you're making us use more coal."

And they will be absolutely right.

Need an excuse? →

Makes Excuses

My Hummer doesn't matter under a cap.

Buy a Hummer and you don't increase emissions.

This is just the flip side of the hybrid story.

- → Hummers use more gas.
- ⇔ Refineries buy more permits.
- Whoever sells these permits must use less carbon.

The Hummer owner will be absolutely right. Buying a Hummer does not damage the climate!

Discourages Initiatives

Individual, Group, City, State and National Initiatives

Public concern with the environment has always been closely linked to individual participation—recycling, buying compact fluorescents, driving a hybrid, or riding a bike.

When the dark-side force of cap and trade turns every beneficial carbon-saving program into a purely financial calculation, when no one can save one ounce of carbon, when cities, states, and groups can no longer make a difference to the climate, our public life will change.

I can't prove it, but I believe this change will not be for the better.

Carbon Taxes Have No Dark Side

A tax stays put. It will not change when you save carbon.

The Untax

In 1920 Arthur Pigou, a British economist, invented a strange new tax—it's not for raising money. The simplest version of Pigou's special tax, applied to carbon, is the untax:

Tax carbon, but refund all the money on an equal-per-person basis.

James Hansen, Al Gore's climate adviser, favors this.

- ◆ Average carbon users pay no net tax.
- Above-average users pay only on their extra use.
- Below-average users are reward for conserving.
- Economists agree this is more market-based than most cap-and-trade proposals.
- There is no dark side of a carbon tax or untax.

Learn More

James Hansen, Al Gore's climate adviser, is the best known advocate of the untax (not his term). Read his short paper: "Tax and Dividend."

Only one book discusses the dark side of cap and trade (on page 141), but it also has a complete discussion of the untax (p. 66, 71, and 145–169). *Carbonomics: How to Fix the Climate and Charge It to OPEC*, by Steven Stoft, with assistance from Dan Kirsther*

Read *Carbonomics* on Google for free.

More about cap and trade + printable version of this book.

* Steven Stoft, Ph.D., author of *Carbonomics*, is an energy economist. Dan Kirshner was Senior Economic Analyst at the Environmental Defense Fund, where he worked for 26 years. (Dan also assisted with this eBook.)

Appendix A: Affected Organizations

To check the effect of a cap, I Googled "green conservation." The top listing, "Conservation International," proclaimed: "Every choice you make contributes to the health of the planet." With a cap, this will no longer be true. www.conservation.org/ACT/LIVE_GREEN/Pages/default.aspx

With a cap, it will no longer make sense to think about your carbon footprint. If you emit more, the cap will make someone else emit less—so it doesn't matter.

There will be no use in buying carbon offsets—that would just be giving money to those who don't care. Nothing else would happen.

These are organizations that focus on individual action to help the climate. Under a cap their agendas would become largely meaningless.

planetgreen.discovery.com
www.energystar.gov
www.conservation.org
www.terrapass.com
www.carbonfootprint.com
www.carboncounter.org
www.carbonfund.org
www.green-e.org
www.cleanair-coolplanet.org
www.thedailygreen.com
www.greenercars.org/
www.climatecrisis.net
www.greencar.com

www.begreennow.com www.earthlab.com www.safeclimate.net greenlivingideas.com www.stopglobalwarming.org www.jpmorganclimatecare.com www.climatesave.com home.altenergystore.com www.joinclimatesmart.com www.empowermentinstitute.net/lcd/ www.greenerchoices.org/globalwarmingsavecarbon.cfm www.4offsets.com www.seegreennow.com www.carbongreenllc.com www.carbonoffsets.org www.thegreencarco.com www.carbonify.com www.carbongreenllc.com

These larger organizations have a broader focus, but key parts of their programs would become meaningless. www.nrdc.org/greenliving www.greenpeace.org www.nature.org

Appendix B: Affected Government Policies

The following policies now save carbon. But under a cap, they will only shift carbon savings from one approach to another.

REGGI: The Northeast carbon trading scheme

California's CO₂ emission standards for autos

The copy-cat auto standards of 13 other states

California's AB 32 that caps GHG emissions at 1990 levels in 2020

California's low-carbon fuel standard

The National Renewable Electricity Standard — soon to be passed

Energy Efficiency Resource Standards in 17 states

Renewable (electricity) Portfolio Standards: More than half the states have these.

California's carbon cap (Passed Dec. 11, 2008, but still sketchy)

The Western Climate Initiative's seven-state carbon cap (in process)

Ethanol subsidies (federal and state)

Solar subsidies (federal and state)

Wind subsidies (federal and state)

Biofuel subsidies (federal and state)