

# Cap-and-Trade *Secrets*

*Will Cap and Trade  
"Practically Guarantee Disastrous Climate Change"?*

—James E. Hansen, Al Gore's Climate Science Adviser

An eBook by

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Kyoto set up a test of cap and trade, so the world could learn. We learned caps are unpopular and often exceeded. But can we make them work?

Key outcomes remain unknown in America, and many are not yet understood in Europe.

We must decide if cap and trade is right before Kyoto's second round in December. America is now headed for ...

# What's Going On?

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## *EDF's most trusted scientist says EDF is disastrously wrong.*

... a carbon cap. But what will happen if we get one?

### **Environmental Defense Fund vs. James Hansen**

EDF has championed cap-and-trade for 20 years. And this year it's hoping for the biggest cap-and-trade bill ever. It says that's the only way to save the earth from passing a climate tipping point.

James E. Hansen, Al Gore's science advisor and the strongest voice for climate stability, ever since his speech to Congress in 1988, says EDF's approach

*will practically guarantee  
disastrous climate change.*

EDF says: Lock in the cap for 40 years and we'll be safe. End of story. Hansen says cap and trade leads to millionaire traders, to increased taxes with no apparent benefit, and, finally, to a public backlash.

But the most surprising clash between EDF and Hansen is on science. Hansen is the leading scientist studying climate tipping points. EDF says science dic-

tates the tipping-point limit—and the cap. Meanwhile Hansen rails against caps and favors a tax.

The demand for caps blew apart the Kyoto negotiations when most of the world's countries rejected caps. Many say this will happen again.

But Obama and Congress are set on a cap. Will it be weak and full of giveaways, as Hansen predicts? Will it discourage the Chinese and Indians? Or is a cap the best path forward?

### **Who's Right?**

For two years, I've researched both EDF's cap-and-trade approach and Hansen's carbon-tax approach. Both work in theory, but even a carbon tax has its mysteries. And few indeed have guessed the seven secrets hidden beneath the surface of cap and trade. Understand these, and you'll know who's right.

# Who's Capped and What's Traded?

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*Even if you understand caps, read "No One Is Capped."*

## The Cap

"Cap and trade" is a system for limiting pollution—carbon dioxide in this case. It's often just called "carbon" for short. In case you're new to this, here's a quick explanation of how the system works.

The cap has two parts. First, a rule determines who must have a permit for carbon. Second, the government issues only a limited number of permits. The limited number is the cap.

A simple rule, though not the best, would say that coal plants and refineries must have permits for the carbon they emit or sell (as part of oil).

## The Trade

When the government issues permits, it can sell them in an auction or give them away to, say, coal-fired power plants. With either giveaways or an auction, the permits end up selling for the same price in the private permit market. That price is determined by the shortage of permits caused by the cap.

If a coal mine has more permits than it needs, it can sell the extra ones to an oil refinery. That's the "trade" part of cap and trade.

## No One Is Capped

No one feels the cap directly. A coal mine might need 60 million permits, but 100 times that many will be available. So individual refineries and coal mines are **not** capped. There's just one cap—on the whole country. The coal mine, and everyone else, feels only the cost of permits. Caps have their effect only through permit prices—the price of carbon.

# Before I Give Away Any Secrets ...

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## *Al Gore prefers a refunded carbon tax.*

Some who favor a cap are saying that anyone who doesn't agree that a cap is better than a carbon tax is secretly against fixing the climate. See what you think.

*The most straightforward policy would be an across-the-board carbon tax. • [A pollution tax] commands the assent of virtually every card-carrying economist.*

—Paul Krugman

*“Cap and trade” generates special interests, lobbyists, and trading schemes, yielding nonproductive millionaires, all at public expense. The public is fed up with such business.*

—James E. Hansen

*I certainly believe that the simplest and easiest way to solve this problem would be a CO<sub>2</sub> tax that is 100 percent refundable.*

—Al Gore

NASA climate scientist, James Hansen, who we just met, favors a carbon tax with a **100 percent refund** to individuals on an equal-per-person basis. I call this an “**untax**” in my book [Carbonomics](#), and explain why it works just as well as a carbon tax.

Al Gore backs both cap and trade and a carbon tax, considering the tax to be better but the cap to be more likely. Most other environmental groups, especially the strongest politically, favor cap and trade and oppose a carbon tax. Although lately some smaller groups have switched to favoring a tax.

Both sides believe the other path cannot succeed. If either side is right, we need to know.

Now, the Seven Secrets.

# 1. Caps Take Control

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***That's what they're meant to do.***

## **How the Cap Controls Total Emissions**

If we cap carbon emissions, they can't go higher. And they won't go lower, because that would mean the cap isn't working.

If emissions start to go too high, that causes a shortage of permits and their price will rise. This causes people to use less carbon, whether they care about the climate or just want to save money.

But what if you want to push emissions below the cap by buying a plug-in hybrid. Or what if your state saves carbon by insulating houses?

These actions still save carbon. But if emissions start to go below the cap, then permit prices fall, and others use enough more carbon to raise emissions back to the cap. Cap and trade controls emissions.

## **German Wind Turbines Do No Good**

"Dear Daniel, sorry, but the EEG [Germany's renewable energy law] won't do anything for the climate anyway." That was once a secret e-mail written by one energy expert in Germany's Green Party to another.\*

Germany's wind and biomass generators saved 120 million tons of carbon in 2008—in Germany. But that meant German industry had extra permits, so it sold them to coal companies in Poland and Slovakia, so they could emit 120 million tons more carbon.

So, in spite of all the wind turbines, Europe will still hit its cap. The turbines save no carbon.

*Spiegel Online* notes, "Experts have known about this situation for some time, but it still isn't widely known to the public."\* It's still a secret.

\* [www.spiegel.de/international/business/0,1518,606763,00.html](http://www.spiegel.de/international/business/0,1518,606763,00.html)

## 2. Caps Kill Initiative

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

### Discouraging

Suppose we did have a national carbon cap.

What happens if you decide to help out and buy the best hybrid car on the market?

No carbon is saved. The permits not used because you use less carbon just make it possible for someone else to own an SUV.

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

The rude ones may just laugh.

This is discouraging. It's also discouraging that appliance standards will no longer make a difference. Corporate Average Fuel Economy (CAFE) won't save carbon. Resource portfolio standards will quit working. And on and on. Under a cap, nothing you can do reduces carbon emissions. The cap is in control. That will eventually kill all other carbon-saving initiatives.

### Is This Logic Perverse?

Some say this logic is "perverse." Some see it as attacking green programs.

It's not perverse to understand. And understanding will help us truly reduce emissions and not just appear to help the climate.

The permit requirement applies to coal plants and refineries. And that's the problem. If we use less carbon, they will have extra permits and will sell them in the permit market. The market will lower the price until someone decides to buy the permits and emit more carbon. That's what's perverse—not our understanding.

And remember:

A carbon tax has no such problem.

# 3. Kyoto-Style Caps Will Fail Again

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## *Little has changed since Kyoto.*

### **Why Kyoto Failed**

At the first Kyoto conference, we proposed a cap and developing countries rejected caps as unfair. No alternative commitment was offered, so they made no commitment. The U.S. Senate then rejected, by a vote of 95 to zero, the idea of a treaty in which China and India made no commitment.

Although many now say that if the United States adopts caps, China and India will follow. That contradicts history. It also contradicts China and India. Both say they won't follow. The liberal Nobel economist Joseph Stiglitz says their rejection of caps is completely reasonable. Any cap would either be unfair to them, or it would do nothing for decades.

Ignoring China's offer to agree to some other form of commitment, but not a cap, is disrespectful and harmful to international cooperation.

By adopting a cap, the United States would, in effect, be saying: "Follow us. You're wrong and should accept a cap." That approach will fail.

Just stop to think. India emits 20 times less carbon per person than the United States. If India's cap is set five times lower than ours, India will say: "We've done less damage. Why should we have to be five times better than you in the future?" But even such an unfairly low cap would not slow India's emissions one bit.

However, India could agree to the same carbon tax as the United States, and the cap would start to work instantly. That would not stop India from catching up with us economically, which they consider most important.

### **Who's Behind The Alternative?**

William Nordhaus, the top energy economist for the last 30 years, agrees with Stiglitz. So does Gregory Mankiw, a leading conservative economist. They, and many others, have proposed global carbon pricing as an alternative to caps, for the reasons just explained.

And Hansen says, "A continuation of the Kyoto Protocol approach, will practically guarantee disastrous climate change."

# 4. Cap and Trade = Cap and Pay

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## *Should the U.S. and E.U. pay the world to curb carbon?*

### **Backwards Negotiating**

The Kyoto negotiation said in effect: “OK, if you developing countries won’t be capped, then we will pay you to reduce emissions.” They are loving it. And, European businessmen love it. Chinese carbon offsets are cheaper than European carbon permits.

If the United States adopts a cap, China, India and Brazil will just see more U.S. businessmen wanting to buy their carbon offsets. One more reason not to agree to a cap—to sell more offsets!

The Kyoto system is paying the developing countries to vote against a cap.

EDF argues in effect: “If we’re nice and cap ourselves, all the other countries will be nice, too.” Well, we should be nice, but also smart.

### **It Just Costs too Much**

China is already emitting as much as we are and is growing faster. If you look at the numbers, Europe is paying China far more to curb emissions than it costs China to curb them. That’s why China loves selling offsets.

Put China’s fast growth together with costly offsets, and you’ll see that the United States would need to pay China and India hundreds of billions of dollars a year, since they won’t have caps.

To control just China’s emissions, we would need to set our cap to zero and then meet our cap by buying only Chinese offsets. That would hold down China’s emissions, but not our own.

Because developing countries reject caps, cap and trade turns into cap and pay.

# 5. They'll Charge You for What's Free

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***Companies always pass on the "cost" of free permits.***

## **Profits form Free Permits in Europe**

Under Europe's cap, coal-fired power plants must have carbon permits, and Europe gives them nearly all the permits they need—for free. So you might think they wouldn't charge us for those permits.

Here's what really happens.

If a unit of electricity normally costs \$40 to make, but now the coal plant has to buy a \$30 permit to make it, the plant will charge you \$70.

With free permits, they think like this: "If I make a unit of electricity, then I must use one of my free permits which I was going to sell for \$30. So making electricity still costs me an extra \$30 because of not-selling a free permit."

No matter how many free permits we give them, coal plants still charge us \$70 per unit of electricity. All economists and top-level environmentalists know this. And now Europeans know it, because the extra billions in profits under the E.U.'s cap have made headlines.

## **Free Permits in the U.S.**

Back in the 1980s, when coal plant owners were blocking all attempts to curb their sulfur emissions, the environmentalists (EDF, NRDC, etc.) suggested cap and trade and giving coal plants all the permits for free.

Back then, coal plants were regulated, so they could not profit from the free permits. As EDF says, it was "wildly successful."

But now, with many plants deregulated, those plants pass on the "cost" of their free permits. And they profit from this cap and trade.

In January 2009, EDF and NRDC proposed a new cap-and-trade bill for carbon. They worked it out with industry in back rooms over the last two years. Guess what? More free permits.

No one notices a few \$100 million of cost passed through from free sulfur permits. But free carbon permits could be worth \$100 billion a year. Pass on those "costs," and, sooner or later, that will make headlines.

# 6. A Cap is a Tax

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***Yes, it's just a tax controlled by the market.***

## **Why a Cap Is a Tax**

If the carbon permits are auctioned, and the price is, say, \$30 a ton, that's the same to industry as if they have to pay a tax of \$30 a ton.

So cap-and-trade with auctioned \$30 permits is just the same as a carbon tax charging \$30 a ton.

Before reading Secret #5, you might have thought that giving out permits for free made all the difference. But now we see that free permits just make companies richer, and they change nothing else. Industry acts just as if it had paid for all its permits.

So, Cap and trade = A variable carbon tax.

But, a cap is a tax with two important differences:

1. Giveaways are more obvious with a tax.
2. The tax rate of a cap fluctuates erratically to enforce the government's cap.

## **Why a Cap Is Different**

Whether a company gets permits for free or buys them, it acts like it bought them at the market price of permits. And buying permits is no different than paying a tax.

But because the permit price varies, it's like paying a tax that varies. And it varies with a purpose—to make sure our emissions meet the cap. If emissions start to go higher, the tax goes up, and if emissions start to go lower than the cap, the tax goes down.

That's why Secret #1 told us: Caps take control. And it's why Secret #2 told us: Caps kill initiative. The fluctuating tax is what does it. If you cut back your emissions, that reduces the tax rate just enough to raise other people's emissions and undo what you did.

# 7. A Cap is Regressive

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***The cap tax rate is higher for the poor.***

## **Why It's Regressive**

A cap-and-trade tax gets passed on, from industry to business to consumers, exactly like a carbon tax. It's really just a combined gas tax, electricity tax, heating-oil tax, and natural gas tax.

But all of these, just like a gas tax, hit the poor hardest as a percentage of their income. It's like having an income tax where the rich pay 5% and the poor pay 10%. No one thinks that's fair.

## **Collect a Regressive Tax to Pay Polluters?**

When coal plants get free permits and make billions extra in profit, where do those billions come from? Not from the government—all it does is print the permits.

All the billions come from the regressive cap-and-trade taxes passed through to consumers but collected at the highest tax rate from the poor.

# What to Do?

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## The Prognosis

We are headed for a weak cap-and-trade policy half finished by Congress when the Kyoto process resumes in Copenhagen this December. There, the U.S. will back caps for all. And developing countries will reject them just as they have said they will.

## The Untax Alternative

James Hansen proposes a carbon tax with a 100% dividend—an untax. Stiglitz proposes a uniform carbon tax rate for the world. What are they thinking?

- ⇒ Don't alienate China and India by trying to cap them far below us.
- ⇒ Get them to commit, so Congress will go along.
- ⇒ America will figure out caps are taxes.
- ⇒ To work, carbon prices must eventually collect \$300 billion a year—and maybe more.
- ⇒ A \$300B regressive tax controlled by lobbyists and speculators will cause a backlash.
- ⇒ Untax! Give it all back equally per person.
- ⇒ Only an untax can be made strong enough.

## Congratulations !

You can stop here and rest assured you are a cap-and-trade expert. Plus you know that we're not trapped. There is a way out of this fix. Al Gore knows what it is, and James Hansen is hard at work on it. [Carbonomics](#) spells it out in detail.

For my money, secrets 1–7 say enough. But as an economist, I feel obliged to reveal the secrets of cap-tax speculators and why caps don't provide certainty. So, if you're curious, proceed to Part 2.

## James Hansen's Bottom Line

*If the United States accedes to the ineffectual 'goals' and 'caps' approach, a continuation of the Kyoto Protocol approach, it will practically guarantee disastrous climate change.\**

\* From "Tell Obama the Truth," revised 12/29/2008.

## Get More Information ( and [Part 2](#) )

This eBook is based on:

***Carbonomics:***

***How to Fix the Climate and Charge it to OPEC***

December, 2008. 297 pp. by Steven Stoft

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Dan Kirshner has provided invaluable help  
with this eBook and with *Carbonomics*.

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Who do you know?

Cap and Trade

Could:      Guarantee climate disaster  
               Bribe polluters with a regressive tax  
               Block international agreement

Would:      Make your carbon efforts useless

If You Care about Climate or Energy:

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