



This Week's Climate Fact

Friday July 25, 2008

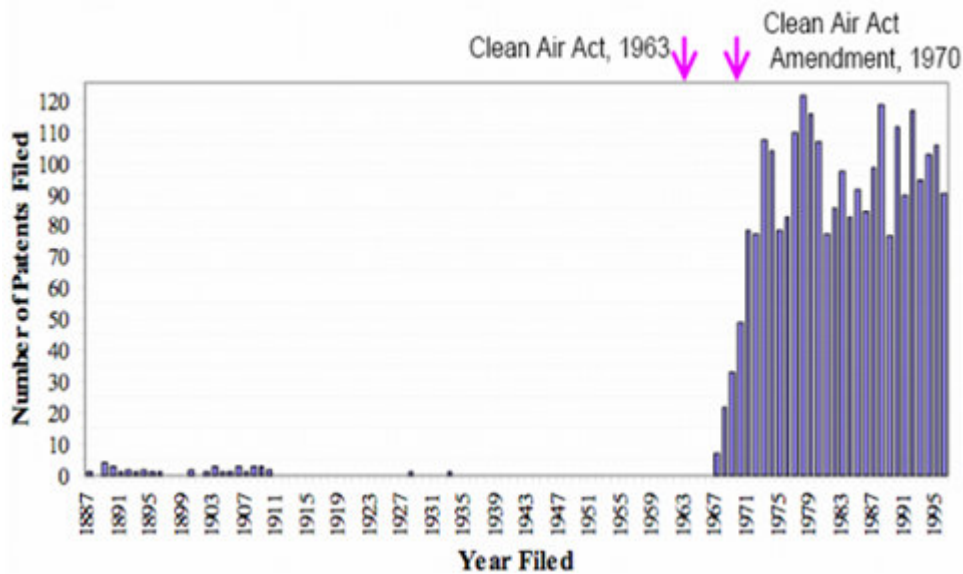
The Power of Markets: Experience shows markets spur innovation.

Global warming is a classic example of market failure. Global warming pollution has grown because the environmental costs are hidden, and we don't factor them into our decisions. We pay for the fuel we burn, but the resulting global warming pollution costs us nothing. The solution is to harness the power of market forces by establishing firm caps on greenhouse gas emissions and a price for pollution.

Using markets to cut pollution spurs innovation. When a cap was applied to sulfur dioxide (SO₂) emissions to curb acid rain, the power sector and its suppliers came up with a range of processes and technological innovations to meet the new limits. Some were relatively basic, such as learning how to burn low-sulfur coal in boilers designed for high-sulfur coal. Others were more dramatic. For example, the prospect of a cap on SO₂ prodded a team of GE engineers to design a method for turning the waste from a "scrubber" into gypsum, which could be sold as a byproduct.

Carnegie Mellon University researchers have shown that SO₂ control patent filings spiked after the Clean Air Act, even though the government had been supporting research long before that. They conclude, "The existence of national government regulation stimulated inventive activity more than government research support alone."

Clean Air Act Stimulated Huge Increase in Pollution Control Innovations¹



If Congress will lead by capping carbon pollution, the market will respond with investment and innovation on a scale large enough to solve this problem. Already, venture capitalists are pouring more than \$300 million a month² into new energy technologies. But it will take the certainty of a cap, an overall limit on carbon pollution, to unleash a sustained wave of investment and innovation that will carry the U.S. into the new global low-carbon economy.

We can solve the climate crisis – as soon as Congress takes action.

It's time to cap emissions.

¹ Graph from: "The Effect of Government Actions on Technological Innovation for SO₂ Control," presentation by Margaret Taylor of Carnegie Mellon at EPA/DOE/EPRI Symposium, August 20-23, 2001.

² Clean Energy Trends 2008, Clear Edge, March, 2008