Blythe Masters Senate Testimony

Testimony of Blythe Masters, Managing Director, JP Morgan Chase before the Subcommittee on Private Sector and Consumer Solutions to Global Warming and Wildlife Protection of the Senate Committee on Environment and Public Works

"Economic and International Issues in Global Warming Policy."

TUESDAY, JULY 24, 2007
2:30 p.m.
Hearing Room (SD-406)

Thank you. It's a pleasure to be here today on behalf of JP Morgan Chase.

My name is Blythe Masters and I am the Managing Director in charge of the Global Commodities Group. Of particular relevance to today's hearing, I manage the trading and marketing of JP Morgan's energy and emission credit trading businesses.

In early 2007, JPMorgan's Global Currencies and Commodities Group (GCCG) established an Environmental Products group dedicated to helping clients reduce emissions and manage associated risks.

We have a team focused on the origination, marketing and trading of carbon emissions, covering the EU ETS (European Emissions Trading Scheme), essential elements of the Clean Development Mechanism (CDM), emerging regional compliance / pre-compliance markets in the US, and voluntary emissions markets. We have dedicated teams of Sales and Trading experts in London (covering EU Allowances (EUAs) and Certified Emissions Reductions (CERs)), New York (covering Verified Emissions Reductions (VERs)), and Tokyo (covering CERs), and are actively expanding to meet growing client demands for environmental-related products and advisory services.

We are also leaders in the US acid rain or SO2 and NOX emissions markets and in 2006 were recognized by Environmental Finance for Best Trading Company in SO2 Emissions.

On a professional level, I have direct experience in markets with significant similarities to the growing emission credit markets. I have been a trader in the commodities markets. A trader and a manager of our global credit derivatives and structured products business. The head of Global Credit Portfolio and Credit Policy and Strategy. And just prior to my current position, the Chief Financial Officer of JP Morgan's Investment Bank.

I would like to thank Senators Lieberman and Warner for their leadership on an issue of such worldwide importance. JP Morgan operates in over 55 countries and has clients in every sector of the international economy. We recognize that climate change poses grave risks to the global environment and the international economy that need to be urgently addressed.

We are working with our clients to ask the right questions about climate change and the environment generally when making investment decisions. We can't dictate to our clients. We're not the government. But we can engage in a dialogue that surfaces the right issues and considers alternatives that help the environment.

Congress is studying whether to create a so-called cap and trade emission framework. JP Morgan supports a framework that caps greenhouse gas emissions and establishes a price for those emissions.

For the private markets to most effectively address the problem of climate change, greenhouse gas emissions, which practitioners refer to as carbon, must have a price. By establishing a price for carbon—through a cap and trade system—Congress will unleash the forces of supply and demand. There are precedents.

As you know, Congress created the first cap and trade program in 1990 to combat acid rain. It's my understanding, Senator Warner, that you played a key role in creating the acid rain program. Well done. It's worked—transparently, more cheaply than expected and it's delivered the needed environmental benefits.

By setting a price on SOX and NOX emissions, market forces drove down the cost of compliance significantly below projections. The market rewarded emitters that reduced their emissions, penalized those that could not or did not, and spurred the development of technologies that made further reductions possible in the most cost effective way.

Like any new program of government regulation, the cost of compliance was a very important and worrisome issue. So it is with the proposed cap and trade system for greenhouse gases.

Given the uncertain cost of the emission allowances that would be required under any cap and trade program and its potentially wide reach, Congress is justifiably searching for ways to moderate expected compliance costs. And to be sure, there are legitimate economic concerns that make cost containment a priority. Indeed, some of my fellow panelists will be speaking to one of the implications of compliance costs—international competitiveness.

Having said that, there are multiple approaches to cost containment. In any free market costs—or prices—are a reflection of supply and demand. Prices will tend to be lower the more supply there is. One way to expand supply is to allow a larger percentage and wider variety of emission offsets to meet emission reduction requirements.

As a result, there are two issues: One, what percentage of an emitter's reduction requirement can be met by purchasing carbon offsets—instead of actually reducing his or her own emissions? And two, what kind of projects are eligible to be considered offsets?

As for the first question, I don't have a precise recommendation but there is an optimal number that effectively balances achieving real and verifiable reductions and minimizing compliance costs. JP Morgan would be pleased to provide intellectual resources to the Committee as it contemplates that balance.

As for eligible offset projects, I believe we can learn from one of the mistakes of the Kyoto Protocol. The Kyoto Protocol currently prohibits using the preservation of tropical forest as a carbon offset. This is a mistake. Deforestation accounts for 1.5 billion tons of CO2-equivalent annually and makes up approximately 20% of annual greenhouse gas emissions. In fact, deforestation is the largest source of emissions in the developing world.

Allowing tropical forest preservation to count as an offset would expand the supply for carbon reductions significantly, act to contain compliance costs and provide a huge bonus in preserving biodiversity. Congress should give serious consideration to the depth and breadth of how offsets can be used in any cap and trade system.

Let me digress for a moment. There has recently been some controversy over whether a small proportion of offset projects actually achieve the emission reductions for which the offsets were granted credit. Some of the controversy is well founded. Like any new and fast moving markets, standards can take some time to develop.

JP Morgan is at the forefront of industry efforts to harmonize meaningful industry standards that ensure reductions take place, eliminate double counting and require effective monitoring. We have recognized the challenges and are rising to them.

In addition to offsets, a greenhouse gas cap-and-trade program can be designed to minimize costs using a variety of approaches including:

- banking of allowances and offsets;
- borrowing of allowances;
- linkage with other trading systems—a subject to which I'll return
- staggering compliance deadlines;
- extending compliance deadlines; and
- complementary policies that drive energy efficiency and technological innovation

But perhaps the most discussed approach is that of the so-called safety valve. Under a safety valve provision, exemplified by the recommendation of the National Commission on Energy Policy (NCEP), covered entities would be allowed to pay the implementing agency a specified amount per ton of GHG instead of submitting emissions allowances, thus capping the cost per ton at the specified "safety valve" level.

From the perspective of greenhouse gas emitters, a safety valve provides certainty of the upper limit of the cost of compliance. However one characterizes this approach, in economic terms this is a price control. It has been argued that a price control on emission credits may be justified in the initial phases of a cap and trade program given the relatively higher degree of uncertainty over the compliance costs.

In both the near and long term, however, the case for price controls is not compelling.

Commodity markets exist to buy and sell commodities. High prices tend to incent an increase in supply in that commodity and/or reduce demand. Carbon markets are no different. Obviously, carbon markets do not exist to incent an increase in the supply of carbon but rather to increase the capital allocated to expanding the supply of low carbon technology. By controlling the maximum price an emitter must pay for emissions, Congress

would be quite directly decreasing the capital available to invest in new and innovative low carbon technology.

The effect of such price controls on investors and emitters should not be underestimated. For example, a frequently proposed price cap for carbon is $10/ton/CO2equivalent. At the same time, the International Energy Agency estimates the cost of carbon capture and storage technology at $30 to 90/tCO2.

With that differential, it's hard to see the economic logic of investing in CCS. And given that over 50% of U.S. electricity generation comes from coal, that demand is still increasing, and that over 150 coal fired power plants are on the drawing board, a price cap that retarded the commercialization of a technology that would allow the U.S.—and the world—to safely use its most abundant fossil fuel would seem inappropriate.

It is not too dissimilar to wonder how much exploration and production activity would be occurring in the global oil markets if the price of crude was capped at $30 a barrel. It's safe to say that the oil majors would be returning most of their exploration budgets to their shareholders and that recoverable reserves would, at best, slowly continue to decline. No new supply would be coming to market.

Sadly, a price control has another drawback—it may prevent the U.S. market from linking to the EU ETS and other international carbon markets. Other systems, principally the EU ETS, will be unlikely to allow carbon credits and offsets from outside the EU if the cost of those credits is artificially low due to price controls and if the price control simply acts as a carbon tax that allows emitters to bust the cap.

Quite a part from the diplomatic fallout of such a policy, failure to link to other carbon markets will reduce liquidity and, therefore, raise compliance costs to U.S. emitters.

It is worth noting that neither the acid rain program or the EU's ETS have used price controls. In the case of the acid rain program, there have been price spikes but they have been temporary and self correcting. Moreover, the cost of compliance in the SOX and NOX markets was initially estimated from $3-$25 billion annually. After the first 2 years of Phase I, the costs were around $800 million per year.

In the case of the EU ETS, despite not having a price control in place emission allowance volatility and/or high prices have not caused major dislocation to emitters or consumers.

I realize that I'm almost out of time, so I'll stop here. I look forward to your questions.

Thank you.