

# Carbon trading set to rewrite eco-rulebook

► Chicago-style ‘cap and trade’ scheme ready for Tianjin debut

By ZHANG YU’AN

Market forces can play an important, if invisible, role in China’s efforts to curb carbon emissions and the potential for carbon trading in the country is huge, according to the chairman of a new initiative aiming to introduce a little US-style environmental know-how across China.

Jeff Huang, assistant chairman of the Tianjin Climate Exchange (TCX) and vice-president-Asia of the Chicago Climate Exchange (CCX), said “Cap-and-trade schemes can prove themselves to be very cost-effective in this area.”

The Chinese government has been active in regulating CO2 emissions and invests hugely in environmental protection projects aimed at pursuing sustainable economic growth.

Establishing a complete greenhouse gas cap-and-trade system nationwide will help boost its success in achieving its goals in this area. Such a system will enable companies to meet emission reduction targets at the lowest possible cost whilst, collectively, seeing cap emissions growth leveling off or actually reducing, depending on the rules of the cap-and-trade system.

Curbing carbon dioxide emissions through cap-and-trade scheme can reward companies who are able to achieve higher level of reductions than their target. They can then become vendors in the market and are free to sell their surplus to other companies who cannot meet their targets, for whatever reason.

Buyers in a well-designed cap-and-trade system can buy allowances ensuring that overall, emissions under the cap

are being managed, Huang said. Overall, cap-and-trade is a system for building in economic incentives for clean energy use and emissions management, leading to their eventual reduction.

As China is one of the largest carbon dioxide emitters in the world, there is considerable potential for environmental and economic benefits through carbon trading

Attracted by the environmental and business potential, the CCX is working with the Tianjin municipal government and the China National Petroleum Corporation (CNPC) – the country’s largest oil and gas producer – on the launch of the Tianjin Climate Exchange, of which the registered capital hit 100 million yuan.

Although cap-and-trade still requires industry-wide education and discussion, Huang is optimistic about the development of the TCX, based on the growth and market development history of the CCX and its affiliated

exchanges worldwide.

Launched in 2003, the CCX now has over 400 members, including more than 100 industrial emitters, offset project providers and aggregators, as well as financial and trading firms. The emitting companies sign a voluntary, but legally binding, contract to reduce their baseline emissions each year. The current minimum reduction level is an entity-wide reduction of a minimum of 6 percent, below the average baseline level of the year 2000, by the end of 2010.

The current CCX total baseline is approximately 600 million metric tons, which is more than the capped emissions baseline of Germany under the European Union Emissions Trading Scheme.

This means that, through the CCX, the United States has more tons of absolute greenhouse gas emissions under a capped system than any other country. In 2008, CCX traded approximately 70



Environmentalists advocate low-carbon lifestyles and transportation throughout China. Deng Jia

million metric tons of cash instruments on CCX itself, as well as an additional 40 million tons in CCX futures and options traded on the Chicago Climate Futures Exchange (CCFE), a wholly owned subsidiary of CCX.

During US President Obama’s first state visit to China, the two countries signed a joint statement, agreeing that “the transi-

tion to a green and low-carbon economy is essential.”

This is an encouraging sign and good news for carbon traders, said Huang. He also believes that the CCX can market its experience in environmental finance and cap-and-trade in China.

As a large potential carbon trading market, it is also essential for China to establish

its own rules and framework that can be eventually linked to a global carbon trading market, Huang said.

The CCX, the Financial Research Academy of the People’s Bank of China and CNPC have now committed to jointly establishing a low-carbon financial research center to develop financial tools for carbon trade.

# German companies keen on climate protection solutions

By JUTTA LUDWIG

Environment and energy efficiency is a key arena for future cooperation for the German Chamber of Commerce in China. Global climate change, in particular, is one of the most important issues – which the chamber believes can only be countered by the joint actions of companies across the world

Through their investments in China, German companies play an important role in the reduction of energy and resource

usage in the country. This is largely by implementing the use of highly efficient equipment and management tools in their plants.

In regard to technology transfer to China during the last two decades, Germany is the country that has transferred the largest proportion of hi-tech know-how to the country.

Consolidated global action is the only way to ensure a sustainable and efficient use of energy as well as to protect the climate and the environ-

ment. With an energy requirement which is estimated as five times higher than that of Germany’s, China’s strong economy nonetheless provides the country with a unique potential for sustainable growth through switching to green technology.

In line with commitments made by the Chinese President Hu Jintao, China is now aiming to significantly cut its “carbon intensity” – the amount of greenhouse gas emitted per unit of gross domestic product – by 2020.

**Focus on sustainability**

Sustainability issues need to be continuously brought to the attention of the international community. German companies are doing their utmost to cooperate with their Chinese partners by laying the foundations for sustainable growth and developing a qualitative growth model.

Successful partnerships have been established in all sectors of the Chinese economy. These are all geared to realizing these concepts and mastering the shared economic, ecologi-

cal and social challenges in many areas, including the automotive, infrastructure, transportation, energy and construction sectors.

In December, the UN climate conference in Copenhagen is hoping to devise a new global regulatory framework for climate protection. For businesses across the world, this will mean significant changes in the way they do business. Future business models will have to emphasize cutting CO2 emissions and optimizing energy and fuel usage.

From an industry standpoint, a transparent, fair and globally effective agreement is crucial to ensuring its smooth implementation.

The inclusion of all emitters must be of the utmost priority – only then will there be a level playing field for businesses worldwide when it comes to combating climate change.

gies embrace features such as resource-efficiency, energy efficiency and smart solutions. The German industry is also increasing its investments in research and development in terms of innovative environmental technology.

In China, German companies are well prepared to cooperate on sophisticated products and solutions and support the Chinese government’s commitment to control the emissions of greenhouse gases. They are already poised to contribute to projects and solutions of all kinds.

solar and wind energy, as well to a number of activities focused on the reduction in use of conventional technologies. Topics such as energy efficiency in construction and shipbuilding are continually at the top of its agenda.

At present, a senior Chinese delegation, consisting of officials from the country’s shipbuilding associations, is on a visit to Germany organized by the German Chamber in Beijing. During their time in Germany, the delegation will evaluate cooperation opportunities with the German shipbuilding industry with regard to energy efficiency.

A second project – SWITCH-Asia – led by the German Chamber in Beijing and funded by the European Commission, aims to promote the adoption of sustainable consumption and production among 500 small and medium sized businesses in China.

Through in-depth cooperation with officials and experts from the Chinese government and industry associations, as well as other German institutions, numerous opportunities for both German and the Chinese industry have already been created, with more set to follow.

## Commitment to environment

The German Chamber of Commerce in China focuses a huge part of its efforts, activities and events on a wide range of environmental topics. Expert workshops and delegation visits have been organized in a range of fields, including the Clean Development Mechanism (CDM).

The CDM Initiative established a platform for both Chinese and German stakeholders seeking to contribute to the reduction of CO2 emissions and to further the slowdown of global climate change. The German Chamber of Commerce in Beijing initiated this project in August 2008.

In addition to this, the chamber frequently launches initiatives related to renewable energies, such as biogas,

The author is Executive Director and Member of the Board of German Chamber of Commerce in Beijing

## Serving the climate

Industrial applications already provide innovative and cost-effective climate protection solutions. These must be applied around the world – even in regions of the world with emerging economies and rising emissions resulting from a dynamic industrialization process.

German technologies and products are designed to serve the global climate. They also create significant economic opportunities. German technolo-

# ‘Who will emerge as the global green-champion?’ asks IEEPA

By BLAKE MARGISON

Since China opened up to the world, most of its GDP growth has come from the manufacturing sector. Its comparatively cheap labor pool has led to a massive growth in exports, as well as GDP, but this has created a massive pollution problem in China.

What many forget is that America once went through exactly the same problem. The trigger for the launch of “Earth Day” was people across America and from many different groups concerned about environmental protection uniting, as they realized they were all speaking the same language and fighting for the same cause.

These factors have now become apparent in China and, in essence, the pollution problem has just been transferred from one country to another. America, the biggest polluter of the last 100 years, is demanding that China change over night, forgetting that they themselves experienced the same problem not so long ago. I call this the natural “growing pains” of a modern economy. Unfortunately for China, it comes at a time when climate change is

reaching a critical point.

Many companies around the world see growing green and corporate social responsibility (CSR) as a burden. We have seen this point of view before and from one of the biggest industries in America.

As China continues to grow, technological solutions will only be one part of the equation. Another major factor will be education, a vital element in promoting understanding among the public and, more importantly, the mayors and other leaders of China. In the past, if you wanted to keep your job, it was only determined by one thing – GDP. The system nurtured unsustainable, unhealthy growth. Managing the change from GDP to green GDP is no easy task but there are already examples of cities and mayors actually making that happen.

The question the world is facing now is – who is going to emerge as the market leader in the green market? Is this the opportunity that China has been waiting for? Or will America get its act together and realize this is the future market that can propel America back to the dominant position that it held for so long? Or will China

and America work together to combat global warming? This all remains to be seen.

The goal of the International Energy Conservation Environmental Protection Association (IEEPA) is to build cooperation between all countries, including China, in developing a sustainable green market. Global warming and environmental protection is a global problem that needs global solutions.

The IEEPA focuses on bringing together associations, businesses, governments, investment and industry experts from all over the world to develop a green economy in China. The IEEPA works with ordinary people in China, Chinese government leaders, Chinese experts, and other Chinese associations to provide an international platform where all sides can cooperate together.

Through IEEPA’s Green World campaign and its associated projects, we are looking to bring growing awareness, education and economic success to the green market.

The author is the public affair’s representative of the International Energy Conservation Environmental Protection Association.



## Winner of Cleantech Connect 2009 awards

Established in 2005, Green Gas rapidly expanded its portfolio around the globe. We currently operate around 50 sites in nine countries, converting methane emissions from coal mines and landfill sites into clean energy and carbon credits. On an annual basis Green Gas eliminates greenhouse gases of 3,000,000 tons of CO2 equivalent.

