

GreenCity

{from previous page}

bon accounting to different authorities.

Guiyang, capital of Guizhou province, plans to establish a new task force in collaboration with the energy auditing system; in Hangzhou, the development and reform commission will lead the task, meanwhile Guangdong officials have announced the provincial meteorological bureau will be in charge of setting up a monitoring platform for greenhouse gas emissions.

Having a clear picture of the sources of carbon emissions is a "prerequisite" for meeting the country's 2020 target, according to Sun Cuihua of the NDRC's climate change department. She said the government is working hard to enhance its capacity in terms of drafting a carbon-emissions inventory and improving the accuracy and credibility of statistics.

Cautious approach

Although the "low-carbon concept" has become a popular tag for authorities across China, officials in pilot areas were extremely cautious when talking to China Daily. Some even refused to be interviewed, saying that the issue is "too sensitive".

Facing the trade-off between environment and income, those who did comment said they need clearer signals from the central government.

"To put it frankly, which one do you want: low carbon or GDP?" asked Wu Hong, who works for the development and reform commission in Guangzhou, capital of Guangdong, who believes that turning green will surely result in a slowdown of economic growth.

Wu Changhua, Greater China director for the Climate Group, a British-based think tank, agreed and added: "I've met many Chinese officials who are really inspired by green practices, but when they sit down to consider their application it is impossible for them to ignore the pressures of GDP growth and carve out their own way."

When China adopted binding targets to control pollution and improve energy efficiency in 2006, officials' careers were no longer solely determined by economic achievements. Instead, they became responsible for reaching greener goals.

The carbon intensity target will feature heavily in the 12th Five-Year Plan (2011-2015), bringing mounting pressure for civil servants like Wu Hong in Guangzhou and Xu in Hangzhou.

Guangdong, South China's economic engine and net energy importer, is already feeling a "sense of urgency" to transform its growth path after suffering blackouts in recent years, said Wu Hong.

However, putting the brakes on a model that has worked for almost three decades to head in a new direction not only requires courage, he said, but also the ability to endure short-term economic loss.

In that sense, the low-carbon efforts could bring opportunities to cities like Guiyang to rush ahead.

Wang at Renmin University said he believes cutting carbon intensity (carbon emissions divided by GDP) does not necessarily contradict with economic growth: "If you can't reduce absolute emissions, expanding GDP will have the same effect," Wang said.

"China is still in the industrialization process and is not likely to reduce absolute carbon emissions for a moment," he said. "But to reduce carbon intensity, what we can do is slow down the pace of emissions growth while seeking larger increases in GDP. That is more pragmatic."

"However, that would require officials making the right choice on which industries to foster," he added.

Wang's team is helping Guiyang to draw up its low-carbon development plan and has discovered that extending the value chain of its aluminum fabrication industry would significantly increase the added value of products and result in few extra carbon emissions.

The city can also cash in on its rich tourism resources and mild summer climate to boost the low-emissions service industry, which can contribute about 26 percent toward fulfilling the city's carbon intensity target.

"As a third-tier city, Guiyang can avoid the carbon lock-in experienced by some well-developed cities and regions," added Wang.

Not just for show

There is no shortage of stunning low-carbon showcase projects in the NDRC's pilot zones, although most of them



ZHANG XIAOYU/ FOR CHINA DAILY

Electric taxis wait at a recharging station in Shenzhen, Guangdong province. There are 50 electric cabs now running on the city's roads.

13

pilot zones

Number of cities and provinces selected by the National Development and Reform Commission as low-carbon test areas

40-45

percent

Target set by the Chinese government for cutting carbon emissions for every unit of economic output on 2005 levels by 2020

50

percent

Target set by Hangzhou for cutting carbon intensity (carbon emissions divided by GDP) by 2020

1.82

million kilowatts

Amount generated by Zhejiang's first rooftop solar energy system, which is at the Qianjiang Economic Development Zone in Hangzhou

300

kilometers

Distance any one of the 50 electric taxis in Shenzhen can travel before its battery needs recharging

are running at a loss or are wholly dependent on government subsidies.

Observers are worried such expensive centerpieces might end up as "image projects," which merely gain approval from higher authorities without genuinely helping to transform the economy.

Jiang Kejun, a researcher with Energy Research Institute affiliated with the NDRC, said bluntly that "low-carbon" tags given to many cities are false, as officials there usually look to single projects without having an overarching consideration of how smart urban planning can reduce carbon emissions.

Equipped with the cutting edge of energy-saving technologies, one demonstration building in the Qianjiang Economic Development Zone in Hangzhou costs 80 million yuan (\$12 million) to build.

The zone also boasts a 64-million-yuan rooftop solar energy system that can generate 1.82 million kilowatts of electricity every year.

Despite subsidies from the Hangzhou government, though, generation of each kW still costs between 1.6 yuan and 2 yuan, while the feed-in tariff set by the power grid is only 1.43 yuan — meaning the more power it produces, the more money it losses.

Shenzhen, which is in Guangdong but is also a separate pilot city, already has 50 electric taxis on its roads. The

cars' batteries take roughly one hour to recharge and can drive as much as 300 kilometers on one charge. However, the owner of the recharging station is providing a free service during the trial stage and was reluctant to talk about the costs.

"The foundation of new industries remains weak and key technology has not yet been refined," said Wu Changhua with the Climate Group, who warned that it could take 10 years for the new technologies to mature and be accepted by the market, thereby driving down prices.

Some cities that have invested heavily on infrastructure to promote a low-carbon way of life are also struggling to create business opportunities aimed at raising funds to support the operations.

Hangzhou government has spent about 300 million yuan on establishing a system with 50,000 bicycles in 2,000 rental spots to reduce the reliance on cars. As rental is cheap, officials have attempted to make money by auction advertisement space on the bicycles. However, enterprises have so far been put off by the high prices.

Wu Changhua urged pilot areas not to be too ambitious in the early stages of green development.

"Plans should be developed according to the real situation of each region, including resources, knowledge and capabilities, and should not be too aggressive," she added.