



### GROWTH THROUGH RECYCLING

An economic model for a sustainable future





12 issues a year at a subscription rate of 180 RMB

SUBSCRIPTION HOTLINES (8610) 6831 0644, 6899 6223, 6899 5801



#### THE DESK

2 A Timely Decision

## THIS WEEK COVER STORY WORLD

16 Health Reform Lives to Fight Another Day

U.S. Supreme Court ruling not the end of the battle



18 Rejuvenating an Ancient Connection New growth for Sino-Arab ties

#### **NATION**



22 Between a Rock and a Hard Place

Stopping the spread of drug use

**24 Failed Localization**China's overlooked thrift stores

26 Reaching Out
Helping misguided youth



#### **10 Cover Story**

**Economic transformation** 

#### **FEATURES**

#### **10** Embracing the Recycling Way

A new economic model for sustainability

#### 14 The ACA and Obama's Future

Upheld in court, but still controversial

#### **20** No Limits

Venturing into space, the deep sea

#### **30** Lucky Number 13

Diversifying investment of insurance funds

#### 42 Old Man and the Sea

Devoted to marine geology

#### **BUSINESS**



**32 A Bazaar Way to Bridge Ties**Market promotes trade with
Taiwan

34 Looking Into Local Financing
Debt risks at the local level

36 Market Watch

#### **CULTURE**

**40 Engineering China's Science**Tackling science, tech
challenges

#### **FORUM**



46 Drug Driving, a Crime?

#### **EXPAT'S EYE**

**48** *Kungqu* **Opera in Nanjing** Admiration for an art

#### **A Timely Decision**

As China's economy undergoes a relatively sluggish state, the Chinese Government's timely decision to promote the development of an environmentally-friendly "circular economy" will bring new opportunities for domestic economic growth.

China is now at a critical point of rapid industrialization and urbanization. On one hand, it is working to accelerate economic development. On the other hand, it is facing challenges in energy conservation, environmental protection and so on. Under these circumstances, promoting economic structure adjustment and the transformation of our economic growth mode is an important measure.

After a seven-year trial, the conditions have formed for China to develop a circular economy, which refers to a system wherein the materials of production circulate in a renewable manner without harming the environment. It has already become a consensus in Chinese society to follow a green and low-carbon road of development. A series of policies and regulations have been set up, leading to industrial breakthroughs in new technologies and deepening the concept of green consumption in people's

China's objective of developing a circular economy is to avoid the traditional economic growth model of "high consumption, high pollution and low efficiency," and instead to take a new road of industrialization to solve environmental problems. Therefore, the road to a circular economy starts in the industrial area.

It is estimated that the circular economy's output value will reach 1.5 trillion yuan (\$238 billion) in the next five years. This is an alluring "big cake" for many investors at home and abroad. But, before sharing the cake, we must realize that China is at a stage of rapid industrialization. There are no fundamental changes in its extensive economic growth mode, which means China's economic development will have to go through a stage of huge resource consumption. Thus, resources should be more effectively used and efforts should also be made to reduce waste.

We must change the policy of solely targeting GDP growth. The governments at various levels need to take circular economy, overall development, coordinated development and sustainable development as important tools in working out economic development planning.

Given the situation that some local governments tend to neglect environmental protection due to the pressure of economic growth and employment demand, the current administrative management system in terms of environmental protection needs to be reformed to combat interference from local protectionism.

Meanwhile, China needs to strengthen its cooperation with the rest of the world. We still lag behind developed countries in the area of technology. Absorbing advanced circular economic technologies to update our own industries is a win-win decision.

#### **WRITE TO US**

Send an e-mail: contact@bjreview.com.cn

Please provide your name and address along with your submissions. Submissions may be edited.

北京周报 英文版 2012年 第28期 ISSN 1000-9140 广告许可证 0171号 北京市期刊登记证第733号 邮发代号2-922·国内统一刊号: CN11-1576/G2 国内零售价: 人民币6.00元

CHINA.....RMB6.00 U.S.A.....USD1.70 AUSTRALIA.....AUD3.00 UK.....GBP1.20 CANADA....CAD2.60 SWITZERLAND.....CHF2.60

JAPAN....JPY188 EUROPE....EURO1.90 TURKEY....YTL5.00 HK....HKD9.30 NEPAL....RS40



#### **BEIJING REVIEW**

#### A News Weekly Magazine **Published Since 1958**

iPad APP

http://www.bjreview.com E-mail: contact@bjreview.com.cn

President & Editor in Chief: Wang Gangyi

Vice President: Qi Wengong

Associate Editors in Chief: Li Jianguo, Huang Wei.

Wang Yaniuan, Zhou Jianxiong Assistant President: Li Zhenzhou Executive Editor: Ding Zhitao

Assistant Executive Editors: Yao Bin. Zhang Zhiping

Editorial Administrators: Li Ning, Shi Bosen Senior Consultant: Shao Haiming

Opinion Editor: Zan Jifang World Editor: Yan Wei Nation Editor: Yao Bin

Business Editors: Yu Shujun, Lan Xinzhen

Culture Editor: Liu Yunyun

Editorial Consultants: Brandon Taylor, Thomas Bradley Rippe,

Joseph Halvorson

Staff Reporters: Tang Yuankai, Ding Ying, Ding Wenlei, Wang Jun, Li Li, Yin Pumin, Liu Yu, Pan Xiaoqiao, Yuan Yuan, Wang Hairong, Liu Xinlian, Yu Yan, Yu Lintao, Zhou Xiaoyan, Bai Shi, Xu Tao, Deng Yaqing, Ji Jing

Photo Editor: Wang Xiang

Photographers: Jiang Xiaoying, Wei Yao

Art: Li Shigong

Art Director: Wang Yajuan

Chief Designer: Cui Xiaodong

Designer: Zhao Boyu

Proofreading: Oin Wenli, Ma Xin

Distribution Director: Pan Changqing Human Resources: Zhang Xiaoli

International Cooperation: Pan Shuangqin

Legal Counsel: Yue Cheng

North America Bureau

Chief: Huang Wei

Tel/Fax: 1-201-792-0334

E-mail: wei298@hotmail.com

General Editorial Office

Tel: 86-10-68996252

Fax: 86-10-68326628

English Edition

Tel: 86-10-68996259 Advertising Department

Tel: 86-10-68995813

Fax: 86-10-68329398

E-mail: ad@bjreview.com.cn

Distribution Department

Tel: 86-10-68310644

Fax: 86-10-68328738 E-mail: circulation@bireview.com.cn

Published every Thursday by

BEIJING REVIEW, 24 Baiwanzhuang Lu,

Beijing 100037, China.

Overseas Distributor: China International Book Trading Corporation (Guoji Shudian), P. O. BOX 399,

Beijing 100044, China

Tel: 86-10-68413849 Fax: 86-10-68412166

E-mail: fp@mail.cibtc.com.cn

Website: http://www.cibtc.com

General Distributor for Hong Kong, Macao and Taiwan:

Peace Book Co. Ltd.

17/Fl, Paramount Bldg, 12 Ka Yip St, Chai Wan, HK

Tel: 852-28046687 Fax: 852-28046409

Beijing Review (USPS 2812) is published weekly in the United States

for US\$64.00 per year by Cypress Books,

360 Swift Avenue, Suite 48, South San Francisco, CA 94080 News Postage Paid at South San Francisco, CA 94080

POSTMASTER: Send address changes to Beijing Review,

Cypress Books, 360 Swift Avenue. Suite 48.

South San Francisco, CA 94080



#### **A Snapshot of History**

A visitor looks at vintage cameras displayed at the Shanghai Museum of Vintage Camera Manufacturing on July 4.

The museum was opened to the public on June 10. It contains more than 100 Chinese-made cameras and more than 80 overseas camera models. Every brand and model of mechanical camera that was made in Shanghai since the late 1950s is on display.

Chen Haiwen, a well-known Chinese photographer and collector, is an investor and creator of the museum. In 2009, Chen purchased the production line for the twin-lens reflex mechanical camera Seagull 4A-109 from the Shanghai Seagull Camera Company. He has now restarted the production of the classic Chinese-made camera, which was last produced in 2004.

"I don't think what I did was brave. It's something anyone would do in that situation. How could one sit and watch people trying to take the plane down, which would probably end up killing everyone in the process?"

Liu Huijun, a passenger on a plane from Hotan to Urumqi, in the Xinjiang Uygur Autonomous Region, who joined the cabin crew and other passengers to foil an attempted hijacking on June 29, recalling the terrifying experience to reporters

"We must ensure that the new pension insurance system covers all rural residents and unemployed urbanites by the end of this year."

Yin Weimin, Chinese Minister of Human Resources and Social Security, at a launching ceremony for a campaign aimed at providing pension insurance to all rural residents and unemployed citizens in Hebei Province on July 1

"Our task is to create a real guarantee of security for the Russian Federation by arming the Russian forces with equipment capable to counter any attempts to offset the strategic balance."

Russian Deputy Prime Minister Dmitry Rogozin, speaking to a local radio station in Moscow about Russia's planned system to overcome and suppress any anti-missile defense for security purposes on June 29

#### "These investigations... as expected, are unnecessary procedures."

Thierry Herzog, former French President Nicolas Sarkozy's lawyer, commenting on French police's raid operation at the home and offices of Sarkozy as part of the investigation into suspected illegal financing of his 2007 election campaign by L'Oreal heiress Liliane Bettencourt, on July 3

#### THIS WEEK SOCIETY





ANCIENT CREATION Archaeologists repair a 55-cmhigh potter figure unearthed in the prehistoric Hongshan Culture Site in north China's Inner Mongolia Autonomous Region on July 3

TRAVEL BOOM Tourists buy souvenirs in the Xinjiang International Grand Bazaar in Urumqi, northwest China's Xinjiang Uygur Autonomous Region on July 2

#### Youngest Vice Governor

Tan Zuojun, former General Manager of China State Shipbuilding Corp., was recently appointed vice governor of northeast China's Liaoning Province, becoming the youngest vice provincial governor in China.

Tan, 44, graduated from Wuhan University with a bachelor's degree in international law in 1990 and gained his master's degree from Touro Law in New York in 1997. After graduation, Tan began work in the shipyard business, starting with China State Shipbuilding Corp. in June 2002. He became general manager in July 2008.

Due to his experience in the shipbuilding sector, Tan was ranked 30th in the list of 100 most influential leaders in the international shipping industry in 2010 by Trade Winds magazine, a top industry publication.



#### **Anti-Piracy Campaign**

The Chinese Government has launched a new campaign targeting rampant online piracy through enhanced supervision and inter-agency coordination, according to a statement from four ministry-level departments on July 4.

The four departments are National Copyright Administration, Ministry of Public Security, Ministry of Industry and Information Technology and State Internet Information Office.

The four-month campaign will highlight supervision over content providers, storage services, search engines and e-commerce platforms, said the statement.

Local authorities are required to conduct special investigations and boost routine inspections over online publications. The statement also proposed supervisory guidelines for e-commerce platforms under which service providers are obliged to create specific rules for copyright protection and internal penalties for violations.

#### **New Drug List**

China will revise its national essential drug list this year to better meet people's pharmaceutical demands, a health official said on July 3.

Vice Minister of Health Yin Li told a national meeting that the number of drugs in the current list was relatively small and its structure was "unreasonable."

Yin admitted that the comprehensive evaluation for drug purchasing in China lacked unified standards, and vicious competition had led to shortages of some low-priced drugs. "There is also a shortage of pharmaceutical professionals at the primary level and the drugs' reimbursement rate is relatively low," he said.

The World Health Organization's essential drugs list has 358 categories, whereas China's latest version, updated in 2009, has only 205.

#### Overseas Adoption

More than 100,000 Chinese-born orphans and children with physical disabilities have been adopted by overseas parents over the last 30 years, a senior government official said on July 4.

Overseas adoption has become an important channel through which orphaned and disabled children find homes, said Minister of Civil Affairs Li Liguo at a ceremony held for 130 U.S. families and 200 adopted children who came back to China to "seek their roots."

Li said the adoption system has improved constantly in recent years, with an increasingly mature legal system and expanding social impact.

China has cemented adoption agreements with 138 government bodies and children's organizations in 17 countries.

#### Heritage Additions

Two more properties in China were approved to join the World Heritage List at the 36th World Heritage Conference held in St. Petersburg, Russia, on June 24-July 6, namely the Chengjiang Fossil site in southwest China's Yunnan Province and Xanadu in China's northern Inner Mongolia Autonomous Region.

So far, 43 Chinese sites, including 30 cultural ones, have been recorded on the list.

Discovered in 1984, the Chengiang Fossil site contains the remains of 200 species of marine creatures up to 530 million years old. That makes it one of the most striking discoveries of ancient life in the 20th century. The fossil site is considered to be the best window to date into the marine life and ecological systems of the Cambrian period.

Xanadu encompasses the remains of Kublai Khan's capital city established in 1256. It was the base from where Kublai Khan established the Yuan Dynasty (1271-1368) that ruled China for over a century and extended its boundaries across Asia. The site

4 BEIJING REVIEW JULY 12, 2012 http://www.bjreview.com features the remains of the city, including temples, palaces, tombs, nomadic encampments and some water works.

#### **Phones for the Internet**

The number of people accessing the Internet via cellphones will exceed the number doing so via personal computers in China in the coming two or three years, experts predicted on July 3.

Experts at a conference organized by the Beijing Communication Industry Association said that mobile Internet will also popularize the Internet in the world's most populous nation.

China's Internet users stood at 513 million at the end of last year, with 356 million logging in with cellphones, up 17.5 percent year on year, according to data from the China Internet Network Information Center.

#### **More Trains to Lhasa**

China has increased passenger train services from major cities to Lhasa, capital of west China's Tibetan Autonomous Region, to cope with a travel surge that has rippled across the Qinghai-Tibet Plateau since a landmark railway opened six years ago.

Trains started traveling daily between Guangzhou, capital of south China's Guangdong Province, and Lhasa from July 9. Chengdu-Lhasa trains will soon follow the same schedule.

Seven major Chinese cities currently have Lhasa-bound trains. All are expected to operate on a daily basis in the future. Among them, Beijing, Shanghai and Xining already have daily trains to Lhasa.

The Qinghai-Tibet Railway, spanning 1,956 km from Xining, capital of northwestern Qinghai Province, to Lhasa, has



LONG-DISTANCE CHALLENGE Chang Sheng-kai (back), a former bicycle athlete from Taiwan, his father Chang Han-zhang (left) and his son Chang Jia-hao ride on a road in Fuzhou, southeast China's Fujian Province, on July 2. They planned to finish a 4,500-km-long riding journey from Fuzhou to Harbin in northeast China's Heilongjiang Province in 28 days

transported 52.76 million passengers since it went into operation on July 1, 2006, said Bao Chuxiong, General Manager of the Qinghai-Tibet Railway Co. The number of Qinghai-Tibet Railway travelers has grown by about 10 percent annually and in 2011, it reached 10.6 million, up 65.6 percent from 2006.

#### **Wider Pension Coverage**

China launched a campaign aiming to provide pension insurance to all rural residents and unemployed citizens in order to help cope with its aging population on July 1.

More than 380 million Chinese have been insured by the urban-rural residents social pension insurance system over the past three years, with about 100 million elderly people claiming basic pensions granted by the state every month, according to official figures.

Some 123 million Chinese were older than 65 by the end of 2011, accounting for 9.1 percent of the total population, according to official data.

#### **New Electricity Pricing**

China implemented a new multi-tier electricity pricing system on July 1 to tackle the increasing pressure of supplying power to the world's most populous country.

Under the new system, the residential electricity rate increases as the electricity consumption base amount increases.

Beijing has set three price brackets for residential users and will keep the current electricity rate unchanged for residents consuming less than 240 kwh of electricity a month.

The current electricity rate for Beijing households remains at 48.83 yuan (\$7.75) for every 100 kwh of consumption.

Different provinces have set up their own price brackets. The new pricing system has been designed to have minimal impact on the poor. Households consuming less than 480 kwh per month can save at least 16 yuan (\$2.54) a month, according to a calculation by the Zhejiang Provincial Price Bureau.

China has been pushing for reform in its pricing of resources and energy as part of efforts to better reflect market demand and save energy as power shortages are reported almost every summer.



WONDER OF WATER The Three Gorges Dam opens its sluices to discharge flood water for the first time this year on July 3

#### THIS WEEK ECONOMY

#### **Interest Rate Cuts**

The People's Bank of China, the central bank, cut the benchmark interest rate for one-year deposits by 25 basis points on July 6. The benchmark one-year lending rate was also lowered by 31 basis points.

After the cuts, the one-year deposit interest rate fell to 3 percent while that of the one-year loan interest rate dropped to 6 percent.

It was the second time that the central bank cut the benchmark interest rates this year after a 25-basis-point reduction on June 8.

The surprise rate cuts came at a time when many analysts fear the economic growth will slow further in the world's second largest economy in the second quarter.

The central bank also said it allows banks to offer 30 percent discount to borrowers, larger than the previous 20 percent, but the lower limit of the floating band of mortgage loan interests remains unchanged.

The upper limit of the floating band was previously adjusted to 1.1 times the benchmark.



MINERAL IMPORT HUB A foreign ocean-going cargo ship is unloading manganese ore at a dock of Qinzhou Bonded Port of Guangxi Zhuang Autonomous Region on July 4. After three years of development, Guangxi's Beibu Gulf ports in Qinzhou, Beihai and Fangchenggang have become a hub for China's manganese ore import

#### IPO Boom

Funds raised through initial public offerings (IPOs) on China's Shanghai and Shenzhen stock exchanges is expected to reach 200 billion to 250 billion yuan (\$31.4 billion-\$39.3 billion) this year, said accounting firm PricewaterhouseCoopers (PwC) on July 3.

During the first half of this year, China's IPO market experienced a slump as uncertain global economic prospects and the euro-zone debt crisis dented investor confidence.

A total of 77.5 billion yuan (\$12.2 billion) was raised through 105 IPOs during the January-June period, down 56 percent and 38 percent, respectively, from a year earlier, the report stated.

The ratio was still higher than the average international level, said Sun Jin, a partner at PwC China.

But a report by accounting firm Ernst & Young said only one Chinese company—online discount retailer Vipshop—held a

successful initial public offering (IPO) in the United States during the first half of this year, down from 13 in the same period last year.

Nineteen Chinese companies were delisted from stock exchanges in the United States during the first half, according to the report.

Ivan Tong, assurance partner with Ernst & Young, said more Chinese companies are seeking delisting partly because the stock prices are lower than expected, therefore "they would rather wait for better chances and better markets."

#### PMI Hits New Low -

The purchasing managers index (PMI), a key gauge of manufacturing activities, fell to a seven-month low of 50.2 in June, compounding concerns over the future of the world's second largest economy.

"The falling index suggests that the economy still faces downward pressure," said Cai Jin, Vice Chairman of China Federation of Logistics and Purchasing, which releases the index.

But "the extent of the decrease this year is the smallest in years, which means that the economy is building a foundation for stable growth," said Cai.

There are still many factors hitting production and it will take some time for manufacturing to turn the corner, said Zhang Liqun, a researcher with the Research and Development Center of the State Council.

#### **Boosting Private ODI**

China on July 3 pledged to help private companies invest abroad while guiding and regulating their investment activities.

The country will strengthen macro guidance on private companies' outbound direct investment (ODI) and help them invest in a step-by-step and focused manner, according to a statement jointly issued by 13 Central

#### **Numbers**

## \$60 million

Apple Inc. has agreed to pay \$60 million to Proview Technology (Shenzhen) to settle their dispute over the iPad trademark on the Chinese mainland, the Higher People's Court of Guangdong Province announced on July 2.

## 25 million tons

China loses about 25 million tons of grain every year due to improper storage, said an official from the Ministry of Agriculture. That amount is about equal to the annual wheat production of Australia, one of the world's major cereal exporters.

6 **BEIJING REVIEW** JULY 12, 2012 http://www.bjreview.com

Government departments, including the Ministry of Commerce and the People's Bank of China.

The nation will increase financial support to private companies and simplify customs clearance procedures, the statement said.

These companies are also encouraged to strengthen coordination and cooperation among each other to prevent disorderly and malignant competition.

#### **Korean Investment**

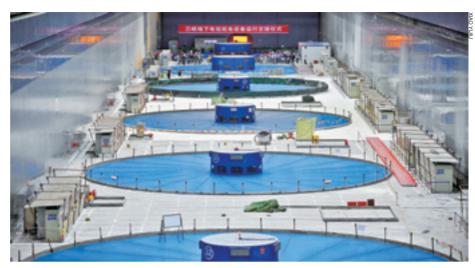
Bank of Korea (BOK), South Korea's central bank, said on July 1 that it invested \$300 million into China's A-shares last month in a bid to diversify its foreign reserves.

In June, the BOK's \$300-million quota under the qualified foreign institutional investor (QFII) program was all invested into the Chinese A-share equity market, according to the central bank.

The BOK selected various asset managers, including local ones, to trust the funds for the QFII as the indirect investment can boost competition for higher investment returns among asset managers, secure diverse investment strategy and enhance risk management.

GOING OUT IN A GREEN WAY Visitors observe a pure electric vehicle at the eighth Beijing International Pure Electric Vehicles, Hybrid Electric Vehicles and Charging Station Exhibition on July 3, which attracted 200 companies with their latest products and technologies





WORKING AT FULL CAPACITY Pictured is the Three Gorges Power Plant's underground power station in Yichang, central China's Hubei Province. With the last of its 32 turbine generators being put into operation, the power plant starts working at full capacity on July 4. The generators have a combined capacity of 22.5 million kw

#### Matriarch of Milk

Sun Yiping, CEO of a leading Chinese dairy producer, has gained media attention for taking proactive actions to rebuild consumer trust amid recent tainted milk scandals.

Sun commanded a fast-track plan to ensure a quality milk supply at China Mengniu Dairy Co. Ltd. in June, when the company announced that it will invest 3.5 billion yuan (\$551 million) in eight to 12 new dairies by 2015. At present, 80 percent of its milk is provided by other farms. The move will allow Mengniu to supply its own fresh milk and avoid food safety incidents from outside sources.

Sun also led Mengniu to learn from a foreign peer. The company entered a long-term strategic cooperation on June 18 with European dairy giant Arla Foods, a world leader in dairy farming, pasture management, quality compliance and production processes. The company will be involved in Mengniu's daily operations, send professionals to work with Mengniu employees, help the company update production technology and improve its management system.

Sun, 45, graduated from China Agricultural University with a master's degree in agricultural product processing. She worked for China National Cereals, Oils and Foodstuffs Corp. (COFCO), the country's largest food manufacturer and trader, from 1993 and became deputy general manager of COFCO Property (Group) Co. Ltd. in July 2007. On April 12, 2012, Sun was appointed CEO of Mengniu.

120,000

Guangzhou, capital of Guangdong Province, will only allow 120,000 passenger vehicles to be registered over a one-year trial period starting July 1, 2012 to ease the city's traffic jams and cut pollution.

**50** yuan

Starting on July 1, households in Bejing whose monthly electricity consumption falls between 241-400 kwh will have to pay 50 yuan (\$7.9) more for every 1,000 kwh of electricity, for residents consuming less than 240 kwh of electricity a month, the price will remain unchanged.

#### **THIS WEEK WORLD**



A South Korean folk band performs during the launch ceremony of Sejong City, 120 km south of Seoul, on July 2. South Korea inaugurated the mini-capital to house much of the nation's government

#### **SOUTH KOREA**



Former Democratic Party of Japan leader Ichiro Ozawa (standing) and other lawmakers who stormed out of Japan's ruling party in protest of a sales tax hike hold a meeting in Tokyo on July 4. Ozawa was named leader of a newly formed party

#### **JAPAN**



Drivers chat on top of a fuel tanker truck, used to transport fuel to NATO forces in Afghanistan, in Karachi on July 3. Pakistan decided to reopen NATO supply routes after the United States apologized for killing Pakistani soldiers in airstrikes in November last year

#### **PAKISTAN**





A 30-carat diamond ring costing 9 million euros (\$11.3 million) is presented at the first jewelry store of the world's leading luxury brand Louis Vuitton, which was opened in Paris on July 2

#### FRANCE



A baby green monkey plays with a toy panda at the zoo in Rio de Janeiro on June 29. The zoo opened a nursery to treat rare animals abandoned by their parents

#### BRAZIL

#### **SPAIN**

Firefighters try to control a wildfire in Valencia on July 1. Wildfires raged in Spain's Valencia and Barcelona regions, forcing the evacuation of hundreds of people

**COVER STORY** 

## EMBRACING THE RECYCLIN

Steering the country away from highly polluting and energy-depleting model in favor of the circular economy By Lan Xinzhen



10 BEIJING REVIEW JULY 12, 2012 http://www.bjreview.com

## **G WAY**



hina National BlueStar Co. Ltd., a member of the state-owned giant China National Chemical Corp. (ChemChina), and Cabot Corp., a U.S. specialty chemical company, in April agreed to expand their joint venture in central China's Jiangxi Province. The new project is to turn Bluestar's byproducts into chemical products for reuse. Bluestar is an organosilicon manufacturer, one of its byproducts methyl trichlorosilane will be turned into fumed silica, a raw material for producing organosilicon at Bluestar.

Compared with similar chemical products, fumed silica has little competitiveness in the market because it's more expensive. However, by recycling the methyl trichlorosilane, the production process can avoid pollution caused by emission of methyl trichlorosilane. The project, a representative of the recycling economy, has won support from the Jiangxi Provincial Government and is already being implemented.

The Chinese Government hopes to jumpstart similar projects as it seeks a sustainable development model. The preference was shown in the 12th Five-Year Plan for the Circular Economy (2011-15), which has been handed in to the State Council by the National Development and Reform Commission (NDRC). It's expected to be released soon, to become the first national plan for bolstering the circular economy.

To date, the output value of China's circular economy has surpassed 1 trillion yuan (\$157.4 billion), offering over 20 million jobs, according to the NDRC. Most industrial output comes from return on technological innovation in highly polluting and energy-depleting industries, such as iron and steel, cement and power generation.

Expectations abound that the output value of the circular economy will reach 1.5 trillion yuan (\$236.1 billion) by 2015. A new economic growth point is emerging.

#### **Current condition**

China's circular economy is still in its infancy. In 2005, the State Council released a regulation to facilitate development of the sector, including it in the national development strategy. After that, the NDRC, together with the Ministry of Environmental Protection, Ministry of Science and Technology, Ministry of Finance and National Bureau of Statistics, selected 178

companies in 20 provinces to develop this economic model on a trial basis. By setting up pilot projects in highly polluting and energy-depleting iron, chemical and nonferrous metal companies, the government is exploring an effective model in developing the circular economy.

Zhou Hongchu, a research fellow at the Research Department of Social Development under the Development Research Center of the State Council, often studies circular economy practices in enterprises. He found out some have done pretty well while some are still undergoing technology innovation.

Different regions and sectors are actively accelerating the development of the circular economy and, meanwhile, the country has worked out institutional arrangement, technological path, successful experience and growth pattern that are conducive to its development.

However, obstacles—like small economic scale, low technological level and severe pollution—hinder its development. Also, some multi-industry chains are restricted, which requires the country to clear the way for any viable boom, said Zhou.

"Policy incentives and national fiscal subsidies have been huge in driving the development of the circular economy, and are one of the main reasons for local governments' resolution to facilitate its development," said Zhou.

#### **Major steps**

Sitting at a critical point in its industrialization and urbanization, China faces both challenges from economic development and environmental protection. Now is the right time for the country to make the plan.

Yang Chunping, Director of the Circular Economy Research Center of Economic Mechanism and Management Institute under the NDRC, has participated in the research of the plan.

The development of the circular economy in China will be a gradual process. During the 12th Five-Year Plan period (2011-15), the focal point should be in-depth development, shown in the following four aspects, said Yang.

First, after the release of the plan, detailed implementation plans should be formulated by local governments based on their regional conditions. Key areas and projects should be

http://www.bjreview.com



POWER ON: A worker monitors generating sets in a DQY biogas power plant in Yanqing County, Beijing on May 19, 2009

selected by local governments to guide social investment and help avoid investment risks in the sector.

Second, the Central Government will continue its subsidies in key projects involving the circular economy. When local governments formulate and implement investment plans, circular economy projects featuring "reduction, recycle and resources" should be listed as key areas for investment.

Third, the government will abolish unreasonable regulations restricting development of the circular economy, formulate industrial policies and channel social investment into the sector. Also, the technology, equipment and products of circular economy should be further promoted.

Fourth, research on pricing policies will be conducted to steer consumers to energysaving, water-saving, material-saving and resource-recycled products and make circular economy projects more appealing to social capital.

According to Yang, some highly polluting and energy-depleting industrial sectors have seen successful practices and experiences in the circular economy; others are still in the dark, clueless to the ways of the

circular economy. Therefore, more emphasis will be placed on sharing experience amongst industries to form a comprehensive system to recycle all resources in society.

The plan focuses on the whole process including production, logistics and consumption. Taking the shipbuilding industry for instance, foreign shipbuilding companies produce steel according to the shape of the ship they are going to build while Chinese shipbuilding companies purchase steel and re-produce it to fit each ship's design. This increases energy consumption, as well as transportation needs.

"Reducing unnecessary procedures in the industrial chain can demonstrate the principle of reduction," said Zhou.

Compared with previous policies that supported circular production in a single company or low-end, scattered and small-sized resource recycling, the plan covers the whole industrial chain and focuses on high-end, concentrated and large-scale resource recycling.

The NDRC and the People's Bank of China will further perfect financing policies for the development of the circular economy. They will formulate specific measures in industrial planning, investment, industry, price, credit, going public and using FDI.

"From pilot run to comprehensive promotion, China is forming a development pattern for circular economy with distinguished Chinese characteristics during the 12th Five-Year Plan period (2011-15)," said Yang.

#### Tasks ahead

Scholars and experts were recently sent to China's central, western and coastal regions for inspection tours. They found some severe issues that are harmful to the development of the circular economy.

"With the excuse of an economic slowdown, many regions have given the green light to highly polluting and energy-depleting projects. If things continue like this, it will be difficult to carry out the plan," said Zhou

How can China effectively make the fledging sector bigger? First, policies should give the circular economy a specific orientation. The most urgent task is to specify a policy system that is conducive to its development, which can channel social capital into this sector, he said.

China's circular economy is at a starting point, which requires more preferential policies in tax, more promotion efforts for its technology, equipment and products, more encouragement to companies for technological innovation and upgrading traditional industries to reduce their energy consumption and emission, said Zhou.

Companies should firmly grasp opportunities during the transformation of China's economic growth pattern. They should implement low-carbon concept in their daily operations; make breakthroughs in the research and development of key technologies in circular economy; expand their industrial chain by strategic cooperation; work full out to enhance utilization rate of resources, he said.

According to Zhou, the government should fully use the price lever to guide more people to choose energy-saving products instead of highly polluting and energy-depleting ones. It should also cultivate the general awareness of energy saving and environmental protection, making it a new fashion in life.

lanxinzhen@bjreview.com

12 **BEIJING REVIEW** JULY 12, 2012 http://www.bjreview.com



China.com.cn China.org.cn

# China's National Online News Service in 10 Languages



## Read BEIJING REVIEW on the go!

The iPad app puts the entire contents of the print edition at your fingertips, in addition to exclusive Web articles, photos and videos. Purchase individual issues and store them in a virtual library for convenient reading during your daily commute.



#### **FEATURES**

- Browse by cover and buy single issues at the Store.
- Download purchased issues to a virtual Library.
- Find articles with an interactive table of Contents or use scrolling navigation to read page-by-page.
- Connect to BJReview.com with Web View.

