

## **China is fast becoming a global leader in clean tech development and investment, GLOBE 2014 conference hears**

*By Elona Malterre*

VANCOUVER – China is fast becoming a global leader in renewable energy and clean technologies, being both a huge market and a significant investor, the **GLOBE 2014** conference heard.

“China will invest annually over \$80 billion in renewable technologies by the year 2020 to achieve 484 gigawatts of power capacity,” **Jonathan Woetzel**, director at **McKinsey & Co.** and co-chair of the [Urban China Initiative](#), told delegates to the biennial international environment business conference and trade show, held in Vancouver in March.

Woetzel, who moderated a GLOBE morning session titled “Spotlight on China: Our Shared Future,” said China will invest \$6.5 billion annually just in LED lighting technology by the year 2015 – 24 times the amount invested by the country in 2009.

“China will invest \$30 billion a year in energy conservation and energy savings equipment . . . \$330 billion over the next five years in water pollution (treatment) . . . \$124 billion over the next three years in air pollution remediation,” Woetzel said.

Session panelist **Rosita Wong**, founder and president of **EastGroup**, said: “China is changing itself every minute . . . and is perfecting itself to be a global leader, a global provider of green technology.”

Keynote speaker **Teresa Wat**, British Columbia’s Minister of International Trade, said B.C. has identified developing clean tech and the green economy as a priority, and “China is turning to technologies where Canada and British Columbia have developed expertise.”

B.C. views itself as the gateway to the Pacific economy, Wat added.

“Our trade and investment network in China helped **IMW Industries** of Chilliwack, B.C. sign a deal with China . . . to ship around \$9 million of equipment to China for use in their natural gas filling stations,” she said.

“**China Gas** and IMW, partnered with **Westport Innovations** of Vancouver, have constructed 120 natural gas fueling stations in China since 2009.”

B.C.’s vast natural resources, competitive taxes and fiscally responsible government attract investors from around the world, making the province one of North America’s most dynamic locations to do business, Wat said.

## **CHINA SETS AMBITIOUS TARGETS FOR GREENER GROWTH**

China’s **12<sup>th</sup> Five-year Plan** (2011-2015) and other government policies have set ambitious targets for greener growth and greater social stability in rural and inland areas.

Despite its continued dependency on fossil fuel energy resources, including coal, China has become the world’s largest market for renewable energy deployment and one of the largest suppliers of clean energy technologies. This is creating new partnership opportunities for foreign suppliers.

Session speaker **YiNing Wang**, secretary general of the **China Association of Machinery Industry for Environmental Protection**, speaking through an interpreter,

told GLOBE delegates that China is concentrating on seven major sectors in pollution control, including prevention, as well as on remediating water, air, soil, solid wastes, noise and some special categories.

The top three areas allocated for equipment expenditures include air pollution (40 per cent of expenditures), water pollution (30 per cent) and waste treatment (12 per cent). China's action plan on air pollution includes spending US\$1.7 trillion on research and development.

Companies wanting to work in China can expect tax exemptions, Wang said, adding that "China and Canada have a long history of doing business," and his organization looked forward to "bright forecasts" for business between the two countries.

Session moderator Woetzel, in introducing **Li Fang**, deputy director of China's **General Foreign Economic Cooperation Center** in the **Ministry of Environmental Protection**, said although the ministry is a relatively one in China, it is now at the centre of China's domestic economic policy.

Fang, in setting an historical context for China's environmental challenges, said globalization has led to the country's pollution problems.

Smog afflicted Europe 60 years ago, she said. "Then it moved to America and now it temporarily sits in the world's factory – China. It will move to the next stop later . . . the only change has been in the location of the pollution."

The Chinese government has decided to resolutely wage war on pollution, said Fang, who as a senior regulatory official offered insights into the environmental standards and processes the country has launched or will be implementing.

China is expanding the number of laws dealing with pollution, ensuring stricter enforcement of existing laws, and increasing the penalties for breaking them, she said. Higher demands will be placed on industries, including through more than 70 environmental standards being revised and improved.

The measures also include allowing any group to take legal action against polluters, not just those who are directly affected.

The country also is offering 'carrots:' incentives and opportunities for businesses to become more profitable and responsible.

China is looking at greenhouse gas emissions trading, which Fang said is an interesting new market in the country that promises profit for businesses. Emissions trading is in a pilot stage and will be considered for other pollutants as well, she added.

Other incentives being explored include creating financial instruments, such as lower interest rates, for environmentally related investments, as well as establishing an insurance system that enables business to lower environmental risk.

China also is opening markets for environmental services to the business sector. Services such as measurement and surveillance were previously done by government which cannot keep up with the demand, so opening the markets will allow businesses to move into this area.

The government also is taking serious steps to ensure that businesses use natural resources prudently, including long-term accountability for environmental performance. One measure being considered is "lifetime environmental performance accountability for government officials," including after they've retired, Fang said.

China also plans to encourage greater public involvement in environmental concerns by establishing a comprehensive environmental and natural resources

information platform. “People will have easy access to decision-making process that directly affects their lives,” Fang said.

The government “will continue to encourage international cooperation to improve and innovate technologies,” she added, including establishing a series of environmental and technological centres to deal with pollution.

In terms of spending on the three top priority areas mentioned by Wang, Fang said that China’s air pollution control plan is currently budgeted at \$1.7 trillion dollars. The water pollution and heavy metals problem is being addressed with a \$2-trillion expenditure, with \$117 billion of that coming within the first five years.

Those are preliminary figures, Fang said, adding that if “we consider the problem of new urbanization, the figures could be much higher.”

## **DOING ‘GREEN’ BUSINESS IN CHINA**

The second part of the morning-long “Focus on China” session featured Western businesses that have been doing business in China for some time.

Moderator Woetzel said the four panelists between them had more than 100 years of experience dealing with China, and making the transition between Western and Eastern business practices.

Rosita Wong, founder and president of EastGroup, was a journalist in Washington, D.C. and Ottawa before establishing her green tech company in Beijing.

Wong called her company “a market fixer” that helps take Canadian, American and European companies to China, which she called a “springboard” for opportunities. She also helps Chinese companies with good technologies take their ideas to the rest of the world, including developing countries such as Ethiopia, Bangkok and elsewhere.

Wong said the calls received in her Beijing office were increasing daily with Chinese companies looking for international technologies. “Every time I come to Canada or to the U.S., I have a shopping list.”

However, she stressed that it is really important for foreign companies to find the “right partner,” so they can land solidly in the Chinese marketplace.

**Stephen Clarke**, vice-president, business development for **Phase Separation Solutions**, a St. John’s Newfoundland-based company that remediates polluted sites, spoke of his experience in China.

Clarke said the company worked in an area in which 22 million people were moved into an urban area in five years, which necessitated that the footprint of the original plan for the city expanded into previously industrialized areas that required remediation.

Clarke agreed with Wong that in order to do business in China, it is necessary for Western companies to find crucial partnerships. “Companies moving from the West to China will inevitably have to give up a certain amount of control, which is difficult for entrepreneurs. But it’s the only way to move forward because it’s a soft landing,” Clarke said.

Phase Separation Solutions initially partnered with an academic organization, the **Nanjing Institute of Environmental Sciences**, which operated the demonstration remediation facility after the Canadian company provided its equipment.

Clarke said his company's experience and partnership allowed it to expand its business into four other provinces in China.

China has "great growth potential," Clarke said. "But I would caution anyone entering the marketplace (to) temper your zeal. You need to be very cautious about what you're doing, and learn a little more before you get there so you can avoid certain disappointments."

**John O'Brien**, founder and managing director of **Australian CleanTech**, and managing director of Beijing-based **Sino CleanTech**, the Chinese operational arm of Australian CleanTech, told GLOBE delegates that he was born in England of Irish parents, but had worked in Canada as well as Australia, so his 'nationality' was clean tech.

"That's very important," said O'Brien, who noted that his father, who'd been a doctor in Manchester, had to change his white shirt three times a day because of the smog. "Smog is not a new problem," he said, adding that "China will solve it more quickly than has been done elsewhere."

The clean tech index in China went up 29 per cent in 2013, so there are some good returns in China for investors. Solar and wind energy are very volatile, but some other sectors are far more stable, including those involved in environmental treatment and management of land, water and air.

The Chinese are keen to use Western technologies, O'Brien said, adding that there was a "queue of people waiting to talk" to his clients who had "dust-management technologies, air quality technologies . . . wastewater treatment for intensive farming, and LED manufacture."

"The government support in China and the investor support in China for clean tech (are) far, far greater than it is in Australia and I think probably in Canada," O'Brien noted.

Panelist **Nicholas Parker**, managing partner at **Global Acceleration Partners Inc.**, said he considered the "Spotlight on China" session the most important event at GLOBE 2014.

Parker noted that he coined the term "clean tech" 12 years ago at an earlier GLOBE conference.

"I set out to create a global innovation eco-system. And in the last 12 years, over \$60 billion has been invested in clean-tech start-ups (and) in growth-stage technologies around the world, in North America, Europe and Australia," he said.

"And yet the opportunity . . . is really in the emerging markets. In terms of resource productivity enhancement, up to 85 per cent of those opportunities reside in places like China and so on."

Parker said that when "it comes to the environment, we're all 'Chinese.' Because unless we help China overcome its environmental challenges, we're all going to suffer."

*EnviroLine*

