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#### WORLD BUSINESS

# Nuclear industry touts safety of new reactors

AP, Olkiluoto, Finland

Halfway around the globe from Japan's atomic emergency, engineers building a cutting-edge nuclear reactor along Finland's icy shores insist the same crisis could never happen here.

And that's not only because Finland is seismically stable.

The 1,600-megawatt European Pressurised Reactor projected to come online in 2013 in Olkiluoto, 195 miles (315 kilometers) northwest of Helsinki, is the first of its kind expected to begin operating after the Japanese disaster.

It has walls thick enough to withstand an airplane crash, components designed to tolerate the extreme cold of the Nordic winter, and decades worth of new safety systems.

"(We have) so many backup systems that the kind of accident like in Japan could not happen," said project manager Jouni Silvennoinen.

With the renaissance of nuclear power at stake, the atomic industry faces the challenge of persuading an increasingly skeptical public that new reactors like the EPR units being built by French company Areva in Finland, France and China are not just safer than the old ones but are virtually disaster-proof.

The state-controlled company has marketed its expensive new-generation reactor technology to the United States and developing countries from India to Saudi Arabia and Brazil. Since news of Japan's catastrophe, Areva's shares have fallen 12.4 percent, trading at euro31.49 midday Friday.

Areva CEO Anne Lauvergeon has said an EPR plant would have survived the earthquake and tsunami without radiation leaks. And French Energy Minister Eric Besson, whose country gets up to 80 percent of its electricity from nuclear power, insisted last week it was his "profound conviction that nuclear energy will stay in Europe and the world and be one of the core energies in the 21st century."

But that's a tough message to sell, with explosions and radiation leaks at the Fukushima Dai-ichi plant in Japan erod-



Contractors work in the reactor building at the construction site of the nuclear power plant Olkiluoto 3 'OL3' in Eurajoki, south-western Finland on March 23.

ing confidence in nuclear power. That confidence took decades to rebuild following the Soviet Chernobyl disaster in 1986 and the 1979 Three Mile Island accident in Pennsylvania.

Shocked by the Japanese crisis, the European Union has called for "stress tests" for its 143 reactors. Germany - the EU's biggest economy - has temporarily suspended plans to prolong the life of its aging nuclear plants and had already planned to abandon nuclear power altogether over the next 25 years. President France's nuclear industry.

Barack Obama, while expressing support for nuclear power, requested a comprehensive review of the safety of U.S. plants.

Even China, which plans a massive expansion of nuclear energy, has said it will hold off on approving new nuclear plants to allow for a revision in safety standards.

Suggesting that third-generation reactors like the EPR would have withstood the shock that crippled the Japanese plant is "sheer arrogance," said Mycle Schneider, an independent researcher on

"There's no way we can say today that any plant in the world would have survived what happened in Japan," he said.

At the Fukushima plant, which began operating in 1971, the massive earthquake and tsunami damaged the critical cooling system, which overheated and began spewing radiation into the environment. For the first time, nuclear engineers were forced to head off a total reactor meltdown at three reactors simultaneously as well as dealing with overheating fuel rods in a damaged storage pool at a fourth reactor.

So how could a modern reactor have avoided those problems?

The principle of power generation is the same as in older high-pressure water reactors like the ones at Fukushima: nuclear reaction heats water to create steam that turns turbines to generate electricity. But technological advances have improved efficiency and stricter safety precautions have made the thirdgeneration reactors more secure, industry officials say.

New EPR plants have backup systems like diesel generators that are housed in separate buildings to protect them from any accident that might occur in the main reactor building. The plant must also have access to other sources of electricity, like gas turbines or the national grid, if the diesel generators fail to work.

At Olkiluoto, four large diesel generators act as a backup if the first step of connecting to the national grid proves unsuccessful. If they don't work, two smaller diesel generators kick in, and failing that, the new reactor can be connected to the joint backup systems of two older reactors at Olkiluoto.

There are also new "protective barriers" shielding the environment from radioactive products used in the reactor. These include encasing the fuel rods in thick metal containers and having a double concrete cover and walls over the containment vessel that houses the reactor.

Besides natural disasters, modern reactors worldwide must be able to withstand terror strikes and - since 9/11 - even a large airliner crash, Silvennoinen said.

### India to pay Iran for oil using Germany

AFP, Berlin

India is set to pay Iran for billions of dollars worth of oil imports by channeling funds to Tehran via the German central bank, a German newspaper report said Monday.

Under pressure from the United States to break

direct commercial links with the Islamic republic, India intends to place money for its Iranian oil imports in an account with the Bundesbank, the Handelsblatt business daily reported. The Bundesbank would then transfer the

money to the European-Iranian Trade Bank AG (EIH), based in the northern German city of Hamburg, the paper said, quoting financial and political sources.

"We are in talks with the Bundesbank," the paper cited Neeta Bhushan from the Indian finance ministry as saying.

The arrangement has been given the green light by two ministries in the German government, Handelsblatt said.

Two of the EIH's main shareholders, Bank Mellat and Bank Refah are subject to European Union sanctions approved last year in addition to UN restrictions, the paper said.

Contacted by AFP, the Bundesbank declined to comment while a spokeswoman for the economy ministry told a regular government briefing that the EIH, also known as the EIHB, was not itself subject to EU or UN sanctions.

"The inclusion of a bank on the (sanctions) list is not something decided by the (German) government but the European Union council," spokeswoman Sarah Schneid said.

"What counts is involvement of a bank in financing Iran's nuclear and missile programme ... The government investigates closely any indications (of such involvement)."

Chancellor Angela Merkel's spokesman Steffen Seibert stressed that the bank was under "strict" supervision, with all transfers over 10,000 euros (\$14,000) needing to be reported and all those above 40,000 euros requiring approval.

Germany has long been under fire for its close business ties with Iran, with the country's exports there totalling 3.8 billion euros in 2010, according to official figures.

# Home lures Taiwan businesses as China costs soar

Namchow Group in Taipei.

should happen now, at a juncture in

history when China and Taiwan are

getting friendlier than ever and have

started removing many of the

started funneling funds out of the

island in the 1980s, they were

attracted by the mainland's cheap

labour and land prices, but they acted

got the official stamp of approval,

and a China-friendly administra-

tion that took over in Taipei in 2008

is promoting economic exchanges

the Economic Cooperation Frame-

work Agreement, the most sweeping

cross-strait pact in six decades, and

an investment protection agreement

wanese funds, with enterprises from

China does still attract large Tai-

Last year China and Taiwan signed

more actively than ever.

is likely to follow soon.

Since then, however, they have

without government permission.

When Taiwanese companies

remaining obstacles to business.

Taiwan enterprises have struggled for years to enter China, but now, just when access to the mainland market is becoming easier than ever, many are paradoxically heading back to their home island.

One of them is Taipei-based restaurant giant Namchow Group, which was a relative late-comer in China but is an early bird in the reverse drive back across the Taiwan Straits, which separates the island from the mainland. "Taiwan people's income is

higher," said Alfred Chen, chairman of the group, which derived about half of last year's Tw\$9.6 billion (\$325 million) in revenues from the island. "Besides, local consumers provide

us with valuable experience regarding emerging consumption habits," added Chen, whose company is maintaining its mainland operations while boosting those at home.

Chen is building a culinary empire on Taiwan centred around a German and a Chinese restaurant chain, plus he is planning to modernise his edible oil and fats plants on the island at a cost of Tw\$500 million.

Cheng Shin Rubber Industries, a tyre maker with plants in China, Vietnam and Thailand, invested Tw\$10 billion at home last year to boost its local capacity and plans to spend another Tw\$20 billion over the next two years.

"The investments are aimed to boost the manufacturing capacity of our high-price items," company spokesmanWu Hsuan-miao said.

This appears to be the beginning of a broader trend. Taiwanese companies with a majority of their business on the Chinese mainland invested Tw\$40.9 billion at home last year, a tripling of the figure since 2007.

"There are signs that such investments are on the rise," said Tristan Lu of the Taiwan Institute of Economic Research, a private think-

tank based in Taipei. It is somewhat ironic that this the island investing \$6.7 billion on



Chefs prepare food at the kitchen of a Chinese restaurant owned by Taiwan's

the mainland last year, according to

the Chinese Ministry of Commerce. But at the same time, China's investment climate has changed dramatically, investors say, as skyrocketing labour costs, a new business income tax and a more cumbersome labor contract law combine to sour the outlook.

"Lots of Taiwan-invested companies have been forced to close their plants there," said Ling Chia-yu, the head of the Taiwanese economic ministry's Department of Investment.

But Taiwan-invested companies which are getting less enthusiastic about China may find that returning home is not a solution to their woes, analysts said.

"Those companies, mostly small ones without competitiveness, won't be able to survive in Taiwan even if they come back," said Tung Chen-yuan, an expert on China-Taiwan economic ties at Taipei's National Chengchi University.

#### S Korea looking for energy deals on Africa tour

AFP, Seoul

South Korea's foreign minister will make a rare visit to Africa in April, the foreign ministry said Monday, as Seoul joins Beijing in the scramble for access to the continent's vast natural resources.

Kim Sung-Hwan will travel to Gabon, the Democratic Republic of Congo and Ethiopia between April 2 to 9, to meet Gabonese President Ali Bongo Ondimba and Congo's President Joseph Kabila.

His visit comes as China, the world's secondlargest economy, has steadily deepened ties with Africa, which is rich in the energy resources and raw materials that it needs to fuelits breakneck growth.

Kim, in the first visit by Seoul's top diplomat to Ethiopia, will also meet Prime Minister Meles Zenawi before talks with the African Union Commission chairman Jean Ping, the ministry said in a statement.

Talks will be held on oil exploration projects in Gabon and the building of infrastructure in Congo in return for energy deals, a ministry official said.

"We plan to actively encourage South Korean companies take a plunge in Africa, the world's emerging economy rich with energy resources," the ministry said in a statement.

"The trip... is aimed at helping South Korean companies win business deals there and sharing the experience of our economic development with Africa," it said.

No South Korean foreign minister has visited Congo since 1986 and

## Wal-Mart to reopen 12 quake-hit stores in Japan

REUTERS, New York

Wal-Mart Stores Inc will re-open 12 of its Seiyu stores in Japan which were affected by the earthquake, and is hoping to open the remaining 12 impacted stores as soon as possible, a spokesman for the U.S.-based retailer said.

Wal-Mart has 371 stores and 43 deli outlets in Japan, of which 24 were affected by the March 11 earthquake and tsunami that left more than 27,000 people dead or missing across Japan's devastated northeast.

Of Wal-Mart's affected stores, two were severely hit and were completely covered by mud, said Wal-Mart Asia's Vice President of Corporate Affairs, Anthony Rose.

The remaining 22 affected stores managed to operate out of parking lots in

some form within hours of the disaster, and were giving away bottled water and items such as noodles while selling some limited items, Rose said.

Wal-Mart said the 12 returning to full operations on Monday are located in Sendai City and in a suburb of Sendai. The other 12 will reopen as soon as possible, said Rose, who is based in Hong Kong.

"Wal-Mart has a lot of experience of dealing with disasters learning from the earthquakes in china, Chile and also the Katrina disaster to name a few," said Scott Price, president and CEO of Wal-Mart Asia in a statement emailed by

"Within minutes of the earthquake in Japan, we activated our emergency operations center in Bentonville and command centers in Tokyo and Hong Kong," Price said in the statement.



Two real estate agents wait for customers at a stall in Beijing yesterday. China's efforts to cool its red-hot real estate market showed signs of working in February, as government data showed more cities seeing a fall in house prices from the previous month.