

Japan crisis won't derail Europe's nuclear revival

REUTERS, London

Europe's need to reduce dependence on oil, gas and coal mean its multi-billion-dollar nuclear new-build plans are unlikely to be hurt by Japan's nuclear crisis but after a huge earthquake.

The disaster is a setback to the nuclear industry, which is enjoying a renaissance as public fears over nuclear safety have faded along with memories of the 1979 Three Mile Island accident in the United States and Ukraine's 1986 Chernobyl disaster.

Governments are likely to face more vocal opposition to new nuclear plans after Japan fights to avert a meltdown at three nuclear reactors, describing the massive earthquake and tsunami as its biggest crisis since World War Two.

Anti-nuclear campaigners around Europe have seized on the Japanese accident as evidence of the dangers of nuclear power and said governments should rethink plans for new plants.

"I think it will make a lot of governments, authorities and other planners think twice about planning power stations in seismic areas," said Jan Haverkamp, European Union policy campaigner for environmental group Greenpeace, which opposes new nuclear reactors and wants existing ones phased out.

French reactor maker Areva and nuclear power producers EDF and GDF Suez are important industry players. France's Alstom and Schneider Electric are also active in the sector, as are Switzerland's ABB and Germany's Siemens.

Chancellor Angela Merkel, whose government last year extended the operating lives of Germany's nuclear reactors, said the government was consulting with nuclear experts and watching Japan's accident closely.

The Japanese radiation leak comes at a difficult time for Merkel, whose conservatives face three state elections in March where nuclear safety fears could help her opponents.

On Saturday, tens of thousands of anti-nuclear protesters formed a 45-km (27 mile) human chain from Stuttgart to a nuclear power plant that will be kept running longer because of the new policy. The protest was planned before the Japanese earthquake.

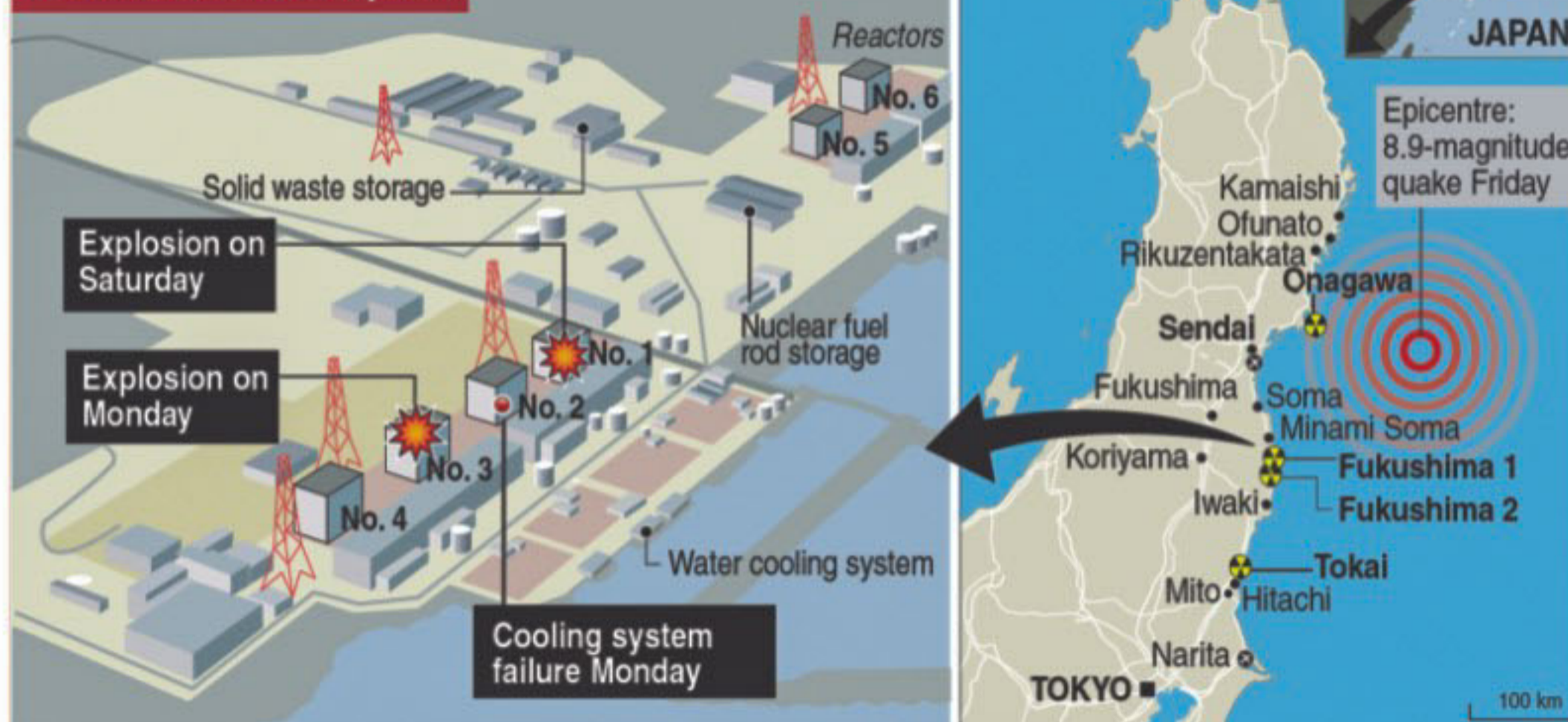
EU Energy Commissioner Guenther Oettinger plans a meeting in the next few days to discuss lessons from the accident with nuclear safety authorities, nuclear operators and constructors.

In Britain, which plans a major nuclear building programme to replace ageing plants, Energy Secretary Chris Huhne said on Sunday he had asked the chief nuclear inspector to report on the implications of the Japanese crisis.

Crisis at a nuclear power plant

210,000 people evacuated from 20km radius of Fukushima power plant

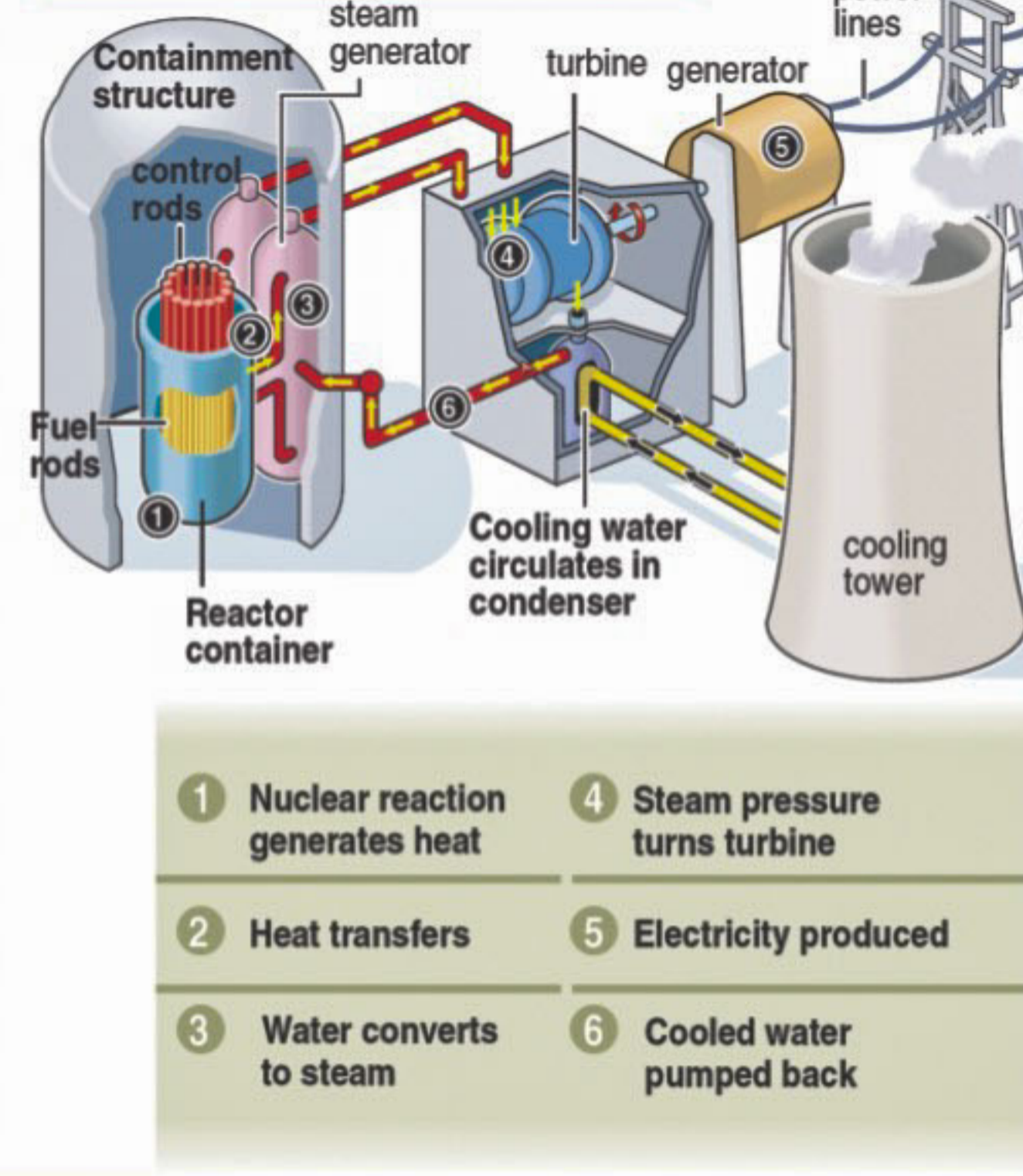
Fukushima 1 atomic plant



Failure at Fukushima

- ▶ Tsunami damage caused a failure of cooling systems
- ▶ Hydrogen released from water as a result of high temperatures inside containment structure
- ▶ Explosion occurred as a result of a build up of the flammable gas
- ▶ Containment structure of reinforced concrete torn open in the blasts
- ▶ Officials say reactor container not breached so far, no major rise in radiation
- ▶ A meltdown of fuel rods could cause a radioactive blast that would breach the reactor

How a light-water reactor works



He said that while there may be lessons on operator safety, Britain had different reactors to those in Japan and stressed that Britain is not in an earthquake zone.

British Green lawmaker Caroline Lucas said the Japanese accident strengthened the case against new nuclear construction.

"You will never be able to completely design out human error, design failure or natural disaster," said Lucas, whose party backs energy efficiency and renewables to meet Britain's energy and climate change goals.

Walt Patterson, associate fellow at London's Chatham House thinktank, said that, while the

Japanese crisis would affect public perceptions of the nuclear industry, the financial damage could also be severe.

"Somebody is going to wind up paying the bill and it will probably be the Japanese public one way or another," he said.

"That is undoubtedly going to filter back to the debate in Europe as a further factor in the very dubious economics of these plants," he told Reuters.

Italy, one of the few European countries prone to earthquakes, is the only Group of Eight industrialised nation without a nuclear power plant.

Prime Minister Silvio Berlusconi wants a quarter of the country's electricity to be nuclear in future and the leader of Berlusconi's PDL party in the lower house said Italy would not change its plans because of the Japanese disaster.

Events in Japan are likely to loom large in voters' minds however when Italy holds a referendum within the next three months on whether to build nuclear power plants.

France, world No. 2 nuclear energy producer after the United States, said it would discuss possible precautionary measures for its 58 reactors that provide most of its electricity.

Areva, EDF and GDF Suez had no comment.

And sources said the Japanese nuclear threat was unlikely to freeze nuclear investment in countries such as Britain, where Areva, EDF and GDF Suez want to export know-how and equipment.

"In the heat of the moment, this will of course stir calls to end nuclear power generation, but over the longer term governments have to think rationally about rising power needs and CO2 emissions," said an industry source, asking not to be named.

"Nuclear power is an unavoidable element of the energy mix."

Another French industry source said the Japanese nuclear accident would create a "premium on safety" and support the case for building third generation reactors.

That source said third-generation reactor models such as the 1,650-megawatt (MW) EPR and the 1,100-MW Atmea, both manufactured by Areva, offered the possibility of confining the core of a melting reactor, which was not necessarily the case with the Fukushima Daiichi reactors built over 30 years ago.

"I cannot see how what's happening in Japan could call Britain's programme into question given the country's power needs," the second nuclear source said.

"Of course this will raise additional questions on safety but I don't think this will delay the certification process or the investment decisions."

The Japanese accident strengthened the case against new nuclear construction. You will never be able to completely design out human error, design failure or natural disaster

Palestinians eke out living on garbage dump

AFP, Yatta, Palestinian Territories

Among the gentle slopes of cypress-covered hills near the West Bank city of Hebron is an anomaly, a stinking garbage dump that is workplace and home to dozens of men and boys.

The quiet that hangs over neighbouring olive groves, in the far south of the West Bank, is broken here by the shouts of workers, many of them children, and the grinding of a bulldozer covering the picked-over trash with sand and dirt.

Overhead the sky is clear and the sun beats down, heating up the detritus of modern life -- vegetable scraps, washing liquid bottles, old clothes, cans with dregs of soda in them.

The smell produced is overpowering at times, a sickly-sweet stench of rotting organic matter and chemical effluvia, which sticks to clothes and hair despite the light breezes that sweep over the hilltop.

At the far end of the hill, created entirely from layers of garbage ploughed over with sand, are makeshift residences -- planks of wood with tarpaulin or rubbish bags strapped over them to provide shelter.

For many of those working here, these shacks act as their home during the week, a place they can sleep at night rather than going back to the village of Yatta. And it also means they are on hand to sort out any rubbish that comes in after dark.

It is unpleasant, tiring work, but is a rare source of income in the West Bank, where unemployment stands around 15.2 percent.

Most of the adult workers here once worked in Israel in the 1990s, but found

themselves out of a job as security measures were tightened after the start of the second intifada in 2000.

Children find themselves here after their families breadwinners are no longer able to provide.

"My father worked here, but he fell and hurt his leg and he can't anymore, so he took me out of school and I've worked here ever since," says 17-year-old Mahmud Nabhan.

"I was 12 when he took me out of

school, but I don't want to go back. Me and my brother are the ones that earn money for our whole family."

He and his 13-year-old brother both sport checkered scarves around their heads, which serve a dual purpose: shielding them from the sun, but also available to be wrapped round their faces to help mitigate the putrid smell.

As the trucks pull up, bringing tonnes of refuse from neighbouring Palestinian towns and villages as well

as Israeli settlements, children run towards the back, scrambling to claim bags that could contain valuable materials.

One teenager grabs a single mattress, quickly working to strip the outer layer of fabric, then the foam innards, to reveal its skeleton of metal springs and joists.

Others sort through household rubbish, tossing cans into one pile, plastic teahina containers into another,

planks of woods into a third.

A teenager struggles to contain a tangle of red and grey cables that he pulls from one bag, scooping up strays as they slip from his grasp.

"Each person has a spot where they put their stuff, and they sell it themselves, no one is the boss," says Mohamed Rabie, a talkative 17-year-old with stained front teeth.

The goods that have value -- wood, steel, aluminium and plastic -- are separated out and then driven to the nearby city of Hebron, where factories process them into consolidated blocks for sale in Israel and overseas.

Not everything is destined for sale though, Rabie says.

"Sometime there are good clothes or materials. We wash them and keep them for ourselves."

Children as young as 10 work the heaps of rubbish, which once stripped of anything valuable, are covered over with sand, further building up the garbage hill.

"I sleep here each night and go back home every now and then, because trucks come at night," says Mahmud Talab, a slight boy who gives his age as "either 10 or 11".

He says he has been working at the site for two or three years, since his father died, leaving his family with no one to provide for them.

Even working all day and sleeping on the site, which has no running water, he can only hope to take home around 20 to 30 shekels (up to \$8, 6 euros) a day.

"Jewish garbage is better than Arab garbage because it has more steel in it," Talab says. "And I need the money right now."



Palestinian youths search through piles of rubbish at a dump in the village of Yatta in the southern West Bank. The stinking dump is workplace and home to dozens of men and boys who scavenge through the waste for resalable or reusable items.

AFP