

Need to Rethink Energy Security

Much has been said about Asia's surging demand for energy, fuelled by its spectacular economic growth and an expanding middle class. Indeed, the total consumption of energy in Asia and the Pacific increased by 70 percent between 1992 and 2005.

Yet, consumption per person is still relatively low by global standards: 749 kilograms of oil equivalent in 2005, compared with the global average of 1071 kilograms, Bangkokpost said.

As the living standard continues to rise, per capita consumption is expected to grow. Across the region, 1.7 billion people still rely on traditional biomass fuels, such as wood and animal dung, to cook and to keep warm; nearly one billion people, the "bottom billion," have no access to electricity.

Most of them are the rural poor. Asia has the highest death tolls resulting from indoor air pollution caused by burning biomass and solid fuels; nearly 1.3 million a year in India, China and Southeast Asia alone.

Meeting the most basic needs for modern energy supply is a pre-requisite for our efforts to lift more people out of poverty, and to achieve the other Millennium Development Goals such as reducing child mortality, providing basic education to all and promoting gender equality.

Energy demand in Asia and the Pacific is projected to grow on average by 2.75 percent a year between now and 2030, with the region accounting for half of global demand by 2030. Much of that—more than 80 percent—will still be for fossil fuels such as oil and coal, making the region not only vulnerable to volatile energy prices but also to carbon emissions from the burning of fossil fuels.

Meeting this enormous demand is already a chal-



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lenge for governments. With energy prices continuing to break new records, it is doubly difficult.

At present, many countries in the region are trying to enhance energy security by doing more of the same—building more power plants and pipelines, diversifying oil supply sources, expanding strategic storage, etc. But these are only short-term solutions. They will not shield energy-importing countries from price volatility as demand continues to outstrip supply.

As a new study by the United Nations Economic and Social Commission for Asia and the Pacific (ES-

cap), "Energy Security and Sustainable Development in Asia and the Pacific," points out, one problem is that Asians are too dependent on fossil fuels. To improve long-term energy security and sustain economic growth and development, Asians need a new approach to energy consumption—more efficiency and more renewable energy.

The study estimates that by improving energy efficiency—using less energy to perform the same tasks—global energy demand could be reduced by 12 percent by 2030, saving \$766 billion in building new energy infrastructure. Another way to look at it is that for every one dollar invested in

improving energy efficiency, Asians would save more than two dollars in infrastructure investment.

Renewable energy currently accounts for only 9 percent of primary energy production in Asia and the Pacific. Yet the region is well-endowed with renewable energy resources. It has 40 percent of the world's total hydroelectric technical potential, and about 35 percent of solar and geothermal energy potential. It also has substantial potential for generating biomass and wind energy.

Energy security is not just about reducing our vulnerabilities to volatile energy

prices; it is also about ensuring access to affordable energy for the poor. To pursue energy security, the countries of the region need to ensure that energy supplies are available, sufficient, affordable and sustainable.

The way ahead will rely on using innovative financing and greater regional and sub-regional cooperation to develop energy infrastructure which promotes equitable economic and social development without compromising the environment.

Now is the time to move beyond independent energy policies to inter-dependent intercountry policies for the benefit of all.

In the News

British Gas Market Under Intense Pressure

Britain's imports of liquefied natural gas have slowed almost to a standstill this year, adding to the pressure on domestic prices, which have already risen by at least 15 percent. The sharp fall in LNG imports is an embarrassment for the government after heavy spending on the infrastructure needed to boost shipments to compensate for dwindling gas supplies from the North Sea.

According to the Guardian, it also follows a drop in the level of gas imports from continental Europe in spite of higher prices in Britain.

LNG is gas that has been converted to liquid to make it easier to transport. Imports over the winter are believed to be less than half of the previous year. The last LNG cargo to dock at the Isle of Grain terminal was at the end of January, though another shipment could arrive next week.

LNG is sold as an international commodity with cargoes traded on a global basis. The price is set internationally and Britain had to compete with countries such as Japan and South Korea that are heavily reliant on oil and gas imports and are prepared to pay accordingly.

Britain has spent heavily on building the necessary infrastructure—new LNG capacity is being built at Milford Haven, the world's longest undersea pipeline, the Langed pipeline, gives the UK access to one of Norway's biggest gas fields and Britain now has access to continental European supplies through a pipeline to the Netherlands as well as the Belgian interconnector. But as Paul Golby, chief executive of E.ON UK, notes, building the infrastructure does not necessarily mean Britain will always get the gas it needs.

"I think there has been a little naivety about gas infrastructure—an assumption that if the metal is there, the gas is going to flow," he said. "That does not follow."

Secondary Priority

This month Thor Otto Lohne, the executive vice-president of the Norwegian pipeline company Gassco, reportedly warned an energy seminar that long-term contracts with continental European companies meant that "the UK is a secondary priority. Like it or not, that is a fact".

British consumer bodies have complained about high gas prices with bills rising by 15 percent this year. But whereas continental European companies can buy supplies from Britain, they are often reluctant to export even when prices are higher than in their home markets. The House of Commons business and enterprise committee and the industry regulator, Ofgem, have said they are looking at the UK market in the light of rising residential fuel bills.

Craig Lowery, head of energy markets at the research company EIC, said long-run contracts and public-service obligations meant gas flows through the pipelines from continental Europe did not always respond to price signals, while Britain was geographically right at the end of the pipeline as far as westward gas flows were concerned. "If you build the infrastructure it does not guarantee that the gas is going to come. That is the commercial reality."

Global Circumstances

A Centrica spokesman said, "We are not getting enough gas into the UK, at least not without paying very high prices. We're currently seeing a whole series of global circumstances and influences impacting on UK gas prices."

"Not least, record oil prices are impacting directly on gas prices, because there is a direct linkage between the two, particularly in continental Europe. But we are also seeing heavy demand for LNG from the far east attracting shipments which might otherwise have come here, and also the ongoing impact of a dysfunctional European market sitting next to our highly competitive one. The market in which we buy our gas is now pretty much a worldwide one."

A spokesman for National Grid acknowledged there were uncertainties. "Having the capacity does not mean the molecules are going to arrive."

Britain, however, had the advantage over many other countries, he said, in that it has a diverse range of sources for gas. "We have our own indigenous supply; we can draw on the LNG market; we have the flow from Norway and from continental Europe."

The government sees gas as part of a balanced portfolio of energy sources which include new nuclear capacity, renewables and coal to replace existing generating capacity.

Golby is keen to stress that because of the long lead times required to bring in new nuclear and coal plants, decisions need to be taken in the near future on how to meet the need for new generation. If those decisions are not taken within the next one or two years Britain risks "sleep walking" into a gas-dependent world or will suddenly realize that only another dash for gas will ensure Britain has enough power generation.

Gas plants can be built much more quickly than nuclear or coal. New nuclear power plant could take 10 years to bring into service, coal between four to eight years. "The one thing we know we can do is build a gas-fired power station in probably two years," Golby said.

If gas plays a bigger than expected role in future, Britain will not be able to switch to alternatives as they become available. "There's no way in five years we are going to turn to something else—that's not a financial option," Golby said. "Security of supply is not a simple issue. We have to think in terms of getting a balance of different types of supply because over-reliance on one is really dangerous."

Mexicans Protest Reform Plan

Thousands of people, some dressed in oil worker jumpsuits, protested a Mexican energy reform proposal on Sunday that leftists say is a veiled attempt to privatize the cherished state industry.

Decrying government plans to allow more private investment in state-run oil monopoly Pemex, protesters carried signs saying "This is a hold-up!" and showed pictures of President Felipe Calderon holding a gasoline pump like a gun, Reuters reported.

Mexico is the world's sixth-largest producer of crude oil and the third biggest supplier of oil to the United States. But output and reserves are falling after years of underinvestment and decades of using Pemex as a government cash cow. Police said more than 30,000 people marched through central Mexico City to gather in the massive Zocalo square, led by leftist firebrand Andres Manuel Lopez Obrador, who narrowly lost the presidency to Calderon in 2006.

"Calderon's proposal is a privatizing reform that is going to damage the most valuable resource that we Mexicans have," said Luis Reyes, a former engineer at Mexico's National Petroleum Institute.

Supporters of the energy plan say Pemex has long worked with private companies and that Calderon's plans only seek to harness private sector know-how, not to sell off Pemex. "The state will never lose control of the company," the Energy Ministry said in a statement on April 27.

The leftist Party of the Democratic Revolution and some smaller allies disrupted the upper and lower houses with round-the-clock protests this month to block Calderon's plan.

They lifted the protest last week after the ruling National Action Party agreed to a broad debate on the issue, which Lopez Obrador celebrated as a defeat for the government. "We blocked the attempt to privatize oil behind our backs," Lopez Obrador said in a speech in the Zocalo. He warned that leftist lawmakers would take over Congress again if necessary.

But he said his anti-oil privatization movement would be peaceful, backtracking on earlier threats this year to take over oil installation and key Mexican airports.

"I'm sure that facing such insistence to violate the constitution and privatize the oil industry, (leftist) lawmakers will restart their peaceful resistance in both chambers (of Congress)," he added.

Calderon wants to sweeten oil field service contracts with bonus fees to attract experienced foreign partners that could help Pemex uncover new deepwater oil deposits and lift declining output and reserves. Pemex on Sunday said it had launched a tender to expand a petrochemical plant on the Gulf of Mexico, underscoring Pemex's reliance on private companies in some areas of its operations.