

On track to be a top sulphur source

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Top of the pile: Adnoc plans to increase its production of sulphur by developing large gas fields containing hydrogen sulphide. Courtesy Adnoc

The UAE could rank among the world's top sulphur producers and marketers by 2013, due to a huge projected increase in brimstone output by Abu Dhabi National Oil Company (Adnoc).

Adnoc expects to more than quadruple its sulphur output by 2013 from 1.7 million tonnes currently, due largely to the planned development of several large gas fields containing high concentrations of hydrogen sulphide, a gaseous compound of the yellow element that accumulates in deep gas deposits.

That would put the UAE on track to produce at least 7.1m tonnes of sulphur annually, potentially surpassing the seven million tonnes produced by Russia, which is the world's fourth-biggest producer behind Canada, the US and China.

Adnoc accounts for 85 per cent of the national output of two million tonnes, the US Geological Survey estimates. Last year, it tied with Kazakstan for eighth place in world sulphur production rankings.

In preparation for becoming a major supplier to the rest of the world, Adnoc is exploring ways to diversify its markets, said Dagher al Murar, the company's sulphur sales manager. Sulphur can be used as fertiliser and in industrial applications. As well as selling more sulphur to existing customers located mainly in North Africa, Senegal and Jordan, Adnoc will seek to expand to several additional countries including Brazil, Madagascar and Australia.

"Our strong marketing team and strategic geographical location as well as advanced production and loading facilities make us a favourite choice for sulphur buyers," Mr

Murar said.

Adnoc said it may even go a step further by investing in the sulphur consuming industries of trade partners. That would include the fertiliser industry, as sulphur is a key component of commodity chemicals used as plant nutrients in agriculture.

Such a plan could dovetail with the Government's recently revealed plan to secure food imports by investing in overseas farming ventures. It could also leverage Adnoc's petrochemicals expertise, as certain key fertilisers are made from natural gas feedstock.

China and India, to which the UAE already exports some sulphur, are the world's top brimstone consumers and are considered the biggest contributors to the surging global demand that has recently propelled sulphur prices to historic peaks above US\$600 (Dh2,203) a tonne. Analysts have related spiking sulphur demand to the ballooning food requirements of the world's two most populous nations.

A greater than tenfold increase in sulphur prices over the past year, which has coincided with global food shortages, has caught the attention of Adnoc's top managers. "The price of sulphur keeps moving up," Omar Suwaina, a senior Adnoc executive, remarked last month in his keynote address to an Abu Dhabi energy conference.

Adnoc produces most of its sulphur as a by-product of oil refining, but the big gas reserves that it is seeking to develop as a fuel source for power generation could provide an even bigger supply of the mineral that in the past has been regarded as a waste product, or worse.

Sulphur in oil or gas is considered highly undesirable: it corrodes equipment, contributes to air and water pollution and in some chemical combinations can be lethally toxic.

On world markets, crude oils containing high levels of sulphur trade at steep discounts to low-sulphur crudes due to significantly higher refining costs related to sulphur removal.

In natural gas, sulphur can cause even bigger problems stemming from public health and safety issues surrounding the production and processing of gas containing deadly hydrogen sulphide.

However, the dwindling supply of "sweet" crudes and natural gas that are naturally low in sulphur is forcing the world to develop less desirable "sour" deposits. As a result, new sulphur production from oil and gas projects in the Middle East alone could quickly expand, creating keen competition among the region's exporters.

Nevertheless, high agricultural demand could continue to shore up sulphur prices for some time, analysts predicted. A second use for sulphur in nickel production is also likely to bolster prices, as the base metal is in strong demand for alloys used in industry and construction.

