South Africa: Artificial Oil, Artificial Hopes

The minority regime has been reassuring its supporters that the Sasol oil-from-coal plant is the final solution to its energy problems. The truth is somewhat different.

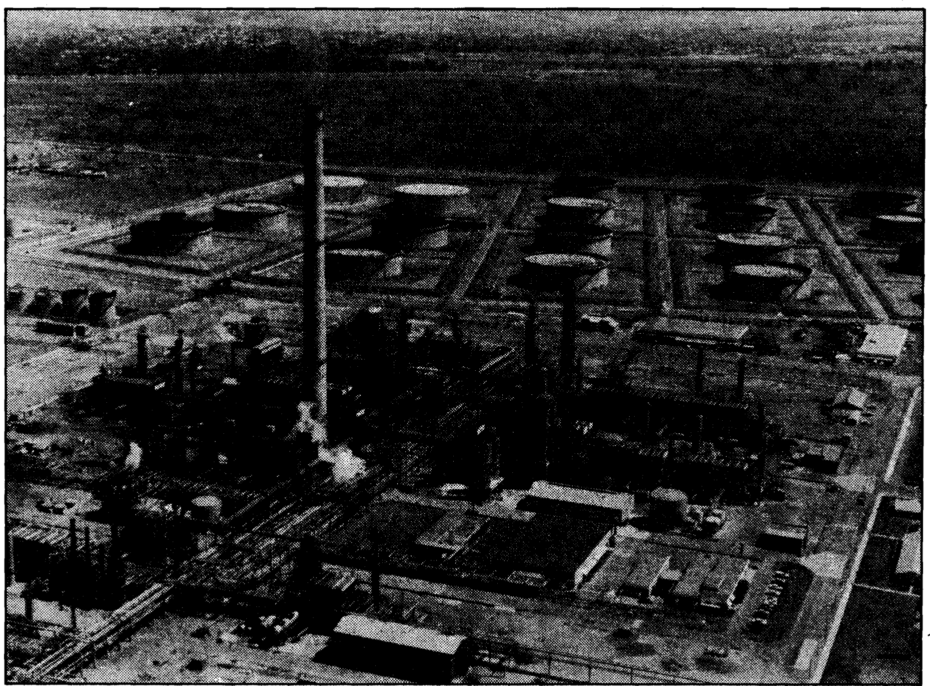
By Paul Conlon

Officially flaunted claims that all three Sasol plants can produce 100,000 barrels per day (b/d) of oil are specious. Total liquefaction capacity is probably closer to 70,000 b/d. With current domestic product consumption running at between 250,000 and 320,000 b/d, the gigantic "coalplex" in Secunda in the Transvaal, as costly as it has been, does not decisively affect Pretoria's fuel-strategic position.

While strategic stockpiling still defies accurate outside estimates, it is probably somewhere between 6 and 15 months. At these levels of consumption and storage, and at liquefaction capacity levels of 55,000-75,000 b/d, the country could withstand a complete oil cutoff for anything between 220 to 652 days.

The plants are capital intensive to an extent which would be unacceptable in an OECD (Organization for Economic Cooperation and Development) economy. They thus represent one of the most massive and ill-advised overinvestments carried out in a semi-industrialized country in recent years. The two new plants cost about $5.8 billion, yet produce only 5-10 percent of all energy in an economy with a GNP (Gross National Product) of about $80 billion. Fixed costs cover at least one-third of the price of motor fuels produced.

The plants' thermal efficiency is low; while it could have been higher if by-product gas could have been sold, the plants would have produced such gas in quantities beyond what the market could use. They are unprofitable and produce fuels at higher cost (possibly equivalent to $75 per barrel) than if imported crude was refined. Their only rationale is as a strategic response to the oil embargo threat. They have, however, a useful life of at least 25 years and, once the embargo threat is removed, they will emburden the national economy as unprofitable white elephants.



Abbas/Gamma

The oil refinery at Sasolburg.

Zimbabwe has had just such experiences with power plants built during the years of the minority Smith regime.

The Fischer-Tropsch-Synthol process used was an antiquated first-generation technology even when it was chosen. Its production is weighted to the lighter end and in no way alleviates South Africa's serious shortage of diesel fuel. Nonetheless, it was picked for good reasons: it can handle high-ash coals, it has been tried and proven, and South Africa has a modicum of know-how and trained personnel because it had been used in the first Sasol plant opened in 1955. Transnationals, like Fluor and Lurgi, enriched themselves and built up their synfuel (synthetic fuel) credentials by selling the hapless racists a technology that nobody else would seriously consider.

Selecting technology for future coal-liquefaction plants is obviously also the major bone of contention between Sasol, Gencor and the government at the moment. When the decision on the fourth plant is made in the next few years, the U.S. Lummus company's Integrated Two-Stage Liquefaction (ITSL) is the most suitable candidate for process technology, because it can handle high-ash coals and produces a predominantly distillate slate; but it has never been tested in a real-life plant.

The Republic of South Africa's energy sector had been distorted by the country's historic pattern of race relations even before the embargo threat, which only exacerbated matters. Low paid black labour, not just in the mines, but at almost every other step in transportation and handling, artificially enhanced the role of coal and led to its covering over 80 percent of national energy supplies. This leaves much less room for oil substitution. Hence, almost all substitution schemes increase the total cost of energy or entail other dysfunctional side effects. The system grew up on cheap labour, but it must now restructure to capital-intensive technologies to keep itself going. The conversion of coal to fuel oils and other chemicals, such as fertilizers, has left the country with large amounts of certain by-products which are now available in excessive quantities. This has led to a burst of expansion in the processing of heavy chemicals which were previously imported. The profitability, however, of everything from extraction onwards is artificially improved by low-cost mine labour. If and when this basis is ever removed, all profitability structures built on it will collapse.

Fuel production from the new plants has also seriously exacerbated the problem of overcapacity in the country's conventional oil refineries, which are largely owned by foreign companies. The latter now have one less reason to collaborate with Pretoria in running the blockade.

Between interest payments on capital intensive liquefaction plants, opportunity losses on stockpiled crude, similar losses on coal used for liquefaction (which could be exported at a much higher price), the "pariah penalty" for clandestine spot-market purchases and the high cost of Sasol-produced fuel, the national economy's annual running loss in the energy sector may amount to $2.7 billion. Clearly this could be just as lethal as an oil cut-off, though in a longer term, and the minority government is still left with no secure source of petroleum. A combination of factors—stockpiling, an oil market glut and their success with Sasol—helped the regime to survive the cessation of Iranian oil deliveries in 1979, but as the international oil market turns around it is difficult to see where they can go from here.

Embargo's Impact

Last year's euphoria over the prospects of producing a paltry 20,000 b/d of oil at unprofitable cost from South Africa's own wells evaporated when testing failed to confirm sufficient reserves off the southern coast. Drilling on the eastern coast near Durban and seismic exploration near the mouth of the Orange River only reinforce the impression of a country desperate for oil at any price.

The demise of the presumed major supplier (the oil trader Marc Rich), as well as the new Nigerian government's crackdown on corruption are reducing the flow to the illegal market, while Brunei has promised to stop exporting crude to South Africa and Oman may soon find it prudent to do the same.

With an energy sector which is fraught with diseconomies and bottle-necks, and whose future development is totally unclear at this point, what is ultimately at issue is where and by whom the inevitable losses will be absorbed. The world community's oil embargo may not have been effective in stopping the oil flow to South Africa, but it has certainly had an impact on the country's economy. ▲▲▲

Fettered Zaïre

Cosmetic changes designed to attract fresh foreign investment conceal a tightening of presidential repression.

By Antoine Kadiga

For several months, those Western media favourable to "Marshal" Mobutu Sese Seko have been trumpeting that "prosperity is once again just around the corner." Not without humour, Prime Minister Kengo Wa Dondo has said that he envisages giving Zaïrois the same standard of living they enjoyed on the eve of independence, while, according to the most optimistic estimates, purchasing power has dropped by 90 percent since then.

Past master at the art of poker bluff, Mobutu is once again setting his country on a course of indebtedness (already in excess of $4.5 billion), having set out a proposal to Belgian investors for the electrification of the railway line from Kinshasa to the port of Matadi. An $80-million contract including new equipment is being drawn up even though a number of experts have already estimated that traffic on the Bas-Zaïre line is insufficient to justify such a cost.

At the same time, officials have to content themselves with a monthly salary varying between £9 and £18 sterling, barely enough to buy their monthly bag of manioc or maize. Unfortunately for them, the drought ravaging Kivu, the traditional granary of the country, has brought in its wake a shortfall of 60 percent in yields of manioc and 80 percent in those of beans. This has already led to forecasts of a considerable increase in the price of food.

In a region such as Shaba, formerly a producer of food surpluses, the local people have been forced to fall back on a series of devices to obtain food from their neighbours in Zambia. At the same time, however, Zambian customs have been cracking down severely on Zaïrois traders who go to sell emeralds and watches in order to buy sugar or maize flour. By way of reprisal, the Zaïrois authorities could think of nothing better than to threaten the some 40,000 Zambians living in Shaba with expulsion.

Of course Mobutu can fool foreign investors for the time being. He managed to obtain the United States' signature on a "bilateral treaty for the encouragement and protection of investment" at the beginning of August, and the Reagan administration has offered to lend Mobutu $59 million in the 1985 budget under the heading of military and economic aid, representing an increase of $14 million over the previous year. But what is the tangible benefit for the ordinary Zaïrois and what part did the sending of a Zaïrois contingent to Chad play in it? And what about the training of over 1,000 Chadian commandos at Kota-Koli base in Equator province?

Meanwhile, early in the morning of August 29, customs officers at Brussels airport seized 228 kilogrammes of "Bangui" Zaïrois marijuana) destined for Zaïre's embassy in Luxembourg. In July, two assistants of the Zaïrois minister of Foreign Affairs, Umba Di Lutete, were arrested in Lisbon, also with cases full of "Bangui". It is also worth recalling the recent arrest of the secretary of Bobi Ladawa, wife of "The Guide," in Brussels where she was carrying diamonds worth $2 million.

Killer State

All this would be slightly amusing if it were not for the fact that repression inside Zaïre was increasing at the same time. In order to support an army and gendarmerie whose main task is to oppress the people and which males up its unpaid wages by pillaging its fellow citizens. Mobutu has created a "civil guard", directly responsible to the presidency. As demonstrated by the attacks in March against the "Voice of Zaïre" and the National Telecommunication Office in Kinshasa, at least one part of the opposition may have opted for armed action. Moreover, the explosion of a bomb on August 11 outside the Zaïrois embassy in Brussels by a previously unknown group calling itself "Melende" (Determination) can hardly be reassuring to the Zaïrois dictator.

In any case, Mobutu cannot use these acts to justify the banning of his opponents in the Democratic Union for Social Progress to their home regions, as he did with Mukoka Mwena Kavulu, ex-major of Mbuji Maye (capital of east Kasaï and a diamond town) and member of the National Assembly for Kabinda from 1977 to 1982 who has been chosen as a prisoner of conscience by Amnesty international. The 100 illegal executions carried out by the Special Research and Surveillance Brigade of what are officially called common criminals at the OAU 2 Centre and in the Lingwala Prison marks a sinister note in the new austerity decreed by Mobutu. Amnesty is of the opinion that they form part of a deliberate plan to reduce crime in Kinshasa; above all, in order to reduce unemployment, the regime is physically liquidating those without work. Austerity Mobutu fashion. ▲▲▲