

international news

Energy planning Soviet style

by our Soviet correspondent

ENERGY has been an emotive concept in the Soviet Union since 1920, when the Eighth All-Russian Congress of Soviets adopted the "Goelro" plan for the electrification of the country, with Lenin's famous equation "Communism = Soviet Power + Electrification". It was a coal miner called Stakhanov who, in 1935, by mining fourteen times the normal output of one man in a single shift, became the eponymous hero of the concept of 'Stakhanovite' labour. New prestige projects, such as the Bratsk power station or the Novopolotsk oil refinery, remain standard subjects for poets of a high literary reputation—and their works are analysed by the critics with more than usual attention to their political content. Yet the very significance of energy as a touch-stone of Soviet progress makes it somewhat difficult to assess the overall situation. When the opening of each new power station is reported by the press in careful detail, and with the Soviet propensity for presenting statistics not in absolute figures, but as percentages relative to some inaccessible base year, it is easy to become lost in a mass of minutiae on the one hand and of vague generalities on the other.

Conversely, it is not always easy to distinguish the economically viable project from that undertaken primarily for prestige purposes. Thus the plan described in an *Izvestiya* interview in January 1971 by Minister of Electrification Petr Naporozhnyi, which involved the use of power stations on the White Sea to fill in at peak consumption periods, loses a certain amount of its credibility when one remembers that they would be inoperable during the winter months—at precisely the time when the new unified grid has to depend almost entirely on thermal generation since the Siberian hydroelectric stations are also icebound. On the other hand, the imaginative proposals of I. V. Shishkin for running an entire city on thermal waters would seem to be economically viable, given his basic assumptions of a stratum temperature of 150° C and a sufficient water table (*Priroda*, No. 5, 95–103; 1969).

The present power difficulties of the western nations, however, have evoked considerable comment in the Soviet press from which the picture does become a little clearer. Side by side with cartoons of the pathetic British motorist walking his car to work emerge more factual statements, such as an interview (*Novoe Vremya*, No. 48, 20–22; 1973) with Ruben Napoleonovich Andreasyan, a senior researcher at the Institute of World Economics and International Relations. Andreasyan categorically denied Western reports of an oil shortage in the Soviet Union and was prepared to quote figures. The Soviet Union, he stated, "is one of the richest countries in the world as regards resources of liquid fuel. . . It should be said that the oil of Western Siberia is outstanding not only on account of its high quality, but also its low cost. . . The Soviet Union is already one of the largest oil exporters in the world. In 1972, it exported 76.2 million tonnes of crude oil, not counting prepared petroleum products". As to the reports that the Soviet Union imports Arab oil, this is true, but the amount involved is only 7.8 million tonnes, ten times less than the export figure, and is intended as a gesture of aid to the balance of payments of the oil exporting countries. Of the oil exported, some 50 million tonnes goes to the non-Communist world, and the rest to the Comecon bloc through the "Druzha" pipeline system, which celebrated its tenth anniversary on December 23, 1973. Reports of the economic integration of Comecon would suggest that by now the smaller member countries supplement their domestic oil production (if any) entirely from Soviet sources, but Reuter reports from Warsaw early in the current crisis (November 25) revealed that Poland, at least, still buys a significant amount of her oil on the world market and has now introduced a speed limit of 80 kilometres an hour and similar measures for saving fuel.

Soviet oil production figures for January to November 1973 (*Pravda*, December 11, 1973) totalled some 385,000 million tonnes (25 million tonnes more than for the same period in 1972), together with some 46,000 cubic metres of natural and petroleum gas. The pride of the Soviet oil industry, the West Siberian (Tyumen') oil field (opened up in 1964), has already surpassed its target for the current year by some 2.3 million

tonnes and is expected to produce 87.5 million tonnes in all—some 3 million tonnes above the target. According to a Tass report headlined by the Minsk newspaper *Zviyazda*, the Tyumen' field has achieved a record output of 285,000 tonnes in 24 hours.

Nevertheless, the budget and state plan for 1974 (*Pravda*, December 13, 1973) places great stress on "the fuel and energy sectors". The output of electrical power is assigned a target of 975,000 million kilowatt hours (kWh)—an increase of 6.6% in comparison with 1973. The output from nuclear power stations is to be increased to 161,000 million kWh (38% more than in 1973). This increase in electrical output will permit industry to increase its consumption by 5.7%, agriculture by 13% and "the community and living needs of the urban population" by 8%.

The following increases in fossil fuel outputs are envisaged: petroleum and gas condensates by 30 million tonnes (7%), gas by 20.8 million cubic metres (1.8%), mainly from West Siberia, the Kazakh SSR, Central Asia, the Komi ASSR, the Udmurt ASSR and the Perm' and Orenburg regions. To serve these fields, more than 9,000 km of new pipeline and 85 pumping and compressor stations are scheduled to go into service during 1974. The oil refining and petrochemical industries are assigned an increased target of 6.8% with a "considerable increase" in the output of high-octane and low-sulphur fuels. A mouthwatering picture to the harassed Western consumer, perhaps—yet it must be recalled that one has no clear picture of the potential demand, and plans for such large increases may be evidence of the need to close even greater gaps.

Coal output is planned to be 679.1 million tonnes—10 million tonnes more than 1973, with 8 million tonnes of the increase coming from open-cast mining. This emphasis on open-cast mining became evident in the late 1950s with the opening up of new coalfields in northern Kazakhstan and central Siberia.

These figures, it is stated, should basically cover all "normal regular demands". Nevertheless, "it is necessary to exhibit care in expending fuel resources, and to ensure the unconditional fulfilment of the plans for saving fuel and electricity"; this is another indication, perhaps, that demand still outstrips supply.