

SWEDEN

Swept in on the green wave?

From Stockholm, Wendy Barnaby assesses what the result of the recent Swedish general election could mean for science in that country

AFTER 44 years in power, Sweden's Social Democrats have been defeated at the polls. Their general approach to science was not discussed in the election campaign. But scientific assessments became very important in the debate which dominated its final stages: whether or not to push ahead with the Social Democrat's plan to make Sweden the world's largest producer of nuclear energy *per capita* by 1990. The scientific input was dramatised by a telegram sent two days before the election by the American Union of Concerned Scientists to the Prime Minister, Olof Palme, challenging his view that nuclear waste disposal problems are on the way to being solved.

Although the non-socialist parties which will now form a coalition government are split on the nuclear issue, the pre-election battle lines were drawn between the Social Democrats on the one hand and the anti-nuclear energy Centre Party, the largest non-socialist party, on the other. And in spite of the enormous organisational and governmental machinery at the Social Democrats' disposal, it was the arguments of the non-establishment scientific community which ultimately appealed to the Swedish voters.

The Centre Party, traditionally the political voice of the Swedish farmer, has in the past few years been the champion of the so-called 'green wave': demands for decentralisation of population and power, environmental protection, the careful use of finite resources and—in the energy field—the development of reliance on renewable resources such as wind and solar power. According to the party's spokesman on scientific affairs, Bengt Sjönell, one of the new government's aims will be to bring the Swedes into balance with nature as far as energy resources are concerned. The first test of how this rather idealistic hope is to be realised will come less than 2 months after the formation of the new government, early in October, when the squat Barsebäck 2 nuclear power reactor, becomes ready for fuel insertion.

The Centre Party's leader (the new Prime Minister), Thorbjörn Fälldin, is personally and publicly committed to stopping the loading of fuel into any more reactors. (He has also promised close down those five reactors already in operation.) Nobody doubts

the strength of his commitment. But the problem with Barsebäck 2 is how fuel loading can be prevented. One proposal is to prohibit the insertion of fuel by passing a succession of laws each valid for one month at a time until compensation can be negotiated with the reactor's owners, who have demanded \$445 million from the government. The trouble with this is that the reactor is owned by a private company, Sydkraft, and for a non-socialist government to make its legislative debut with such regulation of private industry would be politically unpalatable. To get around this difficulty, it has been suggested the Nuclear Power Inspectorate—a state body which checks reactors under construction and in operation to see that they conform to agreed standards—could prohibit fuel loading at Barsebäck 2. But that organisation is itself not at all happy with the idea. Its brief covers purely technical areas, and although the checklist for the reactor has not yet been entirely worked through, there have so far been no technical hitches. Dr Arne Hedgran, a representative of the inspectorate recently made it quite clear that the organisation does not want to become involved in the government's political problems.

The tangle over Barsebäck 2 is the most pressing problem faced by the new government; not only because of the time factor but also because the Centre Party's credibility will be greatly affected by its handling of the situation. In its very first days of power it will have to come to grips with the issue held to be largely responsible for its victory.

The influence of the already-powerful environmentalist groups will no doubt increase under the new government, partly because of official willingness to listen, but also because of significant gains by the environmentalists in the local elections held at the same time as the national ones. One such local result has particularly far-reaching national and international implications. A victory by groups opposed to the mining of uranium near Billingen, 350 km south-west of Stockholm, means that uranium reserves estimated to be the West's largest in the next economical price range cannot now be exploited for at least three years. The mining firm LKAB had been hoping to mine them either for domestic use or for export.

Beyond the immediate problems, what sort of initiatives in science policy can be expected from the Centre Party? It should be mentioned that Sweden



Fälldin, committed

has no ministry of science: the administration of science instead falls to various other ministries. Those most concerned are Education, Industry and Agriculture, but even they exert little pressure on the direction of research. Once funds have been allocated to the extraordinarily varied array of institutes and research bodies, each research group is practically autonomous in deciding how they are to be spent. Consequently, it is often hard to see whether Sweden has any science policy as such at all.

One trend which is, however, apparent in all this diversity is the priority given to applied research over basic research. This emphasis has been responsible for the present plight of so-called basic technical research, which has been practically squeezed out of existence in Sweden. Bengt Sjönell recently declared that the Centre Party wants to strengthen the relative position of basic research, and stressed specifically that support for basic technical research would be increased. But the party's intentions have not yet been expressed in detailed proposals, or even in concrete plans, though in tertiary scientific education, the party will try to tempt students back to research in the natural sciences, whose current unpopularity has been raising questions about Sweden's long-term scientific research capabilities. But Sjönell seems unaware of the potential of the International Energy Institute due to begin work here next year. Although the government will have no control over the work programme at the institute, it is a reasonable bet that much of the research done there will be directly relevant to official aims. And for a government whose interest in science is concentrated in the energy field, the value of such research should not be underrated. In other areas of Swedish science, the prognosis is business as usual. □