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London Report: The Sun Also Rises

Until two years ago, the isolated few who had noticed the potential for solar energy in Britain could have been excused for feeling themselves immured in the Dark Ages. Emsly Morgan, for instance, created a legend with his design for St. George's School, in Wallasey, near Liverpool, which opened in 1961. Its orthodox heating system, installed at the behest of Morgan's chief, the Wallasey Borough architect, has never been required; solar energy, utilized by Morgan's farsighted building design, keeps the school warm in winter and cool in summer. But Morgan's design died with him, before anyone else considered it of more than curiosity value. Members of Liverpool University's Department of Building Science are now trying, with elaborate instrumentation, to ascertain just how St. George's School works. They, like many other Britons, have begun at last to take solar energy seriously. It's been an unconscionably long time, but the sun is at last beginning to dawn in Britain.

In July 1973, at the United Nations Educational, Scientific, and Cultural Organization (UNESCO) Paris conference "Sun in the Service of Mankind", 40 British delegates found each other, having hitherto been mostly unaware of each other's existence. Eight were individual members of the International Solar Energy Society (ISES), founded in 1954; the ISES empowered Mary Archer, a photochemist at the Royal Institution, to circulate potentially interested parties with a view to forming an official section of the ISES in Britain. The inaugural meeting of the United Kingdom section was held on January 24, 1974, at the Royal Institution to a packed house. The growth of the United Kingdom section has been breathtaking. It already numbers over 500 paid members, your correspondent among them. Its meetings are playing to standing room only, even for some pretty abstruse technical material; it has established its own publication, *Sun At Work In Britain*; and its chairman, John K. Page, professor of building science at Sheffield University, is leading a working party with a grant from the Wolfson Foundation, investigating the possibilities for application of solar energy in Britain. Their report to the government, due in July this year, should be required reading for British energy planners.

Whether it will be, of course, will depend not only on the still tiny number of ISES members in Britain, but on the countrywide upsurge of enthusiasm for the sun. The do-it-yourself solar installations are sprouting on all sides. At the Eitheny-Gaer commune in the Welsh mountains the solar roof can provide as much hot water as seven domestic immersion heaters; the roof featured on the cover of *New Scientist*, September 19, 1974, and was described in a delightful article by Philip Bracchi, one of the commune members. Several other solar installations have been featured in the pages of the *Daily Telegraph* and *Observer* color supplements, and even in *She* magazine, among the cosmetic ads and recipes. Public and media awareness of the value of solar energy for photothermal applications is rapidly assuming the dimensions of folklore. Milton Keynes, a "new town" in Buckinghamshire, home of Britain's Open University, has installed a solar water heating system in one of its council-built houses, for test purposes; other local authorities have indicated similar intentions. Kit Pedler, creator of the British television series "Doomwatch," is building his own "autonomous" house, incorporating solar systems. The Science Research Council is funding a project at the Cambridge University Department of Architecture with a similar objective. A group of radical designers, Graham Caine and his colleagues, have probably the longest track record, having built and lived in their "autonomous" house in suburban London long enough to withstand many pilgrimages from subsequent converts to the concept.

Brian Brinkworth of University College, Cardiff, having written the only British semipopular treatise on the subject, *Solar Energy for Man* (Compton Press), is now practicing what he preaches, with a working solar installation in Cardiff. He is one of the most able, and most entertaining, advocates of solar energy in the country, dedicated but hardheaded. He, like his colleagues, is pleased to see the sudden breakthrough in public consciousness of solar energy, but he is also concerned lest the rash of small firms now advertising startling economies with solar energy bring the whole field into public disrepute. There are now more than a dozen firms, mostly new, marketing solar panels and fittings in Britain. Some of these appear to be very worthwhile purchases indeed, but others are bound to fall short of the euphoric claims made by their promoters. A few unhappy experiences with premature enthusiasms could still undermine the whole technology.

More problematic still is the official attitude toward solar energy. The British energy establishment is heavily biased, on the government side, toward electricity and nuclear power. Mention of solar energy always seems to elicit the Pavlovian response, "Ah yes, but of course solar power is an unproven technology unlikely to be available for many years". Solar *power*, that is, generation of *electricity* from solar energy, may well be just that - but what of it? The patterns of end-use consumption of energy in Britain currently include no more than 5 percent requiring electricity as such; by far the majority of demand is for low-temperature heat. The first whispers of a new heresy can be heard: "What's so great about electricity?" If we can get even a moderate proportion of our heat requirements from the sun, we can take our time about centralized, high-technology energy sources and their electrical offspring. The amps and volts may have a headstart, but the old favorite is moving up fast on the outside: here comes the sun!

