## Australia—The Snowy Mountain Project

After a splendid lunch given by the Directors of ICI in Melbourne, we flew to Canberra on Saturday 19 March 1966 and spent the rest of the weekend touring 800 kilometers of the famous Snowy Mountain Project. Started in 1949, it is one of the greatest Macro-engineering feats yet undertaken by man to reshape the planet for his benefit. It 'simply' meant turning west the easterly flow of two rivers to irrigate the dry areas of Australia's centre, instead of letting them run to waste into the Pacific Ocean.

By the time we saw the Project, 18 large dams had been constructed, 1600 kilometers of roads and mountain tracks had been laid down, 133 km of tunnels with an average diameter of over 6 meters had been drilled at speeds which set up world records, only to be broken again soon afterwards. On completion, we were told, its hydroelectric power would generate 4000 megawatt of electricity, four times the output of Britain's largest atomic power station.

We had all heard about 'The Snowy' but had not realised the magnitude of the project which greatly impressed me and my colleagues from London. Here was the use of science and technology for the unquestionable benefit of mankind, without damage to the environment. Most careful plans had been laid down and were being executed before our eyes, to safeguard or replant the trees, the shrubs and the grass-lands covering an area of 182000 square kilometer. An excellent example of the Scientific Temper! Most remarkable of all the facts told us by Professor Tom Leech, the Director of Scientific Services of the Snowy Mountain Authority, was his statement that neither cost nor time would overrun the original estimates.

He explained the methods employed by the Authority to achieve this target. Quality control of all work by sub-contractors was uppermost, and for example the testing of kilometers of pipe lines was up to aircraft standard. Safety was next, and the accident rate was only one fifth of the Australian average, brought about by a safety lottery with A\$ 100 prizes, provided a gang of workmen had been accidentfree for three months. This lottery had also made it possible to stop insurance and thus saved A\$ 300 000 in compensation each year. Any deviation from the original time schedule brought heavy penalties to the contractors.

With the Project almost completed, Professor Leech said: "We have made tremendous progress here in the use of geology for civil engineering and we are studying two further projects now: A giant underground water reservoir in Birdsville for dry Queensland, perhaps excavated by atomic bombs and a new harbour at Cape Preston". Nothing came of these feasibility studies and, regretted by all, the teams of successful engineers had to be dispersed.

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