

File HQ P1/15.
7 July 1938
PUTTING SCIENCE BEHIND INDUSTRY.

EXPANDING C.S.I.R. ACTIVITIES → GOVERNMENT'S PROPOSALS.

The Prime Minister announced today that the Commonwealth Government contemplates an extension of the activities of the Council for Scientific and Industrial Research to embrace the problems of secondary industry. This step is considered necessary, not only in the interests of great new industries about to be stated, such as aircraft and motor production, but also in relation to other new industries, projected or possible, and the greater efficiency of the manufacturing industry in general.

The functions of C.S.I.R. already include the carrying out of research in connection with both primary and secondary industries, but the Council's activities have so far been directed almost entirely towards investigation of problems affecting the primary industries.

To advise as to the most economical means of setting up an effective organisation for this work, the Council, at the instance of the Government, has appointed a Committee consisting of the following:

- any
allocation
- Sir George Julius, Chairman, C.S.I.R.
 - (1) Mr. W.R. Hebblewhite, Chief Executive Officer, standards Association of Australia.
 - Mr. H. Tindale, General Manager, Australian Gas Light Co. Ltd.
 - (2) Mr. A.J. Gibson, Consulting Engineer, Sydney.
 - (4) Mr. J.P. Tivey, Australian General Electric Ltd.
 - (4) The Hon. F.P. Kneeshaw, President, Chamber of Manufactures, N.S. Wales (Managing Director, Kandos Cement Co. Ltd.).
 - (5) Mr. A. Maughan, President, Australian Association of British Manufacturers.
 - (1) Sir Henry Barraclough, Dean of Faculty of Engineering, University of Sydney.
 - 3 Mr. I.H. Boas, Chief, Division of Forest Products, C.S.I.R.
 - 2 Mr. W.E. Bassett, Consulting Engineer, Melbourne. (formerly Senior Lecturer in Mechanical Engineering, University of Melbourne).
 - Mr. J. Bradford, General Manager, Broken Hill Pty. Co. Ltd.
 - Mr. M.T. Eady, President, Chamber of Manufactures, Victoria (McPherson's Pty. Ltd.).
 - Mr. G. Lightfoot, Secretary, C.S.I.R.
- 7) months
any
after

MATTERS REFERRED FOR ADVICE.

The Commonwealth has been asked to prepare a definite programme of work and scheme of operations; to indicate the extent to which existing institutions such as Engineering and Physical Laboratories at the Universities, the State Railways Departments, the Defence Department's Laboratories etc. can be utilised; to make recommendation as to the nature of the organisation staff, etc. which would be needed.

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sary to give effect to the proposals and furnish approximate estimates of cost; to make a thorough survey of the work and organisation of the more important engineering and physical research institutions abroad and to determine the extent to which information and advice could be obtained from other countries.

Available information indicates that there is a great deal of work which can usefully be done in connection with the engineering industry, the building industry, the ceramic industry, the textile industry, the electrical industry and in connection with metallurgical problems, medical supplies, cranes, elevators and other hoisting apparatus, together with numerous other minor matters.

FUNDAMENTAL STANDARDS.

The secondary industries in Australia are suffering seriously from the lack of accurate fundamental standards of measurement. To some extent, the Defence Department has filled this need with regard to certain physical standards, but in many directions the need for such standards is still very apparent, and this is particularly the case in the electrical industry. The production and use of master gauges for controlling precision manufacture is a matter of vital importance in the development of Australia's secondary industries, and this need will be intensified when any attempt is made to manufacture by mass production methods internal combustion engines suitable either for land or air transport.

In the electrical industry it is at present almost impossible to have any accurate check made regarding the correctness of electrical measuring instruments. Commercial organisations, including those engaged in the supply of power, have to rely upon the continued accuracy of fairly high grade test instruments for the checking of their commercial instruments, but are without any means of verifying the accuracy of the test equipment. An adequate organisation would probably go far towards correcting this position, but would need to have the use of certain standard apparatus. Great help could accrue from a close linking up with the National Physical Laboratory in Great Britain, but this could only be effected through some national organisation in Australia.

It must not be inferred that the Commonwealth Government has done nothing in this regard for secondary industries. In the field of standardisation of production quite a lot has been accomplished. The Standards Association of Australia, a body which is subsidised by the Commonwealth Government, has helped considerably to bring about economies in production. The general benefits from this source accrue from reducing unnecessary and uneconomical diversity of demand, and in setting up standards of quality of materials and performance of appliances which lead to increased value and reduced prices to the consumer, whether he be an individual or a large department.

The association has issued more than £30 Australian standard specifications and codes for such diverse articles and appliances as rolled steel sections, salt glazed ware pipes, telephone and telegraph material, fencing wire, electricity meters, railway rolling stock materials, paint materials, electric wiring, steam boilers, lifts and elevators.

CO-ORDINATION.

In addition to these more direct benefits to industry, the Association has given valuable national service by co-ordinating the efforts and requirements of departments throughout the Commonwealth in a way which could not be achieved otherwise, and by encouraging co-operation and service between producers and consumers throughout Australia. The value to the community derived from the interchange of ideas, and the voluntary pooling of experience of over 4,000 technical experts in 500 committees, is inestimable.

The Association is also the channel for a continuous stream of draft British standards for comment and criticism regarding Australian conditions, and it thus ensures a source of valuable technical information for secondary industries.

Sir David Rivett who arrived in London on 2nd July has been asked to establish contact with the National Physical Laboratory, with the British Aircraft Laboratory at Farnborough, and with other institutions whose co-operation would be desirable in connection with secondary industry research in Australia.

IMPORTANCE OF EXPANSION OF SECONDARY INDUSTRY.

"The proposal to extend research in secondary production marks an important step forward in connection with the development of Australia" added Mr. Lyons" and although it will doubtless impose increased financial obligations upon the Commonwealth Government, the money will be well spent if we secure more economical production and a widening of the field of employment. The contraction of world markets for primary production has forced us to recognise that the expansion of secondary industries is not only essential to the provision of an increased home market for primary products, but it is necessary to place Australia in a position to carry a progressively larger population.

7th July, 1936.