## Australia's Innovation System Submission 7

## **SUBMISSION**

I have more than 40 years experience in investment internationally, with a major focus over that period on Australian mining companies.

My professional background has been in research and research management, strategic planning, corporate finance, venture capital and business consulting. A long time ago, I was awarded an ANZAC Fellowship and spent a short period working for CSIRO. For four years, I was Commercial Advisor to the then New Zealand Minister of Finance, Right Honourable Sir William Birch.

Over the last 17 years, my consulting work has focused very much on the business-science interface, particularly around joint-venture structures for optimising industry led research. This has been complemented by business strategy, market analysis and commercialisation services to high-technology companies, along with continuing angel investment and international sharemarket investment.

The Australian economy is dominated by its mineral industries. Large-scale manufacturing has always proven difficult, with competitive advantages not always obvious. Mineral output has mostly been exported in large volumes and in unprocessed forms.

I think that the most important application of innovation in the Australian economy relates to analysing the value chains of each of the largest volume minerals produced, e.g. iron ore, copper, nickel, coal, gas. The aim should be to seek to add value to each of these minerals in a modest and economic manner. This is not to say that Australia should seek to build manufacturing businesses based on the minerals. However, the emphasis should be on the next stage of value that can be added to the raw material. For example, I have been heavily involved in provision of business strategy, market analysis and commercialisation services for a company seeking to produce silicon nitride nanofibres from coal. This company has achieved a major technological breakthrough and could be the basis of a whole new advanced materials industry. It is in this space that Australia should seek to become world leading and to which should allocate very substantial university and CSIRO research and commercialisation resources.

I will be overseas from late July to early October but would be happy to discuss this matter further with the Senate Economics References Committee or relevant government officials involved with research and innovation policy from mid October 2014.

Yours sincerely

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