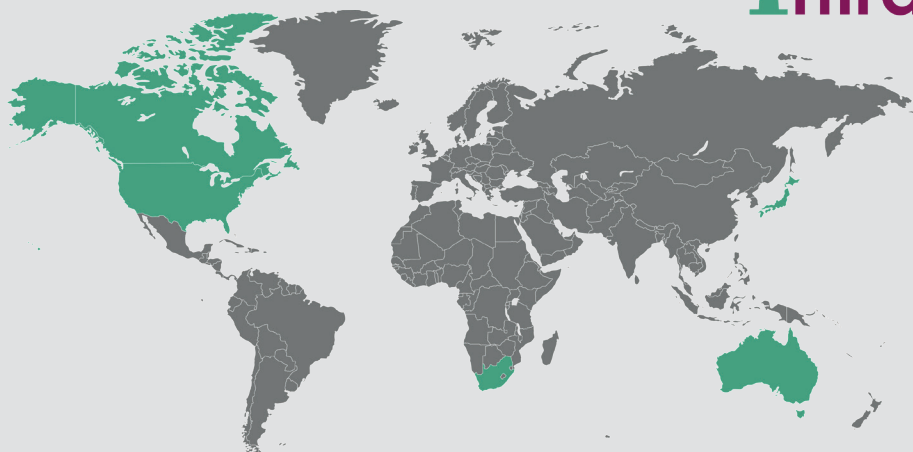


## RESEARCH &amp; INNOVATION

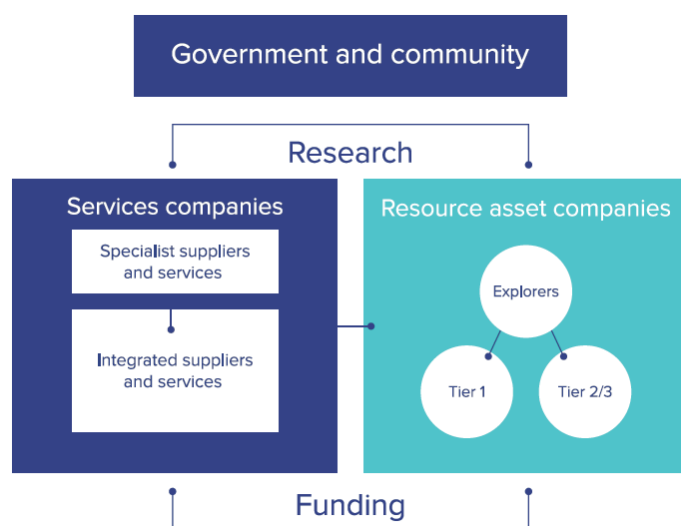
# Raw Materials and Research & Innovation



In the past 50 years, there has been a growing interest in the economics of innovation and technical change. It is now widely accepted that **research, science and technology are vital to ensure national competitiveness**. Governments across the globe are searching for ways to encourage investments in science and technology as they are expected to have a positive impact on a country's economy. In the context of the **Mining Innovation Ecosystem**, this can be especially observed between Resource asset companies and service companies.

The benchmarking of five reference countries (namely Australia, South Africa, Canada, the United States of America (U.S.) and Japan) with respect to their Research & Innovation activities applied the concept of '**Innovation Systems**'. This concept stresses the fact that innovation is not only the result of new knowledge creation, but rather of knowledge being 'used' in a variety of ways and by different actors. It puts emphasis on the quality and depths of interactions and the efficiency of knowledge creation and knowledge diffusion among the relevant organisations. Among these actors one will find companies of various types and sizes that interact with their customers and suppliers in the raw materials supply chain, organisations for research and education (e.g. universities, research centres) and various kinds of intermediate organisations (funding agencies etc.).

Each reference country's research and innovation performance is described and measured in qualitative and quantitative terms in a separate chapter of the Observatory's **transactional report on Research and Innovation**. At the end of the report, all the countries are compared against each other. It is worth mentioning that there is no such thing as an ideal innovation system.



*The Mining Innovation Eco-System. Source: VCI, 2014*