

## **Re: National Enabling Technologies Strategy – Discussion Paper**

### **1. What are the key issues and challenges that need to be addressed by the National Enabling Technologies Strategy?**

The main challenge from ANBF's perspective is to accelerate innovation in Australian industries by enhancing the capacity for our businesses to absorb the global knowledge pool in enabling technologies .for sustainable economic and social benefits.

Underpinning this is the need for Government to help industry by providing a clear vision of where Australia needs to be. A united (ie from a State and Federal level), clear direction and solid leadership in the delivery of its strategy is critical to its implementation and overall success

This can be further extended to include the following sub-challenges:

- Defining, through consultation with industry, niche enabling technology applications where Australia can establish a comparative advantage.
- Developing an effective industry base by establishing critical mass in key areas through support for industry clusters
- Moving away from discovery based product development to an application based problem solving culture with a clear focus on who the demanding customer is and what product/solution is needed or demanded.
- Improved translation and diffusion of knowledge to business solutions and final products
  - How can research institutes support new product and process development for cost-effective and scalable manufacturing?
- How can research institutes better collaborate with industry
  - Are research resources being allocated to what industry need?
  - Does industry really know how to access research facilities?
- Ensuring our regulations keep abreast with technology and the changes that these new technologies will bring whilst making certain that these do not present barriers to industry growth
- Encouraging a multi-disciplinary role approach to problem solving and the development and application of enabling technologies
- More effectively engaging the wider community
- How to better encourage, develop and support education and awareness in industry

- Articulating the skill set needed for our current and future workforce in the development and application of enabling technologies.
- Clear definition of the problems that we are trying to solve – problems that encourage industry to direct and target their efforts towards developing solutions and products knowing that there is a demand in the market with a customer base

## **2. How should these issues and challenges be addressed?**

Public awareness is most critical where technologies impact on the public - ie .end-products and services. Industry development and public awareness are congruent.

At the Government level NETS needs to have:

- (1) A clear industry development policy around enabling technologies that can best leverage Australia’s research know-how for economic and social benefits and which can better define where Government should focus its investment in research and research infrastructure; and
- (2) A Public Awareness program that works hand-in-glove with the industry policy.

This can be further extended to include the following activities:

- Focusing on applications rather than the technology. Promote benefits while acknowledging risks to engage and establish interest from community and business/industry
  - Benefits need to be addressed from an emotive perspective
  - Risks need to be discussed from a rational perspective
- Government procurement as a driver for innovation in enabling technologies - “raising the bar”
- Increase in public awareness of assistance programs available to industry
- Suggestion : Match making database to link industry with research
  - Industry can post on this database problems which research can access and target or modify their activities
- Improvement of network amongst and between entrepreneurs, academia and governments
- Development (and then awareness) of Industry focused technology programs
  - Learn from success stories eg Finland, Israel, Singapore

### **3. What would you like to see as the main outcomes for the National Enabling Technologies Strategy?**

- Industry development policy and Public Awareness program that works in a consultative partnership arrangement between Government, Industry and Academia
- Increased capacity for Australian industries to absorb global enabling technologies know-how
- Increased product development capabilities for manufacturability.
- A move from fixed commodity manufacturing to high value-added flexible manufacturing
- Increased inward investment, domestic employment and exports
- Increased uptake of enabling technologies aimed at increasing social benefits
- Increased community awareness of benefits from the application of enabling technologies
- Promotion of what State and Federal Governments are doing to address the concerns and issues surrounding the development, manufacture and use of new technologies
- Facilitating collaboration between industry and research