



INNOVATION INNOVATION

Powering Ideas
An Innovation Agenda
for the 21st Century

Super Science - Future Industries

Key Points

- The Government will invest \$504.0 million in cutting edge biotechnology, nanotechnology and information and communications technology research infrastructure.
- A range of facilities will be provided for biological discovery and biotechnology development that will enable advances in disease prevention and food security. This includes platforms for the study of genes and their functions, the manufacture of biotechnology products, and the creation of an integrated online biodiversity knowledge base.
- Facilities will be provided to support fundamental and applied research at the nano-scale, for the development of new materials and prototype devices with applications in a wide range of sectors, from automotive to health.
- Nuclear science facilities at the Australian Nuclear Science and Technology Organisation (ANSTO) will be enhanced.

- Advanced ICT platforms will be provided for data management, computing, simulation and modelling that are essential for modern research that transcends geographical and disciplinary boundaries.
- A National Enabling Technologies Strategy (NETS) will be established to complement the investments proposed under this initiative.

The application of technology-driven, knowledge-based advances will lead to innovation, the development of new industries and the transformation of existing industries across a range of applications.

Facts and Figures

Australia's ability to capitalise on research outcomes to develop future industries depends on the underpinning science and research on which new discoveries are built.

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This initiative will target key priorities identified in the Review of the National Innovation System and the 2008 *Strategic Roadmap for Australian Research Infrastructure*.

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The National Enabling Technologies Strategy will help Australian industries capitalise on growth opportunities following the global financial crisis. NETS provides funding for new and enhanced biotechnology and nanotechnology measurement laboratories.

NETS establishes a policy capability to support economic growth. It will ensure a whole of government approach to regulation, and engagement in international efforts to address health and safety issues.

Deliverables under the initiative include:

- \$38.2 million to establish the National Enabling Technologies Strategy.
- \$8.0 million to establish a laboratory in Australia that will partner with the European Molecular Biology Laboratory (EMBL).
- \$50.0 million for the provision of DNA sequencing and bioinformatics infrastructure to support bio-molecular research.
- \$50.0 million for nano- and micro-technology research infrastructure and facilities for the processing and fabrication of new materials.
- \$62.0 million to ANSTO to provide additional neutron beam instruments for the OPAL research reactor and upgrade the Centre for Accelerator Science.
- \$35.0 million for pre-clinical testing facilities and other infrastructure to support new drug discovery, novel cell therapies and the development of nano-medicines.
- \$30.0 million to create an integrated online biodiversity database.

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- \$15.0 million for improved animal phenomics research facilities.
- \$10.0 million to upgrade major university based ion accelerator facilities.
- \$10.0 million to enhance plant phenomics research infrastructure.
- \$10.0 million to enhance population health data linkage infrastructure.
- \$182.0 million for the provision across all States of ICT infrastructure including data storage facilities, access and collaboration tools, and high bandwidth connections for research organisations.

Senator the Hon Kim Carr
Minister for Innovation, Industry, Science and Research