



**Australian Government**

**Department of Innovation  
Industry, Science and Research**



# **INNOVATION POLICY REPORT**

**AUGUST | 2011**



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## DEPARTMENTAL DEVELOPMENTS

### NEW: Publication of the Australian Innovation System Report - 2011

In Powering Ideas: An Innovation Agenda for the 21st Century, the government committed to the production of an annual report on innovation. [The Australian Innovation System Report - 2011](#) is the second report in the series.

New features in the report include a combined innovation system approach with an input-output-outcome framework, a comparison of current indicators with the previous report, linking of innovation and productivity using new national accounting methods, a broader look at 'framework conditions', new features on the role of vocational education and training in innovation, entrepreneurship rates and framework conditions, social innovation data. inclusion of the Science, Research and Innovation Budget Tables, and a case study companion (online).

The report looks at some broad features of the Australian Innovation System and how they compare internationally – usually with OECD countries. With the exception of collaboration and early stage venture capital, Australian innovation input data such as resource mobilisation, research and skills capacity, and business conditions rate relatively highly compared to other OECD countries, demonstrating a high capacity of the innovation system to produce and diffuse innovations.

Innovation output indicators suggest that we rate relatively highly on entrepreneurship, knowledge diffusion, industrial design, trademark registrations and knowledge generation but relatively poorly on new-to-market innovation and patenting. Analysis of the ways in which Australian firms innovate confirms that modification of innovations that have already been introduced to Australia is by far the most common approach. Australia has extremely low proportions of 'new to the market international innovations' even by large businesses compared to other countries. Large Australian firms are more than twice as likely to modify and introduce to Australia innovations already developed internationally. This suggests the important role of large firms as conduits for overseas innovations reaching the domestic market.

Given that our research capacity is moderate to high by international standards our low new to market innovation could suggest an issue with research-industry partnering or a lack of complementary markets in Australia for our research output. Our generally low rate of patenting and low rates of collaboration between industry and research sectors compared to the OECD supports this observation.

Additional hard copies of the report are available - please e-mail [InnovationReport@innovation.gov.au](mailto:InnovationReport@innovation.gov.au)

## NEW: Clean Energy Future

The [Clean Energy Future Initiative](#) was announced 10 July 2011 and is part of a long term plan to reshape the economy, cut carbon pollution, drive innovation, and help avoid the increased costs of delaying action on climate change. The Department of Innovation will play a lead role through the development and implementation of five new programs:

**Clean Technology Investment Program** - will provide grants to manufacturers to invest in energy-efficient capital equipment, low-pollution technologies, processes and products. The program will support investment in more energy efficient equipment, technologies, processes and products. Applicants will be required to demonstrate that the investment is beyond business as usual replacement (\$800 million over seven years).

**Clean Technology Food and Foundries Investment Program** - special assistance will be provided to the food processing, metal forging and foundry industries. These industries are trade-exposed and have higher exposure to energy costs than general manufacturing businesses. The program will provide grants worth up to \$150 million over six years to the food processing industry and up to \$50 million over six years to the metal forging and foundry industries. It will support investment in more energy-efficient capital equipment, low-pollution technologies, processes and products. Like the Clean Technology Investment Program applicants will be required to demonstrate that the investment is beyond business as usual replacement (\$200 million over six years).

**Clean Technology Innovation Program** - will provide competitive grants to support business investment in innovation activities (research and development (R&D), proof of concept and early stage commercialisation to develop new products, processes and services). It will fund the development of a range of clean technologies including low emission and other energy efficient technologies.(\$200 million over five years).

**Steel Transformation Plan** - will encourage investment and innovation in the Australian steel manufacturing industry to help the sector transform into an increasingly efficient and economically sustainable industry in a low-pollution economy (\$300 million for the four year plan).

**Clean Technology Focus for Supply Chains** - will deliver existing programs that provide advisory and other non-financial assistance to businesses, to small and medium businesses in clean technology industries to enhance the clean technology focus of industry supply chains, which will help local businesses secure contracts for major projects (\$5 million over four years).

Public stakeholders consultations will occur from October 2011 and programs will commence in 2012.

## NEW: EU Australia Innovation Policy Dialogue

A delegation from the Innovation Division of the Department of Innovation attended the EU–Australia Innovation Policy Dialogue in Brussels on 8-10 June 2011.

The Innovation Policy Dialogue was one of the outcomes from the 11th Joint Science and Technology Cooperation Committee (JSTCC) held in Sydney mid 2010, where it was agreed to include a policy dialogue on strategic cross cutting innovation policy and practice to the JSTCC agenda.

The purpose of the dialogue was to exchange information on innovation policy priorities and challenges and to explore areas for possible further discussion and collaboration as well as further preparation for the visit of the European Commissioner for Research, Innovation and Science Australia in 2012.

Discussion focused on a number of policy issues including: measuring innovation; business innovation and R&D; public sector innovation; innovative government procurement; improving collaboration between private and public sectors; smart specialisation; and green growth.

### ***Points of interest on developments on EU policy:***

The EU has two Innovation Headline Indicators for measuring progress towards Innovation Union 2020 targets: 1) R&D Intensity and 2) Innovation Intensity (a measure of high growth firms in economies). The EU has sought assistance from the OECD to identify how to measure innovation intensity, as this is a new innovation indicator.

The [Innovation Union Scorecard](#) report includes 24 research and innovation indicators (12 of which are internationally comparable), grouped under the categories Enablers, Firm Activities, and Outputs. The first report was published in February 2011 with the next update expected in January 2012.

The Innovation Union [Competitiveness Report](#) was published in June 2011. It analyses the strengths and weaknesses of national innovation systems to support individual country policy choices. The document builds on the Innovation Union Scorecard and includes factsheets on each country's research and innovation performance.

In March 2011 the EU launched the [European Social Innovation initiative](#). This virtual hub for expertise and information on social innovation across Europe will:

- connect projects and people who can share experiences and learn from each other;
- develop a resource bank of up to date policies at local and national levels and provide information on funding opportunities for social innovation;
- showcase social innovation projects and initiatives underway across Europe (10 projects have been selected to be showcased);
- facilitate new relationships between society, governments, public sector institutions and relevant private sector bodies; and

- develop concrete recommendations in financing and in upscaling/mainstreaming of social innovation in Europe.

In June 2010, the EU launched its [Smart Specialisation Strategy \(S3\)](#) platform. The platform aims to support smart specialisation processes in regions across Europe. Smart specialisation policies involve government working collaboratively with all stakeholders to identify through a 'bottom-up' consultation process research and innovation strengths to target funding and implement strategic road map processes. These policies and strategies can potentially help countries and/or regions to attain sustainable competitive positions in global value chains by exploiting their positions and context-based comparative advantages in innovation activities. Features of the online platform will include:

- guidance, analysis and research on smart specialisation and related issues as well as practical technical support;
- a toolbox based on relevant EU policy support activities in research, SMEs, innovation, clusters, digital agenda, health, climate change, creative industries and university-business co-operation;
- training on how to develop smart specialisation strategies; and
- peer-to-peer reviews processes to help assess and improve regional strategies and speed-up the learning process between regions.

## NEW: Commercialisation Australia projects

The Minister [announced](#) an additional \$5 million of support for 13 projects on 22 July 2011.

The latest announcements highlight the range and depth of support offered by Commercialisation Australia to [companies and individuals](#), including support for a natural treatment for osteoarthritis, the improved management of Parkinson's disease and a baby bottle that eliminates the need to carry separate formula containers.

The Commercialisation Australia Board's next meeting is on 10 and 11 August.

## NEW: Australia-US Research Infrastructure Workshop

Over 40 US and Australian delegates attended a joint workshop organised by the Australian National Fabrication Facility (ANFF) and the USA's Air Force Office of Scientific Research (AFOSR). The workshop was held at the ANFF headquarters in Melbourne on 18-19 July 2011, with visits to Sydney laboratories on 20-22 July 2011. The workshop aimed to initiate international collaborations in the cutting edge areas of advanced materials, nanoelectronics, nanophotonics, sensors and medical devices.

The quality of the workshop and its potential to bring benefits to Australia was underlined by level and breadth of the US delegation with representatives from a

number of high-status organisations: Army Research Laboratory; Army Corp of Engineers; Office of Naval Research; the National Institutes of Health; and NASA.

The level of US interest is also testimony to the quality of work being undertaken at the ANFF. Established in 2007 through the National Collaborative Research Infrastructure Strategy (NCRIS), the ANFF links 18 universities and the CSIRO to provide Australian industry and publicly funded researchers with state-of-the-art nano fabrication facilities. The Australian delegation to the workshop included Australian researchers and research infrastructure experts from across all ANFF member organisations.

The workshop is an outcome of the first meeting of the US-Australia Joint Commission Steering Meeting (JCM) for Science and Technology, held in Washington DC earlier this year. The Department supported a major delegation to the JCM that included Ms Rosie Hicks, CEO of ANFF. The ANFF-AFOSR workshop was also supported by the department of Innovation as it promotes research infrastructure links internationally consistent with the strategic and collaboration principles of the NCRIS program. Ms Clare McLaughlin, General Manager, Research Infrastructure Branch, attended the workshop dinner.

## **NEW: Review of Venture Capital Limited Partnership Regime**

As part of its review of tax arrangements applying to collective investment vehicles, the Board of Taxation reviewed the Venture Capital Limited Partnership regime. The Board has completed its review and provided its report to the Assistant Treasurer. It is expected that the report will be available some time in the future.

## **NEW: Innovation Financial Data Project (PricewaterhouseCoopers)**

The Department of Innovation commissioned PricewaterhouseCoopers in March 2011 to undertake the Innovation Financial Data project. This project was an exploratory study to develop a systematic and reliable method for estimating business expenditures and income on innovation using financial accounting information. The intention of this study was to illustrate the way to navigate through different accounting structures to identify innovation related transactions in a systematic manner.

Key technical concepts were illustrated in the report by means of worked examples for various sizes and types of firms.

The Department of Innovation plans to publish and release the report, discuss the results with the Australian Bureau of Statistics (ABS), and use the results to assist in informing improvements to program data collection.

## Innovation in the Australian Public Sector

The Australian Public Sector Innovation Indicators (APSII) project seeks to improve the measurement of innovation in the Australian Public Service (APS). Following the finalisation of the draft discussion paper and its endorsement by the technical reference group, a consultation paper was prepared for wider stakeholder consideration. It outlines the project in non-technical terms and requests feedback from the project's Stakeholder Reference Group (comprised of representatives from the 20 portfolio departments of the APS and chaired by the Department of Innovation).

The Stakeholder Reference Group held its inaugural meeting on 15 June 2011, where members were presented with a brief overview of the APSII Project and discussed innovation initiatives across the APS. The discussions were insightful and highlighted many of the difficulties faced by agencies in measuring and reporting on innovation.

Work is ongoing on the Public Sector Innovation Toolkit that provides practical guidance on how to foster innovation in the workplace. The Australian Public Sector Innovation Indicators team will also provide input to the Toolkit - material will include information on why measurement and evaluation are important to the innovation process, the uses for innovation data and the broader goals of the APSII project.

## Innovation Investment Fund Round 3

With the conclusion of the third tranche of the Innovation Investment Fund Round 3 (IIF3), on 8 June 2011, seven fund managers have now been licensed and \$140 million of the \$200 million set aside for IIF3 has been committed for investment in the Australian venture capital sector. The government is considering when it will be appropriate to finalise the remaining commitment to IIF3.

## R&D Tax Credit

The R&D Tax Credit Bills were passed by the House of Representatives on 22 November 2010 and are expected to be debated in August 2011. On 15 June 2011, the Minister announced that the R&D Tax Credit would start from 1 July 2011 following crossbench Senators' support for the new program. As a new element under the R&D Tax Credit, the government will introduce quarterly instalments of tax benefit for small and medium businesses from 1 January 2014.

Exposure draft regulations and the decision-making principles that will support the administration of the R&D Tax Credit were released on 11 July 2011 for public comment. Submissions closed on 5 August 2011.

The Department of Innovation held an out-of-session teleconference with Innovation Australia, specifically the Tax Concession Committee (TCC) of the Board and Mr Laurie Hammond, a member of the Board and a former chair of the TCC to discuss the Exposure draft Regulations and the Decision-making principles.

## Clinical Trials Action Group (CTAG) Report Update

The Minister for Innovation, Industry, Science and Research, Senator the Hon Kim Carr publicly released the [Clinical Trials Action Group \(CTAG\) report](#) Clinically Competitive: Boosting the Business of Clinical Trials in Australia on 3 March 2011 on behalf of the government. Minister Carr further announced that the government had accepted all the recommendations made by the CTAG.

The CTAG received input from key clinical trial stakeholders from Commonwealth and State and Territory governments, hospitals, clinicians, researchers and industry and received 54 public submissions which fed into eleven recommendations to improve Australia's clinical trials operating environment.

At the Pharmaceuticals Industry Working Group (PIWG) meeting on 2 May 2011, Ministers Carr and Roxon agreed that a CTAG Coordination Group (the Group) be established to discuss and progress implementation of the recommendations from the CTAG report. The group comprises Australian and state government agencies, consumer groups, industry and researchers. The Group met on 21 June and 25 July 2011 and will continue to meet every five to six weeks and report to the next PIWG meeting.

## Innovation Indicators Working Group

A teleconference of the Commonwealth, State and Territory Advisory Council on Innovation (CSTACI) Innovation Indicators Working Group was held on 19 July 2011.

The options for the provision of Australian Bureau of Statistics (ABS) innovation statistics at a state and territory level were revisited and it was agreed that these options would be revisited by the Working Group for future ABS surveys.

The Working Group was briefed on:

- the recent OECD National Experts on Science and Technology Indicators (NESTI) meeting;
- the use of innovation indicators in the Australian Innovation System Report 2011, including state and territory comparisons; and
- the findings of the Queensland Innovation Survey

The next Working Group teleconference is scheduled for 22 August 2011.

## National Enabling Technologies Strategy, Public Awareness and Community Engagement (NETS-PACE) Education Program.

The National Enabling Technologies Strategy Public Awareness and Community Engagement (NETS-PACE) section continues to develop top quality education materials in the enabling technology fields, specifically biotechnology and nanotechnology.

To improve the value of its education resources to Australian teachers this year NETS-PACE undertook professional reviews of its [AccessNano](#) and [Biotechnology Online](#) resources to determine how they align with the new Australian Science Curriculum (ASC).

The resources were then transferred to the new [TechNyou Education website](#) to highlight their relevance toward the ASC. NETS-PACE determined that finding resources that can be applied to the ASC will be an important issue for teachers as the new curriculum is rolled out.

Alongside the review and transfer NETS-PACE also engaged Education Services Australia to develop new curriculum-relevant content that would link the two fields of nanotechnology and biotechnology together to highlight their interconnectiveness. As these two technologies develop, the two fields will continue to merge together into new applications of bio-nanotechnology. The new website graphically allows teachers to choose their classroom modules by curriculum content headings, or by a graphic interface showing the distinctions as well as the interconnectivity between nano, bio and bio-nanotechnology.

With the new website live NETS-PACE will continue to gather feedback from teachers through the site and revise and develop content. In doing so, NETS-PACE is bridging the gap between the fields of enabling technologies and the needs of teachers adopting the new curriculum. Thereby ensuring that Australian teachers continue to receive, adopt and provide high quality accurate information to classrooms.

## 2011 Strategic Roadmap for Australian Research Infrastructure

During 2011, a [Strategic Roadmap for Australian Research Infrastructure \(2011 Roadmap\)](#) is being developed to inform future decisions on where Australia should make strategic infrastructure investments to further develop its research capacity and improve innovation outcomes over the next five to ten years.

Over 130 submissions were received in response to the Exposure Draft by the closing date of 22 July 2011. The department undertook targeted stakeholder consultations during July, including individual meetings with a number of Industry Innovation Councils and industry peak bodies.

Following analysis of the submissions and input from stakeholder consultations, a final Roadmap will be prepared. It is anticipated that the final 2011 Roadmap will be presented to the Minister for Innovation, Industry, Science and Research for his consideration in late August or early September.

## Research Workforce Strategy Update

The Australian Government indicated in Powering Ideas: An Innovation Agenda for the 21st Century that it would develop a research workforce strategy, to “address expected shortfalls in the supply of research-qualified people”.

The final strategy document, [Research Skills for an Innovative Future](#), was launched on 19 April 2011.

The strategy identifies five key priority areas for focus:

- meeting the need for research skills in Australia;
- strengthening the quality of supply through Australia’s research training system;
- enhancing the attractiveness of research careers in Australia;
- facilitating research workforce mobility; and
- increasing participation in Australia’s research workforce.

A Research Workforce Strategic Advisory Group (RWSAG) has been established to act as an advisory group to assist in the strategy implementation process. The RWSAG had its inaugural meeting on 9 June 2011. It was agreed that a Research Training Quality working group to progress work on broad research training quality issues, be established. The working group is anticipated to meet in mid-August.

The final report on the Examination of the Full Cost of Research Training study, conducted by Deloitte Access Economics will be released on the department’s website in due course.

## Cooperative Research Centres Program

The [Cooperative Research Centres \(CRC\) program](#) supports end-user driven research collaborations to address major challenges facing Australia, many of which are global challenges.

Applications for the 14th selection round closed on 1 July 2011 with 26 applications received. It is anticipated that outcomes will be announced in December 2011. The priorities for the 14th round are social innovation, sustainable regional communities and clean manufacturing (as part of the government’s Clean 21 initiative).

## Education Investment Fund

The role of the [Education Investment Fund \(EIF\)](#) is to build a modern, productive, internationally competitive Australian economy by supporting world-leading, strategically focused infrastructure investments that will transform Australian tertiary education and research. The EIF is jointly administered by the Department of Employment, Education and Workplace Relations and the Department of Innovation.

In the 2011-12 Budget, the Australian Government committed funding of \$500 million over 5 years for a Regional Priorities Round of funding from the EIF. The Round will support regional higher education and vocational education and training institutions to improve their infrastructure and help improve the quality of training and education regional students receive. On 13 July 2011 the Minister for Tertiary Education, Senator the Hon Chris Evans and the Minister for Research, Senator the Hon Kim Carr released draft EIF Regional Priorities Round guidelines for stakeholder consultation.

EIF funding of \$300 million has also been set aside to support research infrastructure projects associated with two key components of the Government's Clean Energy Initiative: the Solar Flagships and the Carbon Capture and Storage Flagships Programs.

## Tertiary Education Quality and Standards Agency

The [Tertiary Education Quality and Standards Agency \(TEQSA\)](#) has been established in response to a recommendation in the Bradley Review of Australian Higher Education and was allocated \$57 million over four years in the 2009-10 Budget.

TEQSA will have powers to regulate university and non-university higher education providers, register providers and carry out evaluations of standards and performance. It is intended to also protect and assure the quality of international education and it will streamline current regulatory arrangements.

On 16 June 2011 the TEQSA bills passed through the Senate and on 22 June they passed through the House of Representatives. The bills received royal assent on 29 June 2011 and have now become acts of Parliament.

From 30 July 2011 TEQSA will be established as an organisation, initially in a quality assurance capacity as it subsumes the functions of the Australian Universities Quality Agency. From 30 January 2012 it will commence its role as the national regulator.

It is expected that the government will shortly announce the appointment of TEQSA's five Commissioners, including the Chief Commissioner who will also be the Chief Executive of the agency. The Minister for Tertiary Education will make these appointments in consultation with the Minister for Research.

Appointments will also be made to the new Higher Education Standards Panel. The standards panel will be responsible for developing the Higher Education Standards Framework in consultation with the higher education sector. TEQSA will register and evaluate the performance of higher education providers against the standards framework.

Within the first year of operation the panel will start to review provider registration, category, course accreditation, and qualification standards. Collectively these standards form the Threshold Standards which all providers must meet in order to enter and remain in Australia's higher education system. The Department of Innovation will contribute to this review insofar as it relates to standards affecting research and research training.

## NATIONAL DEVELOPMENTS

### The Queensland Innovation Survey

The report on the findings of the [Queensland Innovation Survey](#) was released on 15 July 2011. The survey was conducted by the University of Queensland's Business School in conjunction with the University of Cambridge, and on behalf of the Government of Queensland.

The survey was designed to investigate the factors which determine the rate of growth and financial and innovative performance of Australian firms, and in particular Queensland firms.

Responses were received from over 2000 businesses, some 900 of whom are based in Queensland and the remainder elsewhere in Australia. Comparisons were made using a number of criteria, such as industry, firm size and age and innovation status. In addition, the performance of firms was compared not only between Queensland and the rest of Australia, but also between regions within Queensland.

The survey found that innovation rates in Queensland businesses are comparable to those elsewhere in Australia, as was performance against a number of other indicators, such as collaboration arrangements and R&D performance. As the 2011 Queensland floods occurred during the survey response period, some comparisons were made between businesses that reported before and after the floods.

### Exporting Services to Government Program: An ACT Pilot Program

The [ACT Exporting Services to Government Pilot Program](#) (August 2011 to June 2012) aims to provide guidance and practical information for Australian companies looking to export to the US public sector. In particular, the pilot program will focus on bridging the gap between exporters and potential US customers, and decreasing the barriers to market entry.

The program is a combined initiative of [Austrade](#) and the ACT Government's Economic Development Directorate. Participating companies will take part in monthly informational webinars, quarterly expert video conferences, receive one-to-one assistance from Austrade and will be eligible for enrolment in the ACT Trade Mission to the US (November 2011) and the US Public Sector Program (May 2012).

## The Productivity Commission's Rural Research and Development Corporations Inquiry

The PC inquiry into Rural Research and Development Corporations (RDCs) released its [final report](#) on 15 June 2011. The report concludes that the current RDC model should be retained. However recommended a number of changes including:

- the current cap on dollar for dollar matching of industry contributions by the government should be halved over a ten-year period;
- a new, uncapped, subsidy at the rate of 20 cents in the dollar should be introduced for industry contributions above the level that attracts dollar for dollar matching; and
- a new, government-funded, RDC – Rural Research Australia (RRA) should be created to sponsor broader rural research.

The Australian Government's [preliminary response](#) to the PC inquiry was also released in June. The Government will consult broadly with the community in developing its final response to the Productivity Commission's report over coming months. Following that consultation, the Government will finalise its response to the Commission's report, including assessing whether any changes are required to broader rural R&D policy.

The [National Strategic Rural Research and Development Investment Plan](#) was also released in June by the Minister for Agriculture, Fisheries and Forestry Senator the Hon. Joe Ludwig. The plan outlines a rationale for balancing Australian Government investment in rural R&D and identifies major themes against which investment should be determined.

## Swinburne Design Factory

Swinburne University of Technology have announced the first 'Living Lab' dedicated to design based at an Australian university. Inspired by and collaborating with Aalto University in Helsinki, the [Design Factory](#) aims to bring together teams of business, design, engineering and information technology students work on major industry-sponsored projects.

The Design Factory will operate from August 2011 and will later be relocated to the Advanced Manufacturing Centre (AMC) when it opens in 2013. The space will include purpose-built teaching and learning environment reflecting Aalto Design Factory's mix of flexible teaching, meeting and social spaces. The Design Factory at AMC will also house prototyping facilities and provide access to the Factory of the Future, to boost Australian capability in design for manufacturing.

The Aalto and Swinburne Design factories will collaborate on industry-relevant research in areas including product and service innovation, design anthropology and design thinking.

## Fostering Enterprise: the Innovation and Skills Nexus - Research Readings

This [report](#) commissioned by the Australian Government's Department of Employment, Education and Workplace Relations, was released on the 28th of June 2011.

Key themes explored throughout the report include motivation for firm innovation, the skills required for innovation and how innovation and skills development is supported by the training system, firms and government.

## Indigenous Higher Education Advisory Council

At the 19th Meeting of the Indigenous Higher Education Advisory Council (IHEAC), held on 28-29 June 2011, the National Indigenous Higher Education Workforce Strategy (NIHEWS) was launched.

The NIHEWS has been developed by the IHEAC in conjunction with Universities Australia. It aims to bring the number and dispersion of Indigenous employees, within the higher education sector, to population parity within 10 years.

[Recent IHEAC submissions can be found on the DEEWR website.](#)

## INTERNATIONAL DEVELOPMENTS

### Conference on the Common Strategic Framework for EU Research and Innovation

Officers from the Innovation Division of the department attended the EU Conference on the Common Strategic Framework (CSF) for EU Research and Innovation on 10 June 2011.

The conference discussed common themes from the public consultation period on the Common Strategic Framework which occurred between February and May 2011. Over 775 position papers and 1300 responses to an online survey were received during the consultation period.

The CSF program now known as [Horizon 2020](#) will be introduced post-2013, will build upon the successes of the current Framework Programme for Research (FP7), the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT). It will include EUR 80 billion in investment for innovation and research support. The framework and design of Horizon 2020 will be presented by the European Commission, by the end of 2011 for endorsement by the Council of the European Union and the European Parliament.

Key issues discussed at the conference for consideration in the design of Horizon 2020:

- There is overwhelming support across Europe and associated countries for the CSF to bring research and innovation closer together;
- Ensuring simplification in design, access and evaluation is to be a key priority of the CSF;
- Funding for research and innovation should be closely linked to societal challenges and to the EU's policy objectives in areas such as climate change, energy security and efficiency, demographic ageing and resource efficiency. Further to this collaborative research, centred on themes and challenges, should continue to be a core element of the CSF. Both agenda/end user driven research as well as curiosity driven research activities should be supported;
- Targeted support should be provided for all stages in the innovation chain. In particular SMEs should be able to benefit from EU research and innovation funding;
- Elements of the current FP program considered to be successful (i.e. the European Research Council and Marie Curie actions) should be continued;

- Funding opportunities should be made less prescriptive and more open. There should be sufficient scope and opportunities to support smaller projects as well as consortia. This will support more innovation activities and projects; and
- The CSF should increase support for demand led proposals and bottom-up approaches.

## Funding Boost of EUR 7 billion for Innovation Union

The EU Commissioner for Research, Innovation, and Science Máire Geoghegan-Quinn recently announced the release of nearly EUR 7 billion for stimulating European innovation through research funding. Touted as the biggest ever [European Commission funding package](#), it is part of the Seventh Framework Program (FP7), which is the latest phase of the Innovation Union rollout (one of the flagship initiatives of the Europe 2020 Strategy launched in October 2010).

The package will be directed towards funding a number of initiatives and will create around 174,000 jobs in the short term, as well as 450,000 jobs and nearly EUR 80 billion in gross domestic product (GDP) growth within the next 15 years. The funding will take the form of grants, which will be awarded to 16,000 recipients comprising benefactors and organisations from across a variety of European universities, research organisations and industry specialists.

In her announcement to the public, the Commissioner emphasized the importance of the funding package in aiding the EU's recovery from the financial crisis and gave some details on the monetary breakdown, which is summarized briefly as follows:

- The ERC will be provided with funds for an awards scheme which will grant close to EUR 1.6 billion to the best researchers working in Europe;
- Approximately EUR 900 million will be directed towards Marie Curie Actions to support researchers' mobility and careers;
- EUR 220 million (from funding allocated to health research funding) and EUR 240 million (from funding for information and communication technology (ICT)) will go towards tackling the challenge of providing for an ageing population;
- 265 million will be reserved for environment research to help address major challenges such as climate change, biodiversity loss and resource efficiency;
- EUR 313 million will be injected into efficient transport initiatives;
- EUR 488 million will be directed towards nanotechnology projects such as factories of the future, green cars and energy-efficient buildings; and
- Over EUR 307 million will be invested in building a strong bio-economy that will improve production methods, create new industries, and provide jobs.

## XXII ISPIM Conference: Sustainability in Innovation: Innovation Management Challenges

The 22nd International Society for Professional Innovation Management (ISPIM) conference held in Hamburg on 12-15 June 2011 was attended by an officer of the department. The Conference theme was “Sustainability” a major and increasingly important driver of business change.

The Conference brought together professionals interested and involved in innovation management from research, industry, universities, intermediary organisations, and government. Sessions varied from ‘Innovation Process Dynamics’ to ‘Open Innovation’, from ‘Incubators and Clusters’ to ‘Funding Innovation’.

Case study examples discussed at the conference included:

- a presentation that assessed the impact of an R&D grant on a small firm. It showed that the spin off benefits in terms of new partnerships and networks developed as a result of the project was an important outcome, which led to greater returns to the company. Such outcomes are not easily captured when assessing the impact of R&D grants, and become important several years after the original grant was awarded; and
- a review of public procurement in the UK showing a UK government department entering into a procurement arrangement which combined paper purchasing and waste disposal, in which a paper mill collected waste paper, recycled it, and sold it back to the department at a discount. In order to set up this system, the department needed a project champion, senior management support and a good working relationship between supplier and buyer.

## Public Procurement of Innovation Conference

The European Conference on [Public Procurement of Innovation: Facing Societal Challenges Delivering Better Public Services and Supporting SMEs to Innovate](#) was attended by a department officer on 27-28 June 2011.

The EU Europe 2020 Strategy recognised the power of public procurement in supporting innovation. Public procurement in the EU comprises 19% of GDP, or more than EUR 2,000 billion. If even a small amount of this were used for purchasing innovations or the development of innovative solutions, a significant demand pull would be generated, helping innovative firms gain access to new markets.

The conference highlighted the need for governments to procure innovation as part of a policy mix approach to support for both supply-side (research and development) and demand-side (procurement, standards, regulation) policies, but recognised the difficulties in terms of a procurement environment which is risk averse and contains skills gaps.

The conference also provided examples of how regions are supporting procurement of innovation, including the 'Urban Lab' approach of Barcelona, whereby companies can use the city as a lab to run tests and pilots and work with real citizens to obtain feedback.

The focus on the Conference was the launch of the European Supporting Public Procurement of Innovative Solutions: Networking and Financing Procurement Program outlined in the article below.

## Supporting Public Procurement of Innovative Solutions: Networking and Financing Procurement

In June 2011, the EU has announced a new EUR15 million program "[Supporting Public Procurement of Innovative Solutions: Networking and Financing Procurement](#)". The program aims to support public procurers in purchasing new and improved solutions, products and services in areas of social challenges (climate change, energy and resource scarcity, health and ageing), thereby increasing the demand for innovation and enhancing innovation of public services in relation to the improvement in quality/efficiency of public services.

The program has two strands:

**Strand 1:** EUR14.4 million to develop public procurement of innovative solutions (preparation phase and implementation phase), it is aimed at:

- Creating buyer groups dedicated to the procurement of innovative solutions (including needs assessment, market consultation, specification development, and risk management), and the actual procurement process; and
- The public procurement of innovative solutions which have already been technically demonstrated but which are not yet commercially available in the market. This includes solutions based on existing technologies that are to be utilised in a new and innovative way, as well as non-technological innovations. The solutions have to be new to the contracting authority.
- The strand will cover 95% of the eligible costs associated with setting up and running the group, including expertise, legal advice, human resources, training, etc. and 20% (up to EUR 500,000) of any actual procurement that results from group activities.

**Strand 2:** EUR 0.6 million to create and run a European platform dedicated to "public procurement as tool for innovation". It aims at: developing a European platform to support the use of public procurement as tool for innovation policy, making widely available know-how on public procurement procedures for innovation procurement, and state-of-the-art solutions accessible to other procurers.

## OCED Technology and Innovation Policy (TIP) Meeting and Workshop on Knowledge Networks

Two officers from the Department of Innovation attended the OECD TIP meeting in Paris in June 2011. A new approach for sharing information and knowledge was used for the first time by the TIP, whereby representatives were asked to identify the top two to four issues in their country in relation to innovation policy. There was significant alignment around green growth, fiscal constraint and streamlining of support.

The meeting included a workshop on Knowledge Networks. Discussion focused on how knowledge transfer operates and its significance in the 'open innovation' environment. Key messages included:

- industry uses knowledge networks to strengthen innovation performance acknowledging that collaboration is a feature of disruptive innovation;
- new tools such as patent analysis are used by major industry groups to ascertain where relevant knowledge can be gathered;
- the social science areas of higher education institutions appear to be more involved in knowledge networks than the STEM areas;
- open innovation will raise issues in relation to traditional higher education knowledge transfer mechanisms; and
- new measures of knowledge transfer are needed.

The Department of Innovation will participate in three TIP Working Group Projects during 2011-12:

***Transitioning to green innovation and technologies:*** The role of supply and demand-side innovation policies aimed at better understanding the problems and obstacles related to bridging supply and demand-side innovation policies that limit the transition towards green technologies and innovation; and identifying potential best policy practices for linking supply and demand side policies to accelerate or facilitate transition on a systems level.

***Smart Specialisation*** aimed at identifying good practices in policy development, methodologies and selection criteria for designing and assessing smart specialisation strategies. Australia will contribute case study examples to the project.

***Financing, Commercialising and Diffusing Knowledge*** aimed at better understanding the nature of open science and open innovation systems and their role in the transfer, exploitation and commercialisation of knowledge arising from public research; and secondly, the implications for the financing of innovation.

## Demand-side Innovation Policies

The OECD has released [Demand-side Innovation Policies](#), a report on the findings on the OECD Project on Demand-Side Innovation Policies. Australia was chair of the Steering Committee that developed the report.

The report was motivated by the potential for enhancing innovation through consideration of the innovation process as a whole rather than on the traditional supply-side approaches to innovation. The report includes a number of case studies on innovation programs with demand-side components that are operated by the Australian and Victorian governments.

The report suggests that the success of demand-side innovation policies would depend on the market efficiency of the policies and their connection with supply-side measures, and co-ordination of innovation policies and activities across the public sector. The report discusses opportunities to encourage innovation through demand-side measures, including changes to standards, regulations and procurement practices.

## State of Uncertainty – Innovation Policy through Experimentation

This [provocation piece published by NESTA](#) challenges the fundamentals of current innovation policy of modern government. It argues that while modern governments are increasingly more aware of innovation and supporting innovation the rationale, methods and measurement of current innovation policy is flawed.

It is flawed because innovation policy is closely based on industrial policy models based on existence of market failure (failure of private entrepreneurship and enterprise to create new industries and new markets) and therefore requires directed public intervention (support of these through policy instruments and regulatory measures and other resource transfers mechanisms).

Current innovation policy is focused on Friedrich Hayek's problems of missing information and radical uncertainty within the context of Joseph Schumpeter's continual change in information about opportunities and constraints due to creative destruction.

The authors propose a model that:

*Emphasises a learning-focused, network-brokering and information-discovery role for innovation policy, focused on the opportunities for, and constraints to, entrepreneurial action. This might, for example, be operationalised with collaborative experiments, innovation vouchers, innovation networks and clusters, public/private funds, micro-federalism, and related institutional designs. It would seek to achieve the goals of innovation policy by whenever possible reducing uncertainty for entrepreneurs.*

## House of Lords' report on Public procurement and innovation

The House of Lords Science and Technology Committee recently [reported](#) its findings following an investigation into the use of public procurement, as a tool to stimulate innovation.

The committee called for the need for public sector organisations to use the money set aside for public procurement (GBP 236 billion in 2009-10, which equates to 15% of GDP) to encourage innovative solutions to procurement problems, and to achieve better value for money and to stimulate economic growth.

Calling the current culture of government procurement as “antithetical” to innovation, the committee made a number of recommendations in order to bring about a culture change - including the creation of a new ministerial role to specifically oversee both purchasing and innovation.

## Scaling Up Innovation in the Public Sector

The UK Government released the report [Scaling Up Innovation in the Public Sector](#) in July 2011. The report was a culmination of the collaborative workings of a cross-government ‘consultancy’ team, which was established to tackle the mammoth task of finding innovative solutions to the systemic challenge of scaling up successful innovations within, and across, the public sector.

The work was sponsored jointly by the UK Department for Business, Innovation and Skills and the Department for Communities and Local Government and facilitated by the National School of Government.

The report revealed four areas for priority action; including:

- fostering conditions to maximise the capacity for innovative ideas to expand across the public sector;
- ensuring that the public sector has the organisational culture, leadership, and people to support the scaling up of innovative ideas;
- establishing networks that facilitate the dissemination of innovative ideas that could be scaled-up; and
- using appraisal and evaluation of innovative ideas to provide the business case for scaling, to ensure the right ideas are implemented and driven forward.

## Ernst and Young's report: Nature or nurture? Decoding the DNA of the entrepreneur

The aim of this [report](#) is to provide some insights into the minds of today's most successful entrepreneurial leaders and discern what makes them successful. Key findings include:

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- entrepreneurial leaders are made, not born;
- entrepreneurship is rarely a one-off decision;
- funding, people and know-how are the biggest barriers to entrepreneurial success;
- entrepreneurs share common traits; and
- traditional companies can learn from entrepreneurial leaders.

## Advanced Manufacturing Partnership plans revealed

In June 2011 the Advanced Manufacturing Partnership (AMP) program was launched by President of the United States, Barack Obama. The AMP will be led by Dow Chemical CEO Andrew Liveris and MIT president Susan Hockfield. It will focus on coordinating a government-wide effort to leverage existing funds and future budgets to co-invest with industry.

Initial investments are set to include small high-power batteries, advanced composites, metal fabrication, biomanufacturing and alternative energy. The program aims to source up to \$500 million in public/private investment funds.

The program has been designed based on the Advanced Manufacturing Initiative as proposed by the President's Council of Advisors on Science & Technology in a study, [Ensuring American leadership in Advanced Manufacturing](#) (released June 2011).