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Department of Innovation, Industry, Science and Research

# **Demand led innovation initiatives: Early results from Australia**

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## Objectives of the Demand side study

- Identification of Australian-specific policy levers to foster demand for innovation
- Identification of good policy practices
- Identification of potential leverage mechanisms to maximise economic, environmental and social returns
- Enhanced policy insight around diffusion across the value chain
- The need for effective demand-side innovation policy in Australia





## Scope of work

- Input into OECD questionnaire design;
- Identify initiatives that influence demand for innovation
- Liaison with selected initiative owners to complete questionnaire
- Overview and analyse the design, content and nature of selected initiatives
- Initial reporting on initiatives (as available)
- Insights into demand side policy to identify good practices for policy development





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# Methodology for Australia

- Initial selection and contact
- Hands on assistance to complete questionnaire
- Coordination and collation of responses
- Examination of policy implications





## Programs/Initiatives selected

- Climate Ready
- Green Car Innovation Fund
- Smart SMEs Market Validation Program (MVP)
- Australian Stem Cell Centre
- National Information and Communications Technology Australia (NICTA)





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# Information Requested

1. Overview of initiative
2. Procurement
3. Implementation
4. Regulations
5. Standards
6. Evaluation





## Theme - Procurement

- None of the initiatives identified directly sought to use the procurement mechanism to drive innovation.
- But, implicitly, some initiatives seek to generate innovation via procurement mechanisms (eg Smart SME MVP).
- Most programs use indirect mechanisms (such as grants, seed funding, market signal) to generate or support critical mass of private sector demand.





## Themes - Implementation

- Majority of initiatives seek to utilise cooperative or partnership arrangement to address market or systems failure
- In the case of Green Car and Climate Ready they make use of technical specifications or broad aspirational objectives (national challenge)
- Facilitation of market entry and growth through SME-specific support funding (Smart SME MVP)





## Themes - Regulation & Standards

- Regulation not a focus but most programs seek to provide policy input around sectoral governance arrangements (Australian Stem Cell Centre, NICTA)
- Green Car Innovation Fund – No standards, in order to encourage blue sky thinking and solutions.





# Evaluation

- Available evaluative data is limited, however
- Response and take up rates for Climate Ready initiatives is strong
- Continuing government role in supporting strategically vital areas
- Initiatives form key components of Australia's innovation system
- Perception - Government is key risk mitigator-  
important market driver





## Case Study: Smart SMEs Market Valuation Program (MVP)

- Competitive grants program open to SMEs
- Seeks to generate innovative public sector solutions through private sector engagement
- Modelled on US SBIR program
- Uses hybrid model based on prizes (incentive) and government procurement.
- Evaluation currently underway





## Initial implications for policy makers

- Broad environmental & social aspirations combined with good policy design can induce positive response
- Hybrid designs (such as Smart SME MVP) could be considered
- Difficulty of lock-in through difficulties in creating critical mass
- Possible lock-in of expectancy (Public sector innovation)





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## Other initiatives

- Australian Government Procurement Guidelines
- Standards, Innovation and the Australian Economy
- ICT - using demand-side policies (competition, lead user) to uncover high-potential R&D
- Industrial Biotechnology





## Further work/issues for consideration

- How policy design and government-to-business interaction can induce sustained business-to-business innovation demand.
- How government intervention can stimulate innovation demand without stifling competition
- The interaction of innovation demand policies on a complex set of actors, linkages, etc.
- Risk assessment and sharing
- Country specific
- Evaluation of effectiveness of demand side policy remain fertile ground for investigation





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## Other work

Innovation Division-Innovation metrics project

- Review research on and sources of indicators for specific topics and evaluate the results for possible indicators of relevance for Australia.





# Proposed Indicators for innovation demand

Category	Indicator description(s)
Lead markets	Share of firms that report "meet requirements of your most demanding customers" as an innovation objective. This question could be added to the BCS survey (2006-07) question 43b.
"	Share of firms that report each type of location for their most demanding customers for innovative products: local, state, Australia, overseas.
"	National rating for sophisticated domestic customers.
"	Type of most demanding customer: Combine results to a question on the location of the firm's most demanding customers with BCS 2006-07 question 27 on the firm's main type of customer (Government, large businesses, small businesses, general public).
Government procurement	Share of firms that report 'meet requirements of a government procurement contract' as an innovation objective. This question could be added to the BCS survey (2006-07) question 43b.
"	Total GFCF for machinery and equipment and non-dwelling construction by the general government as a percent of GDP measured in current prices.
"	Total GFCF for machinery and equipment and non-dwelling construction by public corporations as a percent of GDP measured in current prices.
"	Share of firms that report 'In response to government regulations or standards' as an innovation objective.
Barriers	Share of firms that report 'uncertain demand for new goods or services' as a barrier to innovation.
"	Share of firms that report 'small markets due to high cost of innovative goods or services' as a barrier to innovation.
Business sector demand	Total GFCF for machinery and equipment and non-dwelling construction by private businesses as a percent of GDP measured in current prices.





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# Questions and discussion





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# Thank you



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