
PRESS RELEASE

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GOVERNMENT COMMITS S\$16.1 BILLION TO SUPPORT RESEARCH, INNOVATION AND ENTERPRISE FOR THE NEXT 5 YEARS AND SEEKS WAYS TO SOLVE COMPLEX NATIONAL CHALLENGES WITH R&D

- *Government to commit S\$16.1 billion to support research, innovation and enterprise in the next 5 years*
- *PM says Singapore's long-term aim to be among the most research-intensive, innovative and entrepreneurial economies in the world in order to create high-value jobs and prosperity for Singaporeans*
- *R&D expertise to be harnessed to solve complex national challenges with global demand – "Energy resilience for sustainable growth" would be the first challenge to be addressed*

1 Prime Minister Lee Hsien Loong, Chairman of the RIEC, announced today that the Singapore government plans to spend S\$16.1 billion over 2011-2015 on research, innovation and enterprise. The Research, Innovation and Enterprise Council (RIEC), comprising several Cabinet Ministers and eminent international leaders in science and technology, endorsed this allocation at the end of its fourth meeting today. The new allocation was recommended by a Whole-of-Government exercise, and is a 20% increase over the S\$13.55b committed from 2006 to 2010. This reflects the growing importance of R&D in Singapore's development as a knowledge-based, innovation-driven economy.

Commitment to R&D for Economic Growth

2 PM Lee said: "Singapore's long term aim is to be among the most research-intensive, innovative and entrepreneurial economies in the world in order to create high value jobs and prosperity for Singaporeans. Research and innovation underpin the competitiveness of our industries, catalyse new growth areas, and transform our economy. Increasingly, intellectual capital will be critical for our next phase of economic development. Hence, the government will allocate S\$16.1 billion to support research, innovation and enterprise activities in the next 5 years."

3 In Sweden, Finland and Israel, private enterprises take the lead in R&D. Likewise, Singapore aims to increase gross expenditure to R&D of 3.5% of GDP by

2015 through greater private sector R&D activity, as recommended by the Economic Strategies Committee.

4 We want our R&D efforts to have greater economic impact, and create more high-value investments and jobs. We will do more to facilitate collaboration between industry and public research institutions to foster greater commercialization of R&D.

5 A larger portion of R&D funding will be awarded on a competitive basis to projects that will strengthen our capability and contribute to economic and societal outcomes. “We want to create an ecosystem of competition and collaboration across institutions and with industry, for the best ideas to thrive, succeed in the market, and impact people’s lives”, said Dr Tony Tan, Deputy Chairman of the RIEC.

Strengthening Singapore’s R&D Foundation

6 Members of the RIEC noted the transformation in Singapore’s R&D landscape. They also reviewed the progress of a range of activities initiated since the establishment of the RIEC and the National Research Foundation (NRF). Government ministries and agencies are more actively engaged in R&D and innovation to enhance service delivery and foster stronger economic growth. Our universities have raised their international profiles for research excellence and academic entrepreneurship, attracting more partnerships and providing more opportunities to their students. Renowned foreign institutions have set up a significant R&D presence in Singapore, helping Singapore to establish herself as a global R&D hub. This will help us to attract talent and generate intellectual property, and enhance our competitiveness in this increasingly globalised world. A*STAR’s research institutes have built up a spectrum of research capabilities to meet the technological needs of industry.

7 The RIEC also noted the substantial progress made in the three strategic research programmes – Biomedical Sciences Translational and Clinical Research (BMS TCR), Environmental and Water Technologies (EWT – Clean Water and Clean Energy), and Interactive and Digital Media (IDM). The RIEC was also pleased to see the early successes of the Campus for Research Excellence and Technological Enterprise (CREATE), the Competitive Research Programme (CRP) Funding Scheme, the Singapore NRF Fellowship, the Research Centres of Excellence (RCEs) and projects under the National Framework for Innovation & Enterprise (NFIE).

8 The RIEC agreed that the R&D foundation will be strengthened through a more competitive funding process in the future, riding on the success of the earlier NRF initiatives.

Harnessing R&D to Address National Challenges

9 The RIEC discussed ways to harness the considerable R&D capabilities developed in Singapore over the years to achieve economic and social objectives. RIEC members noted that Singapore’s size, well-developed infrastructure and a highly efficient and integrated government enable our country to effectively tackle large, complex problems facing many cities. Our solutions will also be useful to other

cities facing similar challenges in the same way as we have done in developing our water industry.

10 Over the past years, NRF has built up world-class R&D capabilities in a wide range of areas, such as energy resilience, transportation, environmental sustainability and urban systems, through initiatives such as the Campus for Research Excellence And Technological Enterprise (CREATE), the Research Centres of Excellence (RCEs) and the Singapore NRF Fellowship. Deep technological knowledge also resides in our universities and research institutes.

11 The RIEC envisages the “National Innovation Challenge” as a way to harness multi-disciplinary research capabilities to encourage innovations and cost-competitive solutions. It therefore supports NRF’s proposal to focus on developing solutions to a few large, complex national challenges facing Singapore as a major new R&D thrust for the next 5 years. A coordinated effort to marshal the diverse R&D expertise to address complex national challenges can produce innovative and impactful solutions. This would not only solve Singapore’s own problems and make life better for Singaporeans, but also develop our industry and spawn new businesses to exploit opportunities abroad.

12 The RIEC endorses S\$1 billion for the “National Innovation Challenge” to develop innovative solutions to national challenges in areas such as energy resilience, environmental sustainability, and urban systems.

Energy Resilience for Sustainable Growth

13 The first national innovation challenge proposed by the NRF is “Energy Resilience for Sustainable Growth” which aims to develop cost-competitive energy solutions for deployment within 20 years to help Singapore improve energy efficiency, reduce carbon emissions and increase energy options. A programme office would be set up to engage all entities that could contribute to this effort. A Whole-of-Government process would be employed to identify other national innovation challenges over the next five years.

14 Mr Peter Schwartz, Co-founder and Chairman of Global Business Network, said “There are many challenges awaiting us, for example, energy for the long term and food security. Singapore is well placed to bring together its scientists, engineers and entrepreneurs to create solutions to these challenges for itself and possibly for the world”.

15 Prof Paul Herrling, Head, Corporate Research of Novartis International AG said, “It is fundamentally important to build a critical mass of in-country science and technology capabilities and know-how to be able to recognise and harness breakthroughs whenever these occur. The NIC will allow Singapore to achieve this.”

16 Dr Tan said: “It is heartening to note the transformation in Singapore’s R&D landscape over the last few years after the government elevated R&D into a national priority by setting up the RIEC and the NRF. The National Innovation Challenge will open up an exciting new frontier for Singapore. It will bring together the considerable

R&D expertise built up over the years to solve our own challenges while also developing our industry to take on global opportunities.”

17 The RIEC will meet in 2011 for its fifth meeting in Singapore.

The National Research Foundation (NRF)

The National Research Foundation (NRF), set up on 1 January 2006, is a department within the Prime Minister's Office.

The NRF sets the national direction for research and development (R&D) by developing policies, plans and strategies for research, innovation and enterprise, funds strategic initiatives, builds up R&D capabilities and capacities through nurturing our own and attracting foreign talent, and coordinates the research agenda of different agencies to transform Singapore into a knowledge-intensive, innovative and entrepreneurial economy. It provides secretariat support to the Research, Innovation and Enterprise Council (RIEC), chaired by the Prime Minister. A five-year budget of S\$5 billion has been allocated to the NRF in 2006 to achieve this mission.

The NRF aims to:

- Transform Singapore into a vibrant R&D hub that contributes towards a knowledge-intensive, innovative and entrepreneurial economy; and
- Make Singapore a talent magnet for scientific and innovation excellence.

For more information, please visit www.nrf.gov.sg.
