

30 January 2010

Prime Minister

1. You established the Economic Strategies Committee (ESC) in May 2009 to develop strategies for Singapore to maximise our opportunities in a new world environment, by building our capabilities and making the best use of our resources, with the aim of achieving sustained and inclusive growth. Members of the ESC were drawn from government, the labour movement, the private sector and academia. We formed eight sub-committees and several working-groups to study the issues comprehensively.

2. The ESC has completed its work and now submits its key recommendations for the Government's consideration. The Committee has engaged widely and benefited from diverse views and suggestions from companies, business chambers and associations, universities and think-tanks, unionists, professionals, entrepreneurs and members of the public. In total, more than 1,000 people participated in generating the ideas leading to the ESC's proposals.

3. The ESC believes that the strengths that Singapore has built up in the past will give it advantage in the decade to come, especially with the rapid expansion of urban demand in Asia. However, we must go beyond what we have developed, and do things differently. We have to grow deeper capabilities and expertise to make the most of the opportunities ahead, as well as to stay relevant as new players internationally gain competitive strength. Further, to sustain economic growth despite a more slowly expanding workforce, we have to make a clear shift: to grow based on skills, innovation and productivity.

4. Singapore should aim to sustain productivity growth of 2 to 3 percent per year, more than double the 1 percent we achieved over the last ten years. This will raise productivity by one-third over a decade. It is a challenging goal, involving major changes in every sector and sustained over a full decade, and will require a comprehensive national effort. But raising skills and productivity is the only viable way to improve the real wages of workers, and is the best way we can help citizens with lower incomes.

5. To shift to productivity-driven growth calls for a qualitative transformation of our economy. Our companies must compete by innovating, investing in their people, and creating higher value jobs. We must allow market forces to restructure our economy, providing more room for efficient enterprises to grow, and pushing less efficient activities either to upgrade or phase out. The move to higher value activities will also be supported as businesses internationalise their operations, whether to shift lower-value activities abroad or to capture new revenues and expand, creating demand for management, design, marketing and business services in Singapore.

6. Our specific recommendations are summarised under three broad priorities. *First, we have to boost skills in every job.* We should develop an outstanding nation-wide system of continuing education and training, to give everyone the opportunity to acquire greater proficiency, knowledge and expertise, from the most basic jobs to the most complex. Employers and industry associations, unions and government will also have to work together to redesign and create better jobs. We recommend a progressive increase in foreign worker levies to incentivise companies to improve productivity.

7. *Second, we have to deepen capabilities among Singapore companies to seize opportunities in Asia.* Our MNC strategy remains important, but there is also considerable opportunity in the next 5 to 10 years to attract global mid-sized companies, and to facilitate local companies to grow into industry leaders in Asia. We recommend measures to develop the market for cross-border financing to help companies expand abroad. We also propose a significant push to reap the commercial potential of our science and technology base.

8. *Third, we must make Singapore a distinctive global city.* The ESC is convinced that Singapore's future rests on growing a deep pool of highly capable and entrepreneurial people. Our open and multicultural society will be an increasing advantage. We must continue to attract top quality people from around the world, while investing further to provide the best opportunities for Singaporean talents to grow and develop, to the highest levels of expertise in a range of fields. The ESC also recommends support for the growing creative and arts clusters, which will add to the character of the city, and nurture new talents. Our programmes to rejuvenate our mature housing estates, develop eco-towns and regions with diverse lifestyle options, and make major improvements in transport connectivity will ensure that Singapore remains a highly liveable place even as the economy grows.

9. We believe the strategies we propose will help transform Singapore's economy once again, raise our citizens' living standards, and enable us to take full advantage together of the new opportunities emerging in the world around us.

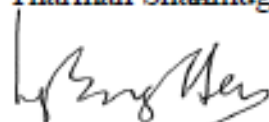
10. We thank you for the privilege of serving on the ESC.



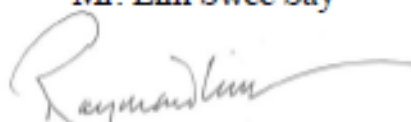
Mr Tharman Shanmugaratnam



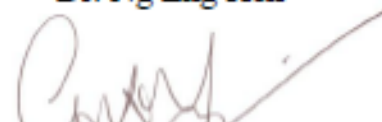
Mr. Lim Swee Say



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Mr. Raymond Lim



Mr. Gan Kim Yong



Mrs. Lim Hwee Hua



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Mr. S. Iswaran



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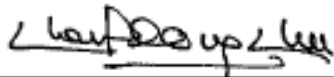
Mr. Heng Swee Keat



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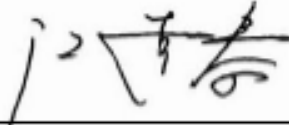
Mr Tony Chew



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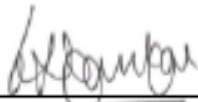
Mr. James Koh



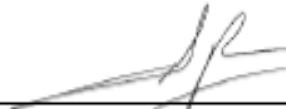
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Dr. Ricky Souw



Mr. Tan Mok Koon



Mr. Wong Fong Fui



Prof. Bernard Yeung

*Prime Minister  
Singapore*

1 February 2010

Mr Tharman Shanmugaratnam  
Minister for Finance  
Chairman, Economic Strategies Committee

Dear *Minister,*

Thank you for your letter of 30 January 2010 submitting the key recommendations of the Economic Strategies Committee (ESC).

The ESC has studied the challenges facing Singapore comprehensively, and its proposals are realistic and achievable. The Government accepts the key thrusts of the ESC report, and will provide its specific responses in the 2010 Budget Speech and the Committee of Supply (COS) Debate.

I agree that for the next phase of Singapore's development, we must shift decisively to foster growth through skills and innovation. This requires a major and sustained national effort. The Government will strongly support the transformation, but cannot do it alone. Businesses have to change their mindsets, moving from doing more of the same or making incremental improvements to seeking new and innovative ways to create value. They must do this continually, and not imagine that a one-off effort will suffice. Our people must continue to upgrade their skills and deepen their expertise. This too must be relentless, as it is our only way to sustain growth and raise incomes. We must invest in our people, and provide them with the skills and wherewithal to become more productive and give better value.

On behalf of the Government, I would like to thank the members of the ESC, its sub-committees and working-groups for your hard work. You have made a valuable contribution in charting the course for Singapore's economic development over the next decade.

Yours sincerely

Lee Hsien Loong

# ECONOMIC STRATEGIES COMMITTEE KEY RECOMMENDATIONS

## Table of Contents

<b>GOAL</b> .....	<b>2</b>
<b>PART I: OVERVIEW</b> .....	<b>2</b>
<b>WHERE WE STAND</b> .....	<b>2</b>
<b>Opportunities in a New Landscape</b> .....	<b>3</b>
<b>OUR KEY CHALLENGE: GROWING THROUGH SKILLS AND INNOVATION</b> .....	<b>4</b>
<b>How Fast Can We Grow?</b> .....	<b>6</b>
<b>Making the Move Now</b> .....	<b>7</b>
<b>Managing our Foreign Worker Dependence</b> .....	<b>8</b>
<b>THREE PRIORITIES FOR THE NEXT DECADE</b> .....	<b>9</b>
<b>AN ENABLING ROLE FOR GOVERNMENT</b> .....	<b>13</b>
<b>OUR FUTURE</b> .....	<b>14</b>
<b>PART II: KEY STRATEGIES</b> .....	<b>16</b>
<b>I Growing Through Skills and Innovation</b> .....	<b>17</b>
<b>II Anchor Singapore as a Global-Asia Hub</b> .....	<b>21</b>
<b>III Build a Vibrant and Diverse Corporate Ecosystem</b> .....	<b>23</b>
<b>IV Make Innovation Pervasive, and Strengthen Commercialisation of R&amp;D</b> .....	<b>28</b>
<b>V Become a Smart Energy Economy</b> .....	<b>31</b>
<b>VI Enhance Land Productivity to Secure Future Growth</b> .....	<b>33</b>
<b>VII Build a Distinctive Global City and an Endearing Home</b> .....	<b>35</b>
<b>APPENDIX 1: ECONOMIC STRATEGIES COMMITTEE MEMBERS</b> .....	<b>39</b>
<b>APPENDIX 2: COMPOSITION OF SUBCOMMITTEES</b> .....	<b>41</b>

## **ECONOMIC STRATEGIES COMMITTEE KEY RECOMMENDATIONS**

### **GOAL**

#### **HIGH-SKILLED PEOPLE, INNOVATIVE ECONOMY, DISTINCTIVE GLOBAL CITY**

We must make skills, innovation and productivity the basis for sustaining Singapore's economic growth. This will also provide for inclusive growth, with a broad-based increase in the incomes of our citizens.

We must also be a vibrant and distinctive global city – open and diverse, the best place to grow and reach out to a rising Asia, and a home that provides an outstanding quality of life for our people.

### **PART I: OVERVIEW**

#### ***WHERE WE STAND***

1. The Singapore economy has fared well amidst the challenges of the last decade. Growth averaged 5 percent per year during the period, even with the deep recession of the last two years. The majority of households have seen significantly higher real incomes over the decade, with median incomes rising by over 20 percent<sup>1</sup>.

2. Our economy has become more diversified and globalised. We have an increasingly vibrant international services sector, and are one of the leading business and financial hubs in Asia. We have moved up the value chain in manufacturing, with new strengths in areas such as the biomedical sciences and aerospace engineering. We made good progress in developing entrepreneurship, with many more start-up enterprises and larger numbers seeking to expand abroad. We have strengthened trade and investment links within the region and with our global partners, and we are an emerging hub for global talent.

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<sup>1</sup> Increases have also been seen at the lower end of the income ladder. At the 20<sup>th</sup> percentile of employed households, real incomes per capita have grown by about 10 percent over the last decade. This does not include the benefits derived from Government transfers (net of taxes), such as the Workfare Income Supplement and enhanced housing grants for lower income households.

3. Our economy and people have shown resilience during the recent crisis. However, the next decade will be different. There will be new challenges and opportunities for Singapore, and we will have to update our strategies and develop new capabilities.

### *Opportunities in a New Landscape*

4. Singapore is well placed to succeed in the emerging post-crisis world. The global crisis has reinforced the shift of markets to Asia. Growing urbanisation, infrastructural development and increasing demand for services in China, India and ASEAN will play to the strengths of many Singapore-based companies.

5. Our companies have an important **window of opportunity to create a strong presence in Asia over the next 5 to 10 years**, while their skill-sets are in high demand. Over time, other players in Asia will catch up and deploy the best human capital to compete. We must establish leading positions in key market niches in this next decade, which we can build upon to establish new ways of adding value over the longer term.

6. The G3 economies, while growing more slowly because of reductions in household wealth and continued deleveraging, will remain large and sophisticated markets. Singapore should stay engaged in these markets, and grow its role over the next decade as a key global centre for high value manufacturing and services. We will also benefit from the increased premium that global companies are placing on jurisdictions that provide safety and stability, post-crisis.

7. The crisis has also altered global finance. There has been a reduction in the capacity to finance cross-border and emerging market risks that could persist for some years. We should further develop our financial markets and plug current gaps in funding for Singapore enterprises venturing abroad.

8. There is therefore no lack of opportunities for Singapore in the decade ahead. We must build deeper capabilities and expertise to make the most of this window for growth. But to sustain growth, we must make better and more productive use of our resources, and especially by growing the skills and talents of our people.

9. The size of our workforce will be a major constraint. A large part of our GDP growth of 5 percent per year in the last decade was achieved through the expansion of our workforce – both among residents and the foreign workforce.

Our resident labour force will experience much slower growth in the next decade<sup>2</sup>.

10. At the same time, we have to moderate the future growth of the foreign workforce. The rapid increase in foreign workers in recent years has enabled us to seize opportunities, grow our economy and in so doing, create jobs and raise the incomes of Singaporeans<sup>3</sup>. However, we have become more dependent on foreign workers, who now make up almost one-third of the total workforce<sup>4</sup>. Whilst this is comparable or slightly lower than what is seen in several other global cities, we have to manage this dependence and not let it increase indefinitely.

11. While not as pressing as our workforce constraints, we must begin taking active steps to use land and energy more efficiently. There is some scope for further reclamation of land, but there will be limits on how far this can go. Likewise, we have to play our part in reducing carbon emissions as a responsible member of the global community. We must also develop a strategy to diversify our sources of energy so as to insure ourselves against future spikes in fuel prices.

***OUR KEY CHALLENGE:  
GROWING THROUGH SKILLS AND INNOVATION***

12. We must shift to achieving GDP growth by expanding productivity rather than the labour force. We must boost productivity in order to stay competitive, upgrade the quality of jobs, and raise our people's incomes. A slower growing workforce makes it all the more important for every enterprise to innovate to create more value, and to maximise the potential and performance of every worker.

13. This shift to productivity-driven growth will require **major new investments in the skills, expertise and innovative capabilities of our people and businesses over the next decade.**

14. We have **significant room to improve productivity in every sector** of our economy. In absolute levels, Singapore's productivity in manufacturing and

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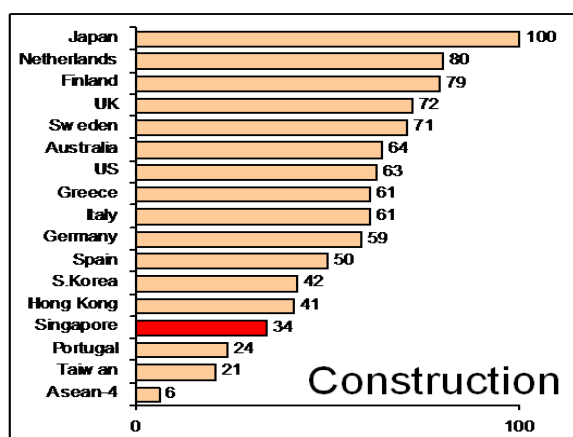
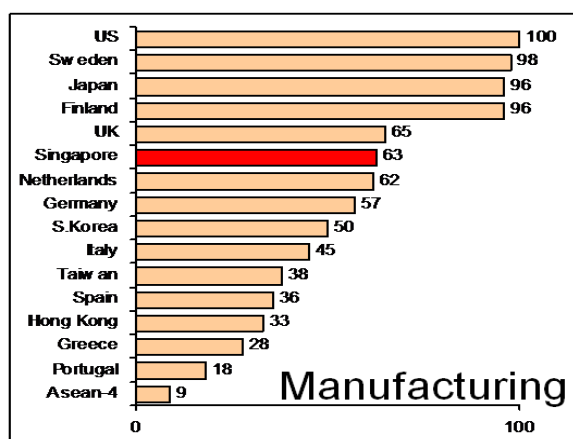
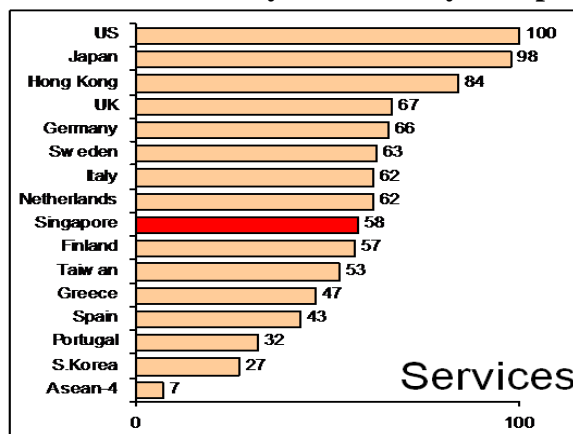
<sup>2</sup> Our resident labour force grew by 3 percent per year in the last 10 years. It is expected to grow only half as fast over the next decade.

<sup>3</sup> Household incomes went up fastest between 2006 to 2008, coinciding with the period when the foreign workforce was growing most rapidly.

<sup>4</sup> As a proportion, non-residents comprise one-quarter of the total population.

services are only 55 to 65 percent of those in the US and Japan (see [Figure 1<sup>5</sup>](#)). In the retail sector for example, our average level of productivity is about 75 percent of that in Hong Kong and one-third that of the US. In construction, productivity levels are half that of the US and one-third that of Japan.

**Figure 1: Cross Country Productivity Comparisons**



<sup>5</sup> The comparisons are for average productivity levels from 2006 to 2008. (Based on real GDP data at constant 2000 prices; converted to common currency based on average exchange rates from 1999 to 2001.)

15. Other advanced economies have succeeded in raising productivity substantially within individual sectors, over a decade:

a. Hong Kong's services sector saw productivity grow by 3.1 percent per year over 1999 to 2008. A more knowledgeable and experienced workforce, coupled with a steady expansion in business investments (especially IT-related), helped boost worker efficiency. Service quality in the hospitality and retail sectors improved significantly. There has also been a shift within the services sector towards higher value-added activities, such as the financial services sector.

b. Finland's manufacturing productivity grew by 5.8 percent from 2000 to 2008. This partly reflected the restructuring at the factory level that began earlier. Inefficient plants were phased out, while more competitive plants invested in technology and created high skilled jobs. Many small companies also benefited from supply-chain relationships with industry leaders like Nokia. This was coupled with a strong national focus on upgrading of the workforce.

c. In Denmark's manufacturing sector, productivity grew by 2.7 percent per year over 2000 to 2008. The improvements reflected industrial restructuring and the growth of high-value niche areas, such as within the furniture industry. R&D investments have also paid off in increased productivity.

d. Australia's construction sector saw a significant improvement in productivity earlier this decade, following two decades of stagnant productivity growth. It was achieved through industry reforms and incentives for contractors to substitute technology for labour. The localised and experienced workforce in Australia's construction sector also contributes to higher productivity, and contractors are generally willing to invest in the training and career development of their workers.

### *How Fast Can We Grow?*

16. We can achieve **productivity growth of 2 to 3 percent per year over the next ten years**, more than double the 1 percent rate achieved over the last decade<sup>6</sup>. This is a challenging target, particularly applied across the economy

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<sup>6</sup> The main sources of weak productivity growth in the last 10 years were in service industries such as restaurants and real estate services, and in construction. Overall manufacturing productivity also grew slowly at about 1.4 percent, although performance has varied widely within the sector. The electronics, pharmaceuticals, and transport engineering industries registered strong productivity growth.

and not just within a single sector. Attaining it will require a comprehensive national effort.

17. Achieving this higher rate of productivity growth will, even with the slower growth in the labour force, allow us to **grow our GDP by 3 to 5 percent a year**. Productivity will therefore account **for about two-thirds of our GDP growth, compared to just one-fifth in the last decade**.

18. GDP growth at 3 to 5 percent per year will be healthy for an economy at our stage of development – it exceeds that of most advanced countries, which typically grow by 2 to 3 percent. Growth in some years will be higher, reflecting the global economic cycle. Realistically, however, on average and taken over the ups and downs over the next decade, GDP growth is not likely to match the 5 percent achieved over the last decade. But it will generate the resources needed for social investments in health, education and schemes to help lower income citizens move up, and to safeguard our security.

19. **What matters most is the growth of incomes of our people**. We can only raise wages and incomes on a sustained basis if productivity rises. With the shift to productivity-based growth, we will be able to get higher growth in wages and incomes.

### *Making the Move Now*

20. Achieving 2 to 3 percent growth in productivity – which will raise our **productivity by one-third over the next 10 years** – will require a major, qualitative transformation of our economy. It cannot be done in one move, and the results will take time to materialise, but we have to start now and vigorously pursue changes in the following key areas.

21. First, we have to **deepen skills and expertise within every sector of our economy**. Higher productivity does not mean that Singaporeans have to work longer on the job. It will mean working smarter. We must equip everyone with more skills so that we can do higher quality jobs – such as by handling more complex tasks or by providing better service. We must make a collective and sustained effort to upskill our workforce through Continuing Education and Training (CET). Equally, our enterprises must innovate. They must make greater use of technology and reorganise work to create better and higher paying jobs. Every employer must see this as their responsibility.

22. Second, we must **restructure our economy, to provide more room for rapidly growing and more efficient enterprises**. We have to allow market forces to work through, so that expanding businesses can obtain the space and

resources they need, and less efficient activities can either upgrade or phase out over time. Our companies must therefore be nimble. They must constantly look out for new opportunities, consolidate or acquire other players where necessary to build up scale and efficiency, and exit from less productive businesses and activities. This dynamic of restructuring is critical to achieving a more productive economy.

23. Third, businesses must **expand abroad and capture new growth opportunities in order to grow high-value activities in Singapore**. Expanding abroad will often mean relocating lower cost activities overseas. But it creates and retains more good jobs in Singapore – in higher value production, regional management and marketing operations, product development and design, and in trade, finance and business services.

### *Managing our Foreign Worker Dependence*

24. We should avoid becoming overly dependent on foreign workers, and continuing to increase their proportion of the total workforce over the long term. Foreign workers will remain valuable to Singapore, especially those with skills. They fill many jobs for which there is a shortage of Singaporean workers, including in the construction and marine sectors, in manufacturing industries, and in important parts of the service sector, such as tourism-related businesses.

25. However, we cannot increase the number of foreign workers as liberally as we did over the last decade, or else we will run up against real physical and social limits. Further, if access to labour is too easy, companies will have little incentive to invest in productivity improvements, which will affect our efforts to upgrade the skills and wages of lower-income Singaporean workers.

26. The best way to manage this dependence is to rely on the price mechanism. **We need to raise the foreign worker levies progressively**, giving companies time to adjust and to invest for productivity. This approach will allow flexibility for employment of foreign workers to fluctuate in response to business cycles. The levy mechanism will enable competitive and dynamic businesses which run short of workers to seize opportunities and grow, without being hamstrung by rigid quotas.

27. **Our companies have to change the way they work**. They have to rely more on technology and innovation, and improve skills among both their local and foreign employees as a basis for competitiveness and growth. With the recovery from the crisis, the time is right to shift gears. If we leave this till later, the pain of adjustments required will be greater.

28. However, even as we moderate the growth of the total foreign workforce, it remains critical for Singapore to continue attracting highly capable and entrepreneurial people from around the world to work here. They will complement our home-grown talents, and **add to the critical mass of talent in science and engineering, design, finance and start-ups that Singapore needs to be a serious player in the knowledge-based economy**. Keeping our society open to top talent will help to create many more opportunities for Singaporeans.

### ***THREE PRIORITIES FOR THE NEXT DECADE***

29. The ESC is recommending seven strategies for the next decade, which are set out in Part II of this Report. They aim to make skills, innovation and productivity the basis for our economic growth and for a broad-based increase in the incomes of our people. They also aim to make Singapore a distinctive global city and an endearing home.

30. Our recommendations can be summarised in three broad priorities:

a. **BOOST SKILLS IN EVERY JOB**

We must undertake a comprehensive national effort to boost productivity, involving a **partnership of enterprises, people, unions and government**.

- A **high-level national council** should be established to oversee and drive efforts to boost productivity and expand CET. This will serve to coordinate the work of different government agencies and enable close collaboration between the private and public sectors.
- We need to upskill our people at all levels, **from basic jobs to the most complex**. We have built a strong pre-employment education system, and are making new investments to open up more opportunities at the tertiary level. Our next major investment in our people must be to develop **an outstanding, comprehensive, nation-wide CET system**. Learning and acquiring new skills throughout life will become the norm for every Singaporean.
- We must **make enterprise innovation pervasive**, and support this through both **broad-based and targeted sectoral programmes**. Companies must find every way to create better jobs – producing more or delivering better value for every person that they employ – and thereby justify higher wages. Industry associations, unions, and

the Government should work together to promote enterprise innovation.

- The Government should **enhance fiscal incentives** for companies to innovate and improve efficiency. It should also provide substantial support for efforts to upgrade worker skills. This should also include greater support for low-wage workers – by enhancing the Workfare Income Supplement (WIS) scheme to encourage continued employment, and by giving them further support for participating in training to raise their skills.
- We must also **progressively raise foreign worker levies**, to incentivise companies to invest in improving productivity. This will also ensure that our economy’s dependence on the foreign workforce over the long term does not grow significantly beyond current levels, of about one-third of the total workforce. We must at the same time **raise the quality of the foreign workforce**, and give employers incentive to retain experienced and skilled foreign workers.

b. **DEEPEN CORPORATE CAPABILITIES TO SEIZE OPPORTUNITIES IN ASIA**

We must grow a diverse and resilient ecosystem of companies, including a stronger base of local companies with the potential to be leaders in Asia. We must also entrench Singapore as the essential base in Asia for both MNCs and global SMEs. The MNCs remain a critical part of our economy – they allow Singapore to stay plugged into the developed country markets, which will remain sizable for the foreseeable future. They also play a key role in developing Singapore as a hub for pan-Asian management operations.

Three main areas require special focus:

- First, we have to make a significant push to **derive commercial value from R&D**. Businesses can make much greater use of our science and technology base, through both product and process innovation in areas ranging from biomedical technology to clean energy solutions.

Our total R&D expenditure has to grow over the long term to secure our future as a knowledge-based economy. Over the next five years, we should target to raise Singapore’s total expenditure on R&D to 3.5 percent of GDP – compared to our current

expenditure of slightly below 3 percent. This should be achieved through increased private sector R&D expenditure<sup>7</sup>. We should also maintain our commitment to public sector R&D, so as to catalyse private sector research and commercialisation.

- Second, we have to develop the **financing capabilities to take advantage of the opportunities in Asia**, and manage the inherently higher risks of these markets. Demand is growing rapidly in fields where Singapore-based companies have significant strengths, such as in urban infrastructure and services, waste and water management, and healthcare. But there are some gaps in cross-border financing capabilities in Singapore, including in trade and project finance. The Government should help the market plug these gaps through market-based solutions and institutions, to provide the credit insurance, guarantees and other instruments needed to facilitate commercial bank financing. This will also build up Singapore's role as a hub for Asian finance.
- Third, we should develop stronger alliances between large and small players to promote technology transfer, test-bedding and commercialisation. The alliances will help SMEs develop capabilities in the local market which they can then deploy abroad. This network of supply chain relationships will also benefit the larger foreign players and help root them in Singapore.

c. **MAKE SINGAPORE A DISTINCTIVE GLOBAL CITY AND ENDEARING HOME**

**Singapore's future must rest on being a global city.** New York and London are what they are, not because of the specific economic activities they conduct, but because people want to be there. That too, has to be Singapore's key advantage in the future. Being a global city and a meeting point in Asia for enterprise, talent, cultures and ideas, will be a **source of competitiveness and growth in its own right.**

We must continue to attract top quality people from around the world, even as we restrain our overall dependence on foreign workers. New competitor cities are already staking their claims in the global knowledge-based economy. The largest Chinese and Indian cities gather deep pools of talent from their respective hinterlands. But our advantage lies in our

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<sup>7</sup> This will bring us to the Gross Expenditure on R&D (GERD) level of countries such as Finland (3.5 percent), Sweden (3.6 percent) and Japan (3.4 percent) currently.

ability to attract **diverse and high quality talent from Asia and around the world, who work alongside their Singaporean peers and add to our capabilities.** This must remain an enduring advantage.

As a global city, we will also see enterprising Singaporeans venturing overseas for part of their careers, as our companies expand abroad and as demand for their skills grows. But Singapore must remain their home, the country they feel emotionally rooted to.

**Wherever they may be, in Singapore or abroad, we need to engage our people.** Their commitment, ideas, skills and hard work will continue to be our greatest strength.

To realise our potential as a global city, we should focus more in two main areas:

- First, we must grow the **software** that will make Singapore a distinctive global city.

We must develop thriving **creative and arts clusters** – distinguished for both their development of Asian content and appeal to an international audience. We should also aim to host more pinnacle global events, building on the new vibrancy of the city and Marina Bay.

We must provide the best opportunities in Singapore for **diverse talents** to grow and develop. Our workforce will become significantly better educated over the next decade. By 2020, 50 percent of our resident workforce is projected to possess at least a diploma, including 35 percent holding degrees<sup>8</sup>. This is comparable to the leading global cities today. However, we have to complement these academic routes of advancement with a range of **new, practice-based pathways to excellence.**

We have to build **deeper expertise across the board**, whether amongst our machinists and R&D engineers in manufacturing, or our finance professionals, designers, chefs and animation artists. Singapore must also be a centre for **thought and practice leadership**, in our key areas of specialisation.

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<sup>8</sup> This compares with 39 percent of our resident workforce currently (in 2009) having at least a diploma qualification, including 27 percent having a degree. Among our younger workforce (those aged 25 to 44 years), about 50 percent are projected to have degrees compared to 40 percent today.

- Second, we must develop the infrastructure necessary to provide the highest quality of life in Asia.

We must continue to rejuvenate our mature HDB towns, as we are doing in Dawson Estate. We should also expand the range of lifestyle options, developing new regions with individual characters like Marina Bay, Jurong Lake District and Punggol.

We should **plan ahead for a city that remains extremely liveable even as we grow**. We have to make more efficient use of our land, to optimise its economic value and preserve a sense of space in our residential neighbourhoods. This will call for bold and imaginative urban planning and redevelopment.

We must develop a masterplan for the progressive development of a new waterfront city at Tanjong Pagar once the port's lease expires in 2027. We must also expand our 'land bank' by investing in the creation of underground space, especially around our transport nodes.

We should also develop distinct **eco-towns and residential precincts**, as well as new models for resource-efficient industrial clusters, e.g. on Jurong Island – where desalination and recycling of energy can be part of an integrated and cost efficient system.

## ***AN ENABLING ROLE FOR GOVERNMENT***

31. Achieving these priorities will require a strategic combination of government and private initiatives over the next decade. We have the advantage of sound government finances, unlike many other developed countries which face the prospect of deep cuts in expenditure or higher taxes following the crisis. The Government must **invest ahead in the fundamentals that will drive Singapore's success**: the best quality education, advanced skills, research capabilities, and the infrastructure and connectivity of a global city.

32. The government can help to catalyse economic restructuring. Raising productivity, and shifting to more efficient use of labour, land and energy will require changes in our economic structure. However, the government cannot prescribe which companies and sectors should grow. It should instead **provide the right price signals (e.g. foreign worker levies) and enable market forces to reallocate scarce resources to where they can be most productively used**.

33. The Government must also **ensure that growth remains inclusive**, benefiting all members of society, while encouraging a spirit of self-reliance. Like many other countries, we will face the continuing challenge of helping lower-skilled workers to stay employed and improve their wages, in an environment of intense global competition. The best way to do this is for Government to provide strong support for low-wage workers to upskill, and for community programmes that help them raise their aspirations. The Government must also continue to help low-income families by ensuring their children have full education opportunities, in school and beyond. This depends on sustained economic growth and effective programmes to share the fruits of growth with all citizens.

34. Overall, government expenditures will grow. But they must remain fiscally sustainable so that the overall burden of taxation on individuals and enterprises remains low. **Our success ultimately depends on the abilities and drive of our people and businesses.** The government cannot substitute for the dynamism created by the skills, talent and ingenuity of our workforce, or by entrepreneurs imagining new products and finding new market niches.

## ***OUR FUTURE***

### ***High-Skilled People, Innovative Economy, Distinctive Global City***

35. The economic strategies that we have laid out will strengthen Singapore and enable our people to make the most of new opportunities emerging in the world around us.

36. Ten years from now, Singapore will be different.

37. Our people will have the skills, expertise and flair to take on higher quality and higher level jobs, across the whole range of occupations. It will put us in a **virtuous cycle of better skills, better jobs and higher wages.**

38. We will be a nation that recognises and rewards **many routes to success** – through mastery of skills on the job, advanced academic and professional training, entrepreneurship or creative flair. There will be opportunities for every Singaporean to learn and develop throughout their careers, through an affordable and top-quality system of continuing education and training. This, on top of a first-rate education system that provides a broader range of tertiary options for our young.

39. We will have a **deeper base of globally-competitive Singapore companies**, who will be leaders in market niches across Asia. We will also be a key base for global companies to grow and manage their pan-Asian operations, and for Asian enterprises which are expanding internationally. Nearer home, ASEAN will provide an integrated market, allowing businesses to operate seamlessly across the region.

40. We will have a **vibrant climate of innovation**, with both new and established businesses seeking commercial success through design, new products and services, and tapping on knowledge from a broader base of public and private sector R&D.

41. Our economic growth would thereby be sustainable, driven by productivity rather than by expanding the labour force. It will also be **inclusive, allowing all Singaporeans to share in increased prosperity**. Sustained growth will give us the resources to help our lower income citizens gain the skills they need for a better future, while providing them with additional support through the Workfare Income Supplement scheme, housing and other government initiatives. It will also help individual and corporate philanthropy to flourish, and encourage the many initiatives that build an inclusive society.

42. We would have refreshed and enhanced our infrastructure. By revitalising mature residential estates, developing eco-towns, decentralising commercial activity and connecting the island with convenient rail and road networks, Singapore would be a highly liveable place even as we grow. We would have recycled existing industrial land to support new, higher value activities, and established new models of resource-efficient industrial clusters. We would also have mapped out a whole new waterfront city at Tanjong Pagar, comparable in size to Marina Bay, and planned for the creative use of new underground space, especially around the island's transport nodes.

43. Singapore will be a **leading global city, with a character of its own**. It will be distinctive for being the most open and multicultural city in Asia, for its clusters of artistic and creative energy, and for the high quality of life it provides its people.

44. We must make a major push over the coming decade to upgrade our productivity and deepen our capabilities. We must **keep rejuvenating and enlivening our city, and empowering our people to be the best that they can be**. We can transform our economy once again and raise living standards for all our citizens.

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## **PART II: KEY STRATEGIES**

In line with the three broad priorities set out in Part I of our Report, the ESC recommends seven strategies over the next 10 years to sustain economic growth and enable broad-based improvement in Singaporeans' living standards.



## **I Growing Through Skills and Innovation**

1. We must achieve higher productivity growth of 2 to 3 percent per year, enabling our GDP to grow on average by 3 to 5 percent per year over the next decade.
2. Increased productivity is not achieved merely through increased efficiency, but through continually growing the value of our economy by adopting new ideas and seizing new opportunities.
3. The ESC recommends the following:
  - Establish a **high-level national council to oversee and drive efforts to boost productivity and expand CET**. This will ensure national level coordination of government agencies and close collaboration between public and private sectors.
  - Encourage **enterprise innovation** and investments in technology and training, both through broad-based and targeted sectoral approaches (see Box 1 for examples of enterprise innovation).
    - Introduce strong economy-wide **fiscal incentives** for companies to invest in productivity enhancement and innovation.
    - Set up a **National Productivity Fund** to provide grants to support industry-focused and enterprise-level productivity initiatives at the sectoral level.
    - Develop a national productivity knowledge base by establishing a **Productivity and Innovation Centre** for enterprises to tap on.
      - This should include a **comprehensive approach to spur innovation and quality in the services**, from adoption of technologies to better manage their supply chains, to optimisation of workflow processes.

## **Box 1: Examples of Enterprise Innovation**

### **Boncafé International Pte Ltd**

Boncafé produces its own line of gourmet coffee products, and is also one of the best known coffee brands in Southeast Asia. To improve productivity, Boncafé made significant investments to automate its production line, including the loading of coffee beans, roasting, packing and sealing processes. Through these measures, it has increased the quality as well as quantity of its output, and reduced wastage due to human errors. Previously highly labour-intensive tasks, such as the loading of coffee beans, have also been made easier and faster. For example, with the help of a coffee packaging machine, the number of pouches of ground coffee an employee can pack in an hour has increased from 12 to 360. This also resulted in a more satisfied workforce.

### **Muthu's Curry**

Aisvaryam's Fiine Foods Pte Ltd is a food and beverage company best known for Muthu's Curry and Muthu's Flavours. The company has adopted several best practices in raising productivity. For example, they implemented a wireless ordering system, where the orders are directed to the kitchen and point of sale. The new system has resulted in higher customer satisfaction and shorter waiting times. It also helped reduce errors, speed up workflow, and consolidated data for review and enhancement of operations. With strong standard operating procedures and training, they are able to better recruit and integrate new staff. Finally, they have achieved HAACP<sup>9</sup> certification, giving them a competitive edge in overseas expansion.

### **Atlas Sound & Vision Pte Ltd**

Atlas Sound & Vision carries a diverse portfolio of mid to premium AV brands and is Singapore's sole retailer of Bose audio systems. Atlas places great importance on developing manpower capabilities, and has sponsored employees for post-graduate management courses and diploma retail courses. To deliver more value to its customers, Atlas also conducts personalised and structured demonstrations of its sound system for customers – termed the “Atlas Experience” – and keeps a detailed and computerised record of customer and sales history. Atlas also uses an Enterprise Resource Planning (ERP) system that provides real-time data on its sales and inventories to optimize the replacement of inventory stock.

- **Upskill our people at all levels.** To complement the efforts of our Institutes of Higher Learning, we must create more opportunities for

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<sup>9</sup> Certification for food and pharmaceutical safety

individuals to progress through a first-class CET system – with at least 240,000 undertaking CET each year by 2015. Lifelong learning must become an integral part of our society.

- **Provide more opportunities and multiple skills-based progression pathways** to complement the academic route, through our schools and CET system.
  - **Further build up a first-class CET system** by attracting best-in-class foreign institutes to Singapore along with continued investment in local CET institutions, to provide a wider range of qualifications.
  - **Provide stronger linkages and clarity between our academic and skills qualifications.** This will facilitate upward mobility for workers and provide employers with clarity on how different qualifications relate to one another (e.g. how Workforce Skills Qualifications (WSQ) relate to National ITE Certificates (Nitec), polytechnic diplomas and university degrees).
  - **Reach out to more PMETs (Professionals, Managers, Executives and Technicians).** We should develop people with “T-shaped” competencies - possessing both deep skills in their area of expertise and broad knowledge of horizontal skills (e.g. business operations, project management, HR, sales or finance and management). Development of professional continuous development courses will inject new specialised expertise, thereby ensuring their lifelong employability.
- **Strengthen support for low-wage workers**
    - **Enhance the Workfare Income Supplement (WIS) scheme to encourage continued employment and support incomes.** The WIS, introduced in 2007, has succeeded in raising incomes and encouraging low wage workers (LWWs) to work. Our next step should be to enhance the WIS scheme by providing stronger incentives for older workers in particular to stay in the workforce.
    - **Provide additional support for training LWWs.** While WIS relieves wage stagnation, it does not directly lift LWWs out of their low-wage condition. WIS should be complemented with incentives to encourage LWWs to upskill and upgrade to better jobs that allow them to earn more.
  - **Manage our dependence on the foreign workforce**

- **Raise foreign worker levies in a gradual and phased manner.** This is the most efficient and flexible way of ensuring that our economy's dependence on the foreign workforce does not grow excessively. It will allow for fluctuations in the foreign workforce to cater to business cycles – for example, in the construction sector. The levy system will also allow competitive and dynamic businesses and industries to seize immediate opportunities and grow, and not be constrained by rigid quotas or fixed allocations of foreign workers.
  
- **At the same time, the quality of the foreign workforce must improve.** We should set effective quality benchmarks that leverage on WSQ and other skills recognition frameworks. We should also encourage employers to bring in and **retain skilled foreign workers** by increasing the skilled levy differential and promoting good management of foreign workers.

## II *Anchor Singapore as a Global-Asia Hub*

1. We must enhance our position as a Global-Asia hub. We must be the key base for global players seeking to tap into opportunities offered by a rising Asia, and for Asian enterprises looking to expand beyond their home markets. We must also be a key global centre for high value manufacturing and services.

2. We can do this by building on our physical and cultural connectivity to Asia and the world. Our market neutrality also offers global businesses a strategic base to **manage and integrate their pan-Asian operations**, without being tied down by in-market challenges and constraints.

3. We should also **grow opportunities in ASEAN**, working together with our regional partners to realise the vision of a single market under the ASEAN Economic Community by 2015. Together with enhanced transport connectivity, this will encourage businesses to deploy a whole value chain of activities across the region, building on the complementary strengths of the respective economies.

4. We should build on our unique position as a city that can grow both high-value complex manufacturing and international services. The ESC recommends the following:

- **Retain a globally competitive manufacturing sector at between 20 to 25 percent of the economy.** High value and complex manufacturing generates good jobs with diverse skill requirements, provides opportunities for constant upgrading, and stimulates demand for sophisticated services. To do so, we should:

- Continue the shift into complex manufacturing – areas where know-how and intellectual property are crucial such as nutraceuticals; the design and production of “mission-critical” components such as those in medical devices; and cross-disciplinary areas like bioelectronics.

- Grow manufacturing-related services such as headquarter-related activities, R&D, Intellectual Property (IP) management and product lifecycle management by capitalising on the convergence of manufacturing with services.

- **Strengthen our position as a leading Global-Asia financial and business hub** that connects the global and Asian business community. To do so, we should:

- Build on our strengths in risk management and trading; asset management and private banking; loan syndication; project and infrastructural financing; and capital-raising. Together with the growth of other modern services, such as info-comms technology (ICT), accounting, legal and consulting services, we will establish Singapore as the leading business hub in Asia.
- Seek to seamlessly integrate physical trade with related services such as trade finance, risk management, supply chain management, certification and distribution. In the aviation and maritime areas, we will enhance activities in the insurance, financing, legal and arbitration services. We will strengthen our trade linkages and enhance our connectivity to harness the new patterns of trade and people flows to Asia.
- **Develop Singapore as a leading consumer business centre.** We must build up a cluster of key companies in the consumer-centric fields such as marketing, branding, consumer research and market intelligence. We should capitalise on our cultural affinity with the region, and develop Singapore into the pan-Asian location of choice – from which consumer insights are developed, consumer-centric businesses are grown and managed, products and services developed, tested and launched, and intellectual property (IP) and trademarks owned and anchored.
- **Establish Singapore as the location for “future-ready” urban solutions.** We should leverage on Singapore’s own future urban needs and track record in urban planning to help catalyse the innovation of ‘future-ready’ solutions. In particular, Singapore should focus on the areas of urban mobility/smart transportation, energy efficiency and management, renewable energy, and water and waste management. Singapore is also well-placed to test-bed systems-level integration in these areas. Such initiatives can also foster collaboration amongst Singapore-based companies to provide solutions which could be scaled up and exported.

### **III Build a Vibrant and Diverse Corporate Ecosystem**

1. A diverse corporate landscape – one that comprises a mix of large and small companies; local, Asian and global – will be a key strength for Singapore. We must create multiplier effects through strong partnerships and networks between these companies. These synergies will enable our companies, including local SMEs, to better capture emerging opportunities, particularly in Asia.

2. Singapore should entrench its position as a location of choice for the world’s leading companies, including MNCs, global mid-sized industry leaders, and Asian enterprises seeking to internationalise. **MNCs must remain key players in our economy.** They are a major source of new technologies, and allow Singapore to stay plugged into the developed country markets – which although slow growing, will remain sizeable sources of sophisticated demand. Many **global mid-sized companies** who serve niche markets will also be looking at Asia for their next stage of growth. In addition, we are seeing the rise of many innovative and globally competitive Asian enterprises.

3. We must also grow a **deeper base of globally-competitive Singapore enterprises.** Many of our companies are now strengthening their capabilities and internationalising. They are expanding in new markets, especially in Asia and the emerging world, with revenues from China and India more than tripling since 2005 for our top 100 international companies<sup>10</sup> (see Box 2 for examples of local enterprises expanding into new markets).

#### **Box 2: Examples of local SMEs expanding internationally**

##### **IPS Group Pte Ltd**

IPS Group (IPS) (Revenue: S\$100 million) designs and builds infrastructure equipment and distributes engines, generators, security & aviation equipment in Asia. In the early 1990s, IPS tied up with a German company, Lintec GmbH, to manufacture infrastructure equipment in China. Through this joint venture, IPS gained invaluable technology and technical know-how. IPS formed strong relationships in China, and also made inroads into India through acquisition. Today, IPS Group generates more than 90 percent of its sales from the regional markets in Asia.

##### **Telesensory (Singapore)**

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<sup>10</sup> This refers to a list of Singapore’s top 100 companies ranked by their sales revenue from overseas markets, ranked by DP Information Group.

Telesensory (Revenue: S\$3.02 million), a young company, manufactures low vision equipment to assist visually impaired people. The US market accounts for about 60 per cent of its turnover and the firm is diversifying into Asian markets such as Japan and India. Sales in Asia-Pacific have increased from 20 to 40 percent of the company's revenue over the past 2 years, and it hopes to base half of its business in the region within the next three years. The company is investing in new capabilities to develop new products catering to the ASEAN markets.

#### **Ezra Holdings Ltd**

Ezra Holdings (Revenue: S\$462 million) is an offshore engineering and services company which offers integrated solutions over the life cycle of an oilfield – from construction and maintenance to marine and offshore engineering services. Ezra has been investing in equipment and technology – including state of the art energy services equipment – and its people, posting them overseas for training and to different markets for international exposure. The group has recently secured a major contract in the fast-growing African offshore oil and gas market. Over the past two years, it has doubled its revenue by expanding in markets such as West Africa, India, South East Asia and Australia.

#### **Spy Apparel Pte Ltd**

Spy Apparel (Revenue: S\$2.9 million), a young company, is a specialist in the product development, retailing and wholesaling of contemporary women's wear. With high-quality and well-designed pieces regularly displayed in Hong Kong Fashion Week, Spy Apparel secured regular buyers from America, Spain, Turkey, France, UK and Japan. The company actively re-defines its collections for various markets, and recently won a valuable project from a renowned Japanese retailer. Over the past two years, Spy Apparel has doubled its revenues by expanding abroad.

4. More companies are also developing the critical mass required to compete globally. The number of Singapore enterprises with **revenues over \$100 million** has approximately doubled over the last decade, from about 280 in 1998 to 530 as of 2007. By implementing the following key strategies, the ESC believes that we can raise this number significantly, to reach **1,000 such enterprises** over the next ten years.

5. The ESC recommends the following:

- Entrench Singapore as a **premier location in Asia for MNCs** by developing deeper market knowledge and expertise with a pan-Asian focus.

- **Promote Pan-Asian market research** to build deep Asian market intelligence in the area of business services, analytics, branding and regulatory knowledge.
- **Develop professional services and grow a pool of Asia-ready managers, professionals, and leaders** to helm global MNC and mid-sized companies' operations in Asia and to drive the internationalisation efforts of Asian enterprises.
- **Facilitate the talent recruitment, management and development needs of large and small Singapore-based enterprises** out of Singapore, especially for the pan-Asian region.
- Establish Singapore as the **essential base for global mid-sized companies** who are industry leaders seeking to expand in Asia, and for **Asian enterprises** to internationalise.
  - Facilitate their quick start-up and expansion through **shared resource centres, and ready access to knowledge and networks**. Our development of deeper market knowledge with a pan-Asian focus will be a critical factor that will attract these businesses here and help them expand in the region.
- Develop a deeper base of **globally-competitive Singapore enterprises**, so as to grow the external wing of the economy.
  - **Catalyse cross-border financing capacity**. Local companies' international expansion in the years ahead must be accompanied by stronger bank financing and insurance capacity. There are current market gaps in three major areas: **trade finance**, where there is an undersupply of credit insurance and the need for an aggregator; **internationalisation finance** (funding of overseas plants and operations); and **project finance**, where there is limited capacity among local banks and where global players have cut back on long-tenor loans.
    - The Government should help **plug these gaps in financing capacity through market-based solutions and institutions**. Specialist financial institutions like ECAs (Export Credit Agencies) and EXIM (Export-Import) banks have helped complement private financial institutions in several other markets, and have gained importance since the crisis. They are also an integral part of the Asian project finance market.

- A specialised institution along similar lines in Singapore could support the market by performing the following functions:
  - Risk and credit insurance for trade finance
  - Guarantees for loans by commercial banks for overseas investments;
  - Guarantees for project finance and where necessary, co-financing with commercial banks.
  
- An institution of this nature should be run on a commercial basis, even if it is funded with government equity. It should also partner with financial institutions to develop the market for cross-border finance, and not crowd out other market participants. It should **attract and develop specialist market expertise and capabilities**, with a focus on key sectors and geographies that Singapore-based companies have strengths in.
  
- Catalyse the supply of growth capital for growth-oriented SMEs based in Singapore, **through seeding public-private co-investment funds**.
  - We should make provisions for funding of new capital up to **\$1.5 billion in the next 10 years, with the Government contributing about half this amount**. The Government, as co-funder, should rely principally on the private sector fund managers to assess investment worthiness, so as to avoid eroding commercial discipline in investment decisions.
  
- **Empower our local trade organisations to drive growth and internationalisation.** Trade organisations are valuable strategic platforms to champion productivity, capability and talent development programmes, and aggregate demand for the outsourcing of non-core corporate functions for their members. Trade organisations have the potential to explore and facilitate overseas market access, particularly in the immediate region. The Government should thus further strengthen the institutional capabilities of the trade organisations to empower them to serve as industry champions and market facilitators.
  
- **Facilitate corporate restructuring through conducting mergers and acquisitions (M&As)** so that companies can take advantage of post-crisis opportunities to grow inorganically.

- **Enhance access to human capital for SMEs**, which usually face more difficulties in attracting and retaining talent, through broadening the scope of internship programmes and facilitating a ready network of mentors to provide strategic and expert advice.
- **Set up a platform and provide grants for businesses to co-develop innovative solutions with government.** By tapping on the government's sophisticated demand and larger purchasing power, such a platform can provide more opportunities for businesses in Singapore to build exportable capabilities and thereby establish track records.
- **Support stronger alliances between Singapore-based businesses** – both foreign and local – in technology development, test-bedding, commercialisation, and in scaling up into international markets. This should build on existing Local Industry Upgrading Programme (LIUP) schemes, extending it to support technology transfer and market access.
  - **Provide incentives for MNCs to co-develop innovative products and services with SMEs**, helping Singapore-based companies build credible track records, enhance innovation and accumulate knowledge capital.
  - **Support upgrading of local suppliers** to meet the qualifying criteria of top MNCs/global SMEs.

#### **IV Make Innovation Pervasive, and Strengthen Commercialisation of R&D**

1. Over the past decade, we have established a strong base of research capabilities. We should build on this good foundation to further deepen knowledge creation, and at the same time seek to reap greater economic benefits from our investments in R&D. In particular, we must strengthen emphasis on **business innovation and commercialisation of R&D**. We should also leverage on design to come up with new products, services and business models. We can establish Singapore as **Asia's Innovation Capital** – a hub for innovation and enterprise, and a location of choice for commercialisation, even for ideas not invented here.

2. The ESC recommends the following:

- **Raise Singapore's Gross Expenditure on R&D (GERD) to 3.5 percent of GDP by 2015** through increased private sector R&D expenditure.

- We should **sustain our commitment to public sector basic and mission-oriented research and the development of an R&D talent pool**. This will create a strong value proposition for the private sector, especially those involved in long-term research in areas such as the biomedical sciences.

- We can go beyond 3.5 percent in the longer term.

- **Strengthen emphasis on innovation and the commercialisation of R&D.**

- **Further leverage on public sector R&D institutions and facilities to drive commercialisation.** This includes facilitating private sector access to public sector IP, and infrastructure for piloting and test-bedding of innovative solutions.

- Create **customised platforms to facilitate the integration of capabilities of research institutions, companies and public sector agencies to deliver innovative solutions.** This could include consortia-type cooperation between companies in the same sector to develop a common agenda for research.

- Set up **use-driven innovation platforms to link practitioners and researchers to undertake applications based research.** More use-driven platforms like the existing collaboration between A\*STAR and

the Boston-based Centre for Integration of Medicine and Innovative Technology (CIMIT)<sup>11</sup> should be adopted here.

- **Provide ease of access to a range of ideas and IP from both public and private sectors.** This should also include knowledge capital from abroad as part of the strategy of “not invented here but commercialised here”. One way to do this is to attract fully-managed premier-service incubators<sup>12</sup> to bring about a step change in how we incubate start-ups.
- **Expand Centres of Innovation in polytechnics** to provide technological help to locally-based enterprises to enter new, innovative growth areas such as Medical Technology and Clean Energy.
- **Attract and develop talent for commercialisation.** This includes not just research talent but also innovators, technology transfer professionals, patent agents, and start-up mentors<sup>13</sup>. In particular, we should enhance the role of universities in cultivating and training entrepreneurs through seed funding, supporting small-scale innovators and recruiting faculty with entrepreneurial skills as role models.
- **Emphasise design-driven innovation.**
  - **Instil design thinking in our workforce** by accelerating the introduction of design thinking programmes and modules at local educational institutions and leading foreign design institutions. This can also be supported by incentives to help local enterprises grow their capabilities in areas such as product and industrial design.
  - **Intensify industry collaboration on design innovation.** Stronger linkages between enterprises and design practitioners will encourage the development of innovative products and services that are designed fundamentally with people’s desires and needs in mind as well as cater to the different taste cultures in Asia.

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<sup>11</sup> CIMIT has clinicians define problems to engineers and researchers, who in turn develop the solutions that, in many cases, have led to new technologies and successful start-ups.

<sup>12</sup>An example includes Seattle-based Accelerator Corp, a privately-held company formed for investing in and management of emerging biotechnology opportunities.

<sup>13</sup>For example, Stanford Biodesign offers innovative, hands-on courses that provide students with first hand experiences in innovation at Stanford University. It encourages a multi-disciplinary approach towards innovation in medical devices with fellowship teams comprising graduate students from medicine, business and engineering.

- **Establish an accreditation system to raise professional design standards** through a ‘Designed in Singapore’ certification mark for enterprises to enhance Singapore’s position as a promising and distinctive design capital in Asia.
- Step up efforts in the education system to **inculcate a mindset for innovation amongst young Singaporeans**.
  - Singapore must continue to develop our school curricula and assessment at the primary and secondary level to allow our students to develop the skills that can be practically applied in the real world. The establishment of the Singapore Institute of Technology and the Singapore University of Technology and Design will provide more opportunities for tertiary students to develop innovative capabilities through cross-disciplinary and practice-based learning.

## V *Become a Smart Energy Economy*

1. As a small, resource-constrained country, we have to ensure that energy does not become a limiting barrier for Singapore's economic competitiveness and growth. We also have to play our part in reducing carbon emissions as a responsible member of the global community.

2. We must become a smart energy economy – resilient, sustainable, and innovative in our energy use. The ESC recommends the following:

- **Diversify our energy sources.**

- In the medium term, Singapore should **explore coal and electricity imports** to diversify both the fuel types and fuel source countries in our energy portfolio. The import of electricity is an option which can free up valuable land in Singapore. It could also allow us to tap on the significant renewable energy potential in our region, such as in the form of hydro-electricity or geothermal power.

- For the long-term, we must continue supporting innovation and investing in the infrastructure necessary to develop renewable energy. We should also **study the feasibility of nuclear energy**, a possible option in the long-run to meet baseload electricity demand, as well as energy security and sustainability imperatives. Advances in nuclear technology will make it much safer than earlier designs, and we should carefully study its viability for a small city-state like Singapore.

- **Invest early in critical energy infrastructure.**

- Push ahead to **establish Intelligent Energy Systems (IES)** as the centrepiece of a smart energy economy. The IES will promote greater competition among retailers and enable households to make informed choices on their electricity consumption. At the same time, the IES will incorporate devices such as smart meters and home automation networks to programme appliances to function during off-peak hours when electricity prices are lowest.

- Make early investments in public goods such as **energy infrastructure to improve national energy security and efficiency**. One example is the liquefied natural gas (LNG) terminal which will allow Singapore to gain access to global gas markets. Investing in the extension of the gas pipeline infrastructure can also potentially reduce the cost of electricity and open up new economic clusters in Singapore.

- **Develop Jurong Island as an energy-optimised industrial cluster.** We should harness innovative systems-level solutions, to provide integrated, low-cost and low-carbon solutions for the industry clusters on the island. For example, recycling waste heat from industry for desalinating sea water; the desalinated water would then be channelled back to industry for cooling industrial processes, forming a virtuous cycle. With government planning and infrastructure investment to enable such ‘exchanges’, we can significantly improve resource efficiency.
- **Increase energy efficiency.**
  - Step up measures to **promote energy efficiency for buildings, industry and in homes.** We should enhance incentives, education and adopt essential legislation such as mandatory energy audits which will help build energy conservation know-how and internalise energy management practices.
  - **Support low-carbon solutions in transportation.** We should continue the shift of commuter load to public transport and support the introduction of clean and efficient technologies for public buses. This will ensure that energy-efficient public transport can be realised without higher prices for commuters. We should set the appropriate incentives for the adoption of clean vehicle technologies for private vehicles by awarding the Green Vehicle Rebate (GVR) based on fuel efficiency or carbon emissions of the vehicle.
- **Price energy to reflect real costs and constraints.**
  - Price energy to reflect its total cost, taking into account various externalities and constraints, such as energy security and environmental sustainability. **Appropriate price signals could both promote the use of, as well as encourage investments in energy-efficient and low-carbon solutions.**
  - The Government should study how best to implement a carbon pricing scheme in anticipation of future carbon constraints, should there be a global agreement on climate change. It can also insure us against future spikes in energy prices. This should be carefully calibrated and introduced gradually, with offsets for specific groups like low income households to buffer the transition.

## VI *Enhance Land Productivity to Secure Future Growth*

1. As Singapore grows, there will be greater demands on our limited land resources. We have to take bold steps to enhance land productivity, so as to gain the greatest economic benefits from land, and ensure Singapore remains an extremely liveable city. Our land policies must also support activities in which Singapore has sustained competitive advantages.

2. Over the next decade, the ESC recommends the following:

- **Accelerate the shift towards higher value-added and more land-efficient activities.** We should support the intensification of industrial land use, and progressively step up the comprehensive rejuvenation of mature industrial estates towards more land-efficient and higher value-added activities. Examples include Kallang and Tukang which are today attracting new higher value-added companies such as Hyflux and Caterpillar. We should enhance the master-planning of industrial and business parks to allow more efficient use of land, and incentivise the implementation of innovative intensified industrial plant layouts.

- **Study ways to inject greater land use flexibility.** The government should study targeted ways to make land use more flexible where needed, in order to allow land resources to flow to higher value added activities over time.

- **Enhance diversity of business locations to support a range of enterprise needs.** We must provide the choice and diversity of business locations to support whole value chain activities and cater to the different needs of both MNCs as well as mid-sized companies. The government should introduce new locations for headquarter functions and new industries, as well as incubator spaces for creative industries and start-ups.

3. In the long term, the ESC recommends the following:

- **Undertake a masterplan for the progressive development of a new waterfront city at Tanjong Pagar.** Making a strategic shift to a productivity-driven economy requires us to make bold moves to re-plan our city and recycle land to support new economic activities. A key example is the port land at Tanjong Pagar, Keppel and Pulau Brani. The port's lease at these terminals will expire in 2027. The government should plan ahead with a view to optimise the value and comprehensively re-plan the prime waterfront land that is freed up. With a land area comparable in size to Marina Bay, this area can be comprehensively master-planned and

progressively redeveloped as a new waterfront city with the potential to capture international attention. This will potentially allow for a substantial expansion of the business district, integrated with waterfront housing, hotels, lifestyle and tourism uses.

- **To study, under the Concept Plan 2011, the feasibility of a consolidated port at Tuas in the long term, with adequate handling capacity to ensure continued competitiveness.** If feasible, it will increase port efficiency by allowing the port to achieve greater economies of scale in terms of land and operations, and free up existing port land to support new economic activities in the future.

- **Adopt a long term perspective and invest ahead to create new land and space.** While we can expand our land mass through reclamation as we have done for Marina Bay, there will be limits in the long-run. In the next 10 years, the government should seek to catalyse the development of underground space as a means to intensify land use. We should put in place enablers for underground development such as by developing a subterranean land rights and valuation framework, and by establishing a national geology office. We must also develop an underground masterplan to ensure that underground and aboveground spaces are synergised, and invest in the creation of basement spaces in conjunction with new underground infrastructural projects (e.g. rail), so as to add to our “land bank”.

## **VII Build a Distinctive Global City and an Endearing Home**

1. Our ability to grow and succeed will ultimately depend on the talent and drive of our people. Talented people, both home-grown and from around the world, must see this as a place where they can develop skills, expertise and the creative imagination, achieve their aspirations and contribute meaningfully to a society that is on the move. They must see it as providing an excellent quality of life.

2. Singapore is already investing significantly in the ‘hard’ infrastructure to make this happen, e.g. the Land Transport Masterplan, the Gardens by the Bay, and the new National Art Gallery. We need to make major investments in the software of a global city.

3. The ESC recommends the following:

- **Attract and nurture diverse pools of talent**, both home-grown and global. We must develop the next generation of corporate and professional leaders, and also make Singapore a hub in Asia for **thought and practice leadership**.

- Build up a talent ecosystem of top jobs, personal and professional networks that will provide Singaporeans with opportunities to stretch their potential and reach the apex in their careers, as well as connect with international talent.

- Provide economic agencies some flexibility to adopt a **talent-centric approach** to attracting top-quality people, beyond a firm-centric approach.

- Develop **professional associations and marquee industry events**. For example, the Singapore Leadership Initiative for building Networks and Knowledge (LINK) will bring together business schools, universities and firms offering professional services in a single campus devoted to leadership and talent development.

- Expand and deepen opportunities to **develop professional expertise and thought leadership**.

- **Develop new peaks of excellence for Singaporeans in diverse fields**. We should aim to attract or develop at least 5 world-

class institutions or programmes by 2020 to provide talent development pathways in a wider range of new disciplines, e.g. arts, design, fashion and sports science. These are areas with the potential to attract students from across the region. Our economic agencies could also support these new niche institutions through calibrated grants to make these opportunities accessible for a designated number of Singaporeans.

- Bring in top-quality post graduate institutions and major corporate universities to **groom the next generation of corporate and professional leaders**. We should accelerate the development of critical soft skills and deep specialist market knowledge, so as to position Singapore as the focal point where business leaders develop. For instance, the Human Capital Leadership Institute aims to be the premier institution for raising strategic human capital capabilities in Asia.
- **Develop thought and practice leadership** in key areas of Singapore's capabilities – such as urban planning solutions, legal and accountancy services, risk management and supply chain management.
- Step up efforts to **engage and connect with our talent** through seeding community-based one-stop welcome centres to provide support for newcomers and Singaporean returnees and their families. A more systematic programme will also be established to connect with both Singaporean and foreign talent who are located overseas.
- Make Singapore a **leading cultural capital**.
  - **Rejuvenate and reposition the Singapore Civic District as a premier arts and culture destination** by strengthening programming, marketing, and linkages between cultural institutions in the district. This will build on the opening of the new National Art Gallery at the former Supreme Court and City Hall buildings.
  - **Strengthen our competitiveness as a hub for the arts** by creating new, original and innovative art forms and entertainment content, and enhancing the collections of our major cultural institutions.
  - **Develop artistic, professional, scholastic and technical capabilities in the arts**, including the development of reputable degree and research programmes. These programmes will extend beyond

performance and fine arts to arts management, conservation, curation and research.

- **Provide affordable spaces and incentives for the creative industries.** We should consider re-designating vacant state-owned properties as affordable creative incubators where talents and budding enterprises network, collaborate and innovate. This will support the growth of sustainable arts and creative industry clusters.
- **Grow a thriving arts and entertainment marketplace and boost the trading of art and collectibles** by appropriate incentives.
- **Provide the best quality of life in Asia.**
  - **Develop economically and socially vibrant districts** through place management in Bras Basah-Bugis, Orchard Road, Singapore River and conserved historic areas. Authentic and memorable experiences can be created through active stakeholder coordination, government funding, and the development of place management expertise. This will generate more economic activity and raise Singapore's status as an exciting cultural destination, while preserving the identity and heritage of local communities.
  - **Make Singapore a leading location for pinnacle international events, and diversify our lifestyle offerings and destinations.** We can become the leading city in Asia to attract and grow signature lifestyle events and businesses in sports, arts, music, entertainment, cuisine, and fashion. For example, we could take advantage of our diverse range of lifestyle offerings and multi-cultural content to develop an exciting calendar of international and local events. We could develop Bras Basah-Bugis into a new concept retail and creative precinct of weekend markets and community activities, and build an extensive network of cycling facilities in Marina Bay.
  - **Invest in cutting-edge sustainable development strategies, technologies and R&D projects** to create distinct eco-precincts. We should also develop **new urban planning solutions** to expand the range of districts offering different lifestyle options – as with Punggol, Jurong Lake District and Marina Bay. Such strategies could be carried out collaboratively with private sector players to develop new expertise in architecture, engineering and building design that can become a competitive advantage for our companies bidding for the development of new cities in Asia.

- Provide an expanded and well integrated public transport system through the **Land Transport Masterplan**. This is a major investment that will improve Singapore's convenience and connectivity.
  
- **Decentralise economic activity across the island** through the creation of new commercial nodes outside the Central Area, such as the Jurong Lake District and Paya Lebar, to ease congestion in the CBD and bring jobs closer to homes.

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**APPENDIX 1****ECONOMIC STRATEGIES COMMITTEE MEMBERS**

S/N	Name	Designation
1.	Mr. Tharman Shanmugaratnam - Chairman	Minister for Finance
2.	Mr. Lim Swee Say	Secretary-General, NTUC; Minister, Prime Minister's Office
3.	Dr. Ng Eng Hen	Minister for Education; 2nd Minister for Defence
4.	Mr. Raymond Lim	Minister for Transport; 2nd Minister for Foreign Affairs
5.	Mr. Gan Kim Yong	Minister for Manpower
6.	Mrs. Lim Hwee Hua	Minister, Prime Minister's Office; 2nd Minister for Finance and 2nd Minister for Transport
7.	RAdm(NS) Lui Tuck Yew	Acting Minister for Information, Communications and the Arts
8.	Mr S Iswaran	Senior Minister of State, Ministry of Trade and Industry and Ministry of Education
9.	Ms. Grace Fu	Senior Minister of State, Ministry of National Development and Ministry of Education
10.	Mr. Heng Swee Keat	Managing Director, Monetary Authority of Singapore
11.	Mr. Gautam Banerjee	Executive Chairman, PricewaterhouseCoopers LLP Singapore
12.	Mr. Tony Chew	Chairman, Singapore Business Federation
13.	Ms. Deborah Henretta	Group President, Asia, Procter & Gamble
14.	Mr. Lothar Herrmann	CEO ASEAN, Siemens
15.	Mr. Jason Jiang Nan Chun	Chairman and CEO, Focus Media Holding Ltd
16.	Dr. Jan-Anders Karlsson	CEO, S*BIO

17.	Mr. James Koh	Deputy Chairman and Managing Director, Koda Ltd
18.	Mr. Lim Ming Yan	CEO, Ascott Group
19.	Ms. Shirlene Noordin	Director, Phish Communications
20.	Mr. Viswanathan Shankar	Chairman (Principal Finance and Private Banking), Standard Chartered Bank
21.	Dr. Ricky Souw	CEO Sanwa Group, President of Singapore Precision Engineering and Tools Association
22.	Mr. Tan Mok Koon	Group Managing Director, CSE Global Ltd
23.	Mrs. Josephine Teo	Assistant Secretary-General, NTUC
24.	Mr. Wong Fong Fui	Chairman and Group CEO, Boustead Singapore Ltd
25.	Prof. Bernard Yeung	Dean, NUS Business School

## COMPOSITION OF SUBCOMMITTEES

## Sub-Committee on Seizing Growth Opportunities

S/N	Name	Designation
1.	<b>Heng Swee Keat (Co-Chair)</b>	<b>Managing Director, Monetary Authority of Singapore</b>
2.	<b>Lothar Herrmann (Co-Chair)</b>	<b>CEO ASEAN, Siemens</b>
3.	Mahendra Agarwal	Managing Director & CEO, Gati Asia Pacific Pte Ltd
4.	Beh Swan Gin (Dr)	Managing Director, EDB
5.	Steve Bertamini	Group Executive Director, CEO Standard Chartered Bank
6.	Aaron Boey	President, Levi Strauss Asia Pacific Division Pte Ltd
7.	Chew Choon Seng	CEO, Singapore Airlines
8.	Choo Chiau Beng	CEO, Keppel Corporation
9.	Charles Goodyear	
10.	Ko Kheng Hwa	CEO, Singbridge International Pte Ltd
11.	Ramachandran Rajamanickam	Corporate Vice President, Pacific, Asia and Africa, Abbott Laboratories (Singapore) Pte. Ltd.
12.	Ron Sim	Chairman & CEO, OSIM International Ltd.
13.	Tan Chorh Chuan (Prof)	President, NUS
14.	Sunny Verghese	Group Managing Director and CEO, Olam International Ltd
15.	Bernard Yeung (Prof)	Dean, NUS Business School
16.	Yong Ying-I (Ms)	Permanent Secretary, Ministry of Health
17.	Jan Zijderveld	Executive Vice President, SEA and Australiasia, Unilever Asia Pte Ltd

**Sub-Committee on Developing a Vibrant SME Sector and Globally  
Competitive Local Companies**

<b>S/N</b>	<b>Name</b>	<b>Designation</b>
1.	<b>Lim Hwee Hua (Mrs) (Co-Chair)</b>	<b>Minister, Prime Minister's Office; 2<sup>nd</sup> Minister for Finance and 2<sup>nd</sup> Minister for Transport</b>
2.	<b>Ricky Souw (Dr) (Co-Chair)</b>	<b>CEO Sanwa Group, President of Singapore Precision Engineering and Tools Association</b>
3.	Chua Taik Him	Deputy Chief Executive, IE Singapore
4.	Goh Yong Siang	Senior Managing Director, Temasek Holdings
5.	James Koh	Deputy Chairman & Managing Director, Koda Ltd
6.	Kuah Boon Wee	CEO, PSA Southeast Asia & Singapore Terminals
7.	Ivan Lee	CEO, Thai Express
8.	Patrick Lee Kwok Kie	Executive Chairman & Managing Director, Sing Lun
9.	Lim Ming Yan	CEO, The Ascott Group
10.	Olivia Lum	Group CEO & President, Hyflux
11.	Robert Meyer	Co-founder & Managing Director, Halcyon Investments
12.	Sanjiv Misra	Managing Director, Phoenix Advisers
13.	Harish Nim	CEO, Emerio Corporation
14.	Jean-Philippe Odunlami	Managing Partner, Focus Partners
15.	Png Cheong Boon	Chief Executive, SPRING
16.	Seah Moon Ming	Deputy CEO, ST Engineering
17.	Tan Choon Shian	Deputy Managing Director, EDB
18.	Tan Mok Koon	Group Managing Director, CSE Global Ltd
19.	Teo Siong Seng	Managing Director, Pacific International Lines
20.	Ting Choon Meng (Dr)	Executive Chairman & CEO, HealthSTATS

S/N	Name	Designation
21.	Mike Wiluan	Managing Director, Infinite Frameworks
22.	Mohammed Yunos	Chairman, Airmark Group

**Sub-Committee on Attracting and Rooting MNCs, Asian Enterprises and  
Global Mid-Sized Companies**

S/N	Name	Designation
1.	<b>Leo Yip (Co-Chair)</b>	<b>Chairman, EDB</b>
2.	<b>Deborah Henretta (Ms) (Co-Chair)</b>	<b>Group President, Asia, Procter &amp; Gamble</b>
3.	Jonathan Auerbach	Managing Partner, Southeast Asia, McKinsey
4.	Jennie Chua	Chairperson, Singapore International Chamber of Commerce
5.	Bernd Dautel	Managing Director, Asia Pacific, Wieland Metals Singapore
6.	Stephen Felice	President, Small & Medium Business, Dell
7.	Goh Koon Eng	Managing Director & General Manager, Chevron Oronite
8.	Oyvind Hasaas	SVP Site Operations, Renewable Energy Corporation
9.	Wolfgang Hollermann	CE Asia Pacific, Agility Logistics
10.	Vinod Kumar	President & COO, Tata Communications
11.	Colin Low	President / Regional Executive, GE Growth Initiatives, South East Asia
12.	Leong Yue Wing	CEO TCL Multimedia
13.	Ikuo Miyamoto	Managing Director, Panasonic Asia Pacific
14.	Jon Maxwell Niermann	President (Asia), Electronics Arts Asia
15.	Philip Overmyer	CEO, Singapore International Chamber of Commerce
16.	Benjamin Zhengmin Pan	CEO and Executive Director, Co-founder AAC Acoustic Technologies Holdings
17.	John Paterson	President & CEO, Rolls Royce Marine
18.	Ramesh Subrahmanian	President, Asia Pacific, MSD Technology (Merck)
19.	Wong Lup Wai	CEO, Philips Electronics Singapore
20.	Eric Xu	Co-Founder of Baidu, Angel Investor

### Sub-Committee on Growing Knowledge Capital

S/N	Name	Designation
1.	<b>Lim Chuan Poh (Co-Chair)</b>	<b>Chairman, A*STAR</b>
2.	<b>Jan-Anders Karlsson (Co-Chair)</b>	<b>CEO of S*Bio</b>
3.	Abel Ang	VP Global Product Platforms & CTO, Hill-Rom Inc.
4.	Bertil Andersson (Prof)	Provost, NTU
5.	Chan Lee Mun	Principal, Nanyang Poly
6.	Peter Cheng	VP and MD, Vestas Technology R&D Singapore Pte Ltd
7.	Fong Saik Hay	Chief Technology Officer, Singapore Technologies Engineering Ltd
8.	Koh Soo Boon (Ms)	Founder and Managing Partner, iGlobe Partners (Singapore)
9.	Lee Kok Choy	President TECH Semiconductor Singapore Pte Ltd
10.	Allan Lim	CEO, Alpha Synovate Pte Ltd
11.	Benjamin Ong (AP)	CE, NUHS
12.	Andrew J Ouderkirk (Dr)	Corporate Scientist, 3M Singapore Pte Ltd
13.	Ulf Schneider	VP, Devt Centre, Infineon Tech Asia Pacific Pte Ltd
14.	Tan Eng Chye (Prof)	Provost, NUS

### Sub-Committee on Making Singapore a Leading Global City

S/N	Name	Designation
1.	<b>Lui Tuck Yew (Co-Chair)</b>	<b>Acting Minister for Information, Communications and the Arts</b>
2.	<b>Gautam Banerjee (Co-Chair)</b>	<b>Executive Chairman, PricewaterhouseCoopers LLP Singapore</b>
3.	Cheong Koon Hean (Mrs)	CEO, URA
4.	Heng Chye Kiang (Prof)	Dean, School of Design and Environment NUS
5.	Lee Tzu Yang	Chairman, Shell Companies in Singapore

<b>S/N</b>	<b>Name</b>	<b>Designation</b>
6.	Shirlene Noordin (Ms)	Director, Phish Communications
7.	Ong Peng Tsin	Chairman, Infocomm Investments Pte Ltd
8.	Benson Puah	CEO, The Esplanade Company Ltd & National Arts Council
9.	Andreas Sohmen-Pao	CEO, BW Maritime Pte Ltd
10.	Jan Van den Berg	CEO, AXA Asia Pacific General

### **Sub-Committee on Fostering Inclusive Growth**

<b>S/N</b>	<b>Name</b>	<b>Designation</b>
1.	<b>Gan Kim Yong (Co-Chair)</b>	<b>Minister for Manpower</b>
2.	<b>Mrs Josephine Teo (Co-Chair)</b>	<b>Assistant Secretary-General, NTUC</b>
3.	Douglas Foo	Chairman and CEO of Apex-Pal International
4.	Vijay Iyengar	Chairman, Singapore Indian Chamber of Commerce and Industry
5.	Melissa Kwee (Ms)	Chairperson, Halogen Foundation Singapore
6.	Lim Cheng Teck	Vice-executive Chairman and CEO, Standard Chartered (China) Ltd
7.	Loo Choon Yong (Prof)	Executive Chairman, Raffles Medical Group
8.	Alain Mahillon	General Manager, Hilton Singapore
9.	Zainudin Nordin	Mayor, Central Singapore Community Development Council
10.	Ong Ye Kung	Assistant Secretary-General, NTUC
11.	Pek Lian Guan	Managing Director, Tiong Seng Contractors (Pte.) Ltd
12.	Bruce Poh	Director and CEO, Institute of Technical Education
13.	Bob Tan Beng Hai	Vice President, SNEF
14.	Tan Hang Cheong	Principal, Singapore Polytechnic
15.	Wong Weng Sun	President and CEO, SembCorp Marine
16.	Renny Yeo	President, Singapore Manufacturer's Federation

### Sub-Committee on Ensuring Energy Resilience and Sustainable Growth

S/N	Name	Designation
1.	<b>S Iswaran (Co-Chair)</b>	<b>Senior Minister of State, Ministry of Trade and Industry and Ministry of Education</b>
2.	<b>Jen Kwong Hwa (Co-Chair)</b>	<b>Managing Director, Micron Semiconductor Asia Pte Ltd</b>
3.	Tim Cornelius	CEO, Atlantis Resource Corporation
4.	Gan Juay Kiat	Executive Director, SBS Transit Ltd
5.	Edwin Khew	CEO & Managing Director, IUT Global Pte Ltd
6.	Manohar Khiatani	CEO, JTC Corporation
7.	Khoo Chin Hean	Executive Director, Energy Studies Institute
8.	Kwek Leng Joo	Managing Director, City Developments Ltd
9.	Isabella Loh (Ms)	Chairman, Singapore Environment Council
10.	Joachim Luther (Prof.)	CEO, Solar Energy Research Institute of Singapore, National University of Singapore.
11.	Ng Kee Choe	Chairman, Singapore Power Ltd
12.	Matthew R. Pollard	Director of Asia, Asset Based Investment, Arcapita Pte Ltd
13.	Euston Quah (Prof.)	Head of Division of Economics, School of Humanities & Social Sciences, Nanyang Technological University
14.	Andrew Tan	CEO, National Environment Agency
15.	Russell D. Watson	Managing Director, Merck, Sharpe and Dohme (Singapore) Ltd
16.	Lawrence Wong	CE, Energy Market Authority
17.	Charles Zukoski (Prof.)	Chairman, Science and Engineering Research Council, A*Star

### Sub-Committee on Maximising Value from Land as a Scarce Resource

S/N	Name	Designation
1.	<b>Grace Fu (Ms) (Co-Chair)</b>	<b>Senior Minister of State, Ministry of National Development and Ministry of</b>

S/N	Name	Designation
		<b>Education</b>
2.	<b>Wong Fong Fui (Co-Chair)</b>	<b>Chairman &amp; Group CEO, Boustead Singapore Ltd</b>
3.	Simon Cheong	President, REDAS and Chairman & CEO, SC Global
4.	Chng Hwee Hong	Executive Director and COO, Haw Par Corporation Ltd
5.	Chua Hak Bin	Head of Research, Citi Investments, Singapore
6.	Jagadish CV	CEO, System on Silicon Manufacturing Co Pte Ltd
7.	Deng Yongheng	Director, Institute of Real Estate Studies, NUS
8.	Lee Soon Eng	Senior Managing Director, Global Operations, Hyflux Ltd
9.	Liang Eng Hwa	Managing Director, Treasury & Markets, DBS Bank
10.	Lawrence Lim	GM, Raffles Medical Group
11.	Low Soon Sim	Executive Director, Soilbuild Group Holdings Ltd
12.	Shazad Nasim	Managing Director, Meinhard (Singapore) Pte Ltd
13.	Phang Sock Yong	Economics Professor, SMU
14.	Dorothy Ng (Ms)	Partner & Head, Corporate Real Estate Practice, WongPartnership LLP
15.	Viswanathan Shankar	Chairman (Principal Finance and Private Banking), Standard Chartered Bank
16.	Seek Ngee Huat	President, Real Estate, GIC
17.	Tai Lee Siang	Director, DP Architects
18.	Tan Chong Lee	Head of Southeast Asia Investment Banking, Bank of America-Merrill Lynch
19.	Danny Teoh	Managing Director, KPMG Singapore
20.	Tham Kui Seng	Director, CapitaLand China Holdings Pte Ltd
21.	Yong Mee Him	Director, Woh Hup Pte Ltd