

**SPEECH BY MR TEO CHEE HEAN, DEPUTY PRIME MINISTER  
DURING BUDGET DEBATE - UPDATE ON NATIONAL PRODUCTIVITY DRIVE  
ON 1 MARCH 2011 AT 3.40 PM**

Mr. Speaker, Sir, 2010 was a good year for our economy. Gross Domestic Product (GDP) grew by an estimated 14.5%, a recovery from the 0.8% contraction in 2009. Riding on this rebound, labour productivity also rose by 10.7%, based on preliminary estimates.

2. However, we should not be complacent and declare victory prematurely in our efforts to improve productivity. It is only one year, and the exceptional productivity performance was due to our strong economic recovery. To achieve long term economic and real wage growth, we need to sustain the momentum of productivity improvements.

3. Last year, the Government announced a series of Budget initiatives aimed at driving productivity growth for our economy. These include the establishment of the National Productivity and Continuing Education Council (NPCEC), the setting up of a National Productivity Fund, and the introduction of the Productivity & Innovation Credit. Minister (Finance) talked about the NPF and the enhancements to the PIC in his Budget Speech. Allow me to provide an update on the work of the NPCEC, which I chair.

***NPCEC progress update***

4. The NPCEC was set up last year to galvanise the national productivity drive. All stakeholders – the Government, unions, businesses and workers – are represented. We have a good diversity of expertise, experience and viewpoints. The Council has 3 objectives: first, to prioritise and champion productivity initiatives at the sectoral, enterprise and worker levels; second, to develop a comprehensive, first-class national Continuing Education and Training system; and third, to entrench a culture of productivity and continuous learning and upgrading in Singapore.

### *Sectoral roadmaps*

5. Recognising that each sector in our economy faces different challenges, the Council has adopted a sectoral approach, with an initial focus on 12 priority sectors. Therefore instead of talking about productivity in general, in economy-wide terms, what we are trying to do is to focus on each sector and make productivity meaningful to that sector, and use initiatives that will be meaningful for the companies and workers in that sector. These 12 sectors were selected based on their potential for productivity gains, contribution to GDP, as well as employment size. Government agencies were appointed to lead Working Groups to study the productivity issues in detail and develop productivity roadmaps for each sector. These government agencies cannot work on their own. These Working Groups have been hard at work over the past year; they have been consulting stakeholders, engaging experts and conducting studies to determine the specific productivity gaps for their sectors, and developing strategies and programmes to address them.

6. Sir, the Council has endorsed seven of the 12 sectoral productivity blueprints so far – these are Electronics, Precision Engineering, Construction, Retail, Food Services, Hotels and Logistics & Storage. In addition, we have also endorsed the productivity roadmap for the landscape industry, which is part of the Admin & Support Services sector. Together, these sectors account for about 25% of Singapore's GDP, and about 36% of our workforce. The other Working Groups are scheduled to table their roadmaps for endorsement this year, after discussion with the various industry sectors, which will bring the total for the 12 sectors being covered to 40% of GDP and 50% of the workforce.

7. Some Members, such as Madam Ho Geok Choo and Mr. Calvin Cheng, have asked about improving productivity in manpower intensive industries such as Food & Beverage and Retail. Productivity is not just about automation or cutting manpower. Companies need to take a holistic, comprehensive and fundamental re-look of their businesses. Take the retail industry as an example. The retail industry's productivity is only 40% that of the national norm for the whole economy. It also significantly lags that

of other international cities like Hong Kong and New York. SPRING Singapore has developed a multi-pronged productivity roadmap that will improve the skills of both managers and workers, promote service excellence, as well as enable local retailers to benchmark their performance against each other and diagnose areas for improvement. SPRING will also drive the adoption of technology to reduce the reliance on manual labour and streamline processes. SPRING is at the stage of finalising the finer details of the roadmap, and they will announce these plans soon.

8. But one company that has already benefited from SPRING's productivity initiatives for the retail industry is Robinsons. With SPRING's support, the company initiated a pilot supply chain integration project with seven of its suppliers. Robinsons automated its ordering processes, which reduced the amount of man-hours needed for this function and cut down the time taken to rectify discrepancies due to human error. Processing orders now takes 5 days instead of 7.5 days; and the time taken to perform invoice matching has been significantly reduced by 95%. The suppliers have benefited too, as they are now equipped with the capability and expertise to transact with other major retailers who use the same system through a single interface. Robinsons plans to roll out the next phase with over 100 suppliers. Robinsons' project also exemplifies how we can fundamentally enhance our interactions in the entire supply chain, leveraging on automation, for higher productivity.

#### *Horizontal initiatives*

9. Apart from the sector-specific productivity roadmaps, the Council has also endorsed a number of "horizontal" initiatives, which have across-the-board impact in raising productivity. Examples include the SME-Productivity Roadmap (or SME-PRO) and the Inclusive Growth Programme. And I will touch briefly on each.

10. Madam Ho Geok Choo and Dr. Amy Khor highlighted that small & medium enterprises need more help to tap on government assistance schemes, and SME-PRO was introduced to do exactly that. SME-PRO is a joint initiative by SPRING and the Singapore Workforce Development Agency (WDA) that provides a systematic, 3-step

approach for SMEs to improve their productivity. SME-PRO urges companies to first “Be Aware” of their productivity challenges, before “Getting Trained” and “Taking Action” to break the productivity bottlenecks in their organisations. A dedicated Internet portal – Productivity@Work – was launched as part of SME-PRO to provide businesses with access to information and resources that can help them take action to improve productivity. Since its launch in June last year, which is about 8 months, the portal has seen 33,000 unique visitors and more than 100,000 page views. SPRING also developed an IMPACT (or Integrated Management of Productivity Activities) Assessment Tool to help companies diagnose the state of productivity in their organisations.

11. One company that has benefited from this tool is Seo Eng Joo Frozen Food. It is a home-grown company that supplies frozen food products and services to supermarkets and fast-food chains in Singapore. Under the Productivity Management Programme supported by SPRING, business chambers and associations, the company used IMPACT to diagnose its productivity, identify strengths and weaknesses, and take actions to improve its productivity. It has recruited a productivity manager to spearhead productivity improvement in the company. It has also started to monitor and review key productivity indicators to ensure that the efforts are sustainable and kept on track.

12. Beyond SME-PRO, there are productivity programmes targeted at SMEs which may have fewer resources and may be cash strapped. SPRING has a scheme which provides “Innovation Vouchers” that can be redeemed at participating Knowledge Institutions for consultancy and services. There is also a Micro Loan Programme which offers loans of up to \$100,000 for local SMEs with 10 or less employees. SMEs that have good ideas to improve their business operations and productivity should approach their business associations, SPRING or any of the related government agencies for assistance. There is no lack of support for companies who are enthusiastic and want to improve their productivity. MTI will be elaborating further on its programmes to assist SMEs to grow during its COS.

13. The NPCEC also endorsed the \$40 million Inclusive Growth Programme, to improve the skills, productivity and wages of some 25,000 low-wage workers across all sectors in the economy. The IGP is administered by the Employment and Employability Institute (e2i) of the NTUC. IGP is targeted at employers that employ low-wage workers with monthly salaries of \$1,400 and below. The scheme provides grants to help employers raise productivity by investing in training their workers and tapping on better equipment and technology – with the condition that the employers share the productivity gains with their workers through higher wages. I was heartened to hear the good progress of IGP reported to this House in January. e2i has updated me that the numbers have continued to grow since then. There are now more than 200 projects lined up under IGP, benefiting more than 18,000 low-wage workers. Beyond numbers, what is significant is that in sectors such as Security, Landscape, Hotels and Retail, we are seeing new ways to raise labour productivity and upgrade the skills and wages of our workers. Through IGP, we are witnessing the start of a process of industry development – supported by the Government and unions, but driven by the companies.

14. Many of us are familiar with Sakae Holdings and may have enjoyed a meal at one of its restaurants. Its Chief Executive Officer, Mr. Douglas Foo, sits with me in the NPCEC. So he knows that relying on more and more manpower for growth is not sustainable. Sakae is one company that has tapped on the IGP for funding support. It is deploying PDAs (personal digital assistants) and walkie-talkies for its front-end operations, to provide on-the-spot ordering and billing, and facilitate communication amongst staff. This will help improve efficiency in food delivery and bill processing, by up to 30%. This project will benefit close to 200 workers, who can expect to enjoy a wage increase of up to 15% as a result of the productivity increase.

15. Embracing innovation and technology is not new to Sakae. The company has undertaken many productivity initiatives over the years, such as using its patented interactive menus for faster order processing, establishing a central kitchen, and implementing an RFID system to track the freshness of the sushi on Sakae Sushi's conveyor belts.

16. Christina Tan is a worker who has benefited from Sakae's continuous journey of improvement. Ms. Tan is 53 this year. She was a Service Crew when she first joined Sakae in 2003. In her 8 years with Sakae, she has gone on many training courses under WDA to upskill and improve her productivity. Today, she holds the position of Senior Service Crew, and has seen a 40% wage increase.

17. With the increase in foreign worker levies, Sakae will be doing even more to reduce reliance on manpower and cut down on manpower costs. Some of the works-in-progress include (i) self-ordering and self-payment kiosks for takeaway orders, (ii) electronic order processing to link up Sakae Sushi's automated order screens with electronic order screens in the kitchen, as well as (iii) iPhone Apps for customers to make their own reservations and submit orders ahead of time. The company will be able to benefit from the Productivity & Innovation Credit or PIC for many of these initiatives. Sakae has shown that even in a labour-intensive industry such as Food & Beverage, productivity improvements through automation, mechanisation and innovation are still possible. And I would urge more companies to follow Sakae's lead.

### *CET*

18. We have also set up a Working Group to review the existing Continuing Education and Training system and study ways to further strengthen it. The Working Group has presented a compelling vision for our CET system over the next 5 to 10 years, and I will leave it to the Ministry of Education and the Ministry of Manpower to paint a fuller picture of our future CET landscape for you. But there are two key changes that I would like to highlight.

19. First, as Minister (Finance) has mentioned, our CET coverage will be further broadened and deepened to cater to workers of all levels, including Professionals, Managers, Executives and Technicians – the PMETs. In the past, the CET system had focused more on training for rank-and-file workers, as the Government was concerned about helping them gain better skills, move into better jobs, and earn a better living.

Today, this is still necessary and will continue, but it is not sufficient. We need to ensure that our CET system also caters to our PMETs – who now constitute more than half of our workforce. The shelf-life of their knowledge and skills is getting shorter and needs regular refreshing so that our PMETs can keep up with global advancements, and remain competitive in the rapidly changing global economy.

20. Second, our Post-Secondary Education Institutes (PSEIs) will play a larger role in the provision of CET. Our PSEIs are of high quality, and they are a key strength that we will leverage upon, especially for our PMETs. Our PSEIs currently provide upgrading pathways for working adults to upgrade their qualifications. In Academic Year 2009, about 1,600 students were accepted into part-time diploma programmes. We will expand this, while ensuring the quality of our PSEIs, and adapting content delivery to the needs of adult learners. They won't just be taking a diploma programme meant for 17-year-olds, and applying it to, say, 30-year-olds with working experience, but adapting the curriculum and teaching methodologies. This will create a more vibrant and exciting CET landscape for all Singaporeans.

### ***Mapping the way forward***

21. Sir, some people have likened improving productivity to a race; a marathon perhaps, and one without end. This makes productivity sound as though it's only for the super-fit, and too much effort for most people. Even the super-fit become exhausted running a marathon. I look at it more like brisk walking and I'm sure Mayor Teo will like this analogy. You don't have to be super-fit to do brisk-walking; anyone can do it. You do it regularly, couple of times a week, every week. It doesn't exhaust or drain you. As you brisk-walk, you build up your heart and lung capacity, your muscles and your stamina. You become trimmer and fitter, and find that you can do more and go further. Soon you get hooked on it, and it becomes a habit to exercise regularly and keep improving your fitness and you find you are ready to take on new challenges. Improving productivity is a long-term and continuing process. Improve and you will stay ahead; stagnate and you will fall behind.

22. Even as the remaining five Sectoral Working Groups finalise their productivity roadmaps and present their proposals to the Council, our work does not and cannot end here. Some Members, such as Madam Ho, have asked whether the productivity movement has been a success, and asked for a stock take. I am not looking for quick solutions. Productivity requires continuous effort over the long term. We have got off to a good start, developing strategies for seven of the 12 priority sectors, and opening up availability through various programmes to about half of the first \$1 billion put into the National Productivity Fund last year to fund productivity initiatives over the first five years. The Minister for Finance has just announced in this Budget that the Government has decided to put in a second \$1 billion into the NPF this year. So funds are there to support productivity efforts that prove their worth over the next 10 years. This is going to be a sustained effort. We will continue to monitor, track and review the implementation of the sectoral productivity roadmaps. As I said, we will use sector-specific and sector-relevant measures. We will also look at other sectors beyond the initial 12, because there is room to improve and be even better in every sector of our economy. At the same time, we will further enhance horizontal, economy-wide productivity drivers like CET. However, we must be prudent in our spending and prioritise our efforts, to ensure that every agency, every industry association, every company and every worker is part of our national productivity drive, and that we support programmes that work and modify or discontinue those that don't.

23. Let me share with the House some areas that the Council will focus on in the year ahead.

*Creating value through innovation to boost productivity*

24. First, we cannot rely on just more training or automating even more intensively to increase productivity. Well-trained workers and efficient processes now form the new "baseline" that our companies must start from. To move beyond this, it is critical for us to create value through innovation.

25. Innovation can create value and boost productivity by giving you new products and access to new markets. Let me give you an example: Tan Seng Kee Foods Pte. Ltd., which is a local manufacturer specialising in fresh noodle products; so basically, Hokkien mee and kway teow. In the past, Tan Seng Kee's products were limited to the wet markets, mini-marts and food courts in Singapore due to the short shelf-life of a few days. With the help of SPRING's Technology Innovation Programme for SMEs, the company spent over a year in R&D to develop Kang Kang Pasteurised Fresh Noodles, which last two weeks when stored in ambient conditions, and even up to six months with refrigeration. Tan Seng Kee is now able to extend its reach into supermarkets such as 7-Eleven and Cold Storage, not just wet markets and mini-marts. The company has even started exporting to Dubai, and has plans to penetrate the Indian and European markets in the near future. The expansion to new markets is projected to increase their revenue by more than 50% in the near term.

*Leveraging on strengths of systems and networks*

26. Second, we need to leverage on the strengths of systems and networks. Each company, no matter how large, has limited resources on its own. However, if we look at the sector-wide system of companies, we can reap economies of scale and develop industry-wide strategies for productivity improvements. The construction industry is one example where much work is in progress and much work needs to be done to improve productivity. The Building and Construction Authority (BCA) has leveraged on systems to improve construction productivity by formulating a 5-year Building Information Modelling (or BIM) Adoption Roadmap to implement BIM across the sector. BIM, is a 3D modelling tool for construction, and it enables all parties in the value chain to visualise the design better, detect design problems early, and enhance planning, management and coordination for projects. This integrated approach results in time and cost savings for the entire project. Under the roadmap, BCA is working towards mandatory BIM e-submission of architectural, structural as well as mechanical & electrical plans for building works for regulatory approval by 2015. The public sector will drive BIM adoption by working towards specifying this as a requirement in new building projects from next year. The industry itself is also playing a part – BCA is working with industry groups

such as the Singapore Contractors Association Limited and Association of Consulting Engineers of Singapore to obtain software licences for their members to reduce the cost of adopting BIM. So the industry groups have come on board and they will help their members in the adoption of BIM. I think this is the right approach.

27. We also need to find and leverage more on network advantages. As a small and open economy, one of Singapore's key competitive advantages lies in our networks—not just external, but also our internal networks. We can take advantage of our compact size and increase the networks between firms and between sectors. And the Government cannot do this alone. We need more ground-up initiatives – from the unions, trade associations or chambers of commerce. An example of how these networks can benefit companies is the Stevedore Net, a collaborative platform developed by the Stevedore Association together with 19 stevedoring companies. This allows the industry to move away from its traditional reliance on the exchange of paper-based documents. The mobile-enabled platform helps stevedoring companies automate their day-to-day operations, and facilitates real-time information exchange between the stevedores, their customers and the port. When fully deployed this year, the project is expected to bring about 10% productivity improvement for the companies, reduce vessel turnaround time by up to half a day, and save them ship chartering fees of more than \$1 million a year. The Government supported the project by providing financial support under iSPRINT, a scheme to encourage SME infocomm adoption introduced by the Infocomm Development Authority in partnership with SPRING and the Inland Revenue Authority of Singapore.

*Management as a key productivity enabler*

28. Third, we need to develop our greatest competitive advantage – which is our people. As a baseline, we need to ensure that our CET system provides good training and upgrading opportunities for our workers – so that they can upgrade their skills, work smarter, and be more productive. But we need to look beyond that as well. I met Professor John van Reenen from the London School of Economics in August last year. Professor van Reenen has done much research in productivity; and one of his studies

found a close link between good management practices and higher productivity. And he quantified this. He had a five-point scale. And a single point improvement on a 5-point scale in the management practice score could increase output as much as a 25% increase in the labour force or a 65% increase in invested capital. So the quality of management practices is key. He advocates that the best way to raise productivity is to ensure that there are good management practices in the private sector.

29. We clearly need to ensure that our managers have the management know-how to drive productivity in their organisations. Our CET system must offer specialised courses to help managers embrace and drive productivity. And one such programme is the WSQ Certified, Productivity and Innovation Manager (or CPIM) programme, offered by the Singapore Manufacturers' Federation for managers and supervisors, to equip them with productivity tools and concepts to drive productivity efforts within their organisations. The programme was launched in May last year. As of December 2010, about 140 participants from 25 companies have participated in this programme.

30. We need more of such training programmes. So WDA is working with Nanyang Polytechnic to offer industry-focused productivity courses for managers and supervisors in the Retail, Food & Beverage and Hospitality sectors. MOM, MOE and WDA will continue to expand the landscape for managerial training in the year ahead.

31. We are also doing more to raise the overall quality of human resource management in Singapore. MOM is driving this effort, working to establish Singapore as the HR centre of excellence in Asia – a centre that sets standards, provides directions and creates new knowledge for human capital management and leadership development. Together with the EDB and the Singapore Management University, MOM is seeking to establish the Human Capital Leadership Institute as the premier HR and leadership institution in the region, anchoring world-class Asia-centric HR and leadership executive programmes in Singapore, driving pan-Asian research, and developing cutting edge human capital solutions for Asia.

### *Culture of continuous improvement and learning*

32. I have identified innovation, networks and management. Last, we will put more emphasis on making the fundamental shift towards a culture of continuous improvement and learning. This will be crucial in driving sustainable productivity growth. Quantitative indicators only tell us half the story; like what Mrs. Mildred Tan mentioned, we also need the mindsets and behaviours of our employers and employees to change.

33. Many stakeholders have already taken up the call to focus on productivity. The Labour Movement in particular has shown their commitment by spearheading the IGP, and I urge them to be even more aggressive in breaking productivity bottlenecks. Industry associations have also been actively involved in the productivity movement. The Singapore Hotels Association has formed a Productivity Steering Committee to identify solutions that can drive productivity growth in the hotel industry. The Committee has conducted a review of hotel operations and published a very comprehensive report with recommendations on best practices and solutions related to systems & work processes, and automation & technology. Here again is an example of how we are looking at specific industry sectors, and seeing how they can develop processes which are relevant to them.

34. Aside from the industry associations, companies further up the value chain can also influence those that work with them, raising productivity of the sector as a whole. This requires a fundamental shift in industry mindset across the entire value chain, which is not easy. Take the construction sector for instance. I had an interesting meeting over lunch with various industry groups which represent the various layers, segments, of the construction industry. Developers must change their procurement model such that their consultants come up with buildable designs and contractors adopt technologies and processes that facilitate ease of construction downstream. A few progressive developers such as City Developments Limited are actively driving their project partners to adopt dry walls, pre-fabricated toilets and other productive construction systems in their projects. Similarly, in the public sector, HDB's stipulation of a minimum percentage of precast components in its housing projects has had a

positive cascading impact on its consultants and contractors who have since become adept in precast design and erection respectively. And we need more of this. The subject of productivity in the construction sector will be addressed more comprehensively during the Estimates for the Ministry of National Development.

35. For companies like CordLife Singapore, which is one of the leading cord blood banking companies in the region, the focus on productivity is not just about improving processes but ensuring that their employees have the opportunity to continually improve and upgrade their skills, for even better service delivery. In November 2010, CordLife started with the establishment of the CordLife Academy, a corporate learning division of CordLife Group. The Academy provides a structured and formalised programme to build capabilities and competencies in all employees, and to encourage innovation and creativity that translates into higher productivity, greater efficiency, better employee performance and greater work satisfaction. SPRING co-funded the development of the programme. The pilot run of training will be held for all 60 staff in its Singapore operations as well as the various country heads, before being extended to more than 300 staff in the rest of its operations in Asia. The project is estimated to increase staff productivity by 10%.

36. We need to see such positive attitudes and mindsets cascade down to every company and every worker in Singapore. Ms. Penny Low and asked how the Government can encourage more companies to take up productivity measures. Sir, we are all familiar with the saying that you can lead a horse to water, but you cannot force it to drink. So we have the schemes and resources, but the drive to raise productivity must ultimately come from our companies and from our workers themselves, who see the rewards of bigger markets and higher profits, and more secure and higher paying jobs.

### ***Conclusion***

37. Mr. Speaker, Sir, we have made a good start in our national productivity drive. I am heartened that many have already stood up to be counted – particularly the unions,

some of the industry associations, and many enlightened companies. But we need many more to do so. We need to continue to walk, briskly, down the road less travelled – the one that is more difficult, that involves restructuring and change, but which brings the promise of more sustainable, and more inclusive, growth for the future. And together, I am confident that we will succeed and build a better and more productive future for Singapore.