



**WELCOMING REMARKS BY  
YBHG PROFESSOR DATUK DR ASMA ISMAIL FASc  
PRESIDENT OF ACADEMY OF SCIENCES MALAYSIA**

**LAUNCH OF SCIENCE OUTLOOK 2020 REPORT**

**07 OCTOBER 2021 (THURSDAY)**

**9:30 AM – 12:15 PM**

**LIVE SESSION**

Bismillahirrahmanirahhim, Assalamualaikum W.B.T , Salam sejahtera and a very good morning to everyone.

**YANG BERHORMAT DATO' SRI DR ADHAM BABA**

Minister of Science, Technology and Innovation

**DISTINGUISHED MEMBERS OF ASM COUNCIL**

**SENIOR FELLOWS AND FELLOWS OF THE ACADEMY OF SCIENCES MALAYSIA**

**YANG BERUSAHA PUAN HAZAMI HABIB**

Chief Executive Officer, Academy of Sciences Malaysia

**Senior officials from Ministries, Departments and Agencies,**

**Distinguished Panellists of the Forum,**

**Members of the Media,**

**Honoured Guests,**

**Ladies and Gentlemen,**

## **INTRODUCTION**

1. I am delighted to welcome everyone to the official launch of **Science Outlook 2020 Report themed: Unlocking the Future**. Firstly, thank you to Yang Berhormat Minister of Science, Technology and Innovation, Dato' Sri Dr Adham Baba, for taking the time to officiate the event today. Thank you to all our virtual audience for joining us for this memorable event.
2. Since its establishment in 1995, the Academy of Sciences Malaysia (ASM) has served as the nation's Thought Leader for matters related to science, engineering, technology and innovation. ASM has carried out key strategic STI studies and provided numerous strategic advisory inputs and advocacy to the Government in developing forward thinking policies, position papers, national plans, roadmaps, and initiatives. ASM works in a cross-cutting manner with all ministries in providing strategic STI inputs. Over the last five years ASM has been instrumental in carrying out strategic studies, working papers and initiatives for around 10 different ministries including central agencies such as EPU. It is gratifying to note that from all studies conducted by ASM, about 80% of our recommendations have been taken up by the Government. This reflects the Government's commitment to informed, evidence-based decision making and furthering the nation's progress through STI.
3. Among ASM's flagship studies, is the Science Outlook report that provides evidence-based insights on Malaysia's STI landscape. The findings and recommendations of this biennial report are highly

regarded at the national and international levels. It is a one-of-a-kind report that provides a bird's eye view of Malaysia's STI development with robust analyses and timely recommendations. The first edition, the Science Outlook 2015 report called for transformative thinking, integrated planning, and inclusive implementation. The government adopted 11 out of 18 recommendations made in the report. The second edition, the Science Outlook 2017 was a deep dive of Malaysia's STI Governance, Research, Development and Commercialisation, STI Talent, Energising Industries, STI Enculturation, and Strategic International Alliances whereby 10 out of 18 recommendations were adopted by the government.

4. The 'Science Outlook 2020: Unlocking the Future' may be the third edition of this flagship report but it is a trailblazer document on many fronts.
  - This is the first Science Outlook report that has adopted the ecosystem approach to scan Malaysia's progress over the last thirty years in terms of economic development, societal well-being as well as environmental conservation and sustainability through the STI lens.
  - It is also the first report to evaluate the challenges outlined in Vision 2020 for Malaysia to become a socially cohesive and developed country from an STI perspective and evaluate the development of the nation since the Vision was launched.
  - We take pride that the Science Outlook 2020 is the first ASM report to include growth trajectory modelling and strategic foresighting to future-proof Malaysia's STI policy development and implementation.

The report's findings have been calibrated against national STI strategies and the United Nation's 2030 Agenda for Sustainable Development Goals to assess the nation's sustainable development approach.

## SCIENCE OUTLOOK – PAST AND PRESENT

Ladies and Gentlemen,

5. What are the key ingredients in building a dynamic and robust STI ecosystem? Firstly, it is **evidence**, i.e., evidence that informs stakeholders and decision makers about key trends, data and relevant considerations both quantitative and qualitative for agile governance. Secondly, it is fostering a **participatory model** that supports the whole-of-government and whole-of-society approach. These factors are vital to be impact-driven and catalyse the nation's productivity, enhance competitiveness, and promote inclusive growth to realise Malaysia's aspiration to become one of the world's top innovation-led nations. This was why when the time came to conceptualise the third Science Outlook, the team decided that the report should be a little bit more ambitious in its scope compared to the previous editions. The Science Outlook 2020 is practically a compendium of STI evolution in Malaysia over the past 30 years.
6. Why 30 years, you may ask? For those who are old enough to remember, it was 30 years ago that the Vision 2020 was conceptualised to chart Malaysia's growth into an advanced high-tech economy with a united populace. This grand idea coloured the national development

policies in so many ways that it was only logical to examine the progression of the country's STI landscape after its launch to see the effect of long- and mid-term policies on the aspirations of this vision.

7. To answer what we have accomplished as a nation in that three decades, the Science Outlook 2020 team conducted a deep dive into the STI ecosystem across all stakeholders and benchmarked the findings against global standards. The data collection, as I understand, was not easy because of the disruptions during the pandemic, but the team did an admirable job in getting it done as well as conducting the rigorous analyses needed to narrate the findings accurately.

## **SYSTEMIC ISSUES AND MAINSTREAMING STIE**

Distinguished guests,

8. Science Outlook 2020 showed that we did make tremendous progress in some aspects in terms of STI policy development and implementation, but the conclusion boils down to this: **We could have done better**. Why did we not do it better? In essence, our STI ecosystem tends to adopt a piecemeal approach and is fragmented in many ways – from governance management cycle, investment, talent development, to infrastructure – **we lack focus and consistency during implementation**. Unfortunately, our resources were spread thinly such that it diluted the impact our investments could have had. It also did not help that our industries are, by and large, **risk averse** when it comes to investing in R&D. This is why our Gross domestic expenditure on R&D (GERD) percentage averages around 1% while developed countries spend at least 2% to 4% on

their research activities. We are indeed content to be just imitators and adaptors rather than innovators. This is making it harder for Malaysia to escape the middle-income trap when the global economy and technological complexity continue to evolve at lightning speed.

9. All this combined has made our STI ecosystem sluggish and the ripple effect of the impact affected our lives on so many levels from a not so robust economy, a less than ideal quality of life to inflexibility to adequately respond to global shocks like the COVID-19 pandemic. We cannot afford to continue with this “tidak apa” (no worries) attitude when it comes to our STI ecosystem because the impact is affecting us not just today, but also the future.

Ladies and gentlemen,

10. In order for Malaysia to be globally competitive and become an advanced economy, it is crucial for the Government to intensify mainstreaming STI as a propeller of economic growth in the nation’s transformation plans. The recent tabling of the Twelfth (12<sup>th</sup>) Malaysia Plan with measures to embed STI across ministries for high return of economic value is reassuring. The 10-10 Malaysian Science, Technology, Innovation and Economic (10-10 MySTIE) Framework mooted by ASM, was included as a game changer to streamline national STI priority areas to intensify socio-economic development. If we make the necessary systemic changes, InsyaAllah, we can leap out of the middle-income trap.

11. As we shift towards knowledge economy and move to become a high-income nation, we must also take into account the human aspect of development. Progress of a country is no longer solely measured by gross domestic products (GDP) but also by the growth and well-being of the people. We need to harness STI in a wholesome way so that we improve not just the lives of the people, but also pave the way for Malaysia to become a cohesive, equitable, and affluent society.
12. Those who are in the position to exert change must not have mindsets that are stuck on how things were done 20, 30 years ago; they need to be able to think of how things could, should, and would be 30, 50 years from now. Science Outlook 2020 is the first Science Outlook report to include strategic foresighting to build scenarios and mine ideas that prepare today's action for the future. I hope that more would mainstream strategic foresighting in their policies and actions, especially the Government, industry, and academia.
13. Ladies and gentlemen, an inspiring Vision can only come true when backed with evidence-based policy making, whole-of-Government and -whole societal approach with an impact-driven mindset. I hope that the Government will use Science Outlook as a reference. I implore that you deep dive into our findings and recommendations, and integrate this report as part of the STI management monitoring and evaluation efforts in the country.
14. I could not end without expressing my deepest appreciation and heartiest congratulations to the Science Outlook 2020 team: Professor Dato' Ir Dr Mohd Saleh Jaafar FASc, who was the Chairperson of the study, Professor Dr Nik Meriam Nik Sulaiman



FASc, the Deputy Chairperson, the Working Group Chairs: Professor Mahendhiran Nair FASc, Professor Rofina Yasmin FASc, Dr Helen Nair FASc, and all Working Group Members for your contributions. Thank you also to the ASM Management team and all analysts for your unflagging effort, commitment, and dedication towards producing this extraordinary report.

## **CLOSING**

Ladies and Gentlemen,

15. Unlocking the future of Malaysia calls for transformative thinking, integrated planning, and collaboration towards inclusive implementation. I hope that the reflections of the state of STI in our country in these three decades are taken to heart by all stakeholders – big and small – so that we can work together and reshape Malaysia's STI ecosystem for the better as we progress to become a High-Tech Nation by 2030 and achieve the Shared Prosperity Vision 2030.

Ladies and gentlemen. Its time we acknowledge the elephant in the room. Words alone are not enough. We need more coordinated effective actions. Let us take heed of what had happened in the past and let's not walk into the future unprepared. Thank you once again to Dato Seri Adham Baba, YB Minister MOSTI for your support of ASM's efforts.

Thank you. Sekian, Wabilahitaufik walhidayah, wassalamu'alaikum waramatullahi wabarakatuh.