



18/19 Science Centre Singapore's
ANNUAL REPORT

CONTENTS

Message From The Top

- > Chairman's Review
- > Board Members

Our Team

- > Board Members
- > Management Team

Awards

- > Highlights
- > Awards

Exhibition

- > Timeline of Events
- > Exhibitions

Science Outreach

- > STEM Inc
- > SSCG Pte Ltd

Competition

- > Loren Ipsum
- > Loren Ipsum

Gated Attractions

- > KidsSTOP™
- > Snow City
- > Omni-Theatre
- > Butterflies Up-Close

Community & Partners

- > Volunteer Programmes
- > List of Sponsors
- > Sponsorship Fund
- > Distinguish Guests
- > Sub-Board Committees
- > Projects Committees

Financial Statement

MESSAGE FROM THE TOP

- > **Chairman's Review**
- > **Board Members**



CHAIRMAN'S REVIEW



Ms Tan Yen Yen
Chairman
Science Centre Board

• On features of New Science Centre (NSC)

1 How would the NSC be better than the existing Science Centre? Are there any new features in the NSC, which the public can look forward to?

Beyond focusing on promoting Science, Technology, Engineering and Mathematics (STEM) for young Singaporeans, the new Science Centre is envisioned to be a place where Singaporeans of all ages can be engaged in understanding the latest developments and key issues in STEM.

To support these goals, the NSC will have more purpose-built gallery spaces for thematic exhibits, and will better leverage digital technologies for a more immersive and interactive experience for visitors. The NSC will also have improved educational facilities such as specialised laboratories, to complement learning in schools.

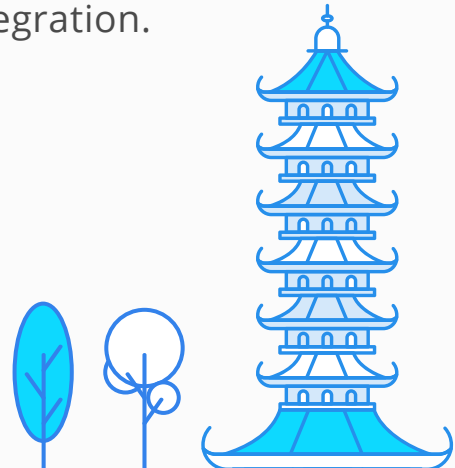
The NSC will expand its engagement with community and industry partners to enrich its exhibitions and programmes. This includes exploring partnerships with home-grown and international companies to develop exhibitions that showcase STEM applications in different fields both locally and globally, and to provide more mentorship and research opportunities.

2 How big is the NSC? How much bigger is it compared to the current science centre?

More details will be announced when ready.

3 Given the location of the NSC at the Jurong Lake Gardens, what sort of new outdoor programmes and activities can we expect at the NSC?

With its setting in a garden by the lake, the NSC will be able to leverage its surroundings to offer a variety of outdoor spaces, programmes and activities that facilitate the exploration of nature and science. The NSC will be an integral part of the Lakeside Precinct in the Jurong Lake District, and will be a welcoming place where “nature comes in and science goes out” – showcasing both a physical and an educational integration.



In line with Jurong Lake District's vision to be a model district that promotes urban sustainability and a healthy living environment for residents, workers and visitors, the NSC will also incorporate sustainability initiatives through upfront planning and design. It will showcase innovative technology and solutions that optimise resources and minimise ecological footprint.

4 What kind of mentorship and research opportunities can we look forward to?

While the NSC is being built, the Science Centre Singapore will continue to renew its exhibits and programmes at its current site to promote interest, learning and creativity in Science, Technology, Engineering and Mathematics (STEM). Science Centre Singapore will continue to engage key stakeholders, including students, teachers, parents, members of the public, and industry players, to co-create and pilot programmes to nurture deep interest and learning in STEM, building on the mentorship and research opportunities currently provided through the Centre for Research and Applied Learning in Science (CRADLΣ).



• **On design of NSC**


5 What is unique about the conceptual design? E.g. Does it foster learning of STEM? How does it take advantage of being situated at Jurong Lake Gardens?

The ground level has been largely retained as a publicly accessible garden, and the design intent is to preserve visual and physical porosity to the waterfront and garden landmarks. With its setting in a garden by the lake, the NSC will be able to leverage the surroundings to offer a variety of outdoor programmes and activities that facilitate the exploration of nature and science. The NSC will be an integral part of the Lakeside Precinct in the Jurong Lake District, and will be a welcoming place where "nature comes in and science goes out" – showcasing both a physical and an educational integration.

6 What was the inspiration behind the design? Can we find out more about the designer?

The concept design proposed by Architects 61 Private Limited, in collaboration with Zaha Hadid Limited, was based on an architectural vision of "beautiful simplicity" and

was inspired by the historic lake ecologies and mangrove swamps in Jurong. The proposed architecture capitalises on the waterfront location and the garden setting of the Jurong Lake Gardens, with the orientation of the building carefully studied to create a strong relationship with the surroundings. The distinctive architecture and form also create a strong sense of arrival for visitors from the Chinese Garden MRT station. The NSC is planned to be well-integrated with Jurong Lake Gardens and the future neighbouring tourism development.



7 Understand that the current conceptual design will undergo further tweaks. Would the finalised design deviate much from the conceptual design submitted by the awarded MDT?

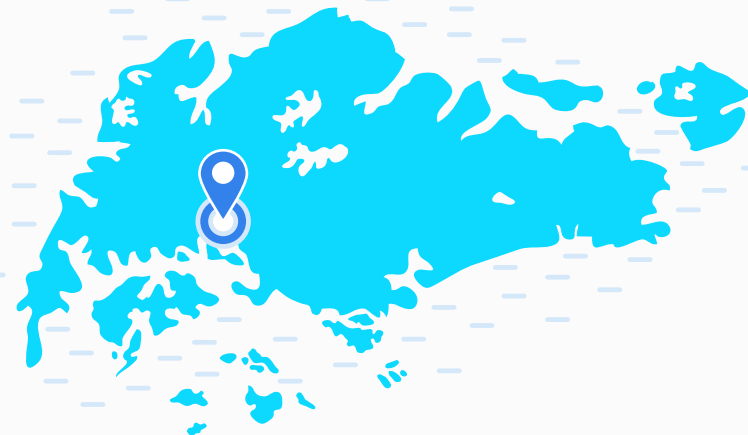
The purpose of the QFM tender was to select a MDT for the consultancy study and design of the new Science Centre. After the award of the MDT tender, the NSC will continue to go through a rigorous planning and consultation process, where the conceptual design is subject to adjustments to accommodate detailed user requirements.

8

What are the plans for JLD and how would the relocation of the science centre contribute to it? What are the plans for the area surrounding the new science centre?

JLD is envisioned to become a distinctive western gateway to Singapore, and when fully developed, it will be the largest mixed-use commercial district outside the city centre.

To complement the mixed-use district, a leisure and recreational cluster will be developed around Jurong Lake to capitalise on JLD's distinctive lakeside and lush garden-like setting to create unique and attractive spaces for visitors and residents to enjoy. The New Science Centre will be a major anchor attraction in this cluster, along with the Jurong Lake Gardens and the future tourism development which will boast a first-of-its-kind attraction(s), hotel, retail, entertainment and other recreational uses.



• On timelines

9

What is the development timeline for the NSC? What will happen over the next few years, and when will the final design be ready? When will actual construction start and end, and when will NSC open its doors to the public?

The NSC is going through a rigorous planning and consultation process. Development planning has begun and we expect the NSC's detailed design to be ready by next year. The NSC is targeted to be ready around 2025.

10

The tender mentioned that the construction of NSC is targeted to be completed in 2024. Does this mean that the NSC will be open in 2024?

The timelines listed in the NSC tender are indicative. It also does not include the time needed for fit out and installation. A better estimation of the NSC's completion and opening timelines would be available after the main construction tender has been awarded.

11

PM Lee mentioned at the 2014 National Day Rally that the NSC will be done by "2020 or thereabouts" but the tender mentioned that the construction of the NSC is targeted to be completed in 2024. What caused the delay?

The Science Centre team and MOE are committed to ensure that the new Science Centre will be a quality institution that Singaporeans of all ages can enjoy and be proud of. The completion date of the NSC has been pushed back as more time was needed for the rigorous planning and consultation process. The current Science Centre will continue to serve the needs of our Singaporeans till the new Science Centre is ready.



• On the team behind NSC

12

The Science Centre Steering Committee was formed in 2014 to provide recommendations for the NSC. Has the work of the committee concluded and what are some of the recommendations which would be incorporated into the new Science Centre?

The Science Centre Steering Committee was formed in 2014 to conceptualise the new Science Centre. As part of its work, it engaged students, educators and members of the public on ideas for the new Science Centre.

The Committee finalised its recommendations in mid-2017. These covered the vision and guiding principles for the development of the Centre. In particular, the Committee recommended that the new Science Centre cover both fundamental and applied sciences, with exhibits arranged thematically, incorporating both local and global examples of STEM applications. The Committee envisioned the new Science Centre as a fun, interactive and engaging platform for STEM that would educate and inspire current and future generations of Singaporeans in STEM.

The Science Centre team and MOE have been working on fleshing out details for the development of the new

Science Centre. The Committee's recommendations have been helpful in guiding the conceptualisation and planning of the new centre.

13

What is JTC's involvement in the NSC project?

JTC will be supporting the development of the new Science Centre through the provision of project management and technical advisory support.

14

Who was involved in the evaluation of the design consultancy tender?

The design consultancy tender was evaluated by members from various agencies, including Science Centre Board, MOE and JTC. Chaired by CE/SCB, A/Prof Lim Tit Meng, the Tender Evaluation Committee was also assisted by the Design Evaluation Panel, which included members from URA, NParks, STB, JTC and HDB, in the assessment of concept design proposals.

The Design Evaluation Panel members are shown below:

1. CE/SCB, A/Prof Lim Tit Meng (Chairman)
2. CEO/HDB, Dr Cheong Koon Hean
3. CEO/URA, Mr Lim Eng Hwee
4. CEO/NParks, Mr Kenneth Er
5. Former CE/SCB, Dr Chew Tuan Chiong
6. Group Director (Project Management)/JTC, Mr Teo Tiong Yong
7. Chief Urban Designer/URA, Mdm Fun Siew Leng
8. Executive Director (Attractions, Entertainment & Tourism Concept Development)/STB, Ms Carrie Kwik (Alternate for CE/STB, Mr Keith Tan)



• On public engagement



15

Did MOE and the Science Centre seek public feedback in coming up with plans for the NSC? If yes, which are some of these ideas/suggestions that will be incorporated in the development of the NSC?

As part of the Science Centre Steering Committee's outreach and engagement efforts, the Committee gathered ideas and suggestions from key stakeholders, including students, teachers, parents, members of the public, and industry players. These ideas and suggestions helped the committee gain a deeper understanding of how the new Science Centre could be relevant and engaging for all visitors, for instance, through interactive exhibits that are fun and educational.

16

Are there plans to engage the public on the programmes to co-create programmes for the NSC?

While the NSC is being built, the Science Centre Singapore will continue to renew its exhibits and programmes at its

current site to promote interest, learning and creativity in Science, Technology, Engineering and Mathematics (STEM). Science Centre Singapore will continue to engage key stakeholders, including students, teachers, parents, members of the public, and industry players, to co-create and pilot programmes to enhance and deepen interest and learning in STEM.

• Others

17

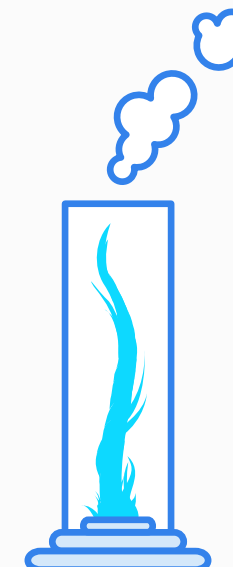
What will happen to the existing Science Centre in the meantime? What about after the NSC is open?

While the NSC is being built, the Science Centre Singapore will continue to renew its exhibits and programmes at its current site to promote interest, learning and creativity in Science, Technology, Engineering and Mathematics (STEM). Following its relocation, the existing building may be repurposed for other appropriate uses. Further details on the planned relocation and the future of the existing Science Centre will be shared when ready.

18

How much is the NSC project expected to cost?

The estimated development cost will be shared when ready.



CHIEF EXECUTIVE'S REVIEW



Assoc Prof Lim Tit Meng
Chief Executive
Science Centre Singapore

Introduction

Over the decades, Science Centre Singapore has established itself not only as an informal learning institution for science and STEM, but also as one of the leading voices of Science, Technology, Engineering and Mathematics. In reinforcing its branding, the Centre raised greater awareness of its mission and vision to the public, which led to more extensive co-creation with the community. The good work and our achievements have also reached foreign shores, and the Centre welcomed a number of overseas media and influencers eager to explore the Science Centre and its many offerings last year.

Voice of Authority and Beyond

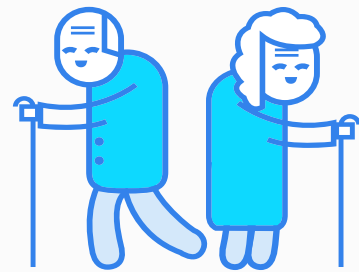
The Centre's STEM initiatives are highly regarded by both local and foreign agencies and organisations, with many expressing their interest to understand and learn more from an industry leader on how to structure and launch programmes and workshops that would advocate better STEM education. From learning journeys for foreign counterparts, to visits by delegates and interview requests from regional media, we have been able to build our reputation. This year alone, the Centre, STEM Inc and the STEM Applied Learning Programme were featured in two Japanese publications and covered by the Thai Public Broadcasting Service.

Staying relevant and attuned to the latest trends has also helped the Centre gain prominence. For example, there has been much discussion on efforts to encourage more women to pursue STEM and STEM related careers. The Centre supported the movement by organising DiscovHER, a series of activities that highlighted achievements by female scientists and researchers, and which also coincided with the International Day of Women and Girls in Science.

Astronomy continues to be a popular topic both for our audiences as well as media. I am heartened so share that the Centre is seen as an authority and we witnessed a surge in public and media enquiries to help explain the phenomena or even debunk myths about certain phenomena. From television features on mainstream media (Channel 8 feature and Channel NewsAsia documentary) to year end meteor showers and the February 19 super moon, the Centre has been invited on many occasions to share our knowledge and enlighten the public on the science behind these astronomical events.



Our exhibitions and initiatives have also been highlighted through opinion pieces attributed to the Centre and key spokespeople. From addressing the ageing population issue with our Dialogue with Time – Embrace Ageing exhibition, to healthy habits with the new health related exhibits at KidsSTOP™ launched in partnership with the Health Promotion Board, to addressing phobias with our Phobia2: The Science of Fear exhibition, there have been many avenues and opportunities to demonstrate how science is omnipresent and thereby emphasise its importance.



Community Co-Creation and Outreach

The Centre worked with the community on a number of events and programmes in 2018, engaging several makers to showcase their creations at Future City at the Istana Open House on Labour Day and inviting notable scientists and creators such as Dr Mike North and

Matthew Gardiner to helm workshops and share their craft with students and wider audiences. The Centre also received requests to share simple DIY activities that families could bond over for the March school holidays, which were eventually published in The Straits Times.

Our student and senior volunteers also had a chance to shine as they were featured in a special article by Lianhe Zaobao. The story talked about the volunteer shortlisting and selection process, as well as the training these volunteers go through for both science knowledge and interaction with visitors. Having volunteers on board helps the Centre tremendously in its outreach efforts and widens our network of engaging passionate people committed and earnest in befriending and transforming the minds of millions through science and STEM.

Attention from Overseas

In recent years, more people and organisations have come to learn about the Centre and its group of attractions. Key opinion leaders and lifestyle writers from countries such as Spain and Italy have covered the Science Centre on their digital platforms and publications. Through the Singapore Tourism Board, the Centre also facilitated visits by Taiwanese media (ETtoday) and key opinion leaders from neighbouring countries such as Malaysia and Indonesia who helped spread word about the Centre among the communities' back home.

These efforts, coupled with quality experiences and engagement have propelled the Centre and its people to greater heights. Science Centre Singapore will continue to strive towards promoting interest, learning and creativity in science and technology to a wider audience and cement its status as a world class science centre.

