





# New *Energy Story* Exhibition to Supercharge Singapore's Energy Future

The exhibition seeks to advance the little red dot's agenda on sustainable development by accelerating awareness and adoption of efficient energy practices amongst the public

**SINGAPORE, 11 August 2021** - Science Centre Singapore (SCS) today launches *Energy Story,* a new exhibition exploring the sources, transformation, and uses of energy, from natural cycles to modern applications.

Jointly presented by SCS, the Energy Market Authority (EMA) and SP Group, this is a net-zero showcase where the energy consumption of the interactive space is fully matched with an equivalent amount of green energy produced, through the purchase of Renewable Energy Certificates<sup>1</sup> (RECs). The exhibition was conceptualised to raise awareness of the critical role that cleaner energy plays in charting a more sustainable future and accelerating the adoption of energy efficient practices amongst the public.

Associate Professor Lim Tit Meng, Chief Executive of Science Centre Board said, "The sustainability mandate is not a new one, it has just been brought into focus in the face of the ongoing economic and environmental crises. Efficient energy consumption, on a larger scale can significantly impact immediate capital and climate recovery to help us realise the long-term vision of a truly sustainable society. With *Energy Story* exhibition, we hope that guests from all walks of life will gain a better understanding of the importance of growing green energy and be inspired to play a part in the nation's "energy reset" movement. From institutions to authorities, companies to the public, we all need to work together to change the future of our world."

Mr Ngiam Shih Chun, Chief Executive, Energy Market Authority added, "Singapore's energy landscape has evolved significantly over the last 50 years. We switched from the use of oil-fired power plants to cleaner sources such as natural gas. Singapore is also one of the most solar energy-dense cities in the world. We plan to decarbonise our power sector further with the deployment of more low-carbon options. We hope Singaporeans and especially students can learn about Singapore's energy transformation and play a part in creating a sustainable energy future for all."

Mr Stanley Huang, Group Chief Executive Officer, SP Group, commented, "Through this exhibition, visitors can learn about Singapore's world-class energy network, and what goes into making it reliable, secure and sustainable for generations to come. As we empower the future of energy, we put knowledge and tools in the hands of the public, so that everyone can take steps

<sup>&</sup>lt;sup>1</sup> Renewable Energy Certificates (RECs) are tradable green energy attributes that represent units of electricity generated from renewable energy generation facilities. With each megawatt-hour of green energy produced, one REC is recorded and tracked. A buyer can purchase RECs to show proof that an equivalent amount of green energy has been consumed to offset the same amount of electricity used.







to contribute towards a greener world. This exhibition will also be a net-zero showcase, through the purchase of Renewable Energy Certificates on the SP REC Platform<sup>2</sup>. The electricity consumption of the interactive space will be fully matched with an equivalent amount of green energy produced."

Six zones of multimedia displays, interactives, and poster panels tell the story of how humankind has progressed off the back of energy discovery, and must now work towards a cleaner, more sustainable future. Visitors can explore global, regional, and local energy data, interact with models of different technologies, and demonstrate relevant physics concepts.

A key feature of the exhibition is *Singapore's Energy Story*, a zone dedicated to raising awareness of our four energy switches and how we are working towards greater sustainability. It highlights the progress of our nation's energy revolution over the past 50 years and how we balance energy trade-offs to power our future.

The exhibition is also aligned with the Ministry of Education (MOE)'s Science syllabus to support learning for lower secondary students, with the exhibits reinforcing textbook topics ranging from the fundamentals of energy in physics to Singapore's pursuit of technological advancements through research and development. It follows EMA's earlier collaboration with MOE on a series of energy education videos from 2019, four of which are featured within the exhibition.

Finally, the exhibition addresses our responsibility as energy consumers. This call-to-action can be seen throughout the 400-square metre exhibition space, inviting visitors to be more energy conscious in their everyday life. These collective small steps can spur a big impact in building a sustainable future for Singapore.

*The Energy Story Exhibition* is now running at the Science Centre Singapore and is accessible with a general admission ticket. Tickets are available for purchase through the online ticketing platform at <u>www.science.edu.sg/buy-tickets</u>.

View the appendix for descriptions of the six zones and visit <u>www.science.edu.sg/energy</u> for more details on the exhibition.

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<sup>&</sup>lt;sup>2</sup> The SP REC Platform operates as a neutral engine that facilitates the transaction of RECs, where buyers and sellers from around the globe are automatically matched based on respective requirements.







The *Energy Story* Exhibition spans six interactive zones exploring the sources, transformation and uses of energy, from natural cycles to modern applications.

### Zone 1: Evolution of Energy Sources

This zone chronicles how energy sources have developed over centuries and how energy continues to drive human civilisation. It includes visualisation of the story of energy over time, from the Industrial Revolution to the present day, and the impact of climate change on energy transition.

## Zone 2: Fundamentals of Energy

This zone highlights physics concepts related to energy, to support learning and education in MOE schools. Interactive exhibits in this space illustrate the Law of Conservation of Energy, including a fun "shadow flash" wall where visitors power a flashing lamp by pedalling a stationary bike in order to "freeze" shadows against a luminescent wall.

## Zone 3: Modern Energy Sources

This zone sheds light on the pros and cons of various energy sources, such as natural gas, solar energy and wind energy, and explains the trade-offs involved in the Energy Trilemma. Learn about how different countries use energy through an interactive data visualisation world map and get competitive in a multi-player "Future Power" game, in which participants "gather" energy while navigating challenges caused by cost and pollution.

#### Zone 4: Singapore's Energy Story

This zone introduces Singapore's energy transformation as guided by the 'Four Switches' - Natural Gas, Solar, Regional Power Grids, and Low-Carbon Alternatives. Learn about how photovoltaic panels work and how Singapore is working to achieve its target of deploying at least two-gigawatt peak (GWp) of solar energy by 2030.

#### Zone 5: Energising the Future

This zone shines a spotlight on Singapore's latest research and development (R&D) efforts in energy, in tandem with the global transition to a sustainable energy future. The focus is on how we are working with the local industry and research community to undertake R&D and pilot solutions to improve how energy is generated, distributed and used.

#### Zone 6: Playing Your Part

This zone is a call-to-action for citizens to play a part in national energy conservation efforts, complete with practical energy efficient tips that can be harnessed in everyday life. It includes an "Energy Conservation at Home" game, in which one strives to achieve the highest energy savings by choosing and employing various electrical appliances. Before leaving the exhibition, visitors can share their thoughts and ideas on how Singapore can achieve an energy efficient future on a photobooth-cum-pledge wall.







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#### **About Science Centre Singapore**

Science Centre Singapore, a non-formal educational institution and leading regional Science Centre, along with its group of attractions, brings out the wonders of science, technology, engineering and mathematics through its unique blend of exhibitions, educational programmes and events. A custodian of creativity and innovation, Science Centre Singapore has captured the evolution of scientific developments for nearly four decades.

The Centre and its partners have played a pivotal role in transforming the way students and the public interact with and learn about science, technology, engineering and mathematics. Since 1977, the Centre has welcomed over 30 million visitors and inspired them with more than 1,000 exhibits spread across 14 exhibition galleries and outdoor exhibition spaces.

The Centre's group of attractions include Omni-Theatre, Snow City and KidsSTOP<sup>™</sup>. The Omni-Theatre is an immersive dual-technology edutainment destination fitted with Southeast Asia's largest seamless dome screen and featuring the latest and brightest 8k digital full dome system in the world. Snow City is Singapore's only permanent indoor snow centre offering an Arctic inspired experience at Singapore's first ice gallery and snow chamber. KidsSTOP<sup>™</sup> - Where







every child gets to Imagine, Experience, Discover and Dream - is Singapore's first children's science centre offering an enriching experience through purposeful play for children aged 18 months to 8 years old. For more information, please visit <u>www.science.edu.sg</u>.

#### About the Energy Market Authority

The Energy Market Authority (EMA) is a statutory board under the Ministry of Trade and Industry. Our main goals are to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Singapore. Through our work, EMA seeks to forge a progressive energy landscape for sustained growth.

Website: <u>www.ema.gov.sg</u> | Follow us: Instagram: <u>@EMA\_Singapore</u> | Facebook: <u>facebook.com/EnergyMarketAuthority</u> | Twitter: <u>@EMA\_sg</u>

#### About SP Group

SP Group is a leading utilities group in the Asia Pacific, empowering the future of energy with lowcarbon, smart energy solutions for its customers. It owns and operates electricity and gas transmission and distribution businesses in Singapore and Australia, and sustainable energy solutions in Singapore and China.

As Singapore's national grid operator, about 1.6 million industrial, commercial and residential customers benefit from its world-class transmission, distribution and market support services. These networks are amongst the most reliable and cost-effective world-wide.

Beyond traditional utilities services, SP Group provides a suite of sustainable and renewable energy solutions such as microgrids, cooling and heating systems for business districts and residential townships, solar energy solutions, electric vehicle fast charging and digital energy solutions for customers in Singapore and the region.

For more information, please visit spgroup.com.sg or for follow us on Facebook at fb.com/SPGroupSG, on LinkedIn at spgrp.sg/linkedin and on Twitter @SPGroupSG.