MEDIA RELEASE

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Building Singapore's Energy Future with Youths

Against the growing urgency to tackle the effects of climate change, Singapore's Energy Story is evolving towards one that is cleaner, affordable and reliable. To catalyse the co-creation of ideas, the Energy Market Authority (EMA) will be organising the inaugural Singapore Energy Grand Challenge (Youth) – SEGC (Youth), with the theme **"How would your energy efficient school or neighbourhood in Singapore look like in 2050?"**. SEGC (Youth) is part of EMA's efforts to engage various stakeholders to co-create Singapore's Energy Story, which is in line with the Singapore Together movement. (Refer to Annex A for more information on Singapore's Energy Story.)

2.   Using Microsoft's Minecraft: Education Edition, a game-based learning platform, students can design Singapore's energy future in an immersive online open-world game. Students will learn about Singapore's energy landscape, apply problem-solving skills, and collaborate to build the energy system they envision for Singapore in 2050. While doing so, they will have to overcome the Energy Trilemma – balancing the trade-offs between energy security, competitive prices and environmental sustainability.

3.   "Through this competition, we hope to share Singapore's Energy Story with youths and co-create a sustainable energy future together. Energy Efficiency will play a key role in achieving a cleaner, affordable and reliable energy system." said Mr Ngiam Shih Chun, Chief Executive, EMA.

4.   The SEGC (Youth) is a partnership between the EMA and Microsoft Singapore. It is supported by Singapore Polytechnic and Infocomm Media Development Authority (IMDA), under the IMDA's National Infocomm Competition initiative.

5.   Mr Kevin Wo, Managing Director, Microsoft Singapore said, "The world is confronted with an urgent carbon problem, and this is what motivates Microsoft's commitment to be carbon negative by 2030. Beyond accelerating the global development of carbon reduction, capture and removal technologies, it will be inspiring to look at this challenge through the lens of our youths. We hope that the immersive learning platform provided through Minecraft: Education Edition will empower our students to confidently problem-solve while picking up skills like collaboration and computational thinking, and perhaps inspire them in a career in the energy sector".

6.   Registration is now open online (https://go.gov.sg/segc2020) to secondary school students and will close on 19 April 2020. Interested students must form a team of between two to four schoolmates and submit a one-minute video showcasing their idea of an energy efficient Singapore in Minecraft as part of their application. Shortlisted teams will be contacted subsequently and invited to specialised clinic sessions to help them with their final submission. Following that, the top three teams will be recognised at Youth@SIEW on 30 October 2020.

7.   The top three teams stand a chance to win cash prizes of up to $10,000. All submissions will be judged according to the criteria of Relevance (40%), Creativity (30%), and Presentation (30%). (Refer to Annex B for more information on SEGC (Youth)).

8.   For more information about the SEGC (Youth), please visit the Powering Lives Portal (www.poweringlives.sg/events/SEGC2020).

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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: www.ema.gov.sg | Follow us: Instagram: @EMA_Singapore | Facebook: facebook.com/EnergyMarketAuthority | Twitter: @EMA_Sg

About Microsoft

Microsoft (Nasdaq "MSFT" @microsoft) enables digital transformation for the era of an intelligent cloud and an intelligent edge. Its mission is to empower every person and every organization on the planet to achieve more. For more news and information, visit https://news.microsoft.com/en-sg/

About Infocomm Media Development Authority

The Infocomm Media Development Authority (IMDA) leads Singapore's digital transformation with infocomm media. To do this, IMDA will develop a dynamic digital economy and a cohesive digital society, driven by an exceptional infocomm media (ICM) ecosystem – by developing talent, strengthening business capabilities, and enhancing Singapore's ICM infrastructure. IMDA also regulates the telecommunications and media sectors to safeguard consumer interests while fostering a pro-business environment, and enhances Singapore's data protection regime through the Personal Data Protection Commission.

For more news and information, visit www.imda.gov.sg or follow IMDA on Facebook IMDAsg and Twitter @IMDAsg.

About Singapore Together

Singapore Together is about the Government working with Singaporeans, and Singaporeans working with one another, to build our future Singapore. The Government will open up more partnership opportunities for Singaporeans to participate. The Government also hopes to support more citizen-led efforts. Whatever our background or interests, we can each step forward to contribute in areas that we care about. By working together, we can turn diversity into strength and transform challenges into opportunities, to build a Singapore that present and future generations of Singaporeans will be proud of.

FACTSHEET FOR SINGAPORE'S ENERGY STORY

To tackle climate change concerns, Singapore has to change the way we consume and produce energy. Minister for Trade & Industry, Mr Chan Chun Sing launched Singapore's Energy Story at the Singapore International Energy Week (SIEW) last October to map our efforts towards a clean, affordable and reliable energy future.

2.   Singapore's Energy Story sets the vision for how Singapore can power our future through four switches (Natural Gas, Solar, Regional Power Grids and Emerging Low Carbon Alternatives), supported by efforts to improve energy efficiency in all sectors.

1st Switch: Natural Gas

Natural gas is the cleanest form of fossil fuel and will continue to be a dominant fuel for Singapore's electricity in the near future. EMA will continue to diversify our gas sources and work with our power generation companies to improve the efficiency of their power plants.

2nd Switch: Solar

Solar is the most promising renewable energy source for Singapore. Energy storage systems are also vital as they help us counter the intermittency of renewable energy sources. Singapore is working towards meeting a new solar target of at least 2 gigawatt-peak by 2030, and an energy storage deployment target of 200MW beyond 2025.

3rd Switch: Regional Power Grids

We are studying ways to leverage on regional power grids for cost-competitive energy. This could be realised through bilateral cooperation or regional initiatives.

4th Switch: Emerging Low-Carbon Alternatives

We are exploring emerging low-carbon solutions (e.g. carbon capture, utilisation and storage technologies, hydrogen, etc) that can help reduce Singapore's carbon footprint.

We will continue to improve our energy efficiency in the various sectors. We will also empower our households with more information to help them better manage their electricity consumption.

3.   Minister Chan also announced the inaugural Singapore Energy Grand Challenge at SIEW 2019. This is part of the government's effort to engage stakeholders such as students, researchers and industries to co-create innovative ideas to transform our energy sector.

FACTSHEET FOR SINGAPORE ENERGY GRAND CHALLENGE (YOUTH)

Target Audience	Open to all Secondary school students
Platform	Minecraft: Education Edition (M:EE)
In Partnership with	Microsoft Singapore
Supported by	Infocomm Media Development Authority, Singapore Polytechnic
Challenge Details	**Challenge Statement:** **"How would your energy efficient school, or neighbourhood in Singapore look like in 2050?"**. o The challenge will leverage Microsoft's sandbox styled game, Minecraft, for participants to create their ideal Energy World and showcase their Energy Story aspirations for Singapore, with a focus on energy efficiency. o In-game constraints (e.g. scarcity of natural resources) will be incorporated to acquaint youths with our Energy Story, and to educate them on balancing the trade-offs in our energy "trilemma".
Prizes	A total of $10,000 cash prizes for top 3 teams ($5000, $3000, $2000)

Competition Details

Phase 1: Registration	
Period	• Open from 18 March – 19 April 2020
Mode of Registration	• Through FormSG (https://go.gov.sg/segc2020)
Criteria	• Open to Secondary school students. • Each team requires two to four participants from the same institution to participate in the challenge.

	• All registration must be accompanied with their teacher's contact details.
	• All entries are required to be accompanied by a 1-min video of their own Minecraft world that showcases their ideal energy efficient world (e.g. smart home / smart school).

Phase 2: Clinic Sessions	
(For shortlisted teams to the semi-finals)	
Objective	• For shortlisted teams to aid deeper understanding of Singapore's Energy Story, Singapore's energy Trilemma, and its corresponding trade-offs.
	• Provides training on navigating the base SEGC world and in-game constraints (that reflects the different energy challenges faced by Singaporeans).
Format	• Half-day training conducted by both EMA and Empire Code.
	• Sharing on: Singapore Energy Story (4 Switches), Energy Efficiency and Trade-offs
	• Technology: Learn Minecraft skills through Empire Code's base world.

Phase 3: Recognition Ceremony	
(Top 3 teams)	
Criteria	• Submission deadline of 3 min video to be qualified for the final shortlisting round.
Platform	• The top 3 teams will be recognised at Youth@SIEW on 30 October 2020.
	• Youth@SIEW has been a key platform since 2012 that enables our primary target audience (i.e. students) to engage in meaningful discussions with industry and political holders on energy issues.