

Singapore Energy Grand Challenge (Junior/Senior) 2022

Frequently Asked Questions

Eligibility Criteria

1) How do I participate in SEGC (Junior/Senior)?

Students have to form a team of 2- 4 and register in one of the categories (i.e. Junior/ Senior Category) online at <https://www.go.gov.sg/segc2022>.

All entries must be accompanied by the name and contact details of a teacher-in-charge from the institution as EMA will reach out directly to the teacher in-charge for subsequent follow-ups.

2) Can I join SEGC (Junior/Senior) by myself or form a team with more than 4 schoolmates?

No. Students within the team must also be from the same institution.

3) Can I form a team with schoolmates across different levels (e.g. a team consisting of secondary 1 and 3 students) if we are all from the same institution?

No. Students in the same team should fall under the same category (i.e. Junior or Senior Category).

Junior Category is open to lower secondary students (i.e. secondary 1 and 2) and Senior Category is open to upper secondary (i.e. secondary 3 and above) and junior college students.

4) How many teams can participate for each school?

There is no limit to the number of teams participating per school.

5) If I participated in previous editions of SEGC (Youth), would I be eligible to participate in this year's Challenge?

Apart from the top 3 winners from previous editions of SEGC (Youth), all secondary school and junior college students are eligible to participate in SEGC (Junior/Senior) 2022.

There will also be a new category for students from Institutes of Higher Learning (IHL) under SEGC (IHL). More details will be released in May 2022.

6) Can one teacher mentor multiple teams for SEGC (Junior/Senior)?

There is no restriction on the number of teams a teacher can mentor as long as students and teachers are from the same institution.

Submission requirements

1) What do I need to submit to complete my registration for SEGC (Junior/Senior)?

To register for the competition, each team is required to submit (i) a 200-word writeup on what [Singapore's Energy Story](#) means to your team and (ii) a PowerPoint deck (in .pdf) showcasing a minimum of 5 ideas* based on this year's Challenge Statement - "As Singapore transitions towards a carbon-free energy future, how can we reduce our carbon footprint by leveraging the four switches and managing energy demand to achieve a sustainable Singapore by 2050?".

**To include at least 3 ideas related to managing energy demand*

Please note that the write-up should not exceed 200 words and the PowerPoint deck should not exceed 7 slides. Submissions which deviate from the requirements will be disqualified.

2) What do I need to include in the PowerPoint deck?

The PowerPoint deck should include the following components:

- a. Description of each idea
- b. Explanation of how each idea addresses the Challenge Statement by leveraging the four switches and managing demand to achieve a sustainable Singapore by 2050
- c. Accompanying visual reference/screenshot of idea built using Minecraft: Education Edition (M:EE)

3) What are the judging criteria for registration?

Submissions will be assessed based on the following criteria:

- a. Relevance (70%) - How the submission is relevant to Singapore's context and addresses the Challenge Statement. The submission should include at least 3 ideas related to managing energy demand.
- b. Creativity (30%) - How the submission showcases innovative ideas and solutions for a sustainable Singapore by 2050.

Please note that the judging criteria and corresponding weightage may differ for registration, Semi-Finals and Finals. More details will be released to shortlisted teams.

4) If my team is shortlisted for the Semi-Finals, what are the next steps?

Shortlisted teams will be invited to participate in a virtual clinic in June 2022 to learn more about Singapore's Energy Story and Minecraft: Education Edition (M:EE) skills. Thereafter, EMA will provide a base SEGC M:EE world with in-game constraints to deepen participants' understanding of Singapore's Energy Story.

Shortlisted teams will be required to develop a 5-minute video as part of their final submission using the base SEGC world provided by EMA. Submissions which deviate from the requirements will be disqualified.

For reference, participants may refer to the top 6 winning videos from SEGC (Youth) 2021 here: <https://go.gov.sg/segc-youth-2021-winners>

Getting access - Minecraft: Education Edition (M:EE)

1) What is Minecraft: Education Edition (M:EE)?

Minecraft: Education Edition (M:EE) is a game-based learning platform by Microsoft that promotes creativity, collaboration and problem solving in an immersive digital environment.

As part of EMA's partnership with Microsoft Singapore, students can leverage the M:EE platform to build and showcase their vision for a sustainable Singapore in 2050, while learning about Singapore's Energy Story - 4 switches, supported by Energy Efficiency.

2) If I do not have an existing Minecraft: Education Edition (M:EE) license, where can I obtain complimentary trial licenses for Minecraft: Education Edition (M:EE)?

You will be required to create a free Office 365 education account for your school using the .edu domain.

For a step-by-step guide to activate the complimentary trial licenses, you may refer to the guidebook at <https://www.poweringlives.gov.sg/> and your teacher or ICT educator would be able to assist you.

Tips and Resources

1) What is Demand Side Management?

Demand Side Management (DSM) refers to initiatives and technologies that encourage consumers to optimise their energy consumption by managing their electricity demand.

The benefits of DSM are two-fold: first, consumers can reduce their electricity bills by adjusting the amount of electricity they use at different timings. Second, the energy system can benefit from the shifting of energy consumption from peak to non-peak hours. This shift from periods of high to low energy demand stabilises the electricity market, reduces price volatility, lowers the cost of electricity, and generates overall energy savings for the country.

DSM can also help to establish reliability and robustness of our energy system. For example, as Singapore transitions to solar energy to meet our climate goals, DSM can be used as a multi-purpose power-system resource that enhances the capacity of Singapore's energy system to cope with intermittency of electricity generated from solar energy.

2) Are there any free resources that I could access to learn more about Singapore's Energy Story and Minecraft: Education Edition (M:EE)?

For more information, please visit

- a. Singapore's Energy Story:
<https://www.beyondthecurrent.gov.sg/>
- b. Demand Side Management:
https://www.ema.gov.sg/Demand_Side_Management.aspx
- c. Minecraft: Education Edition (M:EE):
<https://www.empirecode.co/learning-resources/>

Contact Us

You may contact us if you have queries via EMA_HumanCapital@ema.gov.sg.