

Education Bureau Circular Memorandum No. 24/2025

From : Secretary for Education To: Heads of Government, Aided (including
Special schools), Caput and Direct Subsidy
Scheme Secondary Schools

Ref : 1125-2015-8075-9030-00009-001

Date : 13 January 2025

HydroRace Challenge 2025

Summary

This circular memorandum aims to invite schools to participate in the “HydroRace Challenge 2025” co-organised by the Education Bureau (EDB) and the Electrical and Mechanical Services Department (EMSD).

Background

2. EDB has been promoting students’ motivation and interest in STEAM (Science, Technology, Engineering, the Arts, and Mathematics) and enhancing their understanding in engineering and innovation and technology through diversified and interesting educational activities. In this school year, we collaborate with relevant government departments to organise the “Innovative Engineering Education Programme for Primary and Secondary Schools” (2024/25). EDB also issued a circular memorandum (EDBCM No. 224/2024) earlier to inform the schools about the arrangement of related activities*.

3. EDB and EMSD co-organise the “HydroRace Challenge 2025” as one of the activities in the “Innovative Engineering Education Programme for Primary and Secondary Schools” (2024/25). This Challenge offers our students a STEAM learning experience on hydrogen fuel, including facilitating their understanding of the development of hydrogen energy as a strategy to achieve carbon neutrality and the importance of developing new energy sources with low carbon emissions, and promoting education for sustainable development.

* Previously known as “Low Carbon Energy Toy Car Competition” under “Innovative Engineering Education Programme for Primary and Secondary Schools (2024/25)”

Details

4. The above-mentioned competition will be held on 15 March 2025 at the EMSD headquarters. The target participants of the competition are secondary school students. Each secondary school can nominate one team comprising three to five students to join the competition and submit a proposal. The shortlisted teams will be invited to participate in workshops on hydrogen energy prior to the competition. The competition will offer one award each for champion, 1st runner-up and 2nd runner-up, and shortlisted teams that demonstrate good performance and meet the standards will receive merit awards. Details will be announced through an online briefing.

5. The online briefing will be held on **20 January 2025 at 4:00 p.m.** to enable schools to understand more about the arrangements of the competition. For the details of the online briefing, please visit the weblink below:

Meeting Link: <https://emsd.gov->

[hk.zoom.us/j/92290526666?pwd=JpLikSAYUAUIN5ckoGw1Do0Df0bX8A.1](https://emsd.gov-hk.zoom.us/j/92290526666?pwd=JpLikSAYUAUIN5ckoGw1Do0Df0bX8A.1)



Application

6. Interested schools please complete the application form (Appendix 1) and submit to Science Education Section via fax (2914 0670) or email (science@edb.gov.hk) **on or before 27 January 2025 (Monday)**. The team should submit a proposal (Appendix 2) to Science Education Section **on or before 10 February 2025 (Monday)**. EDB and experts from EMSD will jointly review the proposals to finalise the school shortlist. Successful shortlisted schools will be arranged to participate in workshops and pre-competition testing. For details, please refer to <https://emya.emsd.gov.hk/>



Enquiries

7. For enquiries about applications, please contact Ms TAM of the Science Education Section, Curriculum Support Division, Education Bureau at 3698 3449. For enquiries about details of the competition, please contact Ms LAU of the Technical Secretariat, the Electrical and Mechanical Service Department at 2808 3246.

Dr William LAM
for Secretary for Education

c.c. Heads of Section – for information

HydroRace Challenge 2025 Application Form

Please return this form **on or before 27 January 2025 (Monday)**

To: Science Education Section, Education Bureau (Attn: Ms TAM)

Fax Number: 2194 0670 or email: science@edb.gov.hk

Information of the Teacher-in-charge:

Name: _____ (English) _____ (Chinese)

Post: _____

Email: _____ Mobile phone number: _____

Name of Participating Team:

Information of Participating Students

	Name (Chinese)	Name (English)	Grade level
1			
2			
3			
4			
5			

School Information:

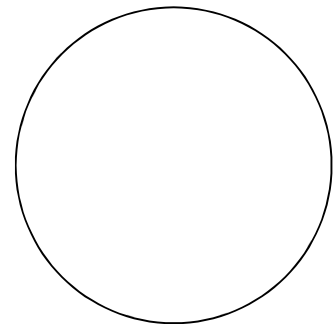
Name of School: _____

School Tel.: _____

Signature of Principal: _____

Name of Principal: _____

Date: _____



School Chop

HydroRace Challenge 2025 Proposal

(Please return this form **on or before 10 February 2025 (Monday)**)

To: Science Education Section, Education Bureau (Attn: Ms TAM)

Fax Number: 2194 0670 or email: science@edb.gov.hk

(The information submitted is limited to this page)

Name of School: _____ Email address: _____

Name of Participating Team: _____

Explain the working principle of a hydrogen fuel cell:

Introduce the design of your hydrogen car and explain how the design facilitates travel for a longer distance and/or at a higher speed: