

**MEDIA RELEASE** 

26 October 2016

## Five Learning Journeys for Students to experience Real-World Learnings beyond the Classroom

As part of five new learning journeys launched by the Energy Market Authority (EMA), students can now experience real-world applications of science and engineering concepts they learn in the classroom. Known as the Powering Lives Trails (PLTs), these are the first-ever experiential learning journeys that take students behind the scenes to energy facilities that are not normally open to the public, so that they can see for themselves how we power Singapore's economy and keep our lights on. The PLTs aim to bring engineering concepts to life and interest students to seek out a career in the Power sector.

2. The trails were designed to cover different aspects of the Power sector - from generation to transmission and distribution of power supply. Details of the five trails are as follows:

- a. "Gas it Up": Marvel at Singapore's only Liquefied Natural Gas (LNG) Terminal on Jurong Island, where gas to power Singapore is imported. This critical infrastructure enhances Singapore's energy security by enabling us to source for gas globally;
- b. **"Powering Singapore":** Discover the Sembcorp Cogen @ Banyan Plant on Jurong Island, to understand how electricity and steam are produced using gas;
- c. "Clean and Green": Explore the Pulau Ubin Micro-grid Test-bed on Pulau Ubin, for a preview of how solar-storage-smart grid technologies are transforming the grid and how the lives of end-users, who previously depended on noisy diesel generators, are being changed;
- d. **"Behind the Scenes":** Learn the challenges of managing the nerve centre of Singapore's power system at EMA's Power System Control Centre; and
- e. **"Keeping it Cool":** Enter the world's largest underground district cooling system with a visit to the Singapore District Cooling Plant at Marina Bay, which is keeping buildings cool at the Marina Bay business district.

3. On the efficacy of such learning journeys, Ms Elissa Goh, Chairperson of the Geography Teachers' Association of Singapore, said: "This is an innovative effort by EMA to bring to life geographical and scientific concepts for our students."

4. Ms Goh and 31 other geography educators visited the Micro-grid Test-bed on Pulau Ubin in September as part of a trial run of the PLT. She added that the PLT "is a very enriching and relevant programme for students and educators to understand Singapore's Energy Trilemma and energy ecosystem".

5. More than 500 students from the Institutes of Higher Learning (IHLs) and educators have been invited over the last six months to help plan, provide feedback and develop these PLTs (See Annex for more information on the PLTs).

- 6. IHLs interested in participating in the PLTs can:
  - Visit www.poweringlives.sg/events/explearningjourney
  - Email EMA\_HumanCapital@ema.gov.sg for more information

## FACT SHEET ON THE POWERING LIVES TRAILS

	The PLTs are the first such structured, experiential learning journeys targeted at students, teaching staff as well as education and career guidance (ECG) officers from the Institutes of Higher Learning (IHLs), which includes the Institutes of Technical Education, polytechnics and universities.
About the Powering Lives Trails (PLTs)	The PLTs provide participants with an out-of-the-classroom learning experience, and aim to:
	a. Cultivate early interest among youths about exciting
	<ul> <li>developments and opportunities within the Power sector;</li> <li>b. Create an understanding of the application of science, technology, engineering and mathematics (STEM) concepts to solve real-world operational challenges; and</li> <li>c. Nurture greater awareness about a career in the Power sector.</li> </ul>
PLTs Programme	<ul> <li>The learning journeys encompass visits to five locations in the Power sector, namely:</li> <li>a. The Singapore LNG Terminal on Jurong Island;</li> <li>b. The Sembcorp Cogen @ Banyan Plant on Jurong Island;</li> <li>c. The Micro-grid Test-bed on Pulau Ubin;</li> <li>d. The Power System Control Centre; and</li> <li>e. The Singapore District Cooling Plant at Marina Bay</li> </ul>
	Each learning journey is a half-day session and comprises an introductory presentation on Singapore's energy story, a career personality profiling activity, a site visit, an interactive learning activity and a networking/Q&A session.
Queries/Registration	The recommended target audience for the PLTs are IHL students, teaching staff and ECG officers. Queries and registration requests can be sent to EMA_HumanCapital@ema.gov.sg. Registration details should include the following*: a. Institution/organisation, course of study and year; b. Preferred choice of learning journey; and c. Preferred date of visit. *All sessions are subject to availability.