

# Youth Energy Movements in Asia

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Rising energy demands are a real issue we face today, the Asian Development Bank has estimated that energy demands will double in the Asia and Pacific region by 2030. There is now an urgent need to increase energy supply while also considering the long term impacts of this change. How can we reduce emissions while at the same time meet rising energy demands? Rampant growth would only lead to depleting fossil fuels, rising carbon emissions and rising global temperatures. In the pursuit of higher standards of living, are we damaging the earth irreversibly? Implementing sustainable growth and clean technology while also ensuring the financial and economic feasibility of these projects is one of the main challenges faced by today's generation. Below is the writing by Mr. Kittithat Promthaveepong, one of the student leaders of Energy Carta in 2015.

Rewinding back to 7 years ago, there was not much traction on the youth clean technology and sustainability movements in Asia. A group of final year students from the National University of Singapore (NUS) who had spent a year abroad in different entrepreneurial hubs across the globe realized that this gap was present in Asia. They shared a common passion for renewable energy and decided to start a non-profit which was built in an entrepreneurial fashion. This led to the formation of Energy Carta (EC) in early 2008.

Since then, EC has been involved in creating platforms where students can become connected with the industry. True to its entrepreneurial roots, EC has explored many different channels such as conferences / games / business case competitions / site visits to determine the best method of engaging students and informing them of different opportunities in this industry. Two flagship projects "Changing the Game: Southeast Asia" and "Energy Trail" were born from this exploration.

"Changing the Game: Southeast Asia" (CtG) is unique element which Energy Carta has in store for the participants. In a board game format with LEGO® blocks and change cards, players take the roles of Citizens, Governments, Businesses and NGOs to implement a variety of energy policies that will change a pre-given 2030 Business as Usual baseline scenario. Players take into account future needs vs. present needs, reduce emissions, diversify their fuel supply mix, adopt electric vehicles, trade technologies, negotiate for pan-regional solutions and work together (or against each other) to Change the Game. Since its inception in 2012, it has been played in many different events such as the Asian Youth Energy Summits organized by Energy Carta and the Energy Forum 2013 in collaboration with the Energy Market Authority.



Figure 1: CtG at the Asian Youth Energy Summit 2015 (Left) and the Energy Connect Forum 2013 (Right)

“Energy Trail” is an experiential learning trail featuring locations or sites which represent various energy and sustainability initiatives in Singapore. Energy Trail provides youth the opportunity to learn about the energy and sustainability sector in Singapore. The trail encompasses locations or sites around Singapore which are representative of various energy and sustainability topics. Past trails have ranged from a university campus such as the National University of Singapore (NUS) to companies or organizations in the business of sustainable product innovation such as the Solar Energy Institute of Singapore (SERIS) to site visits to traditional power plants and renewable energy sites such as the Phoenix Solar installation site at the Singapore Sports Hub.



**Figure 2: Visits to the Jurong Clean Tech Park (Left) and SERIS (Right)**

There was no magic behind this approach; it was merely the effort and time put in by a group of students who wanted to see change. This method is not limited to Singapore. It is possible for student energy groups in the region to do the same and invoke change. According to the International Energy Agency’s Southeast Asia Energy Outlook in 2013, Thailand has the 2<sup>nd</sup> highest energy demand in Southeast Asia and just a little over 20% of the region’s consumption. At the same time, the International Renewable Energy Association also reported that Thailand has high potential for Solar, hydro, and wind energy.

Students, and the youth in general want a sustainable and clean future. Yet currently there is a gap in the knowledge of how they can contribute. Usually, issues of climate change, energy security and sustainable growth are very abstract and hard to digest which can turn away interested students. By connecting and raising awareness on these issues of energy and sustainability, it is possible to provide these students with the knowledge they need to make informed decisions and contribute towards a cleaner future.

I believe there is no clear path forward, but gathering ideas together with fellow students and getting advice from mentors or professors is a great place to start off. It is only through passion and sincerity that we will be able to make a difference. Approach the world with an open mind and together let us move towards our sustainable future. It all starts with a spark of imagination, which grows into an idea. Be bold and put your ideas out there; take failure in stride and learn from others. Patience and passion will then make it into a reality.