Lee Kuan Yew Centre for Innovative Cities

cordially invite you to a Brown Bag Lunchtime Talk

Three research questions on innovation in clean energy technologies

Varun Sivaram
Philip D. Reed Fellow
Science and Technology at the Council on Foreign Relations

Date:	Wednesday, 16 May 2018
Time:	12.00 pm to 1.00 pm
Venue:	~~Lee Kuan Yew Centre for Innovative Cities, Meeting Room 21~~ **Think Tank 19** ~~Building 3, Level 2~~ **Building 2, Level 3** Singapore University of Technology and Design 8 Somapah Road, Singapore 487372 *(see overleaf for map)*

Synopsis

1. How can countries set up institutions to support innovation in clean energy technologies, given the dearth of private sector capital to solve really hard problems, like commercializing next-generation nuclear reactors? Are institutions like ARPA-E in the US or the Fraunhofer Institutes in Germany good models?

2. What does a realistic global decarbonization pathway look like? Some argue that the best way to do it is to electrify the entire economy (electric vehicles, electrification of industry, etc.) and reduce emissions in the upstream power sector by 80 percent by mid-century. Others argue that we should focus on clean fuels to displace petroleum because electrification is infeasible in many cases.

3. How can digitalization advance clean energy systems rather than dirty ones? The danger of some digital innovations, such as autonomous vehicles, is that emissions might actually increase. However, with appropriate public policy, digitalization can be a force for decarbonisation—it just will not happen by itself.

About the Speaker

Varun Sivaram is the Philip D. Reed Fellow for Science and Technology at the Council on Foreign Relations. He teaches “Clean Energy Innovation” at Georgetown University, is a Fellow at Columbia University’s Centre for Global Energy Policy, and serves on Stanford University’s energy and environment boards. He has advised both the mayor of Los Angeles and the governor of New York on energy policy and was formerly a consultant at McKinsey & Co. He holds a PhD in condensed matter physics from Oxford University, where he was a Rhodes Scholar, and undergraduate degrees in physics and international relations from Stanford University. PV Magazine has called him the "Hamilton of the solar industry," and Forbes Magazine named him one of its 30 under 30 in 2017.

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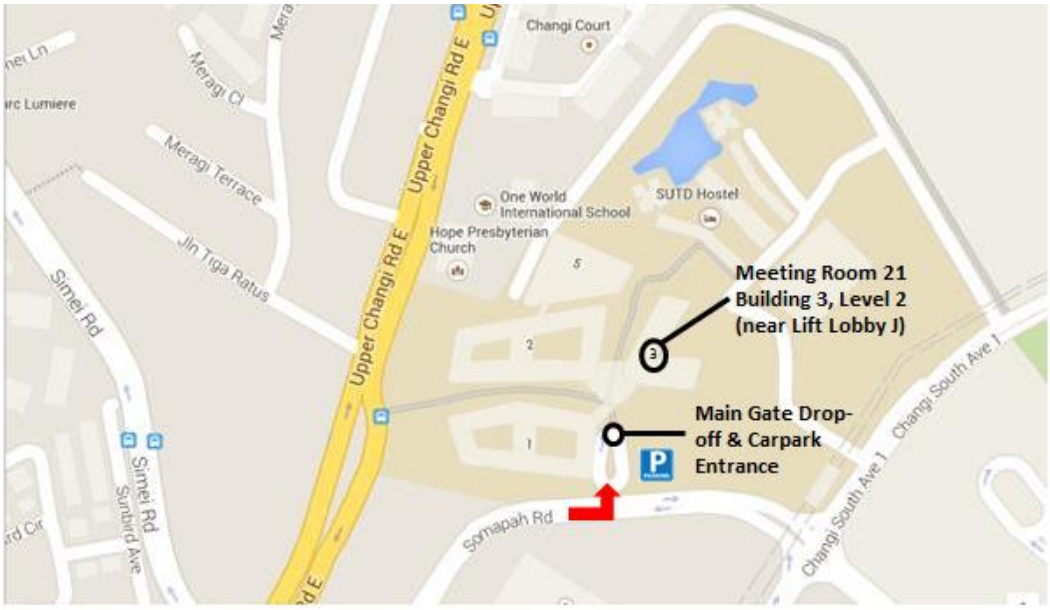

BY TRAIN

Alight at **Upper Changi MRT Station (DT34)** and take Exit B – our campus will be on your left when you exit the station

Alight at one of the bus stops along Upper Changi Road East and walk to our Campus:

BY BUS

- B96041: Upper Changi Road East, Before Tropicana Condo. Service No: 2, 5, 24
- B96049: Upper Changi Road East, Opposite Tropicana Condo. Service No: 2, 5, 24
- B96449: SUTD - Along Somapah Road. Service No: 20
- B96441: Opposite SUTD - Along Somapah Road. Service No: 20

BY CAR

- Take Exit 2B on ECP
- Take Exit 4A on PIE
- Take Exit 1 on TPE

Turn into Somapah Road via Upper Changi Road East. The entrance is on the left. Carpark charges apply.

Click here for the map.

LEE KUAN YEW CENTRE FOR INNOVATIVE CITIES

The **Lee Kuan Yew Centre for Innovative Cities (LKY CIC)** at the Singapore University of Technology and Design (SUTD) focuses on the integrated use of technology, design and policy to study solutions for cities. The LKY CIC works with architects, designers, engineers, social scientists, and urban planners to understand the complex and critical issues of urbanisation, and to explore sustainable and innovative urban solutions.