# I Squared Portfolio Companies for ASIA Panel (Outline)

## HEXA

**About HEXA:** HEXA platform is set up to focus on developing, constructing and subsequently operating renewable energy facilities across solar and other renewable energy technologies, with the aim to invest up to \$300 million in Taiwan.

## Taiwan continues to be one of the most attractive renewable energy markets

- Mandated national energy policy of nuclear plants decommissions and renewable energy promotion
- Actual installed capacity of solar c.4.3GW is far behind the target 20MW by 2025
- Favorable renewable energy regime attractive FIT tariffs, guaranteed off-take by TaiPower (AA rated), no curtailment, etc.

## I Squared Capital is the market leader in many instances, having set many transaction precedent

- Gained hard-earned experience from several market firsts, e.g. world's largest floating solar financing, establishment & exit of Chenya Energy, operational experience from previously completed projects, etc.
- Built on the back of these experiences to launch HEXA with a renewed focus
- Experience across multiple technologies (floating, ground-mount, rooftop, etc.), historical engagements with regulators and local stakeholders allows us to apply lessons learnt from diversified precedent projects
- Land in urbanized Asia is limited and floating solar solves land constraint issues

## Cube Highways

**About Cube Highways:** Cube Highways, a portfolio company of I squared Capital, invests in road and highway projects, along with other select infrastructure sectors in India. Cube Highways group has a portfolio of 28 highways with nearly 8,900 lane-kilometers across India.

### Theme Chosen: Technology in Infrastructure

### Summary:

- 1. Cube Highways uses innovative materials and construction methods that are monitored and supervised by an elaborate and multi-disciplinary Project Management Team.
  - a. On the road assets that experience heavy axle loads, high volume of commercial traffic and extreme temperature conditions, Cube, for the first time for a Highway in India, considered <u>Highly Modified Asphalt (HiMA) material</u> for overlaying as it is designed to enhance rutting and cracking resistance on the roads. This saves the asset from experiencing premature failures.
  - b. On the road assets that experience high axle loads, Cube considered <u>Stone Matrix Asphalt</u> (<u>SMA</u>) for overlaying as SMA is a gap graded rut resistant mix which uses stone-on-stone contact for load transfer and durability. SMA improves pavement life by preventing rutting and hence provide good level of service to road users.
- 2. Cube Highways uses <u>future-focused</u>, <u>& technology-driven operations</u> to ensure smooth movement of traffic at toll plazas, quick response to incidents, etc. Employment of web and mobile-app-based tools for real-time reporting and resolution of Operation and Maintenance (O&M) issues help a lot in time-saving.
  - c. <u>RoadAID (</u>Realtime O&M Monitoring Toll) RoadAID is a centralized platform which allows O&M Team and Managers to real-time report and monitor O&M activities. RoadAID App allows site team to report pavement defects, incidents and accidents, issues with road assets, etc.
  - d. <u>Falling Weight Deflectometer (FWD)</u> Cube is the first to use FWD in India for testing Highway pavements. Falling Weight Deflectometer (FWD) is a state-of-the-art pavement testing unit for determining structural parameters of the pavement. Based on Cube's experience, FWD has now become a norm in India for testing Highway pavements
  - e. Data Centre for Monitoring Toll Plazas and O&M Cube Highways has a state-of-the-art data center with a 750sqft video wall; where 24\*7 streaming of toll plaza feed is monitored. It helps

in minimizing invalid exemptions and misclassifications of toll traffic. It also helps in continuous monitoring of Incident Management Vehicles Movements and helps in minimizing unusual running. It also helps in monitoring Toll Management System (TMS) equipment at sites through surveillance system. Live audio feed is processed to identify the toll collectors behavior.

Through these means, Cube Highways has helped maintain quality of road / highway infrastructure in India.

### **Lightstorm**

**About Lightstorm:** Lightstorm platform vision is to build a fiber based carrier neutral datacenter to datacenter platform across emerging Asia, i.e. in countries with strong data demand but lack of quality infrastructure supply. SmartNet the first of such networks being built in India, is a carrier neutral, low latency, high availability and high capacity linear DC to DC platform. The network will connect all key leading internet infrastructure locations (CLS, data centers, high bandwidth PoPs, CDN locations) into one secured network across the major economic hubs in India. Lightstorm is thus building a robust foundation of digital infrastructure to create new sources of value and differentiation to businesses.

#### Theme Chosen: Technology in Infrastructure

#### **Contribution to the theme:**

With over 1.4B population, 765M internet users (world's second highest), overall Teledensity increase from 18% in 2016 to 87% in 2021 and an expanding focus on the digital delivery of services, the data consumption in India and digitization of the economy is set to increase further. The Indian ICT Infrastructure is at an inflection point where the demand is outstripping supply which became further evident during the pandemic as remote-work became the norm. The cloud adoption which accelerated during this period has also created an enormous strain on the traditional enterprise networks running on current fiber plants that are primarily designed for mobility B2C applications and are unable to deliver enterprise cloud applications. Enterprise demand has also shifted from traditional enterprises to a new set of high bandwidth buyers like OTTs, data center players and MNC tech players requiring low latency and high availability networks.

Lightstorm network infrastructure is designed to meet these current gaps in Indian market by providing utilitygrade resilient fibre network to improve service quality, latency predictability and reduce network flaps. Its linear point to point three path connectivity is aimed to reduce network latency and ensure high availability vs the ring architecture of legacy telco networks in India.

Lightstorm is thus helping solve the challenges in traditional digital infrastructure and fill the lack of adequate good quality fiber infra and enterprise-grade ICT Infrastructure in emerging Asia.

#### Taiwan Cube Energy

**About Taiwan Cube Energy:** Taiwan Cube Energy (TCE), the island's first industrial waste-to-energy (WtE) solutions provider, seeks to address Taiwan's pressing waste disposal needs.

- 1. The project targets increasing non-hazardous, high calorific industrial waste in Taiwan driven by
  - a. aging municipal fleets which require long time to upgrade and retrofit,
  - b. more stringent waste disposal policy that reduces illegal storage or dumping, and
  - c. waste import ban by China and SEA since 2018 significantly reduces waste export volume
- 2. Different from traditional municipal incinerators, we have a pre-treatment process to screen out inflammable materials and convert waste into homogeneous pallets for better combustion. The inflammable materials such as metals or rocks are recycled.
- 3. The design of the project has high energy conversion efficiency of >25% and is eligible for Feed in Tariff via 20 year PPA with Taipower. The project also explores opportunities in the same industrial park to use residual heat (which is usually released to the air) for cooling purpose which will further enhance the conversion ratio.

- Project emission complies with European standard which is higher than local regulation requirement
  Bottom ash and fly ash after stabilization will also be used for construction material manufacturing.