

# Solutions for Sustainable Urbanisation

*Presentation to The Templeton Emerging Markets Group*

Delivered by:

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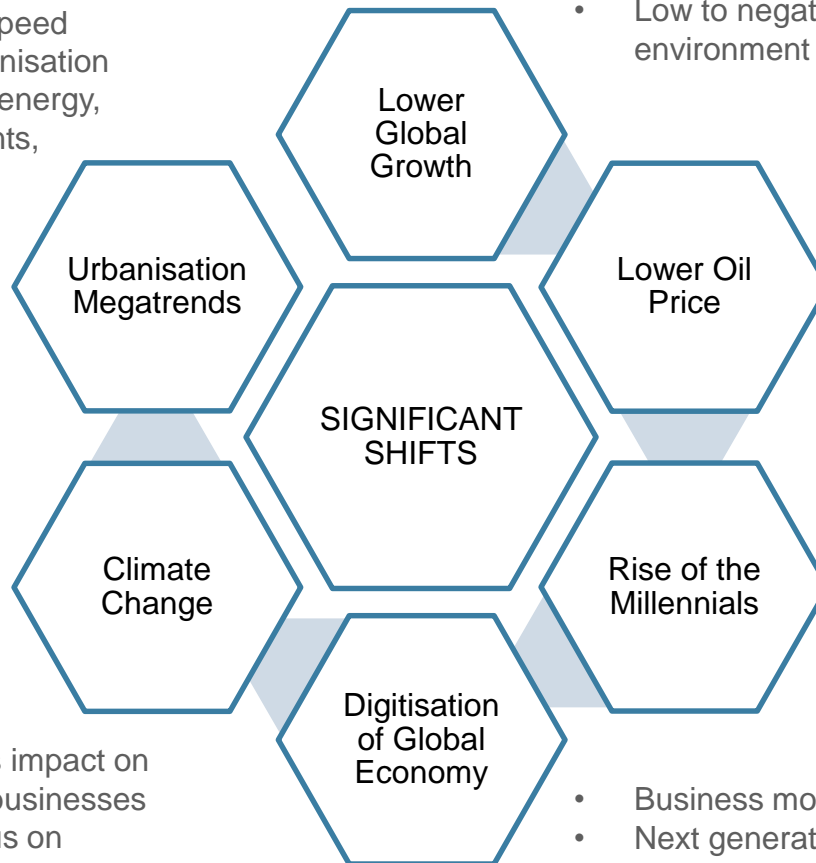
24 October 2016

# Disclaimer

*This release may contain forward-looking statements which are subject to risks and uncertainties that could cause actual results to differ materially from such statements. Such risks and uncertainties include industry and economic conditions, competition, and legal, governmental and regulatory changes. The forward-looking statements reflect the current views of Management on future trends and developments.*

# Evolving External Environment

- Unprecedented speed and scale of urbanisation
- New demand for energy, clean environments, urban living and connectivity.



- Low to negative interest rate environment

- Shale oil revolution
- Slowing global growth
- OPEC's declining influence

- Changes in the market place and workforce

- COP 21 and its impact on countries and businesses
- Increasing focus on renewable energy

- Business models challenged by tech-enabled economy
- Next generation of robotics and artificial intelligence
- Presents both disruptions and opportunities

# Urbanisation: Unprecedented Trends



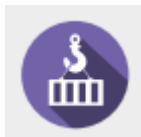
65% of global population will live in cities by 2040.



2.2 billion tonnes of annual municipal solid waste generated by 2025.



44 trillion gigabytes of data will be created and copied by 2020 - as many stars in the universe.

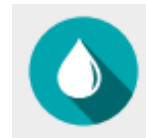


E-retail revenues will grow to US\$ 3.4 trillion by 2019, up from US\$ 1.55 trillion in 2015.

Global energy demand will rise 25% from 2014-2040:



- 40% of demand growth will be met by natural gas



- Oil will provide a third of total energy by 2040



- Electricity demand will rise 65%, 2.5x faster than overall energy demand

Sources: ExxonMobil, Dell EMC and Statista Inc.

# Keppel is in the Business of Sustainable Urbanisation

**Our vision** is to be a global company at the forefront of our chosen industries, shaping the future for the benefit of all our stakeholders.

Keppel meets the world's sustainable urbanisation needs through key businesses in Offshore & Marine, Property, Infrastructure and Investments.



# Keppel Corporation

## Offshore & Marine



- Offshore rig design, construction, repair and upgrading
- Ship conversion and repair
- Specialised shipbuilding

## Property



- Property development

## Infrastructure



- Energy & related infrastructure
- Logistics & data centres

## Investments



- Asset management
- Property & infrastructure trusts
- Private funds
- Investments

# Keppel's Vision 2020

## Financial

- Net profit target
- Sustainable ROE
- PE ratio target
- Higher recurring income
- Institutional quality balance sheet

## People

- Strong succession pipeline
- Tapping global talent pool
- High employee satisfaction

## Stakeholders

- Develop & grow new markets, products & customers
- Focus approach in CSR

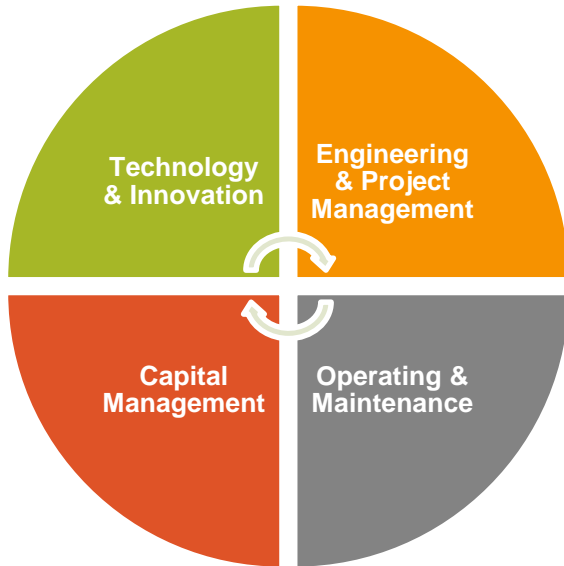
## Process

- Zero fatalities, zero audit failures
- Higher productivity
- Strong risk-management to support enterprise & innovation

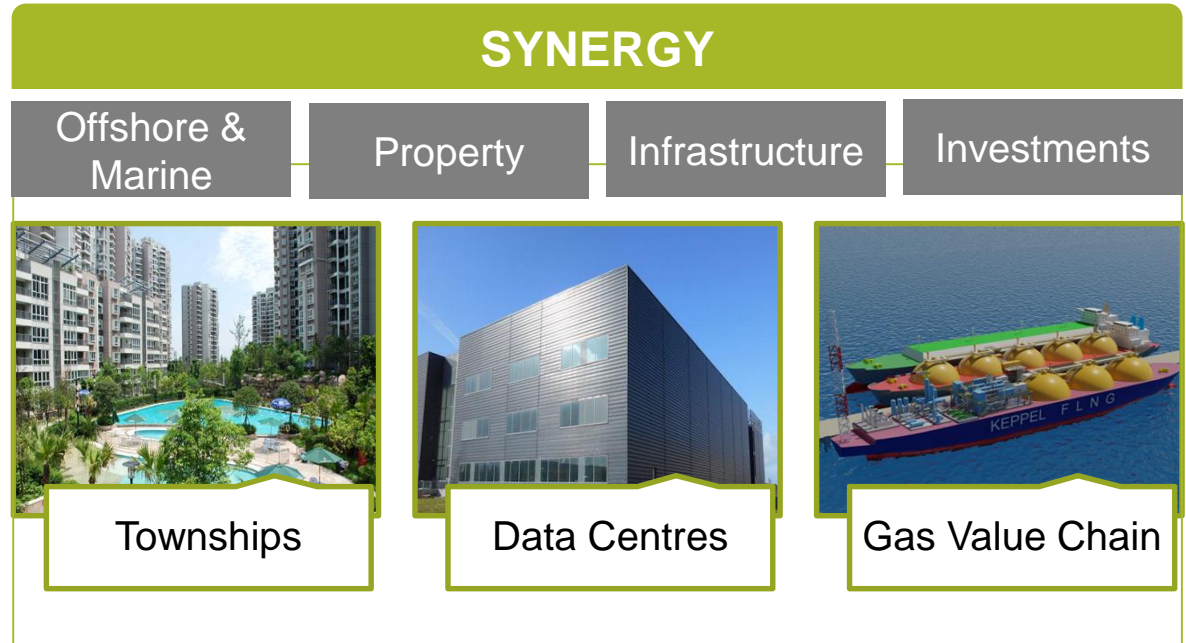


# Harnessing Strengths

Core Strengths:



Building Strong Verticals + Collaboration:

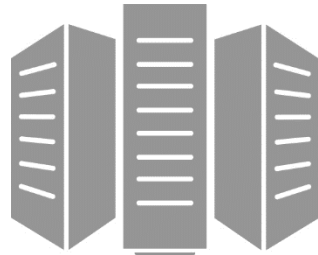




# Scaling the Value Chain *(moving to the right)*

- The world is changing; business models must also evolve from asset heavy to asset light and high value adding businesses.

*An example from the data centre industry:*



# Creating & Capturing Sustainable Value

## Capturing value:

**DESIGN  
&  
BUILD**

- Offshore & Marine
- Property
- Infrastructure
- Investments

### *Project-based*

**SALE  
&  
SERVICE**

- Newbuilds, repair & upgrading projects
- Residential projects
- WTE technology packages

### *Operation*

**OWN  
&  
OPERATE**

- Midstream assets
- Commercial properties
- Plants & data centres

### *Revaluation & Divestment*

**STABILISE  
&  
MONETISE**

- Unlocking value
- Recycling & reinvesting capital for higher returns

### *Fee-based*

**TRUSTS  
&  
FUNDS**

- Fund management
- Operating & maintenance services
- Facilities & property management

## Earnings streams:

Development profit

Operating income  
Operations fee  
Property mgt fee  
Facility mgt fee  
Repair/service fee

Capital gains

Asset mgt fee  
Operations fee  
Property mgt fee  
Facility mgt fee

# Sector Updates & Outlook

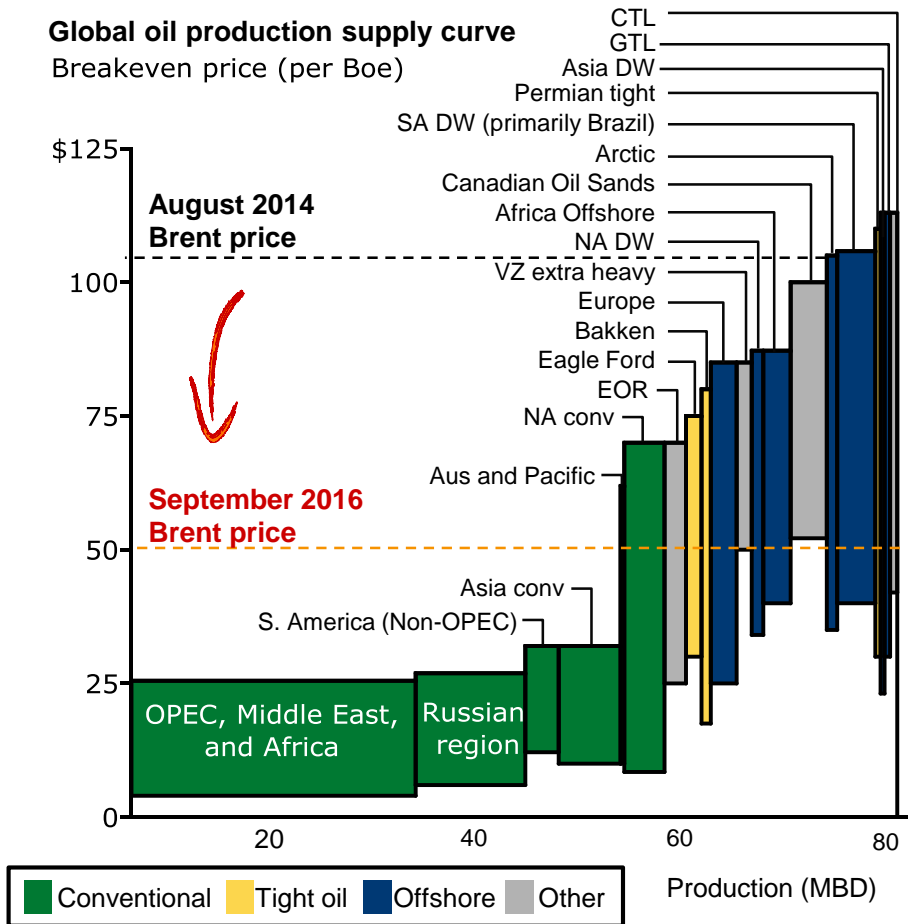


*FLNG conversion project, Golar Hilli*

## Offshore & Marine

# Offshore & Marine Outlook

## OIL SUPPLY CURVE TODAY



## OIL PRICE DYNAMICS

- **Structural changes in oil supply/demand** - flattening supply curve due to:
  - 1 Emergence of **abundant LTO** as a mid-price source
  - 2 Abundant **low-cost conventionals** – will OPEC cut production?
  - 3 Decreasing **offshore breakevens** from technology advancements
- **Demand growth** not likely to reach same levels as seen in recent past
- **Reasonable sustained price range of \$40-80/bbl** - repeat of multi-year highs of last 5 year highs unlikely in near future



# Meeting Challenges with Agility

## Rightsizing and managing costs

- Reduced Keppel O&M's overheads by 20% year on year
- Reduced direct workforce by close to 13,900 (~40%) and subcontract headcount in Singapore by 9,500 (~30%) since the start of 2015
- Reviewing yard capacity and streamlining operations



# Positioning for the Future

## Investing prudently in R&D and new capabilities

- Acquired Letourneau rig designs and after market sales/services

## Exploring other markets and opportunities

- Repurposing existing solutions for non-oil and gas projects
- Growing presence in markets for LNG, floating production and Jones Act vessels



# Providing Diverse Solutions



**Offshore  
Desalination**



**Single/Dual Fuel  
Floating Power Barge**



**PreNEx Liquefaction  
Technology**



**Specialised Vessels**



**LNG Transportation & Bunkering**



*Saigon Centre Phase Two, Ho Chi Minh City*

## Property

# Tapping Strong Urbanisation Trends

## Keppel is meeting the needs of urbanisation in Asia

- Core markets: Singapore and China
- Growth markets: Vietnam and Indonesia

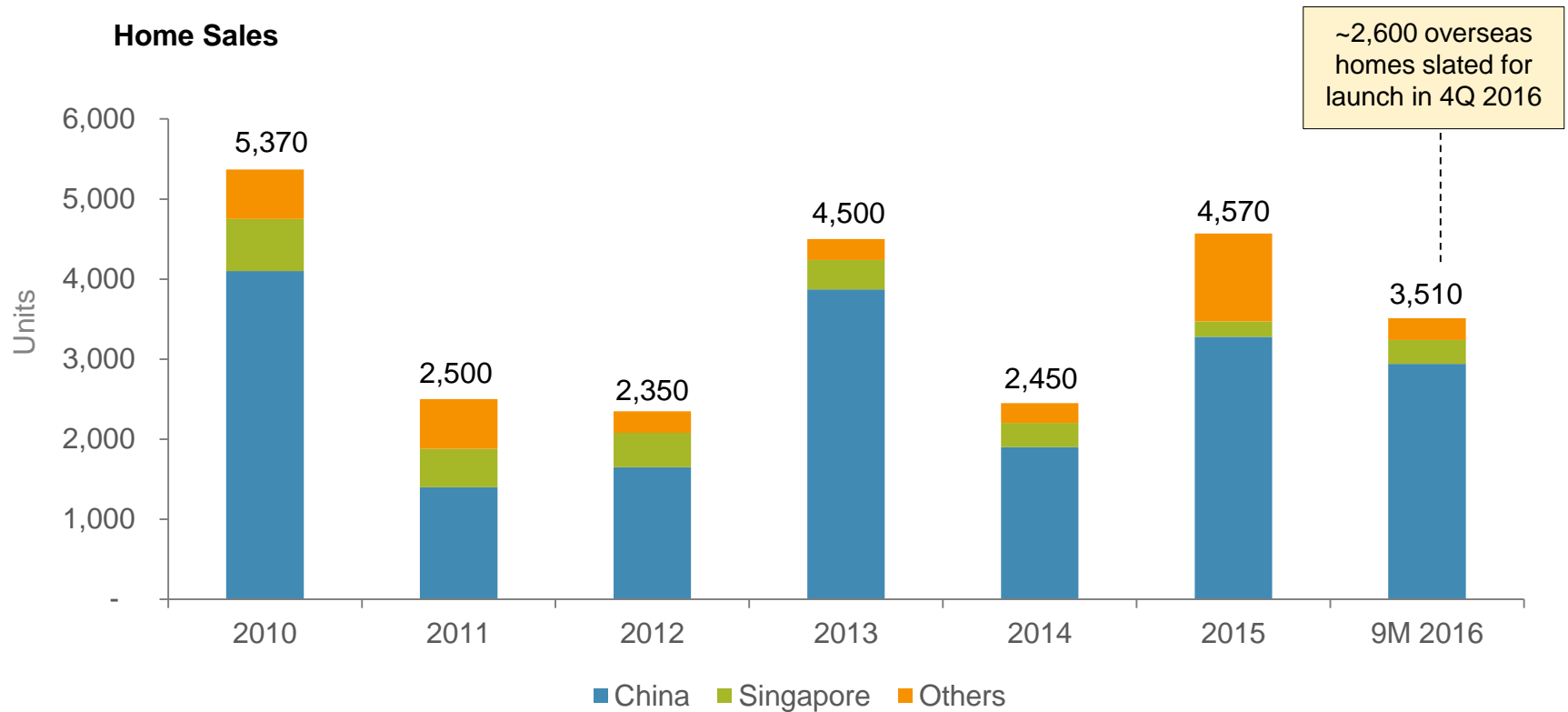
## Growth strategies

- Scale up in high-growth cities
- Selectively acquire completed assets
- Invest opportunistically in developed markets



# Resilient Demand for Homes

*Keppel Land sold an average of above 3,600 homes p.a. over the past six years.*





# Quality Homes

*Pipeline of above 70,000 homes across Asia; >16,000 units slated for launch from now till 2018.*



Waterfront Lifestyle Developments



City Centre Homes



Mixed-use Developments and Integrated Townships



# Distinctive Commercial Developments

*Above 1 million sm of commercial GFA being developed overseas.*



One Raffles Quay



Marina Bay Financial Centre



Ocean Financial Centre

- Keppel Land is Singapore's largest developer of Grade A office buildings



Saigon Centre Phase 2



Yangon Office Development



Thu Thiem Development in HCMC

- Growing commercial portfolio overseas in cities such as Ho Chi Minh City, Jakarta, Beijing, Shanghai and Tianjin

# Sino-Singapore Tianjin Eco-City



The Eco-City in 2008



The Eco-City in 2016

## A model for sustainable urbanisation in China

- Transforming 30-sq km of non-arable water-scarce land
- Collaboration between Keppel's Property, Logistics and Infrastructure businesses
- Home to 60,000 residents and 4,000 registered companies
- Sold about 24,400 residential units to-date



# Focused on Returns

**Keppel Land aims to be developer with highest return in Asia**

- ROE was 18.9% per annum over past 10 years

**Proactive capital recycling for best risk-adjusted returns**

- Eg. Divestment of Lifehub@Jinqiao in Shanghai

**Rightsize property book in response to market opportunities**



*Keppel DC Singapore 2 & 3, Singapore*

# Infrastructure

# Energy-related Infrastructure & Services

## Gas-to-Power



- Developer of power plants
- Imports and retails gas
- Generates and retails electricity

## Waste-to-Energy



- Developer of WTE plants and provider of technology packages
- Implemented more than 100 WTE projects to-date

## X-to-Energy



- Developer and operator of district cooling systems in Singapore and China

## Infrastructure Services

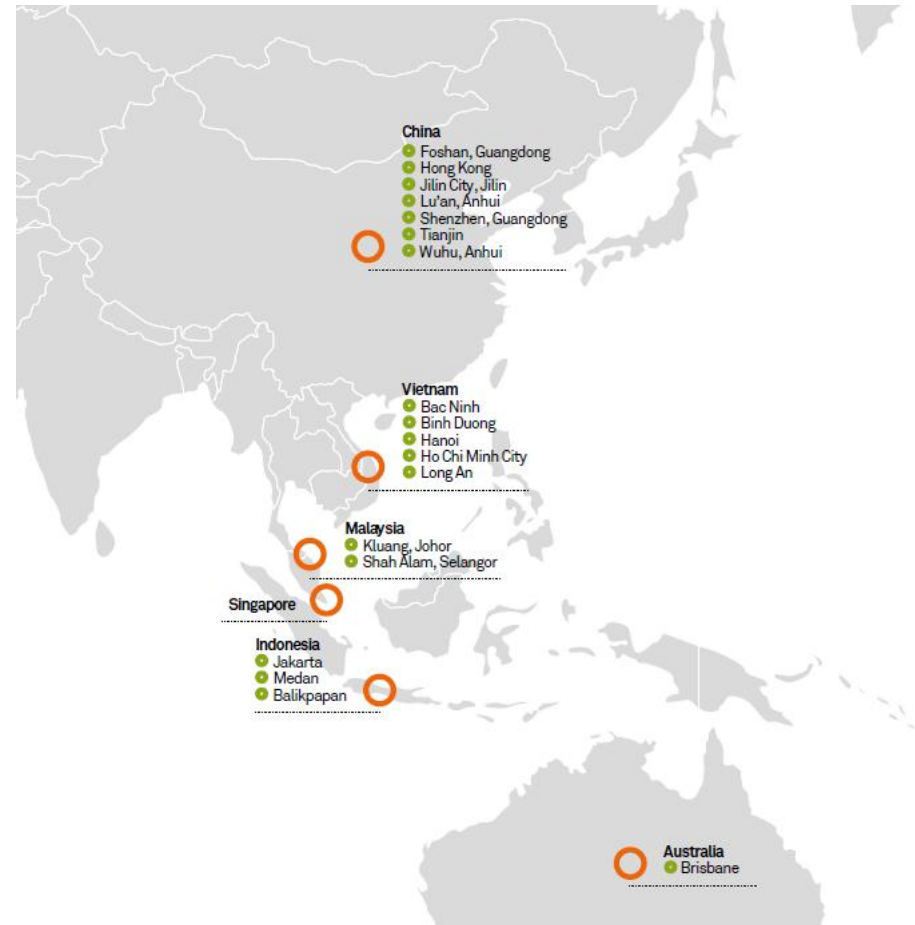


- Provides operating and maintenance services for Keppel-developed plants, including
  - Keppel Merlimau Cogen power plant in Singapore
  - Doha North Sewage Treatment Works
  - Domestic Solid Waste Management Center in Qatar

# Established Logistics Network

*Keppel T&T is meeting the growing demand for quality logistics services in Asia Pacific.*

- 3PL operations spanning 6 countries
- Present in 7 cities across China with 3PL and integrated river port logistics services
- Acquired stake in e-commerce fulfillment company, Courex to tap the growth of e-commerce sector





# Quality Data Centre Assets

*Portfolio of 15 quality data centres across Asia Pacific & Europe.*

Asia-Pacific



Keppel DC  
Singapore 1\*



Keppel DC Singapore  
2\* & 3\*\* & 4\*\*



Cyberjaya\*,  
Malaysia



iSeek\*,  
Brisbane



Gore Hill Data  
Centre\*



Intellicentre 2\*,  
Australia

European



GV7\*,  
London



Keppel DC  
Dublin1\*



Almere 1\* & 2\*\*,  
Netherlands



maincubes  
Data Centre\*,  
Germany



Data centre in  
Milan\*



Data centre in  
Cardiff\*

\* Assets owned by Keppel DC REIT, of which Keppel T&T holds a 30.1% stake through Keppel DC Investment Holdings.

\*\* 70:30 JV between Keppel T&T and Keppel Land.



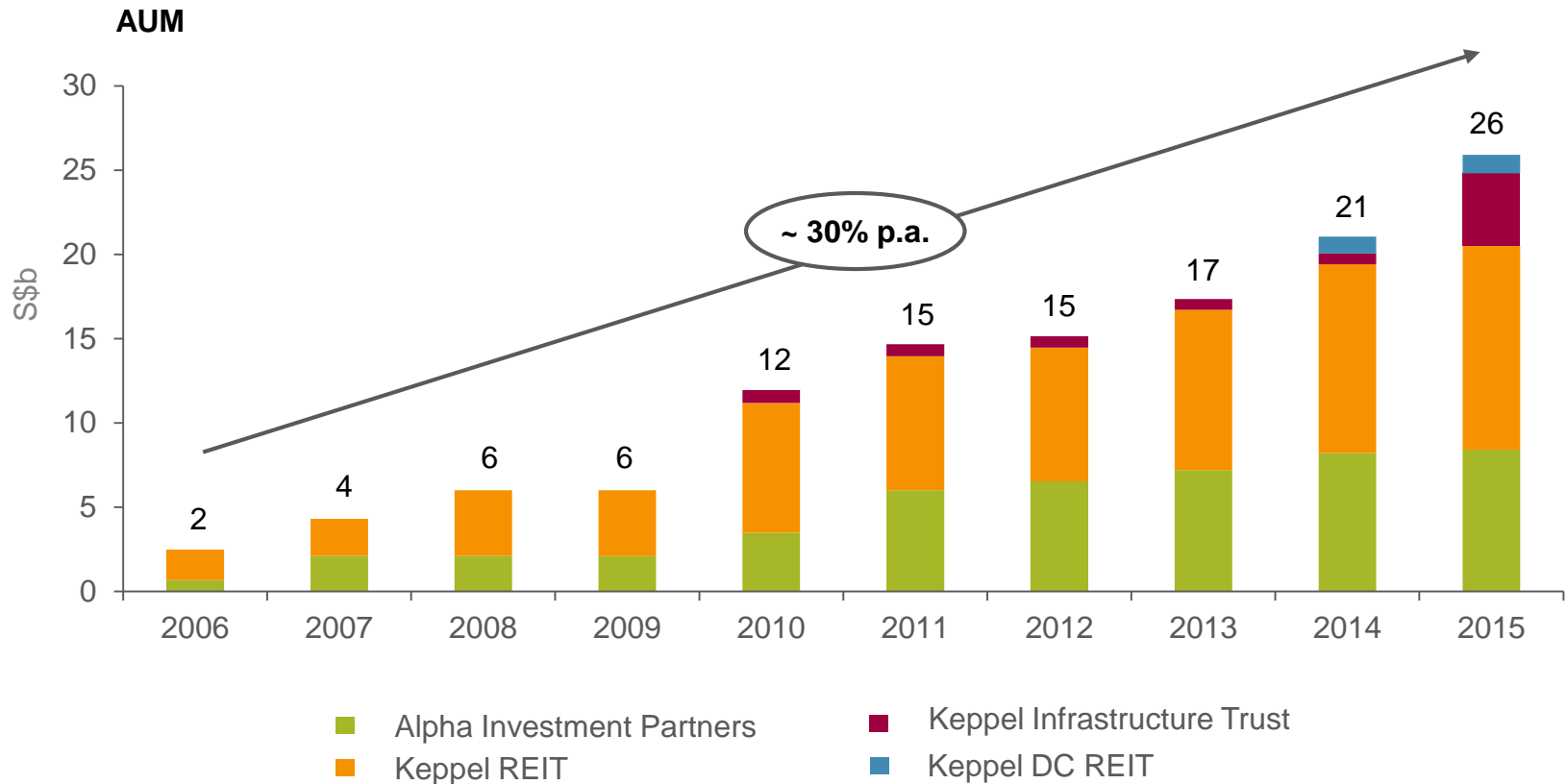
*Ocean Financial Centre, Singapore*

## Investments



# Established Track Record for Asset Management

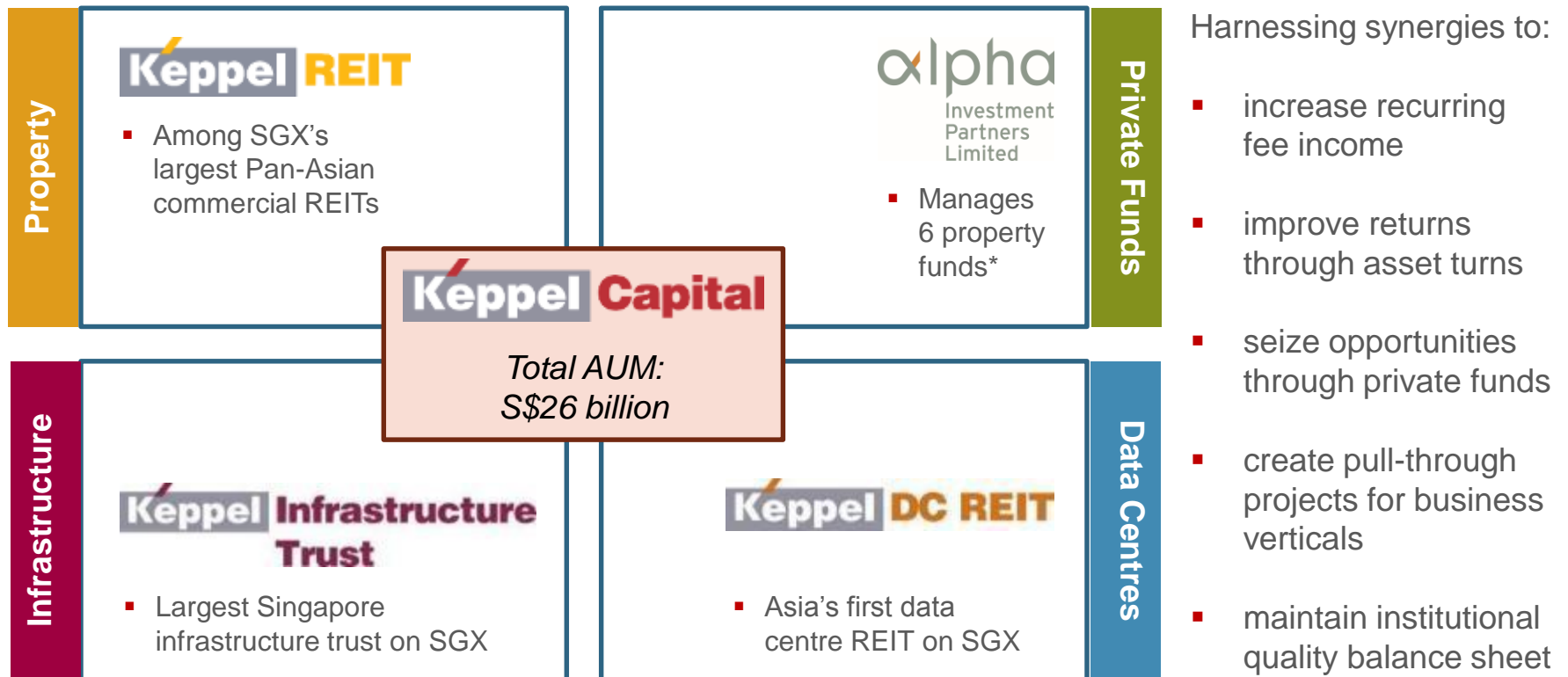
*AUM of Keppel-managed funds and trusts grew at a CAGR of ~30% over the past ten years.*





# Fueling Growth through Asset Management

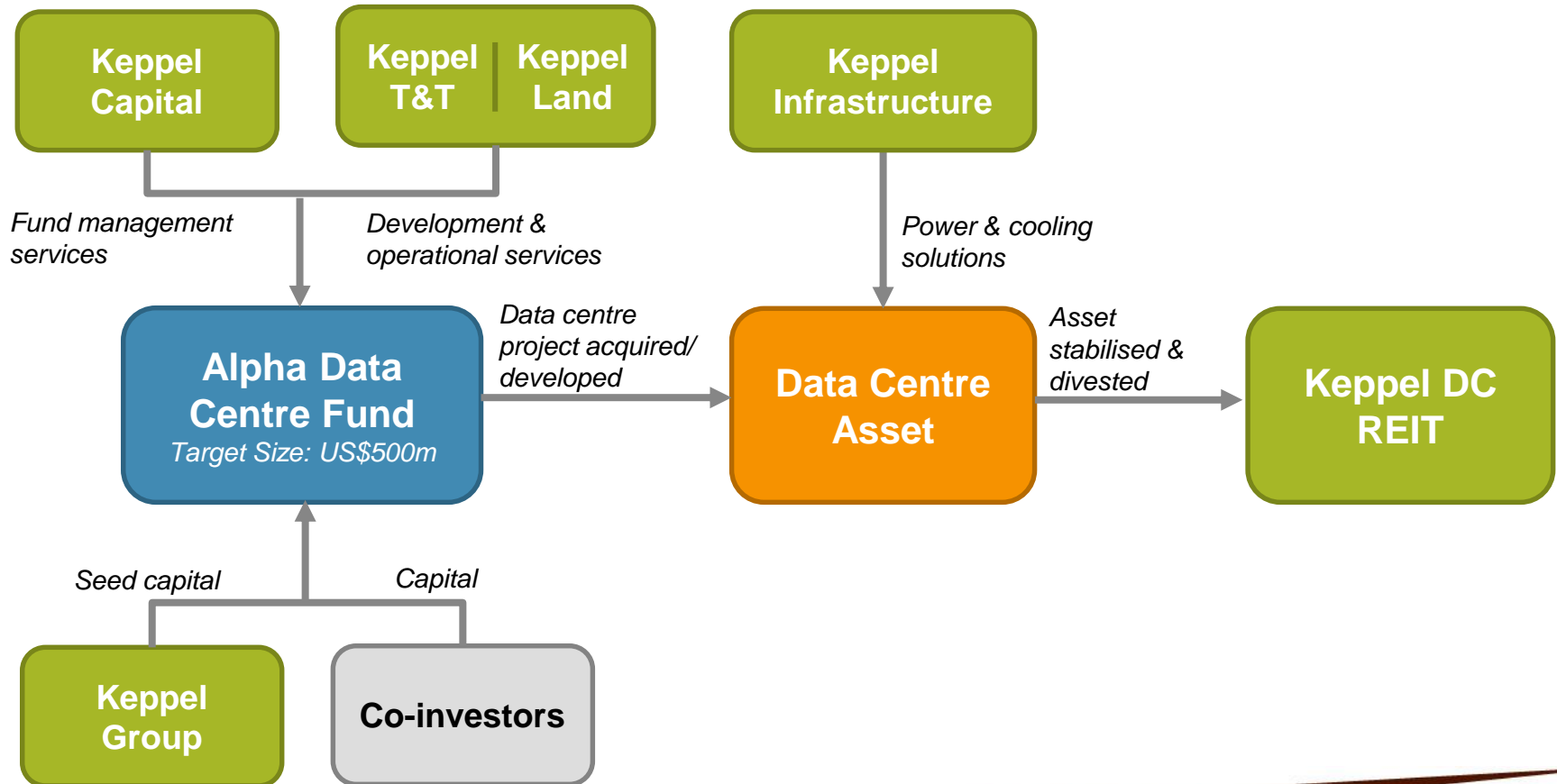
*Boosting the Group's capital recycling platform and expanding its capital base with co-investors.*



\* Excludes the newly-launched Alpha Data Centre Fund and Alpha Asia Macro Trends Fund III, which will add another US\$3.5 billion to AUM when fully invested.

# Driving Collaboration

*The Alpha Data Centre Fund harnesses synergies across the Group's business verticals to create sustainable value with capital efficiency.*



# Creating Synergies

Keppel Land | Keppel Infrastructure



## Inter-BU Sales & Services

- Keppel Land's office is powered by solar energy from Keppel Infrastructure
- Opportunities to offer similar schemes to other office tenants

Keppel Land | Keppel Capital



## Life Hub @ Jinqiao

- Monetised at US\$517m
- Achieved IRR of over 20% through active management

Keppel Capital | Keppel T&T | Keppel Land



## Alpha Data Centre Fund (Target size: US\$500m)

- Expanding capital base with co-investors to seize opportunities
- Creating pull-through for other business units

Keppel O&M | Keppel Infrastructure



## Offshore Desalination Plant

- Harnessing Keppel's capabilities to pursue opportunities

**K**eppel is in the business of sustainable urbanisation. We drive collaboration across business verticals to create and capture value from all parts of the Group.