Operating & Financial Review

We will focus on building the Infrastructure Division into a stable contributor to the Group by developing our energy-related infrastructure, logistics and data centre businesses.

Infrastructure

Profit Before Tax

$256m
as compared to FY 2014’s $452 million.

Net Profit

$207m
as compared to FY 2014’s $320 million.

Major Developments in 2015

- Delivered on Engineering, Procurement and Construction projects:
  - Handed over the Greater Manchester Energy-from-Waste (EfW) Plant in the UK.
  - Achieved substantial handover of the Doha North Sewage Treatment Works (DNSTW) in Qatar and commenced a 10-year operations and maintenance phase for its liquids stream, solid thickening and dewatering facilities.
  - Handed over the Bialystok waste-to-energy combined heat and power (WTE CHP) project in Poland.

- Completed the combination of Keppel Infrastructure Trust (KIT) with CitySpring Infrastructure Trust and injected 51% of Keppel Merlimau Cogen (KMC) into the enlarged trust.

- Keppel DC REIT acquired two data centres in Sydney, Australia and Offenbach am Main, Germany within the first year of its Initial Public Offering.

- Keppel Telecommunications & Transportation (Keppel T&T) commenced operations at its Tampines Logistics Hub in Singapore and a distribution centre in Vietnam.

Focus for 2016/2017

- Continue seeking out value-enhancing projects, leveraging the Division’s project development, engineering, operations and maintenance expertise.

- Improve operational efficiency by harnessing the strengths of an integrated gas and power business platform.

- Continue building up a portfolio of quality data centres and providing higher value services to customers.

- Enhance capability to deliver high value, efficient logistics services in Asia Pacific.
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Infrastructure

Earnings Review
The Infrastructure Division’s revenue decreased by $876 million or 30% to $2,058 million, due mainly to lower revenue from Keppel Infrastructure’s (KI) power generation plant and the absence of revenue from Keppel FMO Pte Ltd, which was disposed in 2014. Profit before tax decreased by $196 million or 43% to $256 million, as a result of losses recognised for the DNSTW, as well as the absence of gains from the sale of data centre assets by Keppel T&T in 2014, partially offset by gains from the divestment of a 51% stake in KMC and the combination of KIT and CIT. In FY 2015, the Division contributed 14% to the Group’s net profit.

Gas-to-Power
Market Review
In 2015, Singapore’s average electricity demand grew slightly at a year-on-year rate of 1.0%, compared to 3.6% in 2014, mirroring a slowdown in the growth of Singapore’s economy. The business climate in Singapore was challenging in 2015 due to overcapacities in electricity generation and gas supply as well as the arrival of new entrants into the market, all of which exerted downward pressure on profit margins.

In the electricity market, the Energy Market Authority (EMA) launched the Electricity Futures Market and announced plans to fully liberalise the electricity market to include domestic households. This would enable households to purchase electricity directly from private retailers in the second half of 2018. Keppel is readying itself to secure a broader customer base after the full liberalisation of the electricity market.

Operating Review
Amidst increasing competition and changing regulations in the industry, KI’s Gas-to-Power business continued to deliver creditable results in 2015.

In June 2015, KI completed the injection of a 51% stake of KMC, which owns the 1,300-MW co-generation plant on Jurong Island, into KIT for a cash consideration of $510 million. The proceeds from the divestment of KMC strengthened KI’s balance sheet.

Earnings Highlights ($ million)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>2,058</td>
<td>2,934</td>
<td>3,459</td>
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<tr>
<td>EBITDA</td>
<td>285</td>
<td>570</td>
<td>150</td>
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<tr>
<td>Operating Profit</td>
<td>221</td>
<td>466</td>
<td>69</td>
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<tr>
<td>Profit before Tax</td>
<td>256</td>
<td>452</td>
<td>73</td>
</tr>
<tr>
<td>Net Profit</td>
<td>207</td>
<td>320</td>
<td>15</td>
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<tr>
<td>Manpower (Number)</td>
<td>2,750</td>
<td>2,728</td>
<td>3,358</td>
</tr>
<tr>
<td>Manpower Cost</td>
<td>181</td>
<td>231</td>
<td>244</td>
</tr>
</tbody>
</table>

01 Dr Ong Tiong Guan, CEO of Keppel Infrastructure, sharing on the company’s directions.
KI will continue to seek out value-enhancing projects, leveraging its project development, engineering, operations and maintenance expertise to strengthen its market position.

**Business Outlook**
The Singapore energy market has been experiencing an oversupply of generation capacity since 2013, when the long-term LNG supply commenced flow in Singapore. Since then, generation companies in Singapore have experienced margin compression as a result of increasing capacity, and it is expected that this oversupply will continue to weigh on the Singapore electricity and gas market in the coming years.

Following the launch of the Electricity Futures Market by EMA, the next major development in the electricity market will be Full Retail Contestability, which is scheduled to be implemented by 2018. This will see about 1.2 million households becoming contestable consumers. To increase KI’s market share and extract greater downstream value from the gas supply chain, KI will be focusing on initiatives to differentiate itself in the type and quality of product offerings, such as bundling electricity, utilities, cooling services and gas supply to customers.

**Waste-to-Energy Market Review**
The global WTE industry is driven primarily by government regulatory policies and rapid urbanisation.

In China, tackling environmental issues has been identified as one of the main priorities by the Chinese government. The Chinese government has set a target to treat up to 35% of the country’s municipal solid waste by incineration as part of its 12th Five Year Plan. This implies a compounded annual growth rate in WTE treatment capacity of 14% per annum from 2015 to 2020, with an estimated total investment of RMB120 billion over the next five years.

In Europe, the European Commission adopted an ambitious new Circular Economy Package to help European businesses and consumers to make the transition to a stronger and more circular economy, where resources are used in a more sustainable way. This package will contribute to “closing the loop” of product life cycles through greater recycling.

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01 In June 2015, KI completed the injection of a 51% stake of KMC, which owns the 1,300-MW co-generation plant on Jurong Island, into KIT.

02 Keppel Seghers handed over Phase 2 of the Greater Manchester EfW facility in the UK in April 2015. Combined with Phase 1 which was handed over in January 2015, the entire facility (pictured) is able to process up to 850,000 tonnes of refuse-derived fuel per annum, making it one of the largest and most efficient combined heat and power facilities in the world.
and re-use, and bring benefits to both the environment and the economy. Keppel Seghers’ recently completed Bialystok WTE CHP project in Poland, which includes an advanced bottom ash recycling plant, is set to contribute to the European Union’s (EU) Circular Economy initiatives.

Operating Review
In the UK, Keppel Seghers successfully handed over Phase 1 and 2 of the Greater Manchester EfW facility, which is one of the largest waste and renewable projects in Europe.

In Qatar, Keppel Seghers substantially handed over the DNSTW to the client in December 2015. In addition, as part of the graduated handover process for the Design-Build-Operate project, Keppel Seghers has commenced its 10-year operations and maintenance phase for its liquids stream, solid thickening and dewatering facilities. The DNSTW is Keppel Seghers’ second landmark project in Qatar. This is in addition to the Domestic Solid Waste Management Centre, which was handed over in October 2011.

In China, Keppel Seghers is currently executing five WTE technology package projects with a total incineration capacity of 7,600 tonnes per day. All projects are progressing within their contractual schedules and budgets.

In Poland, Keppel Seghers handed over the Bialystok WTE CHP project to its client in December 2015. The project was delivered on schedule and on budget, and is among the first WTE plants in Poland to achieve commercial operation.

Business Outlook
Against the backdrop of rapid urbanisation, depleting landfill capacity and increased awareness of environmental and pollution issues, there is a growing need for governments to look into sustainable waste management solutions.

Significant Events
- **January**
  - Keppel Seghers handed over Phase 1 of the Greater Manchester EfW facility in the UK.
  - Keppel Seghers secured a contract to provide a technology package to a WTE plant in Beijing’s Changping District.
- **February**
  - Indo-Trans Keppel Logistics Vietnam (ITKL) officially opened its distribution centre in the Vietnam-Singapore Industrial Park 1 in Binh Duong province.
- **April**
  - Keppel Seghers handed over Phase 2 of the Greater Manchester EfW facility in the UK.
  - Keppel Seghers secured a contract to provide a technology package for a WTE plant in Beijing, China.
  - Tampines Logistics Hub in Singapore commenced operations.
- **May**
  - Keppel completed the combination of KIT with CIT to form the largest Singapore infrastructure-focused business trust.
  - Keppel DC REIT announced its maiden post-IPO acquisition of Intelllicentre 2 in Sydney, Australia.
  - Keppel DC REIT was added to the MSCI Singapore Small Cap Index within six months from listing.
  - KIT raised $525 million in Singapore’s largest equity during the year for the acquisition of KMC.
Operating & Financial Review

Infrastructure

In China, driven by the government’s priority in tackling environmental issues, it is expected that 2020 targets will be set for both pollutant emission reduction and environment quality improvement in the upcoming 13th Five Year Plan.

In Hong Kong, Keppel Seghers was one of the four shortlisted companies who will be invited to submit a Design-Build-Operate proposal for the HK$19.2 billion Integrated Waste Management Facility. This state-of-the-art WTE plant will have the capacity to treat 3,600 tonnes per day of waste and will be built on a reclaimed island.

In Europe, the replacement and upgrading of ageing facilities and rapid development in new EU members will provide more opportunities in this sector. For example, Poland has emerged as one of the most promising WTE markets in Europe with financial support from the EU.

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X-to-Energy

The X-to-Energy division drives KI’s efforts to improve efficiencies and explore new frontiers in the energy sector. It comprises Keppel DHCS, our district cooling and heating systems business, and KIT, an infrastructure business trust listed on the Singapore Exchange.

As part of the Group’s plans to grow its asset management business, Keppel intends to consolidate its interests in KIFM under Keppel Capital Holdings in the Investments Division.

Market Review

Demand for District Cooling Services (DCS) in Singapore has remained strong. Aggregate DCS demand at Keppel DHCS’ existing service corridors, namely at Changi Business Park, Biopolis, Woodlands Wafer Fab Park and Mediapolis, has maintained a compounded annual growth rate of 11% since 2010.

The demand for energy efficiency, which requires all new and existing buildings that undergo major retrofitting works to achieve Green Mark certification, has provided growth opportunities for Keppel DHCS’ retail cooling business. The Company has since secured two additional retail cooling contracts in 2015.

Operating Review

In 2015, Keppel DHCS secured four contracts for its Changi Business Park and Biopolis facilities, with contract sums totaling $108.5 million. With Keppel DHCS’ fourth plant achieving Temporary Occupation Permit in October 2015, both the Mediapolis and Biopolis DCS plants are now integrated, allowing for greater reliability and economies of scale.

Keppel DHCS continued to make improvements on energy efficiency and achieved cost savings in its plants, cutting down energy consumption by more than six gigawatt hours during the year. In July 2015, the Keppel DHCS’ Tianjin plant commenced its first supply to Tsinghua University’s Institute for Electronics and Technology. As part of ongoing efforts to lower its carbon footprint and improve cost competitiveness, the plant...
2015 saw the successful combination of KIT and CitySpring Infrastructure Trust, as well as the completion of the acquisition of KI’s 51% stake in KMC which owns a 1,300-MW co-generation plant on Jurong Island. With these transactions, KIT is the largest Singapore infrastructure-focused business trust listed on the Singapore Exchange with total assets of over $4 billion.

In Singapore, KIT’s plants met all their contracted availability and delivery requirements. City Gas continued to deliver stable growth while DataCentre One will begin generating revenue once its construction is completed in early 2016. In Australia, Basslink, which operates the electricity interconnector between Victoria and Tasmania, achieved 99.5% availability for most of 2015 and met all its statutory reporting obligations.

Business Outlook
The market outlook for DCS remains positive as the Singapore government continues to work towards major cluster developments to further intensify land use. Keppel DHCS will continue to grow and expand its presence within its existing service corridors where it enjoys a natural competitive advantage and pursue opportunities in the Retail Cooling business in specific regional markets.

As the Trustee-Manager of KIT, Keppel Infrastructure Fund Management (KIFM) will identify and evaluate suitable acquisitions, including those from the sponsor KI, under its investment mandate to grow the Trust.

Logistics
Market Review
2015 was mired by another year of growth slowdown in the Chinese economy as it continued its structural transition towards a more consumption-driven economy. Exports and imports were hit by a slow recovery in external trade and a softening in domestic consumption, after a period of overheated growth.

Significant Events
- **June**
  KIT completed the acquisition of a 51% stake in KMC.

- **July**
  Keppel Data Centres Holding (KDCH) announced plans to develop its fourth data centre in Singapore. Phase 1 is expected to be completed by 2016.

- **September**
  KIT was included as a constituent member of the FTSE ST Large/ Mid Cap Index and FTSE ST Mid Cap Index.

- **October**
  Keppel DC REIT entered into a forward sale and purchase agreement to acquire maincubes Data Centre. The data centre is expected to be completed in 2018.

  KDCH officially opened Almere Data Centre 2 in the Netherlands.

  ITKL completed the extension of a warehouse in Bac Ninh, Vietnam, for a key customer in the electronics sector.

- **November**
  KDCH completed the acquisition of 20 Tampines Street 92 to build its fourth data centre in Singapore.

- **December**
  Keppel Puninar Logistics commenced operations for one of the leading e-commerce players in Indonesia.

  Keppel Seghers achieved substantial handover of the DNSTW in Qatar, and handed over the Bialystok WTE CHP project in Poland.
Operating & Financial Review
Infrastructure

The impact from China’s slowdown was felt across the region, as most Southeast Asia countries experienced softer growth. The drop in commodity prices and slow recovery of the region’s key trading partners, such as Japan and the Eurozone posed challenges to the export-reliant economies in the region.

Operating Review
Even as competition intensified, demand for logistics services and warehouse space in the region remained firm. Keppel Logistics achieved improved occupancy rates in its facilities across Southeast Asia.

In Singapore, Keppel Logistics commenced operations in its new warehouse facility at Tampines Logistics Hub in April 2015, achieving a healthy occupancy rate in its first year of operations. For its operational and business excellence, Keppel Logistics was named the Best Land Freight Forwarder in Singapore at the ASEAN Transport and Logistics Awards 2015.

In Malaysia, Keppel Logistics is planning to increase its capacity with a new 45,000 sf warehouse facility located next to its existing Shah Alam facility. Keppel Puninar Logistics, a joint venture between Keppel Logistics and PT Puninar Jaya in Indonesia, expanded its client base with new customers in the fast moving consumer goods (FMCG), e-Commerce and food sectors. The Company now has logistic operations in three cities – Jakarta, Medan and Balikpapan – and will continue to target customers in FMCG and healthcare sectors, and identify strategic locations to grow its network in the country.

ITKL commenced operations at its new warehouse in Vietnam-Singapore Industrial Park 1, and also completed the expansion of its Tien Son warehouse in Bac Ninh province.

In China, despite slowdown in the country’s economic growth, Keppel T&T’s Sanshui Port in Guangdong province achieved a strong throughput growth of 25% year-on-year with the enhancement of services to customers, while Lanshi Port continued to be affected by the traffic control measures in Foshan, Guangdong. The Wuhu Sanshan Port in Wuhu City, Anhui achieved a throughput volume of 4.5 million tonnes amidst the overall slowdown in the area’s manufacturing activities.

During the year, the new integrated distribution centre in the Sino-Singapore Tianjin Eco-City was completed. This distribution centre in Tianjin as well as Keppel Wanjiang International Coldchain Logistics Park in Anhui are expected to commence operations over the course of 2016.

Business Outlook
China’s economic expansion is expected to remain moderate as the country continues its transition towards a more balanced and sustainable growth model. Nevertheless, new opportunities for the logistics sector are emerging on the back of China’s efforts to establish trade corridors linking China and Europe over land and sea.

In Southeast Asia, the formation of the ASEAN Economic Community in December 2015 is expected to bolster intra-ASEAN trade and contribute to the establishment of a more globally competitive single market and production base. At the same time, other projects and initiatives to integrate the wider Asia Pacific region, such as the Regional Comprehensive Economic Partnership and the Trans-Pacific Partnership, will boost trade and enhance growth in the region.
01 During the year, Keppel DC REIT made its maiden acquisition with Intellicentre 2 in Sydney, Australia.

02 Officiating at the opening ceremony of Almere Data Centre 2, Keppel T&T’s first greenfield data centre in Europe was (from L-R), Mr Alexander Van Der Hooft, EVP Operations Business Market, KPN; Mr Thomas Pang, CEO of Keppel T&T; Prof. Dr. Jan Peter Balkenende, Former Prime Minister of the Netherlands and Partner of, Corporate Responsibility at EY; and Mr Mark Psol, Vice Mayor of the City of Almere for Finance, Economic Affairs and Municipal Real Estate.

Investments, intra-Asia trade and consumption demand in Southeast Asia and China are likely to remain positive. Keppel T&T, will remain focused on its target markets to deliver high-value logistics services to its customers through innovation and adoption of new technologies.

Data Centres

Market Review
Global demand for data centres was strong in 2015, backed by the growth of cloud computing and colocation hosting. During the year, the data centre market saw consolidation via mergers, acquisitions and partnerships. A recent research by Allied Analytics shows that the global colocation market is expected to reach US$51.8 billion by 2020, with Asia leading the pack in terms of growth rate.

Operating Review
With strong customer demand in the pipeline, Keppel Datahub 2 in Singapore is currently undergoing its final phase of fit-out. In October 2015, Keppel T&T celebrated the opening of Almere Data Centre 2, its first greenfield data centre development in Europe. The new facility is a high quality Tier 3 colocation data centre with lettable area of approximately 118,000 sf.

In November 2015, the Company completed the acquisition of a property in Tampines, which will be developed into Keppel Datahub 3, its fourth data centre in Singapore. Keppel Datahub 3 will feature approximately 183,000 sf of Gross Floor Area and Tier III, carrier neutral specifications. Phase 1 is expected to be completed by 2016.

Following the sale of the data centre assets to Keppel DC REIT in 2014, Keppel T&T through KDCH continued to operate as the Facility Manager of the REIT’s assets in Singapore.

In its first year of operations since listing on the Singapore Exchange in December 2014, Keppel DC REIT acquired Intellicentre 2 in Sydney, Australia as well as made a forward purchase of maincubes Data Centre in Offenbach am Main, Germany. The data centre is expected to be completed in 2018. As the manager of Keppel DC REIT, Keppel DC REIT Management (KDCRM) currently manages a diversified portfolio of nine high-quality assets in Asia Pacific and Europe, valued at approximately $1.07 billion as at end-2015.

Keppel intends to consolidate its interests in the Group’s asset management businesses, including KDCRM, under Keppel Capital Holdings in the Investments Division.

Business Outlook
With increasing urbanisation and digitisation of the global economy, the demand for data centres is expected to remain strong. Other demand drivers include growing requirements for higher rack density, flexibility and scalability of offerings. These trends present opportunities for Keppel T&T to grow via its Development Company-REIT strategy. Looking ahead, Keppel T&T will focus on expanding its portfolio of high-end data centre assets by developing green and brownfield projects, as well as through acquisitions via the REIT.