

# Operational Briefing

## Presentation to Investors and Analysts

6 February 2018





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Unless otherwise specified all information is as at 31 December 2017.

# Infrastructure





Please visit the following link to view:  
[macq.co/infrastructure](https://macq.co/infrastructure)



# Macquarie's Infrastructure capability

**Broad infrastructure capability**  
to support clients

**Link global long-term capital** with long-term infrastructure assets

**Deep sector expertise** through a strong and stable team with specialist industry expertise

**Adapt to client needs and market conditions:** products and advice shaped for our clients

Strong track record, operating history and **market leading position**

**Delivering all the resources** of the Group to clients

## MACQUARIE ASSET MANAGEMENT

**MIRA:** sourcing, investing and managing quality real asset businesses, on behalf of investors; **\$A133b<sup>1</sup>** AUM across **120 assets** in **25 countries**

**MIM:** managing portfolios of global listed infrastructure securities

**MSIS:** sourcing and managing high-quality private infrastructure debt investments on behalf of investors; **\$A5.8b** deployed across **50 transactions**

**Largest** infrastructure asset manager globally<sup>2</sup> **~500** dedicated staff in 18 countries

**Largest** specialist infrastructure debt asset manager<sup>3</sup>

**\$A1.5b+** invested by Macquarie and staff alongside Macquarie-managed infrastructure funds

## CORPORATE AND ASSET FINANCE

**Principal Finance:** provides **flexible primary financing solutions** and engages in secondary market investing, across the capital structure

**26%<sup>4</sup>** of CAF Principal Finance portfolio in Infrastructure

**\$A4b** of total capital invested in Infrastructure by CAF Principal Finance in the last 5 years

## COMMODITIES AND GLOBAL MARKETS

**Global institutional securities house** with specialist expertise in Infrastructure

**Provides an end-to-end offering** across commodities markets which are used in the building of infrastructure assets, including risk and capital solutions across physical and financial markets

**No. 1** in Infrastructure for the past 6 years<sup>5</sup> by institutional investors

**170+** stocks under coverage **15+** analysts globally

## MACQUARIE CAPITAL

A **global leader** in financial advisory and capital raising across equity, debt and private capital markets within the **Infrastructure sector**

Invests its own balance sheet to facilitate early stage infrastructure projects **alongside clients**

**No. 1** Global Project Finance Financial Advisor<sup>6</sup>

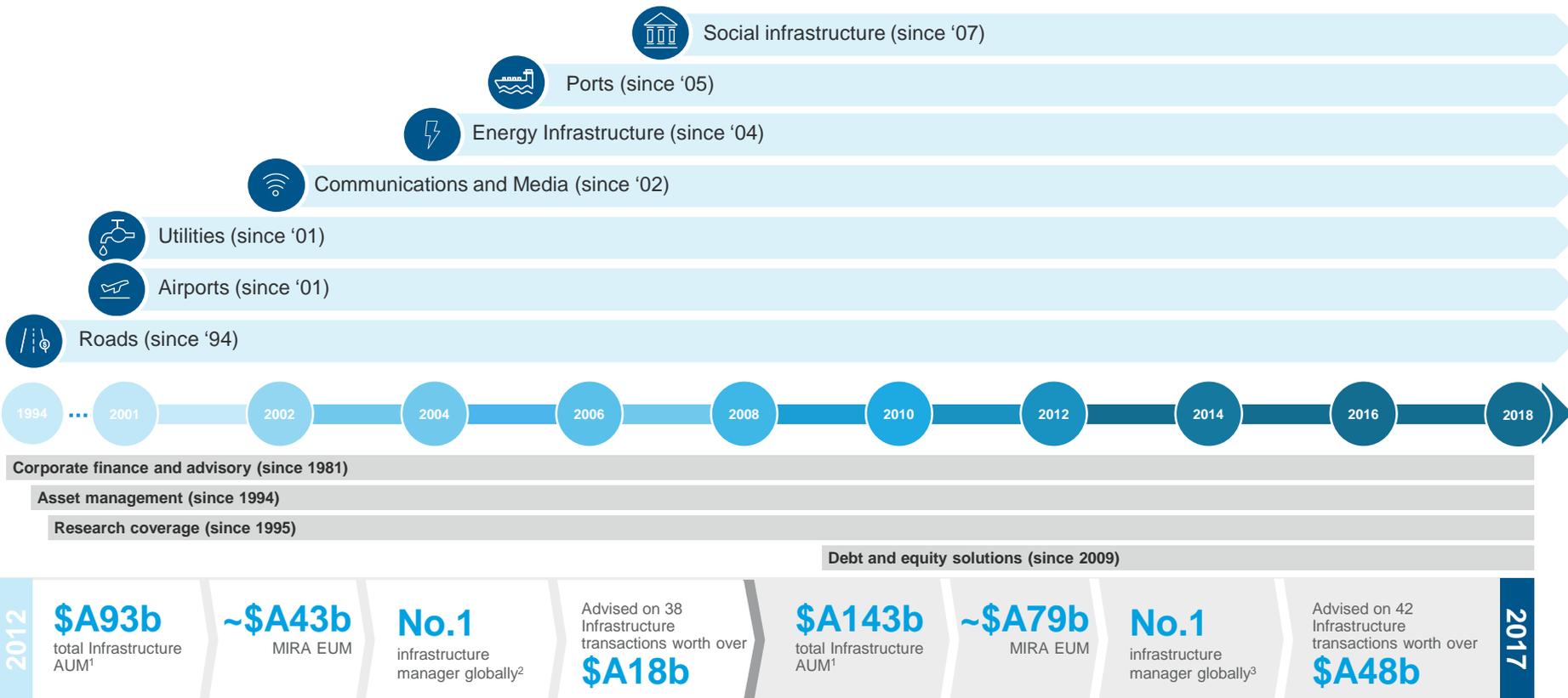
**No. 1** Global Project Finance Sponsor<sup>7</sup>

**220+** executives globally in Infrastructure

**Most innovative investment bank** for Infrastructure and Project Finance<sup>8</sup>



# A pioneer of Infrastructure growing through adjacent evolution



1. Includes MIRA Infrastructure, MIDIS and MIM global listed infrastructure AUM. 2. Towers Watson Global Infrastructure Survey, published Jun 11. 3. Willis Towers Watson 2017 Global Alternatives Survey, published Jul 17.



# Case study

## Core strengths in Infrastructure



**Deep sector expertise** achieved through a strong and stable team with specialist industry expertise



**Strong local presence of staff globally**, regionally focused in all major markets



**Adapt to client needs** and market conditions



**Growth and expansion into adjacent spaces** and markets through acquisitions and organic growth

## MAM: Thames Water

**MIRA is a leader in alternative asset management worldwide. Through its funds, MIRA invested in Thames Water - the largest water and wastewater company in the UK**

### Transaction

Consortium led by Macquarie-managed funds MEIF1 and MEIF2 **acquired** a 100% interest for £2.3b in Dec 06

**Optimised** asset performance through a “back-to-basics” approach, focusing on the core business post-acquisition

Final Macquarie-managed fund **divested** in 2017<sup>1</sup>

### Highlights

**Largest-ever capital investment** program to London's water supply

- Delivered a **~£1b p.a. capital investment** program between 2006 - 2017

Achieved a **22% reduction** in leakage rates

**71% decrease** in injuries over the past 5 years

Served over **9 million water** and **15 million wastewater** customers

## MAM: Water portfolio in Northern China

**MIRA's Asia platform manages over \$A18b of equity capital, including a joint controlling stake in a water portfolio in Northern China**

### Transaction

Macquarie-managed fund **acquired** a joint controlling interest in a water portfolio in Shenyang, China

**Supplies clean water** to 5m Shenyang residents each year, accounting for ~50% of total water usage in Shenyang, with a combined capacity of 900,000 tonnes per day

### Highlights

**Essential part of Shenyang's infrastructure** network, replacing underground water with high quality surface water

- Previously 90% of drinking water came from underground water; now, 70% of water usage comes from surface water

Consistent **top tier operational performance** with industry leading health and safety standards

Achieved a **>75%** increase in utilisation since acquisition

**Local presence** with collaborative and empowered teams



# Case study

## MAM: Copenhagen Airport

## MAM: MIDIS

### Core strengths in Infrastructure



**Deep sector expertise** achieved through a strong and stable team with specialist industry expertise



**Strong local presence of staff globally**, regionally focused in all major markets



**Adapt to client needs** and market conditions



**Growth and expansion into adjacent spaces** and markets through acquisitions and organic growth

**MIRA-managed businesses provide essential services to the community every day. Through its funds, MIRA invested in Copenhagen Airport - the largest airport in Scandinavia**

#### Transaction

First Macquarie-managed fund announced investment in 2005

**Oversaw construction** and launch of CPH Go, a low cost airline carrier facility

Final Macquarie-managed fund **divested** in 2017

#### Highlights

Since Macquarie involvement:

- **Invested over DKK10b (~\$A2b)** across terminal expansion and upgrades
- **~45% increase in passenger volumes** – now ~29m annual passengers
- **3x increase** in low cost carrier passengers
- **165 direct routes** to/from airport; +33 routes
- First Scandinavian airport to cater for the A380 aircraft

**Since its establishment in 2012, MIDIS has grown to be the largest specialist infrastructure debt manager<sup>1</sup>, with over \$A8b of third party investor commitments**

#### Transaction

Currently managing **\$A5.8b** of AUM deployed

**50 debt investments** across transport, power and utilities, and social infrastructure

#### Highlights

Providing **attractive long-dated returns** superior to sovereign and corporate investment grade credit

**Capitalising on supply side dislocation** with inflexible public bond markets and the withdrawal of banks from long-term lending

**Actively participate in shaping facilities** to meet borrower's needs including adding value through non-standard features, and participating in live bid-situations



# Case study

## CAF Principal Finance: Energetics

## CAF Principal Finance: Toll road

### Core strengths in Infrastructure



**Deep sector expertise** achieved through a strong and stable team with specialist industry expertise



**Adapt to client needs and market conditions**



Sourcing capital and **deploying our balance sheet** to support clients



**Strong local presence of staff globally**, regionally focused in all major markets

**Between 2013 and 2015, CAF acquired a controlling interest in Energetics - a rapidly growing provider of “last mile” electricity and gas utility connections in the UK**

#### Highlights

Energetics has completed **168,000 electricity and gas connections** to date, linking utility trunk lines to new residential properties, as well as an additional 331MW of industrial and commercial connections

Supports new home building in the UK, **providing utility connections to ~8% of new homes** built, 16,000 homes annually, and has an order book of 95,000 connections

Providing **significant equity capital and financing** to support expansion; £79m invested since original investment

**CAF has continued and developed Macquarie’s longstanding expertise in toll road investment and management**

#### Highlights

**Invested** \$US149m in the senior debt of Northwest Parkway, a privatized toll road in Denver, Colorado USA

CAF acquired the debt at discounted levels from non-core units of multiple banks

Building on Macquarie’s **unique and longstanding strength** in toll roads; Investment benefited from **insight** in traffic forecasting

Traffic growth of **10% p.a.** during the period of CAF’s investment. Debt was paid off early at par in 2017



# Case study

CGM: Deep sector expertise and capability

CGM: Teesside

## Core strengths in Infrastructure



**Broad infrastructure capability** to support clients



**Adapting to client needs** and market conditions



**Deep sector expertise** achieved through a strong and stable team with specialist industry expertise



**Delivering all the resources** of the Group to clients

**CGM has deep expertise and a leading position in global listed infrastructure. A significant distribution capability is backed by a strong research platform, and enables the mobilisation of capital into infrastructure projects**

### Highlights

- Research platform – ranked **No.1** in Infrastructure sector by institutional investors for past 6 years<sup>1</sup>
- Strong underwriting and distribution capability** through equity capital markets JV with MacCap
- In 2017, Macquarie acted as Joint Bookrunner and underwriter in Transurban's **\$A1.9b** entitlement offer
  - The **largest capital raising in Asia-Pacific** for an infrastructure company in 2017
- Market leader in helping **ASX-listed companies access investors** all over the world including hosting Transurban on 17 global roadshows since 2009
- Well positioned** to support clients with risk management products as infrastructure developments become more exposed to market volatility
- Hedging price and foreign exchange risk

**With MGT Power, Macquarie successfully commercialised, structured and financed the world's largest new-build dedicated biomass plant - the largest cross-group collaboration transaction in EMEA to date**

### Transaction

- The **299MW** biomass fuelled power station, located in North-East England, will generate renewable electricity for the equivalent of **600,000** homes
- MacCap** acted as financial advisor
- CGM and MacCap** provided a development loan and underwriting
- CGM** provided the Power Purchase Agreement (PPA) and FX hedging
- MAM** arranged and underwrote the ECA

### Highlights

- Market first** 18 year fixed price GBP denominated UK CPI linked wood pellet supply agreement
- Market first** PPA for a project of this size
- Macquarie's **first principal sale/partnership with PKA**, a £28b Danish pension fund



# Case study

MacCap: Leading advisor

MacCap: Global sponsor

## Core strengths in Infrastructure



**Deep global sector expertise** achieved through a strong and stable team with specialist industry expertise



**Strong technical and operational expertise**



**Sourcing capital and deploying our balance sheet**

**MacCap is a global market leader in infrastructure advice, connecting institutional investors with innovative opportunities around the world**

### Highlights

#### Clear market leader

- No. 1 Infrastructure Financial Advisor globally<sup>1</sup>
- No. 1 Infrastructure Financial Advisor in Europe<sup>1</sup>
- No. 1 Infrastructure Financial Advisor in ANZ<sup>1</sup>
- No. 1 Infrastructure Financial Advisor in the US<sup>2</sup>

#### Diverse product and regional offering

Landmark deals completed in each region

Diverse geographic spread; Europe is the largest revenue generating region at ~40%

#### Deep range of clients

Strong global client relationships with the major global infrastructure, sovereign and pension funds, corporates and governments

**MacCap is a global infrastructure sponsor, assisting in the creation of assets through use of early stage development capital**

### Highlights

#### The Netherlands

Lead sponsor and sole financial advisor of the 25 year PPP to design, construct, finance and maintain Rotterdam's new €1b A24 Blankenburg Submerged Tunnel

- Complex project won by quality of submission based on learnings from a globally successful sponsor business
- Continues strength in the Benelux PPP space, in addition to prisons and courts

#### Mexico

Together with Techint Engineering and Construction completed the acquisition and financing of Norte III, a 907MW combined-cycle gas plant, under construction near Ciudad Juarez, Mexico

- A landmark transaction in Latin America, an area of opportunity moving forward
- During peak construction period, the project will employ approximately 2,000 workers and is expected to supply more than 500,000 houses in Mexico once completed



# What's next?

## MACQUARIE ASSET MANAGEMENT

### Continue to raise and deploy regional-focused flagship infrastructure funds

**Strong and longstanding track record**; largest dedicated team of any infrastructure manager

Over the past 5 years<sup>1</sup>

- **Raised ~\$A44b** in new equity; **~12%** of capital raised<sup>2</sup>
- **Invested ~\$A34b** in equity
- **Returned ~\$20b<sup>3</sup>** to investors through asset realisations and distributions

### Meet investor demand to move up/down risk curve

Defensive SuperCore assets and infrastructure debt given macro environment

Value adding through **proactive origination**, including complex separations, take-privates, roll-ups

Providing innovative funding solutions (e.g. ECA-backed financing)

**\$A13.7b** of **\$A15.1b** of **dry powder** in **MIRA's Infrastructure funds for disciplined deployment** in assets sourced through **local industry and financial experts**, often on a proprietary or bi-lateral basis

**\$A10b** of co-investment capital deployed in last 12 months providing scope for additional separate account mandates

### Focused on active asset management

Managing risks and **driving key strategic activities** to deliver operational and financial improvements; dedicated team of **over 500 staff** in 18 countries the largest of any infrastructure manager

**40+** senior executives with extensive industry or operational backgrounds

## CORPORATE AND ASSET FINANCE

### Principal Finance

Continue to bias towards **bespoke and less liquid situations** for primary capital and financing solutions and niche assets in secondary markets

**Well positioned** to capitalise on any increase in volatility in asset prices

## COMMODITIES AND GLOBAL MARKETS

**Well positioned to provide bespoke and innovative risk management products to enable the mobilisation of capital into infrastructure projects**

**Increasing levels of private capital** continues flowing towards infrastructure development

Expect **increased demand for risk management** products to protect against market risk in both the physical and financial spaces

Supporting clients to achieve the most efficient cost of capital

## MACQUARIE CAPITAL

### Advisory

Continue to source opportunities to advise on and execute global M&A transactions, leveraging long-term relationships with clients and providing innovative global solutions

### Continue to focus on asset creation

Differentiated as a principal investor with a development capability, in house expertise and development risk appetite

- Employs **~120** engineers, geologists, project managers, safety experts and other technical experts
- Infrastructure projects currently under construction or development worth over **~\$A10b** globally; average monthly construction spend of **~\$A135m**

### Infrastructure replacement cycle

Sourcing global capital to connect with projects to upgrade ageing infrastructure, particularly in developed economies such as in North America

- Global infrastructure dry powder totalled **~\$A200b** as at 31 Dec 17<sup>3</sup>
- **\$US6tr** investment required in the US by 2030<sup>4</sup>

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