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
Macquarie’s Infrastructure capability

**Broad infrastructure capability**  
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; A$133.1bn 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; A$5.8bn deployed across 50 transactions

**CORPORATE AND ASSET FINANCE**

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

**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

**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

**Largest**

- Infrastructure asset manager globally
- Specialist infrastructure debt asset manager
- A$1.5bn+ invested by Macquarie and staff alongside Macquarie-managed infrastructure funds

**~500**

- Dedicated staff in 18 countries

**26%**

- Of CAF Principal Finance portfolio in Infrastructure

**$4bn**

- Of total capital invested in Infrastructure by CAF Principal Finance in the last 5 years

**170+ stocks under coverage**

**15+ analysts globally**

**220+ executives globally in Infrastructure**

A pioneer of Infrastructure growing through adjacent evolution

- Energy Infrastructure (since ‘04)
- Ports (since ‘05)
- Social infrastructure (since ‘07)
- Communications and Media (since ‘02)
- Utilities (since ‘01)
- Airports (since ‘01)
- Roads (since ‘94)

Corporate finance and advisory (since 1981)
- Asset management (since 1994)
- Research coverage (since 1995)

Debt and equity solutions (since 2009)

## 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 |

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### 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**

**Consortium led by Macquarie-managed funds MEIF1 and MEIF2 acquired a 100% interest for £2.3b in Dec 2006.**

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

**Transaction Highlights**

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

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### 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**

**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.

**Transaction 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.

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1. MEIF2.
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

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\(^1\), 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

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

CAF Principal Finance: Energetics

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

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 Principal Finance: Toll road

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

Invested US$149m 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 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.

**Research platform** – ranked No.1 in Infrastructure sector by institutional investors for past 6 years¹

**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

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Case study

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

Clear market leader
No. 1 Infrastructure Financial Advisor globally\(^1\)
No. 1 Infrastructure Financial Advisor in Europe\(^1\)
No. 1 Infrastructure Financial Advisor in ANZ\(^1\)
No. 1 Infrastructure Financial Advisor in the US\(^2\)

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

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:
- Raised ~$A44b in new equity; ~12% of capital raised
- Invested ~$34b in equity
- Returned ~$20b 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 ~$A200b as at 31 Dec 17
- ~$US6tr investment required in the US by 2030

1. 31 Mar 12 – 30 Sep 17. 2. Infrastructure Investor 50 2017, published Nov 17, rankings based on methodology created by Infrastructure Investor, and represents infrastructure direct-investment capital formed since 1 Jan 12 by the 50 largest unlisted infrastructure investors. 3. Preqin.