



MACQUARIE

離岸風力發電國內產業推動及 合作第7次會議

The 7th Communication Platform Conference of
Taiwan Offshore Wind Energy Industrial Cooperation

John Jackman,
Managing Director of Development Capital

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MACQUARIE



01

Introduction to Macquarie

Introduction to Macquarie



Macquarie Group Limited is a global provider of banking, financial, advisory, investment and funds management services in all major financial markets

Macquarie Group overview

- Founded in 1969 as the Australian subsidiary of UK merchant bank Hill Samuel
- Global provider of banking, financial, advisory, investment and funds management services
- Main business focus is providing products and services to clients
- Listed on Australian Securities Exchange (ASX: MQG; ADR: MQBKY)
- Regulated by APRA, Australian banking regulator, as non-operating holding company of a licensed Australian bank.
- Macquarie currently employs over 14,300 people and operates in over 28 countries

Key statistics¹

Total
\$US **367** billion
assets under
management

\$US **17+** billion
market
capitalization

125 M&A transactions
worth more than
\$US **100** billion

More than
\$US **7.3** billion
in annual
revenue

Arranged
more than
\$US **72** billion
of debt

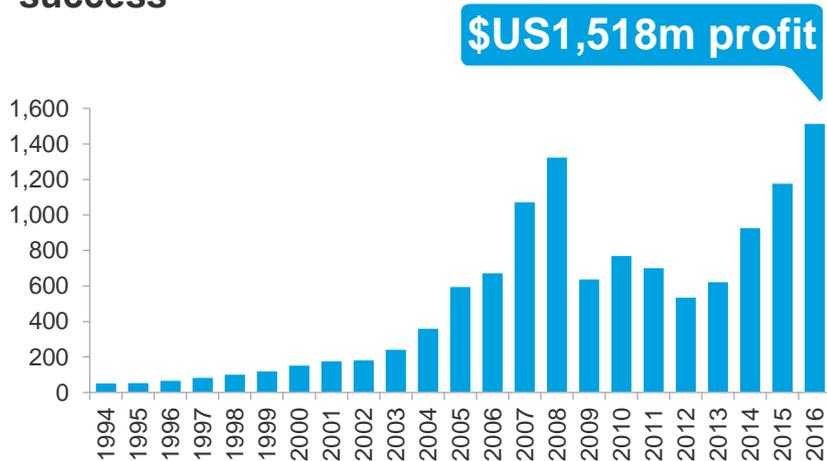
Raised more than
\$US **40** billion
in equity

1. AUM values have been translated from \$A using exchange rates as at 31 March 2016. Revenue figures are for year ending 31 March 2016 and have been translated from \$A using average exchange rate for that period. Debt and equity year ending 31 March 2016. Based on 100% of the deal value (and not the amount of the transaction attributed to Macquarie) where Macquarie acted as adviser, arranger, underwriter or participant to the transaction.

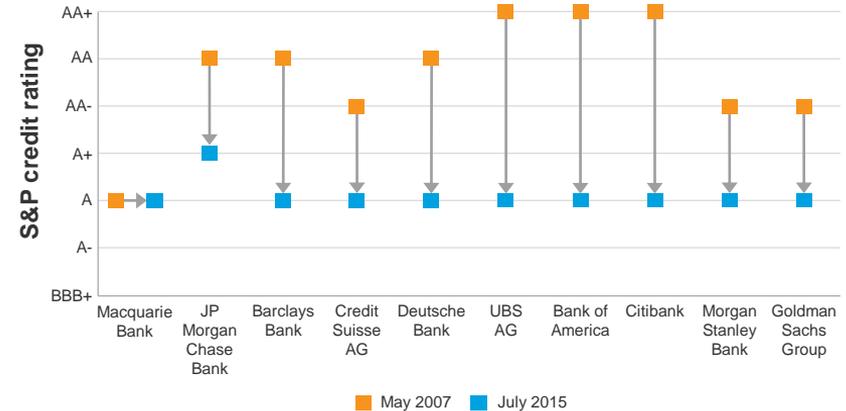
Introduction to Macquarie (cont'd)

Macquarie Group Limited is a global provider of banking, financial, advisory, investment and funds management services in all major financial markets

Macquarie has a long history of financial success¹



Macquarie has maintained its S&P rating for 24 years²



1. All statistics are current as at 31 March 2016.

2. Moody's (19 years), Fitch ratings (24 years) and S&P (24 years). Goldman Sachs Group is used for comparison purposes. Goldman Sachs bank only rated by Standard & Poor's from 2012.

Macquarie Group

Divisions



Founded in 1969, Macquarie Group is a global provider of banking, financial advisory, investment and funds management services in major international financial centres

Macquarie Capital	<ul style="list-style-type: none"> ● Global corporate finance capability, including M&A, debt and equity capital markets, and principal investments ● Key specialities in six industry groups: Financial Institutions; Industrials; Infrastructure, Utilities and Renewables; Real Estate; Resources (mining and energy); and TMET
Macquarie Asset Management	<ul style="list-style-type: none"> ● Top 50 global asset manager with \$US366.1b¹ of assets under management ● Provides clients with access to a diverse range of capabilities and products, including infrastructure and real asset management, securities investment management and tailored investment solutions over funds and listed equities
Corporate and Asset Finance	<ul style="list-style-type: none"> ● Global provider of specialist finance and asset management solutions, with \$US30.2b¹ of loans and leases ● Global capability in corporate and real estate credit investing and lending ● Expertise in asset finance including aircraft, motor vehicles, technology, healthcare, manufacturing, industrial, energy, rail and mining equipment
Banking and Financial Services	<ul style="list-style-type: none"> ● Macquarie's retail banking and financial services business ● Provides a diverse range of personal banking, wealth management and business banking products and services to retail clients, advisers, brokers and business clients
Macquarie Securities Group	<ul style="list-style-type: none"> ● Global institutional securities house with strong Asia-Pacific foundations covering sales, research, ECM, execution and derivatives and trading activities ● Full-service cash equities in Australia, Asia, South Africa and Canada with specialised offerings in the US and Europe. Specialised derivatives and trading offerings in key locations globally ● Key specialities: Financial Institutions; Industrials; Infrastructure, Utilities and Renewables; Resources (mining and energy); Small-Mid Caps; and Telecommunications, Media, Entertainment and Technology (TMET)
Commodities and Financial Markets	<ul style="list-style-type: none"> ● Provides clients with risk and capital solutions across physical and financial markets ● Diverse platform covering more than 25 market segments, with more than 140 products ● Expertise in providing clients with access to markets, financing, financial hedging, and physical execution ● Growing presence in commodities (natural gas, LNG, NGLs, power, oil, coal, base metals, iron ore, sugar and freight)

Macquarie Group

Track record



A global financial services provider with capacity to support clients through balance sheet deployment

Mergers & Acquisitions

470
deals with
value of

\$A141bn
in FY2015
globally

- Public company M&A, friendly and contested
- Corporate divestitures/carve-outs
- Public to private transactions
- JVs and minority investments
- Valuation and fairness opinions
- PPPs
- Cross-border transactions

Principal Investments

\$A2.0bn **+100**
principal
investment book current
positions

\$A1.5bn **+210**
invested in Asia
in last 10 years deals since
2000

- Balance sheet investments to support clients or capitalise on macro theme
- Development capital
 - Late stage project development
 - Backing developers
- Structured investment

Award-winning infrastructure platform in Asia



Specific offshore wind experience

Macquarie's experiences



Macquarie has significant experience in developing, constructing and operating offshore wind projects globally

Macquarie's experiences include:

Mainstream Renewable Power



- Mainstream Renewable Power is a developer of offshore wind with a portfolio of 8GW of offshore wind projects in England, Scotland and Germany with 4.5GW of secured grid connection
- Macquarie invested EUR40 million into Mainstream Renewable Power in 2012
- Macquarie's risk exposure: Development

Baltic 2

EnBW Baltic 2 Offshore Wind Farm

- Baltic 2 is a 288 MW German offshore wind farm developed by EnBW, the 3rd largest German utility
- Macquarie acquired 49.89% stake in 2015
- Macquarie's risk exposure: Construction

Gallopier



- Gallopier is a 336MW UK offshore wind farm developed by RWE Innogy with co-investors in the UK Green Investment
- Macquarie acquired 25% stake in 2015
- Macquarie's risk exposure: Construction



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02

Macquarie's Long Term Plans in Taiwan

Macquarie's long term plans in Taiwan



Macquarie has long-term plans to invest in Taiwan: developing Taiwan's offshore wind energy generation industry is a priority

- Development of offshore wind farm projects brings significant short-term, mid-term and long-term commercial, social and economic development opportunities to local communities and wider supply chain businesses in surrounding regions

Macquarie's goals for offshore wind development in Taiwan:

Centre of excellence
for offshore wind
technology and expertise

Establishment of
manufacturing
facilities

Become an exporter of
offshore wind farm
knowledge and
technologies

Education and training
for local workforce

Provide job and
business
opportunities to local
counties

Achieved through: Best-in-class model integrating international and European best practices from successful European offshore wind projects to Taiwan's supply chains to ensure high standards are maintained for quality, health and safety, and the environment



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03

Involvement from Local Industries

Key benefits of offshore wind developments for local industries



Employment opportunities in **direct jobs**, such as in operating and maintaining equipment and **indirect jobs**, arising from R&D, along the supply-chain and site facilities



Education and training opportunities in **direct specialist tasks** and **indirect specialist tasks** such as capabilities of local fleets and marine construction, operation and maintenance



Local manufacturing inputs through establishment of **domestic supply chain over time**



Project finance and **national savings development** as well as development of a **funding ecosystem**

Involvement from local industries



Macquarie intends on maximising local input into Taiwan offshore wind farms as far as practicable

Local involvement in offshore wind farm projects to be maximised through three channels:

Employment opportunities

- Significant job creation expected in wide array of specialist technical, management and construction roles
 - Local jobs created likely in supply chain and maritime construction
- May not be possible to fill all jobs locally. However, Macquarie is dedicated to employ and train local people as far as possible
- R&D to develop over time to improve on turbine design and manufacturing inputs to better suit Taiwan's conditions

Education and training for locals

- Appropriate training in specialist tasks
 - E.g. Specialist technical roles includes WTG engineering, electrical systems engineering
- Encourage foreign contractors to:
 - Set up local O&M bases
 - Train technically qualified technicians locally

Local manufacturing inputs

- Expect establishment of domestic supply chain over time
- Opportunities expected in:
 - Creating foundations, blades and other major component fabrication and assembly facilities
 - Supplying construction, supply and service vessels

UK estimates suggest a 900MW offshore wind farm project can create 800 – 1,000 full time employment (“FTE”) during the construction phase and over 200 FTE during the operational phase

Involvement from local industries



Macquarie envisages a domestic specialist O&M base in Taiwan for offshore wind farms

Domestic specialist O&M base for offshore wind farms would entail:



Facilities requirements associated with O&M base include:

- Berthing for crew transfer, maintenance vessels and delivery vessels
- Storage capacity at O&M bases to store components, basic maintenance equipment and tools
- Welfare facilities, security and car parking

Involvement from banks and domestic funds



Capital intensive developments such as offshore wind farm developments spurs domestic banks and domestic funds to build up lending and investment capabilities

Key benefits of capital intensive developments on domestic financing sectors

Transfer of knowledge, which contributes to building a dynamic private infrastructure industry whereby:

✓ Local banks build up their lending capabilities in specialised fields

- Domestic banks will build up project financing capabilities, introducing a new source of revenue
- Project financing for offshore wind farms in Taiwan is attractive as project revenues are backed by FiT in domestic currency, banks can charge higher margins over commercial debt and banks have security over asset

✓ Deepening of financial markets occurring through investment of national savings

- A developed domestic infrastructure market can capture domestic savings by deploying them into infrastructure assets with attractive risk-return profiles
- Low risk, stable cashflows from FiT are attractive to investors in search of yield that the bond market can no longer provide

✓ Funding ecosystem develop through strengthening of due diligence capabilities

- Over time, expect specialist due diligence capabilities required for project financing and private capital to develop and competition to increase
- Examples of specialised due diligence requirements for funding project financing include legal (for projects), insurance, technical, environmental, regulatory, tax and accounting



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04

Contact details

Contact details



John Jackman

Managing Director, Development Capital, Macquarie Capital

Phone: +852 3922 1343

Email: john.jackman@macquarie.com