



Macquarie Group

Presentation for Richard Xia
08 December 2019

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Macquarie at a glance



Global financial group

Headquartered and listed in Australia
Top 10 Australian company¹
~£24.0 billion market capitalisation
15,704 employees in 31 markets
£309.2 billion assets under management



Long-term orientation

50 years of unbroken profitability
28 years MBL S&P 'A' credit rating
Strong funding and capital position



Diverse business mix

Genuine expertise creates **market leading** positions across **four business groups**, generating **66% international income** and **~49% annuity-style income²**



Outcome-focused culture

Opportunity for our clients, communities and staff
Accountability for outcomes
Integrity in everything we do

Global financial group

15,704 people in **31** markets²

Locations
Regional headquarters



Assets under management
£148.5 billion
employing 21,000+ people³



Assets under management
£67.0 billion
employing 50,000+ people³



Assets under management
£60.2 billion
employing 10,000+ people³



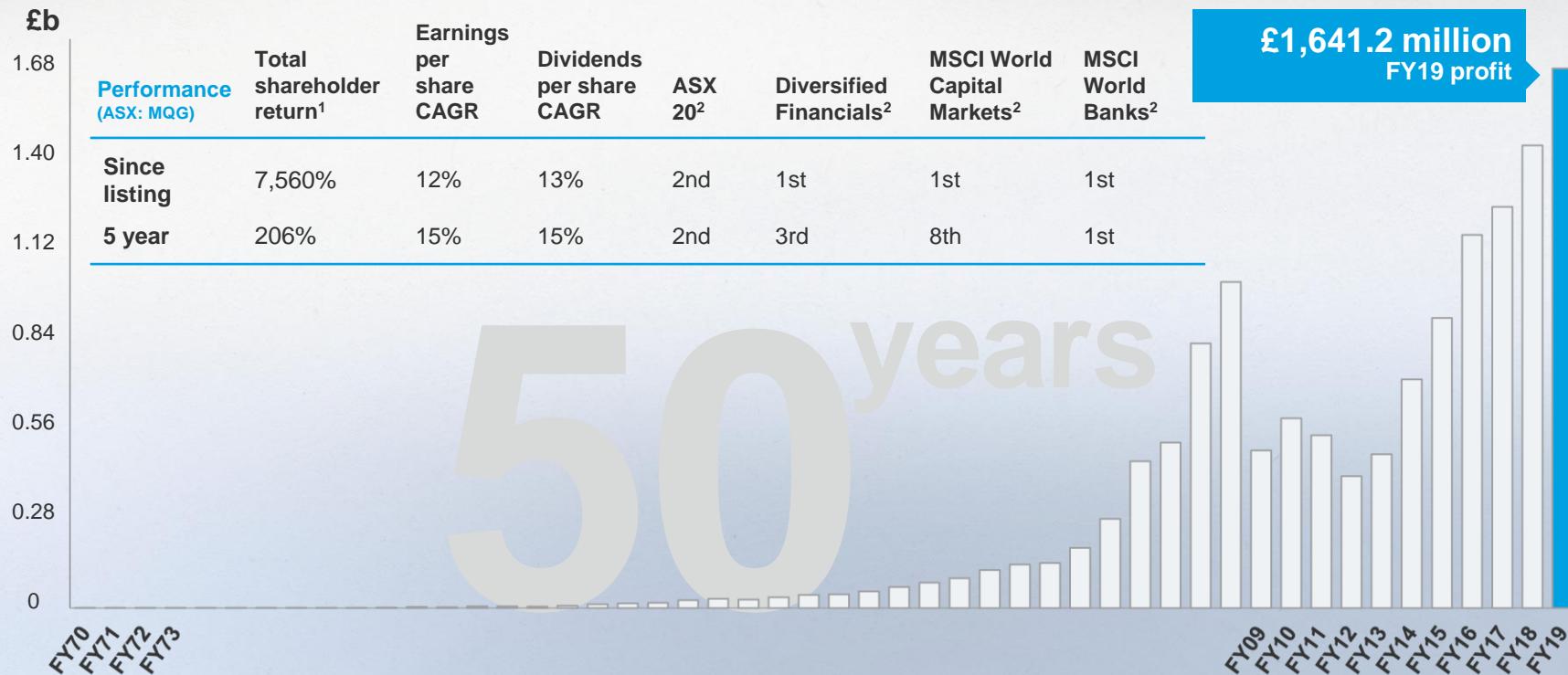
Assets under management
£33.5 billion
employing 41,000+ people³

1. Represents net operating income at 30 September 2019, excluding earnings on capital and other corporate items.

2. At 30 September 2019. 3. Includes staff employed at MIRA-managed fund assets and investments where Macquarie Capital has a significant influence.

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50 years of unbroken profitability



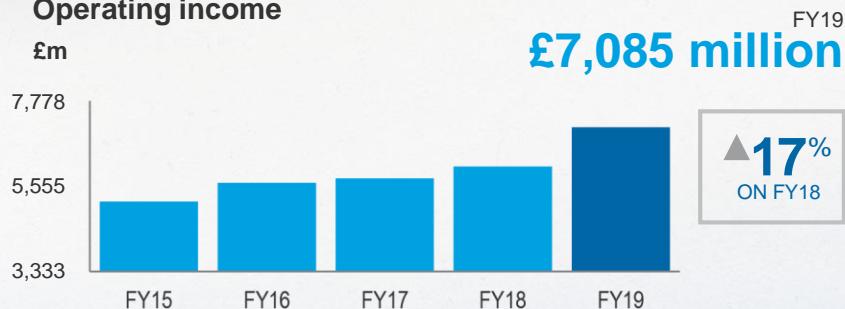
Historical figures converted at FY19 FX rate for comparative purposes. 1. At 30 September 2019. 2. Ranking refers to TSR against the respective index constituents that have been continuously listed since Macquarie's inclusion.

Source: Bloomberg. Data to 30 September 2019. © Macquarie Group Limited

Consistent financial performance

Operating income

£m

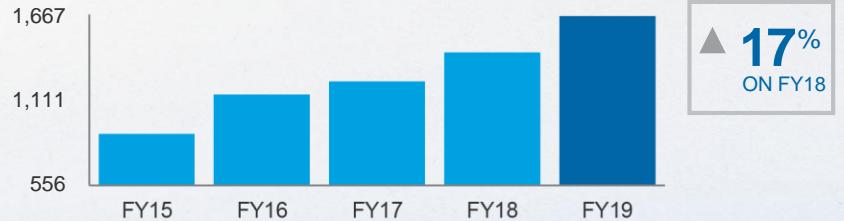


£7,085 million

▲
17%
ON FY18

Profit

£m



£1,657 million

▲
17%
ON FY18

Earnings per share

£

5.56
4.44
3.33
2.22



£4.91

▲
17%
ON FY18

Dividend per share

£

3.33
2.22
1.11



£3.19

▲
10%
ON FY18

Positive result for 1H20

Operating income



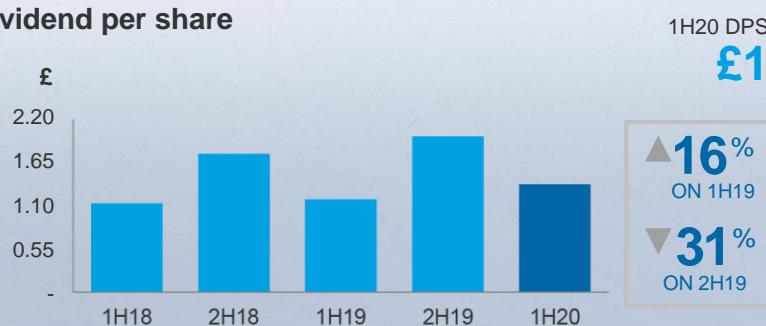
Profit



Earnings per share



Dividend per share





Diverse business mix

Annuity-style activities

Annuity-style Net Profit Contribution

Macquarie Asset Management
Actively manages money for investors across multiple asset classes
No.1 infrastructure manager globally²
Top 50 global asset manager³
£308.5 billion assets under management⁴

Banking and Financial Services
A technology-driven Australian retail bank and wealth manager
Award winning digital banking offering⁵
Australia's 1st open banking platform
A leading Australian vehicle financier
£30.8 billion total BFS deposits⁴

FY19 Net Profit Contribution¹

MAM BFS CGM
~30% **~12%** **~7%**

Markets-facing activities

Markets-facing Net Profit Contribution

Commodities and Global Markets
Provides clients with access to markets, financing, financial hedging, research and market analysis, and physical execution
No.2 physical gas marketer in North America⁶
Derivatives House of the Year⁷
200+ products across 25+ market segments

Macquarie Capital
Advises and invests alongside clients and partners to realise opportunity
No.1 Global Infrastructure Finance Adviser⁸
No.1 in ANZ for completed M&A⁹
£262.4 billion completed deals in FY19¹⁰

CGM MacCap
~22% **~29%**

1. Net profit contribution is management accounting profit before unallocated corporate costs, profit share and income tax. FY19 net profit contribution has been reclassified to reflect the reorganisation between Operating Groups effective 1 July 2019 and 1 September 2019. 2. Based on AUM. IPE Real Assets Top 75 Infrastructure Investment Managers 2019, published July/August 2019. 3. P&I Largest Money Managers 2018, published in May 2019. 4. At 30 September 2019. 5. Winner in the 2019 Mozo Experts Choice Awards for Internet Banking and Exceptional Everyday Account / Winner in the 2018 Mozo Experts Choice Awards in the Travel Money/ International Money Transfer category / Best Digital Banking Offering & Most Innovative Card Offering at 2017 Australian Retail Banking awards. 6. Platts Q2 CY19. 7. 2018 Energy Risk Awards. 8. Inspiratia (H1 2019, by deal count). 9. Refinitiv (CY19 to 30 Sep, M&A Announced and Completed by deal count). 10. Dealogic and IJGlobal for Macquarie Group completed M&A, balance sheet investments, ECM and DCM transactions converted at the relevant report date. Deal values reflect the full transaction value and not an attributed value.

Macquarie Asset Management

Actively manages money for investors across multiple asset classes

FY19 Net profit contribution*
£1,030.3 million



£308.5 billion
assets under management¹



*Based on reclassified FY19 net profit contribution from operating groups.

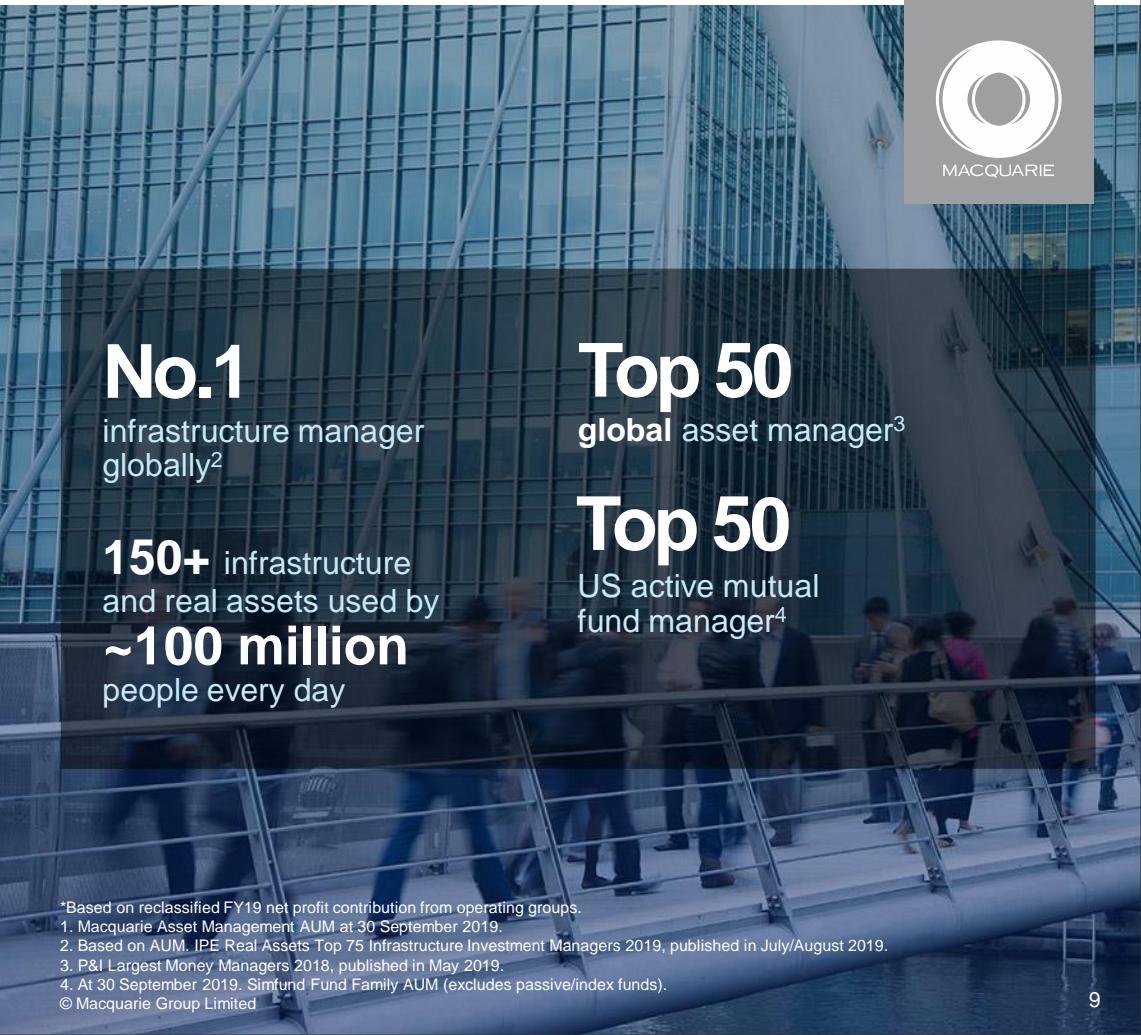
1. Macquarie Asset Management AUM at 30 September 2019.

2. Based on AUM. IPE Real Assets Top 75 Infrastructure Investment Managers 2019, published in July/August 2019.

3. P&I Largest Money Managers 2018, published in May 2019.

4. At 30 September 2019. Simfund Fund Family AUM (excludes passive/index funds).

© Macquarie Group Limited



No.1
infrastructure manager
globally²

150+ infrastructure
and real assets used by
~100 million
people every day

Top 50
global asset manager³

Top 50
US active mutual
fund manager⁴

Banking and Financial Services

A technology-driven Australian retail bank and wealth manager

FY19 Net profit contribution*
£416.1 million



Personal banking	Wealth management	Business banking
Credit cards Home loans Bank accounts	Investments Financial advice Wrap	Property services Professional services



More than
1.5 million
Australian clients

Award winning
digital banking offering¹

Australia's 1st

open banking platform
gives customers control
over their data

A leading Australian
vehicle financier

500,000+
vehicles

£30.8 billion
total BFS deposits²

Australian loan and lease portfolio of
£37.0 billion³

30+ years bringing innovation and
competition to **Australian consumers**

Rebuilt our tech stack and are the
first to offer lending and retail deposits
on **one core banking system**

*Based on reclassified FY19 net profit contribution from operating groups.

1. Winner in the 2019 Mozo Experts Choice Awards for Internet Banking and Exceptional Everyday Account / Winner in the 2018 Mozo Experts Choice Awards in the Travel Money/International Money Transfer category / Best Digital Banking Offering & Most Innovative Card Offering at 2017 Australian Retail Banking awards. 2. At 30 September 2019. BFS deposits exclude corporate/wholesale deposits. 3. At 30 September 2019.
© Macquarie Group Limited



Commodities and Global Markets

Provides clients with access to markets, financing, financial hedging, research and market analysis and physical execution

FY19 Net profit contribution*
£959.3 million



 **30+** years
in metals,
agriculture, equities,
futures and FX

 **20+** years
in technology,
media and
telecoms (TMT)

 **15** years
in energy,
renewables and
sustainability

 **200+** products across **25+** market segments

No.2 physical gas marketer in North America¹

Differentiated insights on
1,200+ listed companies
globally²

£4.0 billion
asset finance portfolio³

10 million+
meters provided to
homes and businesses⁴

1.2 million+
smartphones worldwide
through Telcos

Natural Gas / LNG
House of the Year⁵

Research House
of the Year⁵

*Based on reclassified FY19 net profit contribution from operating groups.

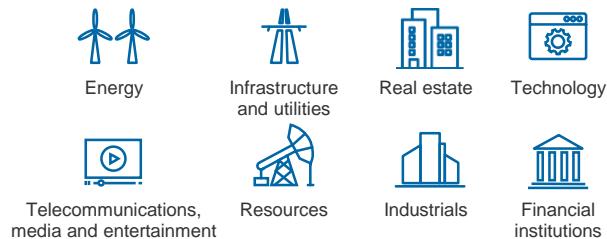
1. Platts Q2 CY19. 2. 31 October 2019. 3. At 30 September 2019 in the Specialised and Asset Finance division. 4. At 30 September 2019, largest independent meter funder in UK, not part of a distribution network or vertically integrated utility. 5. 2019 Energy Risk Awards. © Macquarie Group Limited



Macquarie Capital

Advises and invests alongside clients
and partners to **realise opportunity**

FY19 Net profit contribution*
£976.3 million



 **£262.4 billion**
completed deals in FY19¹

No.1 Global Infrastructure
Financial Advisor²

No.1 in ANZ for
completed **M&A**³

Financial Advisor of the Year⁴

No.1 Financial Advisor for
Power in **North America**⁵

**Global Finance Best Investment
Bank Award 2019** Infrastructure
sector⁶

Global leader
in green energy

250+ green energy projects
under development or construction

**Best Education and Higher
Education Project –**
Grangegorman Campus PPP⁴

**Partnerships Bulletin
Special Award –** Acquisition
of John Laing Infrastructure
Fund⁴

*Based on reclassified FY19 net profit contribution from operating groups.

1. Dealogic and IJGlobal for Macquarie Group completed M&A, balance sheet investments, ECM and DCM transactions converted at the relevant report date. Deal values reflect the full transaction value and not an attributed value.

2. Inspirata (1H CY19, by deal count). 3. Refinitiv (CY19 to 30 September, M&A Announced and Completed by deal count).

4. Partnership Awards 2019. 5. Inframiration (H1 2019, by deal count). 6. Global Finance (2019).

© Macquarie Group Limited



Macquarie in the community

Macquarie Group Foundation

£17.6 million

record contribution in FY19

53,000+
hours
volunteered

1,600+
non-profits
supported

More than

£197.6 million

contributed since 1985

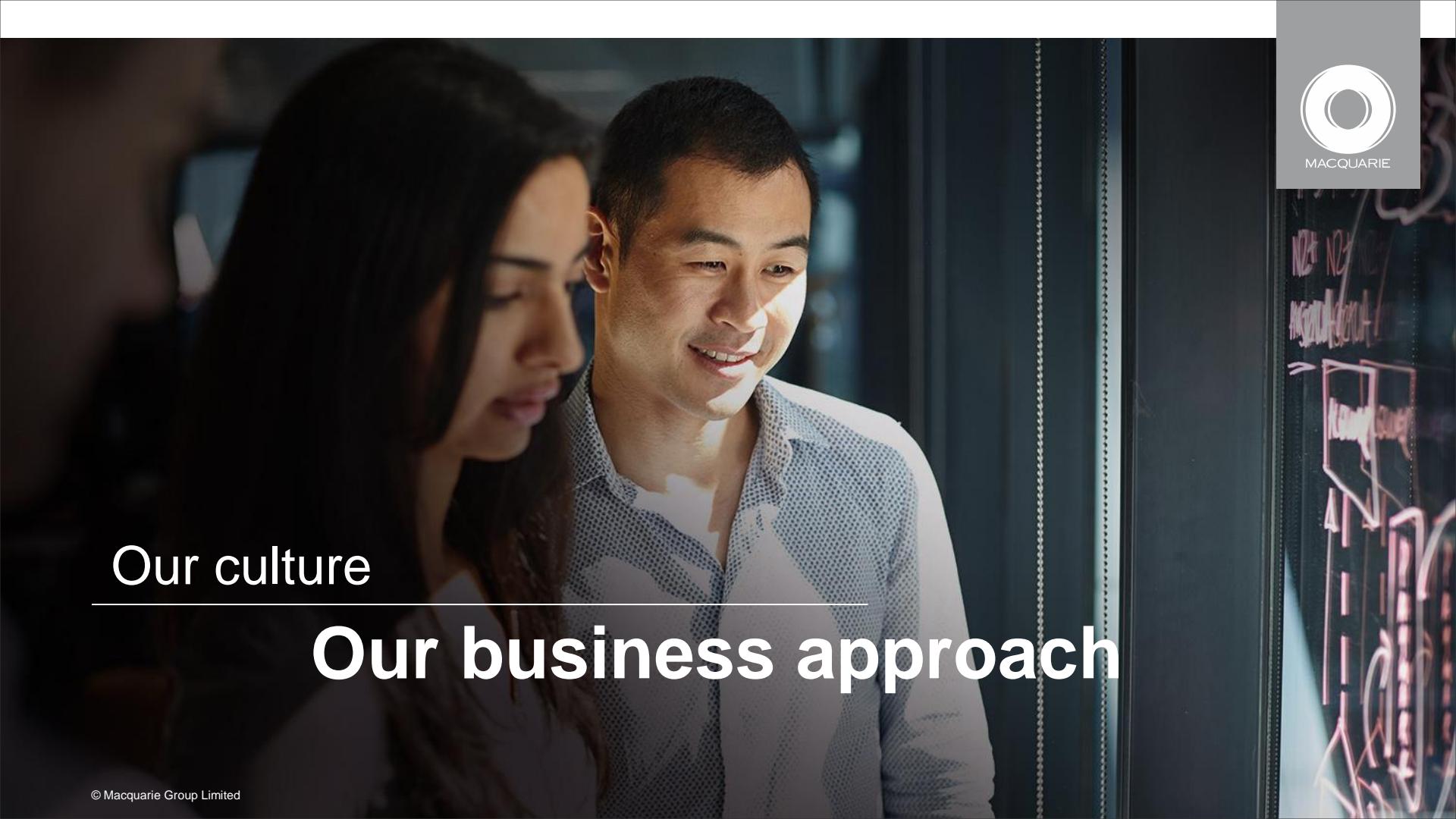


As a company is a member of the society in which it operates, it follows that one of its important duties is to work in a multitude of ways for the betterment of society. In the long run this is consistent with a company's duty to its shareholders."

David Clarke,
Macquarie Group Chairman 1984–2011

Macquarie Group Collection
Supporting emerging
artists **since 1986**

Macquarie Sports
Sports clinics for children
and youth in disadvantaged
communities

A photograph of a man and a woman in a professional setting, looking down at a screen or document together. The man is smiling. In the background, there's a chalkboard with some handwritten text and diagrams, suggesting a business environment like a trading floor or office. The overall lighting is dramatic, with strong highlights and shadows.

Our culture

Our business approach

Inspired by Lachlan Macquarie

Governor of New South Wales 1810–1821



An enduring social and economic legacy



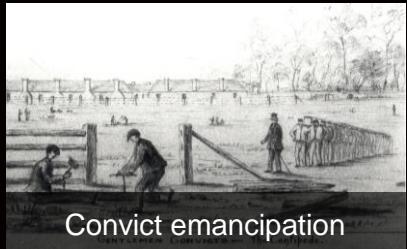
Australia's 1st bank



Australia's 1st currency

265

building projects
in 12 years



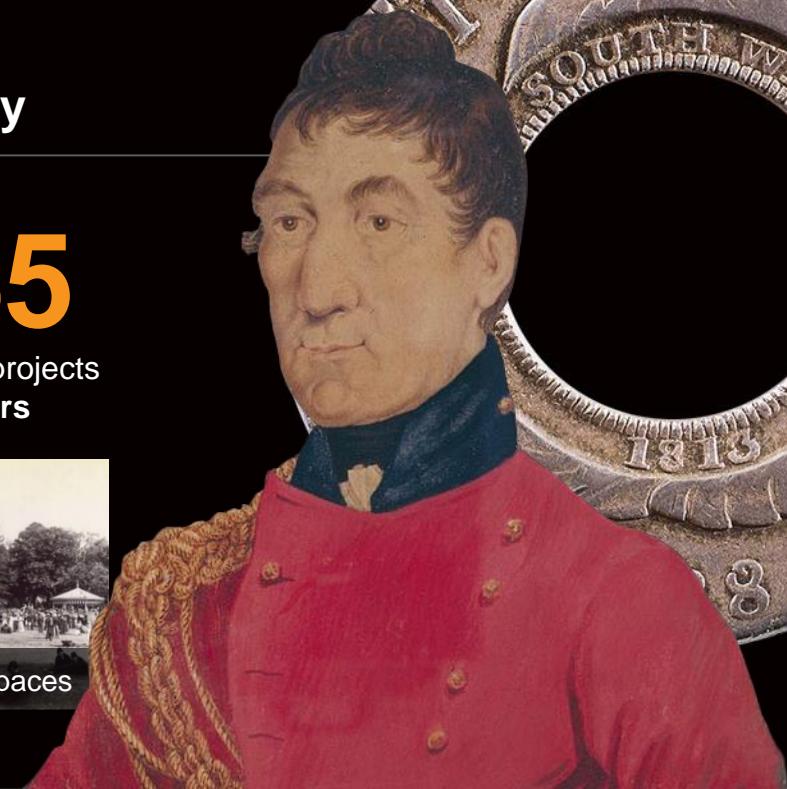
Convict emancipation



Schools, hospitals



Public spaces





His example reflected in our long-held principles



We are in business to be profitable, but it is the way we do business that defines us.”

What We Stand For

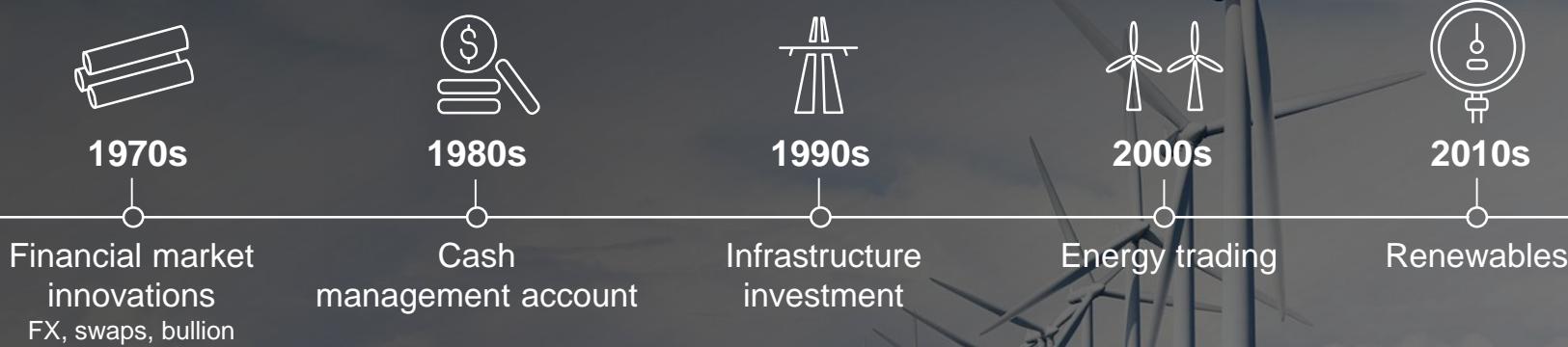
Accountability

OPPORTUNITY

INTEGRITY



We thrive on new ideas



We have a bottom-up culture. We empower our people to make decisions quickly and react to what they see before opportunity passes.”

Shemara Wikramanayake
Chief Executive Officer



And equip our businesses to succeed



28 years

MBL S&P

'A'

Credit rating

**Stable
financial
position**



\$A6.7 billion¹

Group capital
surplus

**Capital to
fund growth
opportunities**



**Green
Investment
Group**



**Facilitate
Group-wide
collaboration**



**Implement
Group-wide
standards**

1. Calculated at 8.5% RWA including the capital conservation buffer (CCB), per APRA ADI Prudential Standard 110. Based on materiality, the 8.5% used to calculate the Group capital surplus does not include the countercyclical capital buffer (CCyB) of ~13bps. The individual CCyB varies by jurisdiction and the Bank Group's CCyB is calculated as a weighted average based on exposures in different jurisdictions.

Within a robust risk management framework



Ownership of risk
at the business level



Understanding
worst case outcomes

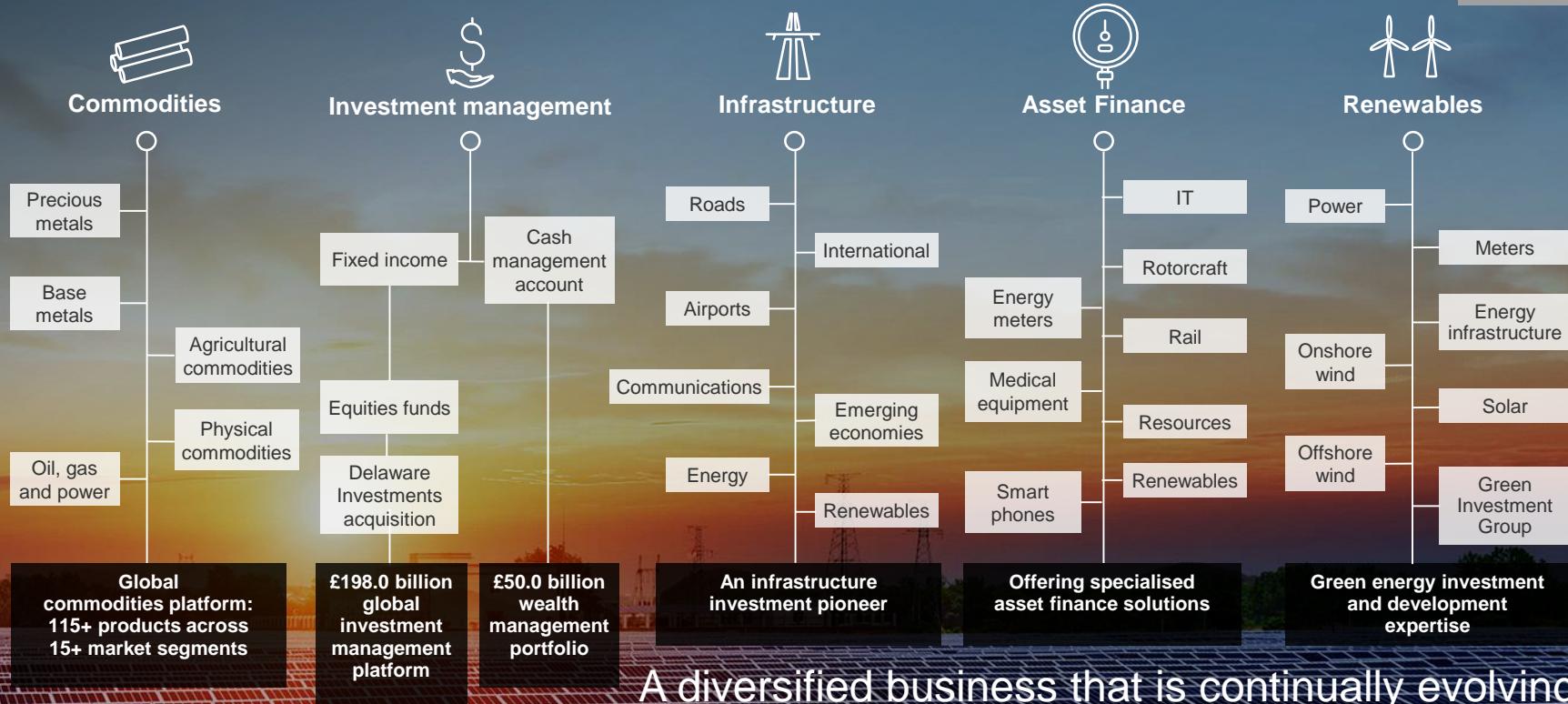


Independent sign-off
by Risk Management Group

Principles stable for **30+ years**

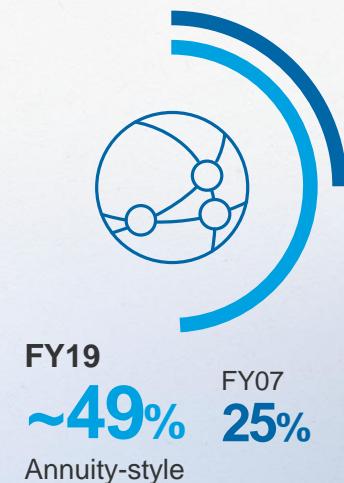
A key factor in our 50 years of unbroken profitability

We build expertise and expand into adjacencies



And adapt our portfolio mix for changing market conditions

Business mix



International income¹



International staff¹



Always mindful of our impact



~100 million people

use Macquarie-managed
essential services daily



22GW+

of generation assets¹



Carbon neutral

since 2010



£197.6 million

community commitment
since 1985



120,000+ people

employed by
Macquarie-managed assets



250+ green energy projects

under development
or construction²



6-Star Green Star rating

Global headquarters



Ethical supply chain
management

17,000 service providers

A longstanding commitment to workforce diversity and inclusion

Our diversity is our strength and helps us deliver innovative and sustainable solutions for our clients, communities, shareholders and our people



At Macquarie we seek to create a workplace where every person feels valued for their uniqueness and where different views and ideas are embraced.”

Shemara Wikramanayake
Chief Executive Officer

68

nationalities, speaking
70+ languages

50:50

gender balance in graduates
and interns hired in FY19



Year on year **increase in female representation** across total workforce

1/4

One-quarter of the Executive Committee and 36.4% of Macquarie's Board of Directors are female



Employee network groups include **Gender, Pride, Culture & Heritage, First Australians, Families & Carers, Veterans, and Wellness**



In the UK, ranked as a **top 100 employer** for three consecutive years in the Stonewall Workplace Equality Index



Gold Employer status in the 2019 Australian Workplace Equality Index for LGBTI inclusion



Received 100/100 score in the 2019 **Corporate Equality Index rating** from the US based Human Rights Campaign



Our culture

Our community engagement

Macquarie Group Foundation

More than **£197.6 million** committed to community organisations since 1985

Staff-led philanthropy



Our **grassroots approach** to philanthropy enables staff to support the community organisations they feel passionately about.”

Lisa George

Head, Macquarie Group Foundation

Integrated approach



Grant-making focus



Supporting social and economic opportunities for young people



Capacity building and innovation in community sector

Macquarie Group Collection



Established in **1987**



Supports **emerging**
Australian artists



Over **800 works** in
40 offices



Themed around the
Australian landscape



The collection acknowledges Macquarie's heritage and reflects our culture as an organisation that actively explores ideas, supports emerging talent and embraces diversity of thought.”

Helen Burton

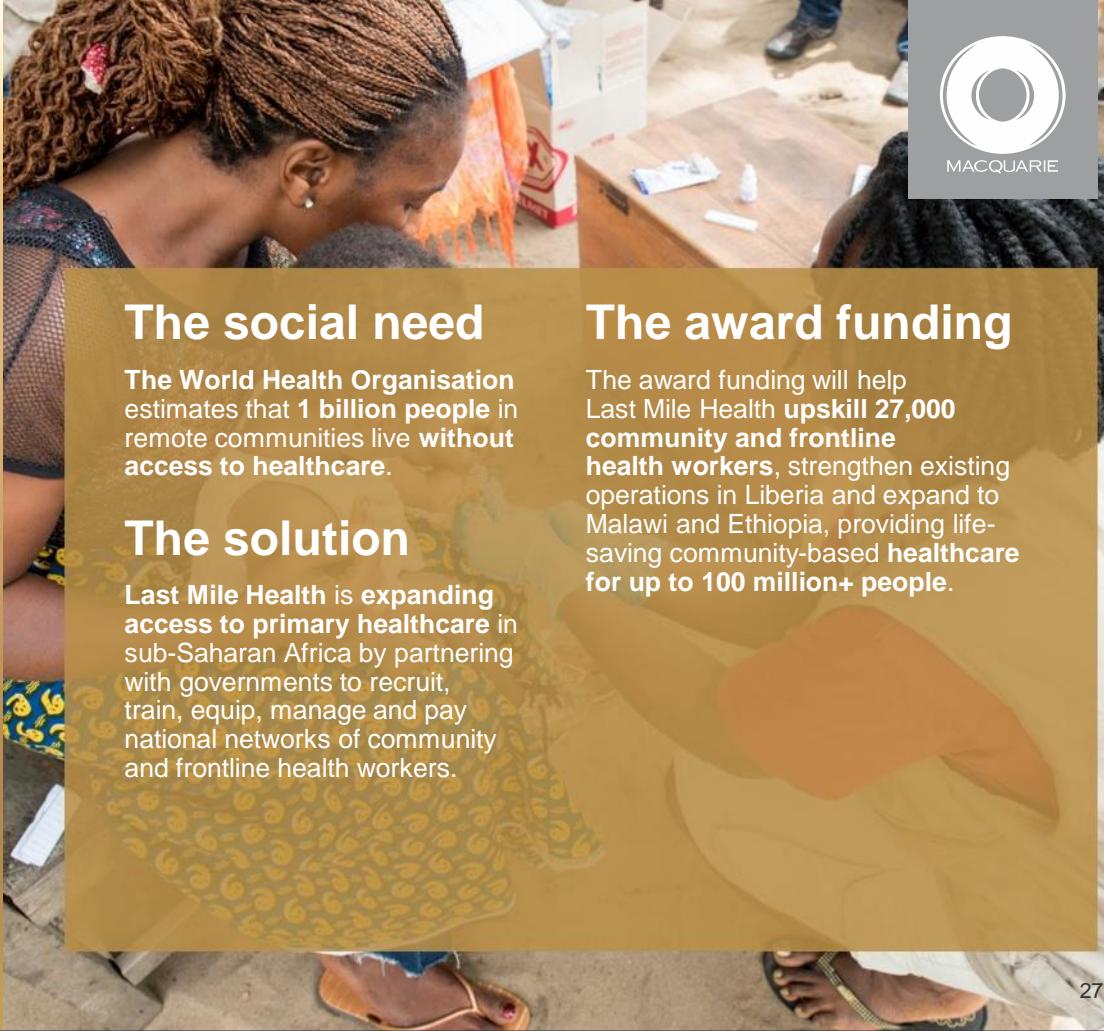
Director, Macquarie Group Collection



Last Mile Health

Saving lives in the world's most remote communities

To find out more, visit
macquarie.com/50award



The social need

The World Health Organisation estimates that **1 billion people** in remote communities live **without access to healthcare**.

The solution

Last Mile Health is **expanding access to primary healthcare** in sub-Saharan Africa by partnering with governments to recruit, train, equip, manage and pay national networks of community and frontline health workers.

The award funding

The award funding will help Last Mile Health upskill **27,000 community and frontline health workers**, strengthen existing operations in Liberia and expand to Malawi and Ethiopia, providing life-saving community-based healthcare **for up to 100 million+ people**.



Monash University World Mosquito Program

*Protecting vulnerable
communities from
mosquito-borne diseases*

To find out more, visit
macquarie.com/50award

The social need

40% of the world's population live in areas vulnerable to devastating mosquito-borne diseases, including dengue fever, Zika virus, chikungunya and yellow fever. Around three billion people are at risk of contracting dengue fever alone each year.

The solution

Monash University's the World Mosquito Program has developed an innovative **natural and self-sustaining intervention** where a naturally-occurring bacteria called *Wolbachia* is introduced into the

Aedes aegypti mosquito, the species most responsible for transmission of these diseases between people.

The award funding

The award funding will **expand the World Mosquito Program to more than 20 countries** across Asia, the Americas and Oceania, accelerating it to reach its goal of **protecting 100 million people by 2023**.





Murdoch Children's Research Institute World Scabies Elimination Program

*Taking action to eliminate
scabies across the world*

To find out more, visit
macquarie.com/50award

The social need

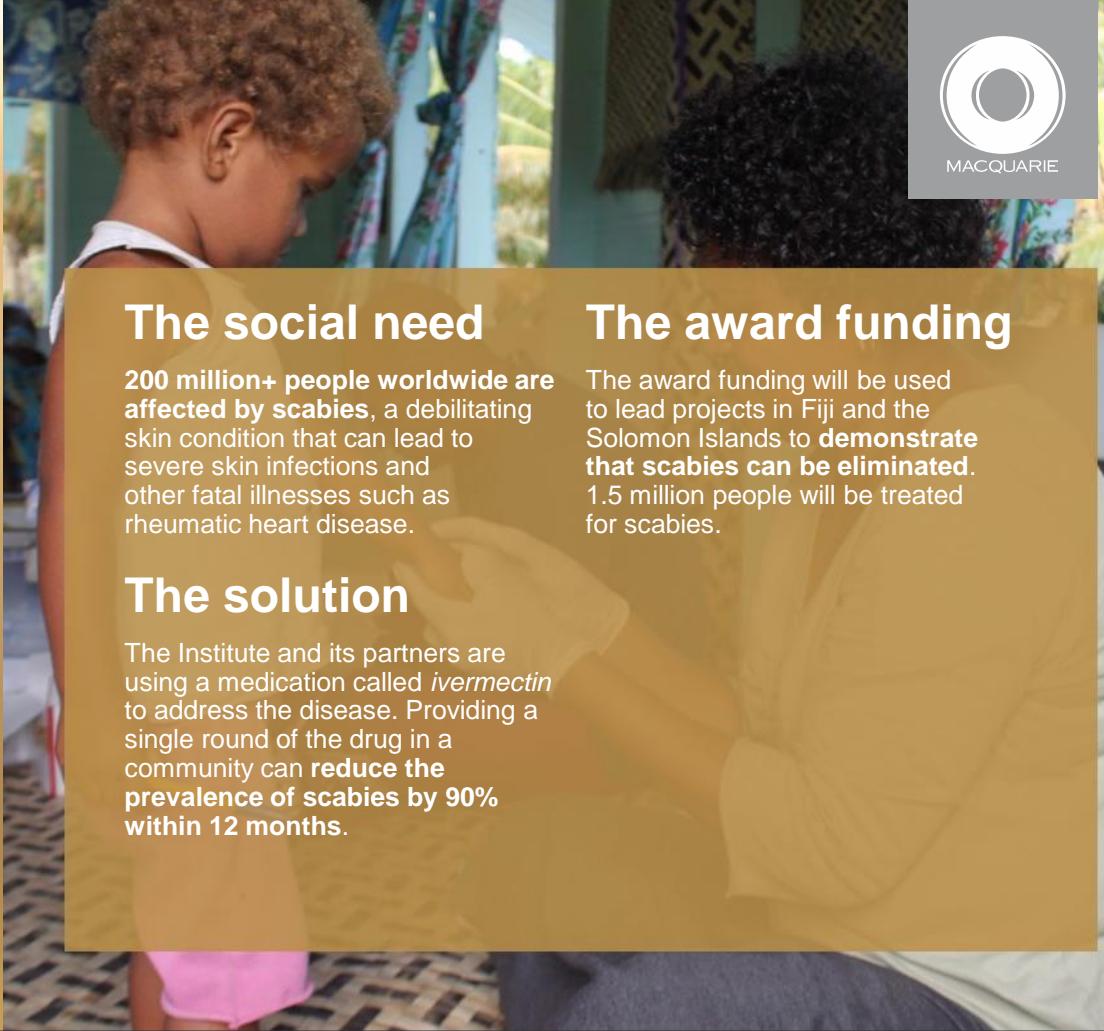
200 million+ people worldwide are affected by scabies, a debilitating skin condition that can lead to severe skin infections and other fatal illnesses such as rheumatic heart disease.

The award funding

The award funding will be used to lead projects in Fiji and the Solomon Islands to demonstrate that scabies can be eliminated. 1.5 million people will be treated for scabies.

The solution

The Institute and its partners are using a medication called *ivermectin* to address the disease. Providing a single round of the drug in a community can reduce the prevalence of scabies by 90% within 12 months.





Social Finance

Mobilising capital to drive social progress

To find out more, visit
macquarie.com/50award



The social need

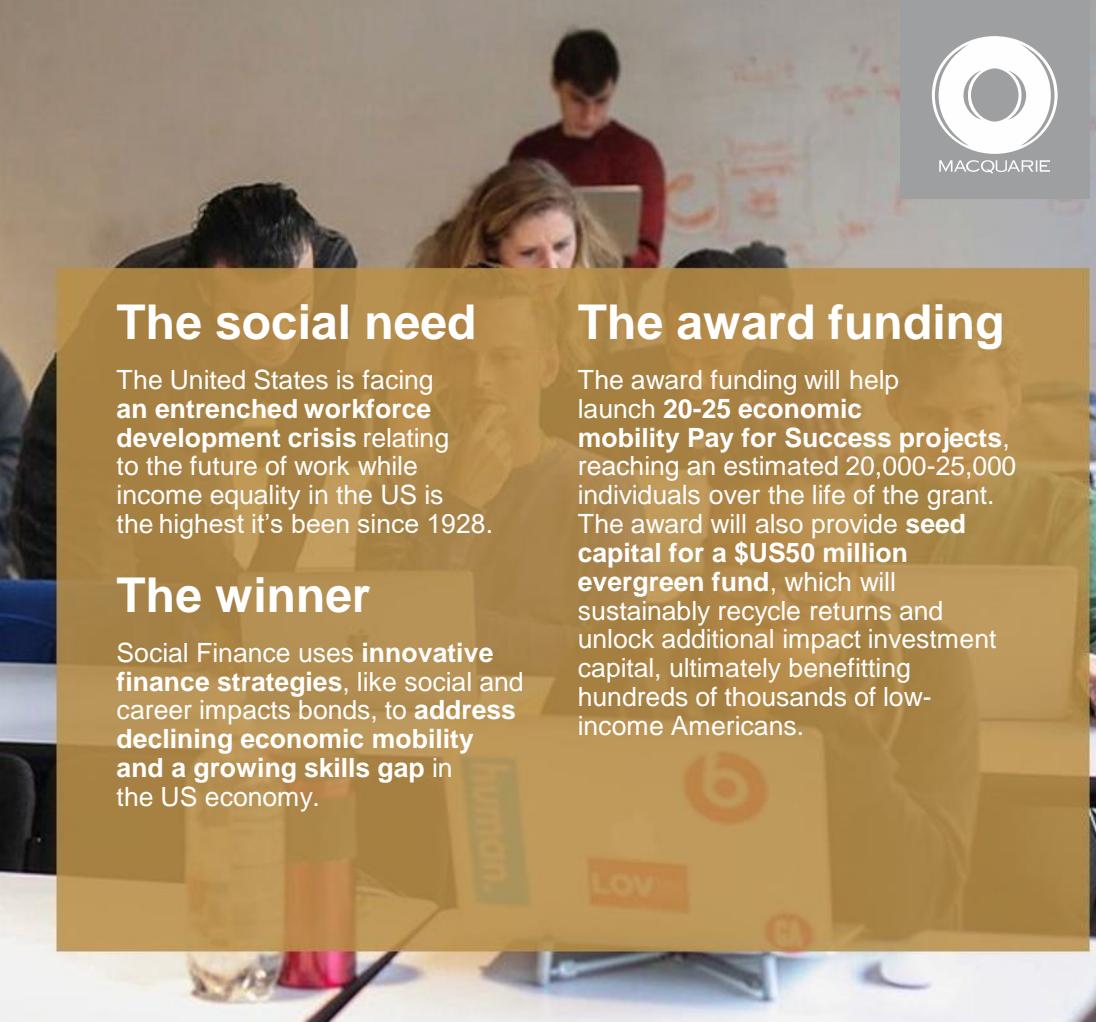
The United States is facing **an entrenched workforce development crisis** relating to the future of work while income equality in the US is the highest it's been since 1928.

The winner

Social Finance uses **innovative finance strategies**, like social and career impacts bonds, to **address declining economic mobility and a growing skills gap** in the US economy.

The award funding

The award funding will help launch **20-25 economic mobility Pay for Success projects**, reaching an estimated 20,000-25,000 individuals over the life of the grant. The award will also provide **seed capital for a \$US50 million evergreen fund**, which will sustainably recycle returns and unlock additional impact investment capital, ultimately benefitting hundreds of thousands of low-income Americans.





The Ocean Cleanup

Developing advanced technologies to rid the world's oceans of plastic

To find out more, visit
macquarie.com/50award



The social need

1.8 trillion pieces of plastic are currently floating in the Great Pacific Garbage Patch (GPGP), and **ocean plastic pollution costs the global economy \$US13 billion every year.**

The winner

The Ocean Cleanup's goal is to **rid the world's oceans of 90 per cent of floating plastic by 2040.** The organisation is developing technological solutions to restore our ocean ecosystem: one is a passive ocean cleanup system to remove existing plastic pollution; and the second is the Interceptor™,

a new technology that intercepts plastic from rivers before reaching the ocean.

The award funding

The award will accelerate the critical development phase of **The Ocean Cleanup's technology.** Once the design is proven, The Ocean Cleanup can begin its scale-up to a full fleet of systems to be deployed across the GPGP and deploy the Interceptor™ in up to 1000 rivers globally.





Our global presence
Australia and New Zealand

Macquarie in Australia and New Zealand



*Pie charts based on net operating income at 30 September 2019, excluding earnings on capital and other corporate items. 1. At 30 September 2019.
 © Macquarie Group Limited

The strong business we built in Australia and New Zealand over half a century provided a platform and culture to grow globally.

Shemara Wikramanayake
 Chief Executive Officer

Leading positions
 in our home market

~£24.0 billion
 market capitalisation¹
 – one of Australia's largest listed companies

Operating since 1969

Our business activities in Australia and New Zealand



Sydney

Our global headquarters



Full-service offering
across all business groups



Australia's largest
global asset manager



One of Australia's
largest diversified farmers
4.7 million hectares



Leading Australian vehicle financier
500,000+ vehicles

Retail banking and **financial services**
portfolio includes¹:

£50.2 billion

funds on platform²

£24.0 billion

Australian mortgage
portfolio



Leading digital banking
offering with features that are
firsts in Australian banking

No.1 in ANZ for announced
and completed M&A³

No.1 Global Infrastructure
Financial Advisor⁴



Leading Australian
equities research team

~2,700

staff in corporate centre roles
supporting Macquarie's Australian
and global operations



Our global presence

Asia

Macquarie in Asia



Asia is becoming more important to the world than ever before and we're able to **facilitate that connectivity.**

Ben Way
Chief Executive Officer, Asia

Local expertise and insight
linking Asia with the rest of the world

Established presence
in world's largest growth region

Regional presence **since 1994**

Our business activities in Asia



Leading regional **infrastructure** and **energy** business

£33.5 billion
assets under management¹



~10GW+
green energy portfolio²

2018 Asia Pacific
Offshore Wind Deal of the Year³
2018 Best Structured Warrant Issuer⁴



Driving cross-border flows



of staff in shared services,
providing support to
Macquarie's global businesses



900+
stocks under coverage⁵



Membership licences
for **14 regional stock exchanges⁶**



A global integrated offering
across **equities, fixed income, commodities and foreign exchange**

1. At 30 September 2019. 2. Portfolio includes assets that are operational and under development or construction at 31 March 2019. 3. 2018 IJ Global Awards. 4. Malaysia Warrants: Best Structured Warrant Issuer 2018 (Bursa Excellence Awards). 5. At 31 October 2019, covering 11 markets in Asia. 6. Macquarie is licensed to more than one exchange in 5 markets.
© Macquarie Group Limited

Macquarie in China



20+
years
of experience
in the China
market

650+ 
people in Macquarie's
Greater China offices with
100+ in mainland China

4,000+
people employed
at invested assets¹

Providing clean
drinking water to 
~500,000
residents in Shenyang

Comprehensive local and offshore commodities platform

servicing clients from
Shanghai and Beijing offices

Growing capability in
Chinese securities

Advised on
cross-border
deals totalling over
£0.5 billion

Supporting our community through
the **Macquarie Group Foundation**



Education, environment and welfare initiatives

Supporting education
for rural youth, local
clean-ups and welfare
shelters

1. At 30 September 2019. Including staff employed at MIRA-managed fund assets and assets MacCap has invested in. Includes permanent and temporary staff as well as construction workers.
All data at 31 March 2019.
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Macquarie in South Korea

 **19 year**
commitment
to South Korea

230+ 

people employed
in Macquarie's South
Korean office

5,000+¹
people employed
at invested assets

Comprehensive platform

Fixed income, currencies,
commodities and equities
markets

Largest foreign asset
manager in South Korea with

~38 assets

across infrastructure,
renewables and waste
management sectors

Providing
essential services
to the South Korean economy



236 million
road users / year

2.4 million
cable TV subscribers

66GwH
power / year

~500,000
tons of waste
treated / year

520 tons of food
waste treated / day

Supporting our community through
the **Macquarie Group Foundation**



**Fundraising and
volunteering**
Focused efforts
supporting vulnerable children



10 years
of Community Days –
annual volunteering events

1. At 30 September 2019. Including staff employed at MIRA-managed fund assets and assets MacCap has invested in. Includes permanent and temporary staff as well as construction workers.
All data at 31 March 2019.
© Macquarie Group Limited

Macquarie in Taiwan



14
years of
experience
in the Taiwan
market

80+ 
people employed
across three office
locations



>2GW
under development
to provide power to
~1 million
homes

70+
stocks under
coverage¹



Warrants

Only foreign
warrants issuer
in Taiwan



Semiconductor

Leading equipment trading
and advisory platform

Supporting our community through
the **Macquarie Group Foundation**



Fundraising and volunteering

Focused efforts
supporting Taiwan
Orphans Welfare
Foundation

1. At 31 October 2019. The 76 Taiwan listed stocks includes 7 covered by HK/Shanghai analysts and excludes 31 non-Taiwan listed stocks covered by Taiwan-based analysts.

All other data at 31 March 2019.

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Macquarie in Japan



20+
year
commitment
to Japan

Trading and execution



1st petrochemical hedge with food and beverage company

1st Japan Crude Cocktail (JCC) hedge with energy client

120+ 
people employed
in Macquarie's
Japan office

Solar and wind development platforms



through partnerships
with local development
companies

130+ stocks under
coverage¹

2,000+
people employed
at invested assets²

Joint lead manager
and bookrunner to
Japan's largest
renewable infrastructure
fund IPO³

Supporting our community through
the **Macquarie Group Foundation**



Educational support programme

Providing mentorship
and educational support
for middle school students
from disadvantaged
backgrounds

¹. At 31 October 2019, % of MCSI Index. ². At 30 September 2019. Including staff employed at MIRA-managed fund assets and assets MacCap has invested in. Includes permanent and temporary staff as well as construction workers.

³. Canadian Solar Infrastructure Fund IPO.

All other data at 31 March 2019.

© Macquarie Group Limited

Macquarie in India

 **14+**
year
commitment
to India

~1,400 

people in Gurugram
support Macquarie's
global operations
across finance,
risk and technology

Largest
international investor in
Indian toll roads

5,000+ 

hours of road safety
training each year

24,000+²

people employed
at invested assets

Top 10 ranked
domestic equities broker and
a leading research house¹



~85%
stocks under
research coverage

**Infrastructure
advisor**



National Highways
Authority of India (NHAI)
Ministry of Finance (MOF)³

Supporting our community through
the **Macquarie Group Foundation**



8,000+

beneficiaries of youth
job training and career
development programmes



₹ 220 million

contributed towards
CSR since 2013,
funding projects with
15 non-profit organisations

1. Based on MSCI India Index

2. At 30 September 2019. Including staff employed at MIRA-managed fund assets. Includes permanent and temporary staff as well as construction workers.

3. NHAI: Hybrid Annuity Model and Toll Operate Transfer initiatives. MOF: National Infrastructure and Investment Fund. All other data at 31 March 2019.

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Macquarie in Singapore



20+
year
commitment
to Singapore

350+ 
people in Macquarie's
Singapore office

Regional hub
for Macquarie's
ASEAN operations
and regional
commodities business



Acquisition of
Conergy Asia
Solar development
platform¹



Market leader
in listed warrants
in Singapore



Supporting our community through
the **Macquarie Group Foundation**



4 years
of Community Days –
annual volunteering
events



£263,467.1 towards
communities in FY19



Launched
the largest
pan-Asia infrastructure
platform Macquarie Asia
Infrastructure Fund
(MAIF1 and MAIF2)

1. Green Investment Group (GIG), Macquarie Capital's global green investment platform, acquisition of a significant solar development portfolio from Conergy Asia & ME ("Conergy"). All data at 31 March 2019.
© Macquarie Group Limited

Macquarie in the Philippines

 **15+**
year
commitment
to the Philippines

~1,000 
people in Manila
support Macquarie's global
operations across operations,
finance, technology and risk

**First and
largest** 
infrastructure fund
Philippines Investment
Alliance for Infrastructure
(PINAI)

5,000+
people employed
at invested assets¹

Top 5 
Foreign broker
Cash equities and
research coverage²

Enough clean
energy to power 
~2 million
households
Acquisition of Energy
Development Corporation

Supporting our community through
the **Macquarie Group Foundation**

 **15+ groups**
supporting education,
social welfare and
environmental initiatives

1. At 30 September 2019. Including staff employed at MIRA-managed fund assets. Includes permanent and temporary staff as well as construction workers.

2. Top 5 share based on trading volume on the Phil stock exchange.

All data at 31 March 2019.

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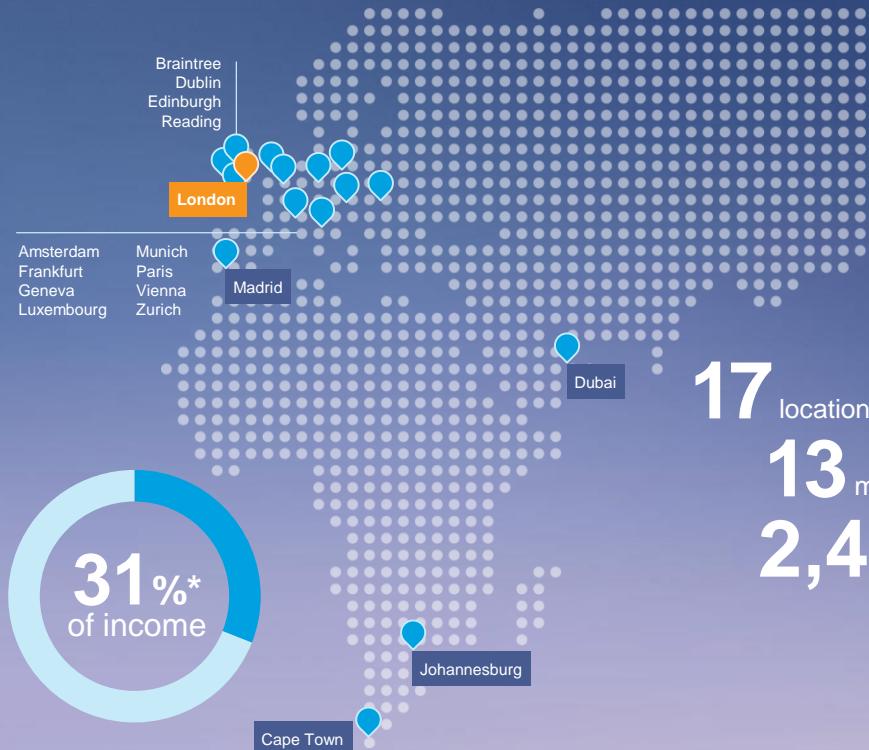


Our global presence

Europe, the Middle East and Africa



Macquarie in Europe, the Middle East and Africa



Our business in EMEA gives us opportunities for scale, with the world's largest single market, and innovation. We are constantly evolving the type of business we do by delivering pioneering solutions for major global growth opportunities like infrastructure, green energy and commodities."

Paul Plewman

Chief Executive Officer, Europe, the Middle East and Africa

4 Platform acquisitions in two years

Regional presence since **1989**

Our business activities in Europe, the Middle East and Africa

Developing and managing new renewable projects, from wind power in Scandinavia to solar power in the southern Mediterranean.



140+
Green energy
projects since 2010



Most Innovative Investment Bank
for Infrastructure and Project Finance¹



37
Infrastructure assets
under management



Investments in²
Social housing in the UK
Roads in the Netherlands
Ports across Europe
Telecoms in Denmark
Waste management in Scotland
Gas network in the UK



£67.0 billion
under management
in EMEA³



A leading risk management provider in the **European Gas market**

2GW of power managed and dispatched in the UK, equivalent to ~6% of UK base power demand

1. The Banker, 2018. 2. Includes investments made through managed funds. 3. At 30 September 2019.

All other data at 31 March 2019.

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Macquarie in the United Kingdom

30
year commitment
to the UK
An established
presence since 1989

1,700+
people employed
across 3 offices
Regional headquarters
for EMEA in London



World's largest infrastructure manager²

Our global infrastructure
and real assets division is
headquartered in London

£40
billion+¹

Invested in UK
infrastructure since 2005

Renewable
energy
global principal
investment business –
The Green Investment Group
- is led from the UK



12,000+³

people employed
at invested assets

10 million+
meters provided to
homes and businesses⁴

Supporting our community through
the **Macquarie Group Foundation**



7 organisations funded
supporting social mobility
opportunities for young
people



10 years
of the CoRe programme
which has supported
60 local charities with
10,000+ volunteers hours⁵

1. At 31 March 2019. 2. Based on AUM. IPE Real Assets Top 75 Infrastructure Investment Managers 2019, published in July/August 2019.

3. At 30 September 2019. Including staff employed at MIRA-managed fund assets and assets MacCap has invested in. Includes permanent and temporary staff as well as construction workers.

4. At 30 September 2019, largest independent meter funder in UK, not part of a distribution network or vertically integrated utility.

5. The Community Resourcing Programme (CoRe) aims to capacity build the local non-profit sector by connecting London employees with local non-profits.

All other data at 31 March 2019.

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Our global presence

Americas

Macquarie in the Americas



23 locations
5 markets
2,803 staff

30%*
of income



Macquarie has grown significantly in the US over the past decade. Our diversified businesses have allowed us to deliver **steady performance for clients** in the world's largest capital market, even in challenging conditions and a competitive landscape."

Shawn Lytle
US Country Head

Leading participant in changing US
energy and infrastructure landscape

Providing asset management and advisory services in **world's largest capital market**

Regional presence since **1991**

Our business activities in the Americas



Top 50
US active mutual fund manager¹



£148.5 billion
assets under management²



Nine
infrastructure and real assets funds³



No.2

physical gas marketer in North America
– the highest ranked non-producer⁴



~11 billion

cubic feet of natural gas volume traded across North America daily⁴



US sector specialist Research, Execution, and Asia-Pacific Sales providing access to global markets



100+

bookrun DCM deals completed in 2018 valued at over \$US82 billion⁶



Best Project Sponsor
Norte III⁷

1. At 30 September 2019. Simfund Fund Family AUM (excludes passive/index funds). 2. At 31 March 2019. 3. Excludes funds managed as part of Joint Ventures.

4. Platts Q2 CY19. 5. At 30 September 2019. 6. Dealogic, as of 31 December 2018. 7. LatinFinance 2018 Project & Infrastructure Finance Awards.

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Macquarie in the United States



25 years
in the US market

2,600+
people in Macquarie's
United States offices

15 locations
connected to our
global platform

19,000+¹

people employed
at invested assets

No.1

US leveraged buyout
loans bookrunner –
Software and Services²

No.2

physical gas marketer
in North America³

Top 50

US active mutual
fund manager⁴



10GW+

of generation
assets⁵

Supporting our community through
the **Macquarie Group Foundation**



20,000+

volunteer hours
contributed to our
communities in FY18



No.1

Financial Advisor for
Power in North America⁸

1. At 30 September 2019. Includes staff employed at MIRA-managed fund assets and assets MacCap has invested in. 2. Bloomberg CY18. 3. Platts Q2 CY19.

4. At 30 September 2019. Simfund Fund Family AUM (excludes passive/index funds). 5. Portfolio includes assets that are operational and under development or construction at 31 March 2019. 6. 2018 Energy Risk Awards.

7. LatinFinance 2018 Project & Infrastructure Finance Awards. 8. Inframation (1H CY19, by deal count).

All other data at 31 March 2019.

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Our expertise in focus

Infrastructure

Our infrastructure expertise at a glance



Largest

infrastructure
manager globally¹



Manager of 135

infrastructure assets²



20+ years

sector experience



Strong

financial, investor and
community outcomes



90+

stocks under coverage³



No.1

Global Public Private
Partnership
Financial adviser⁴



World's Best Investment Bank

in Infrastructure sector⁵



A leader in European

transport infrastructure projects
with preferred bidder status achieved
on major new tunnel and road public
private partnerships

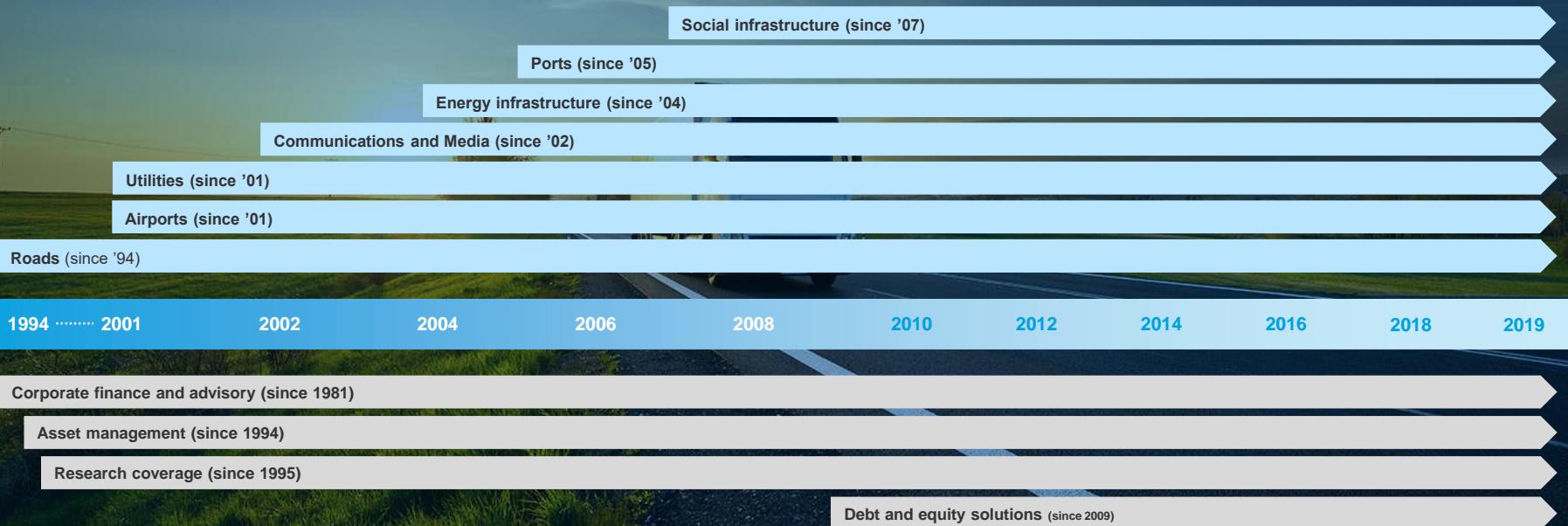
A pioneer in the global infrastructure sector

1. Based on AUM. IPE Real Assets Top 75 Infrastructure Investment Managers 2019, published in July/August 2019.

2. At 30 September 2019. 3. At 31 October 2019. 4. Inframation (CY18, by deal value). 5. Global Finance Awards, 2019.

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How we built our infrastructure expertise



Global opportunities in infrastructure

 There is a growing global need for quality infrastructure as **urban populations grow and the world transitions to a low carbon economy.**"

Shemara Wikramanayake
Chief Executive Officer

Urbanisation
68% world population
to live in urban areas
by 2050¹



Asia accounted for **35%** of global infrastructure deal flow in 2017²



~\$US5tr required infrastructure investment in the US by 2053³



Infrastructure investment of **\$US30 trillion** required annually in the EU⁴



New infrastructure in emerging economies



Replace ageing infrastructure in developed economies



Increased investor appetite for infrastructure

Macquarie continues to evolve its leading sector offering



Case studies

Infrastructure

Developing an important link in the global supply chain

Opportunity

Positioned at the crossroads of the Baltic's deep-sea trading routes, Gdańsk had the potential to become the world's gateway to the fast growing markets of Central and Eastern Europe

Actions

A Macquarie-managed fund¹ led the greenfield development and operation of DCT Gdańsk, driving its evolution from an undeveloped stretch of waterfront to Poland's largest and fastest growing container terminal

Outcomes

Oversaw a significant **capital investment** programme over 13 years

Generating **thousands** of direct and indirect jobs

Capacity to handle

~3 million
shipping containers each year²

Established a **reliable** and **cost effective** alternative to the ports of Northern Europe

Improving the efficiency of **Polish exports**

Contributing

€2 billion
in additional customs duties and tax revenue for Poland each year

Investing in a European transport and logistics hub

Opportunity

A Macquarie-led consortium acquired a stake in Brussels Airport following its privatisation in 2004

Actions

Macquarie and its co-shareholders oversaw a €1 billion capital expenditure programme over 15 years to transform the airport into a leading European transport and logistics hub

Outcomes

64%

increase in annual passenger numbers¹

60+

new destinations¹

Contributing

€3.2 billion

in added value to the Belgian economy each year

Major terminal upgrade

New airport business district and **world-class** cargo facilities

Achieved **carbon neutral** status in 2018²

Generating **20,000+** jobs in the region

Financing social, affordable and shared ownership housing in West London

Opportunity

The shortage of affordable homes in West London, coupled with high property prices, continues to drive the need for lower cost housing solutions

Actions

Macquarie provided a long-term debt facility to the charitable Shepherds Bush Housing Association (SBHA) on behalf of investors, enabling them to boost the delivery of social, affordable and shared ownership housing

Outcomes

Supporting SBHA's ambition to improve the **provision of affordable housing** in West London

200

more affordable homes per year in the next **four** years

Connecting like-minded pension schemes and insurance funds with socially conscious borrowers

Meeting the **longer-term funding requirements** of SBHA to support future investment

Provided

£150m

in financing facilities to help SBHA grow its development pipeline made up of **£50m committed** and **£100m uncommitted** facilities

Upgrading UK transport infrastructure for the 21st century

Opportunity

The 55-year old Silver Jubilee bridge in Cheshire, UK was carrying 10 times its expected capacity and the UK Government prioritised its upgrade

Actions

Macquarie acted as lead equity sponsor, mezzanine debt provider, sole financial adviser and debt arranger, as well as providing interest rate swap and insurance solutions, to support the £600 million project

Outcomes

New six-lane
2km cable-stayed toll bridge opened in Oct 2017 on time and budget

First free-flow toll-collection project in the UK

Macquarie committed
£115 million
to the project across
the capital structure

Improved **air quality**,
public transportation,
walking and cycling facilities

>4,000 permanent
new jobs from regeneration
activity and inward investment

Contracts worth an estimated
£129 million
to local businesses



Improving safety on India's roads

Opportunity

India has the world's second largest road network, transporting the bulk of the nation's passengers and goods, but faces significant safety challenges

Actions

Macquarie has invested ~\$US500 million in India's roads on behalf of investors since 2013, driving better safety outcomes for the community, workers and road users

Outcomes

**Robotic flagmen,
fence barriers,
chicanes and signage**

Collaborating with the
**National Highways
Authority of India**

26 million¹
safe man hours

Rs2.2 million
solar street lighting
initiative lowering risks
for local residents

4,927
hours of road safety
training in FY17



Providing quality drinking water to China's growing cities

Opportunity

The eight million residents of China's Shenyang City were historically supplied tap water from lower quality underground sources

Actions

A Macquarie-managed fund acquired a joint controlling stake in a water portfolio in Shenyang, to complete one of China's largest tap water treatment plants

Outcomes

Exceeds highest standards
of tap water quality

301 million cubic metres
of high quality surface water provided in 2017

Providing clean drinking water to
~500,000
residents in Shenyang

Contributing to Chinese Government's 2020 environment and drinking water objectives

Provides
50%
of Shenyang's total water usage

Connecting Tasmania to international opportunity

Opportunity

Hobart Airport is a critical piece of infrastructure providing a gateway to Tasmania and the Antarctic

Actions

Macquarie invested in the airport, on behalf of investors¹, and a master plan is transforming facilities to better connect Tasmania's economy with mainland Australia and the world

Outcomes

Terminal redevelopment
advanced

Domestic destinations
up from 3 to 5

500-metre runway extension, generating up to
\$A143 million
value for the Tasmanian economy

Passenger numbers
up 36% since 2009

Employs
700+ people

Airport to contribute over
\$A1.6 billion
to Tasmanian economy
by 2035

Replacing essential infrastructure connecting New York and New Jersey

Opportunity

To replace the existing, functionally outdated Goethals Bridge, opened in 1928

Actions

Through a public-private partnership, a Macquarie-led consortium is constructing a new, modern bridge to support economic activity in the region

Outcomes

Increased capacity – **3 lanes** in each direction

Delivered **best value proposal** to the public authority, including risk transfer

2,000+
direct jobs

Improved **safety environment** – separate span for traffic traveling in each direction

10-foot-wide
pedestrian and bicycle walkway

~\$US872 million
in total economic activity

Once-in-a-century upgrade to London's water supply

Opportunity

A Macquarie-led consortium acquired a stake in Thames Water on behalf of investors in 2006, when the company faced criticism for underinvestment and missing leakage targets

Actions

First new investment in Victorian pipes to improve water quality and built a desalination plan to improve security of supply for London homes and businesses

Outcomes

Expanded waste treatment capacity

Generated
267GWh

of its own energy in 2016/17, from renewable sources

Average

£1 billion
annual investment over
12 years

9 million+
water customers

15 million+
waste water customers

Completed Lee Tunnel,
the largest capital project in UK's privatised water industry

22% reduction
in leakage rates

Developing a world-class hub airport in Copenhagen

Opportunity

Copenhagen Airport had the potential to strengthen its role as the largest airport in Northern Europe

Actions

During Macquarie's ownership on behalf of investors from 2005 to 2017¹, over DKK10 billion was invested in upgrading and expanding the airport's operational and commercial infrastructure

Outcomes

New intercontinental routes
Shanghai, Delhi, San Francisco

Baggage handling system major **upgrade and expansion**

~45%
increase in passengers

New **DKK20 billion** development plan to increase capacity

Terminal facilities **expansion, A380 taxiway enhancements**

~40%
increase in employees



Our expertise in focus

Energy

Our energy expertise at a glance



22GW+

of generation assets¹



10 million+

energy meters provided to homes and businesses²



No.2

physical gas marketer in North America³



No.1

global renewables adviser⁴



Leading

global renewables developer



20+

years' sector experience



Research across

60+

energy stocks⁵



400+

green energy and investment specialists⁶

1. Portfolio includes assets that are operational and under development or construction at 31 March 2019.

2. Largest independent meter funder in UK, not part of a distribution network or vertically integrated utility.

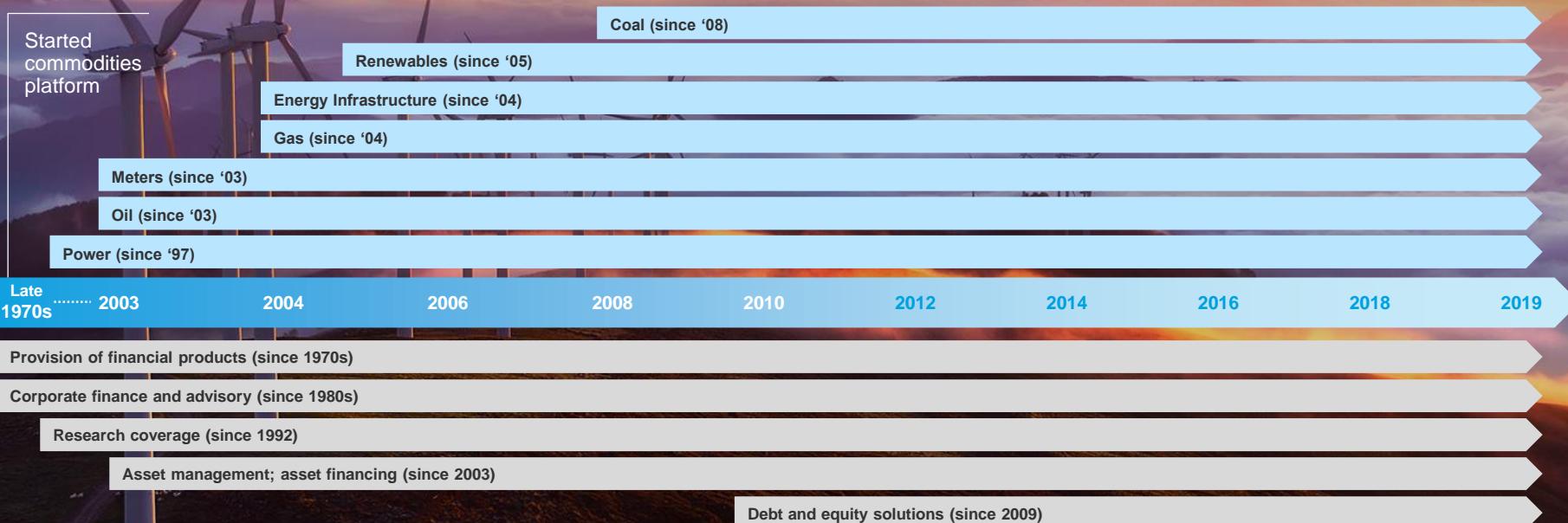
3. Platts Q2 CY19. 4. Inframation (CY18, by deal volume). 5. At 31 October 2019. 6. Including investment platform personnel.

All data at 30 September 2019.

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Capabilities across the energy spectrum

How we built our energy expertise



Global opportunities in energy



~30%

increase in **global**
energy consumption
by 2030¹

Electricity demand
to triple
in Asia by 2040²



US to become a
net exporter
of energy by 2020³



Renewable energy
will account for
~50%
of installed capacity by 2030²



Electric vehicles
~50%
of vehicle sales by 2030⁴



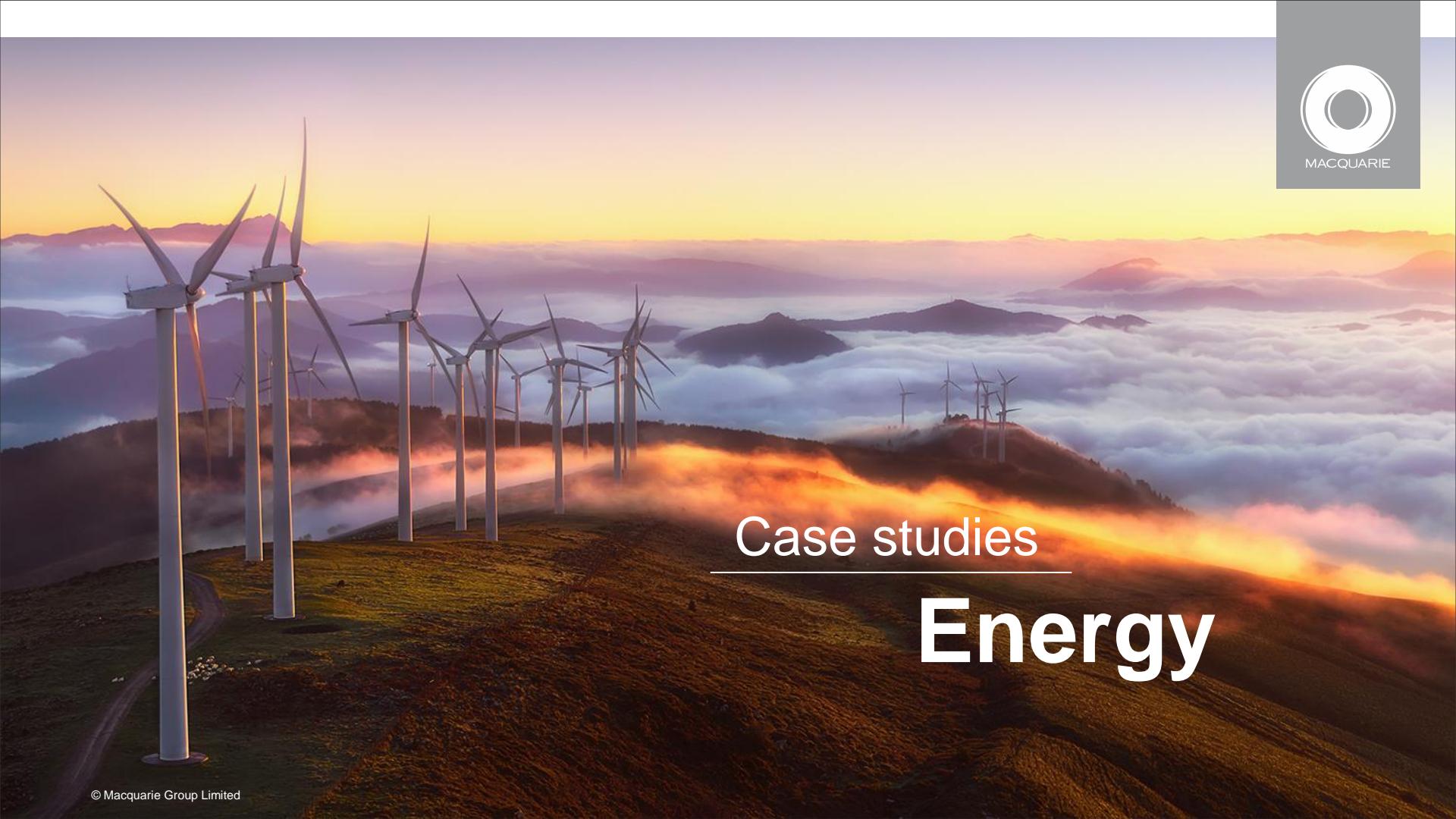
1. BP Energy Outlook, 2017.

2. Future Energy Asia, 2018.

3. US Energy Information Administration, 2019. 4. Bloomberg New Energy Finance London Summit 2017, Breaking Clean, 2017.

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Powering the transition to a low carbon economy

A wide-angle photograph of a wind farm at sunset. Numerous white wind turbines stand on a grassy hillside, their blades catching the warm orange and yellow light of the setting sun. The background features a range of mountains partially obscured by a thick layer of low-hanging clouds or fog. The overall atmosphere is serene and suggests a clean, renewable energy source.

Case studies

Energy

Supplying affordable and reliable electricity to Sydney's Greater West and the Illawarra



Opportunity

Sydney's Greater West is one of the fastest growing regional economies in Australia, requiring increasing levels of reliable power

Actions

Macquarie led a consortium of investors to acquire a 50.4 per cent stake in Endeavour Energy, with a five year plan in place to continue downward pressure on electricity bills while maintaining a safe and reliable network

Outcomes

Reducing operating expenses per customer to maintain the **lowest network bill** in NSW

\$A6.2 billion electricity distribution network serving
2.4 million+ people

Investing efficiently to replace ageing equipment and connect
~105,000 new customers over five years

Connecting to solar, batteries, microgrids and smart meters, providing customers with **choice and control**

59,000km+
power lines

430,000+
power poles

164
zone substations

120,000
customers with renewable generation

Ensuring the provision of gas and electricity meters for energy suppliers

Opportunity

As traditional energy meters are no longer manufactured ahead of the UK's mandated smart meter rollout, existing traditional energy meters can be refurbished, allowing energy suppliers to continue to service their customers

Actions

Macquarie's Meter Processing Centre stores and refurbishes high quality, pre-used traditional meters to ensure ongoing supply and service delivery, while lowering costs and reducing waste

Outcomes

Investment in **equipment, systems and processing** to increase the volume, quality and efficiency of refurbished meters

Building a
stockpile of

260,000

refurbished meters
for future use

Providing **lower cost** traditional meters for energy suppliers and their customers

~10,000

traditional meters refurbished and redeployed per month

560,000+

traditional meters refurbished and redeployed in total

Helping to meet the energy needs of Washington State

Opportunity

Washington State is focused on providing resilient, reliable and sustainable energy generation for its growing population

Actions

In February 2009 Macquarie led a consortium of investors in the take-private of Puget Sound Energy and has supported the company to improve energy delivery for its **1.5 million** customers

Outcomes

More than
\$US7 billion
of capital expenditure invested across the business

Added
400+MW
of hydro, wind and solar generation

Replaced coal-based generation with **renewable energy**

More than
3,100 employees in 2018, up from **2,800** in 2008

First-quartile ranking for **employee safety** each year since 2012

Improved **regulatory outcomes** and stakeholder relationships

Powering more than 500,000 homes in Mexico

Opportunity

The Norte III combined cycle gas plant in northern Mexico faced a series of critical challenges, without certainty of funding to completion

Actions

A Macquarie-led consortium injected vital funds and financial expertise to restart construction

Outcomes

Construction
back on track,
completion **expected**
end of 2019

Secured
\$US716 million
in financing from
10 institutions

Employs
~2,000
local workers during peak
construction periods

907MW
plant, to power
500,000+ homes

Capturing geothermal energy to power the Philippines

Opportunity

The Philippines' energy needs are expanding, driven by population growth and urbanisation, with 7GW more power generation facilities required over the next five years¹

Actions

A Macquarie-led consortium acquired 47.5 per cent of the world's largest vertically integrated geothermal company, Energy Development Corporation, through a public tender offer

Outcomes

Working alongside a
strong local partner

Provides
1.4GW
of clean energy
to the local community

Contributing to the
Department of Energy's
2016–2030
energy roadmap

90%
of energy generated
contracted for an
average eight years

Giving consumers better **control** of their energy use

Opportunity

As part of a plan to upgrade energy supply and improve efficiency, the UK Government has mandated the adoption of smart meters to reduce carbon emissions

Actions

Since being awarded its first gas and electric meter installation contract in 2003, Macquarie has become the largest independent¹ smart meter owner in the UK, helping consumers to better control their energy use and what it costs them

Outcomes

Largest

independent¹ smart meter owner in the UK

Installed smart meters in

~6 million

UK homes and commercial premises by 2021

~20%

of UK smart meter market

Contracts to own and deploy

10 million+

residential smart gas and electricity meters in UK to 2021

A blurred background photograph of a person's hands and torso. The person is wearing a dark suit jacket over a light-colored shirt and a grey ribbed sweater. They are holding a white smartphone in their right hand and a black laptop or tablet in their left hand.

Our expertise in focus

Technology



Our technology expertise at a glance



Research across
260+
telco, media and
technology stocks¹



Australia's
1st
open banking platform



No.1
Technology
financial adviser²



Award winning
digital banking
offering³



No.1
US leveraged buyout
loans bookrunner –
Software & Services⁴



1st
Australian bank
to offer lending and
retail deposits on the
SAP core banking system

Equipping our business – and our clients – for the **technology revolution**

1. At 31 October 2019. 2. M&A deals in Australia. Dealogic, by number. 3. Winner in the 2019 Mozo Experts Choice Awards for Internet Banking and Exceptional Everyday Account / Winner in the 2018 Mozo Experts Choice Awards in the Travel Money/International Money Transfer category / Best Digital Banking Offering & Most Innovative Card Offering at 2017 Australian Retail Banking awards. 4. Bloomberg CY18.
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How we built our technology expertise

Investing in platforms

Innovative wrap investment platform since '99

Australian Core Banking platform
Global oil trading platform introduced

API-enabled technology

Car buying and financing ecosystem
Smart meters for UK residents

Supported **Google Pay**
Leading digital banking experience

Search-as-you-speak
natural language recognition for online and mobile banking
Supported **Apple Pay**

Investing with entrepreneurs

Seek '99
RPData '04
Smart Salary '04
oOh!media '06
SeekAsia '10

Nuix
PEXA
Temple & Webster
Takeaway.com

Next Payments
FinTech Collective (Fund I)
RedEye
Renrui HR

Informatica
Stone & Chalk
Digital River

Console
FoodByUs

PropertyIQ
FinTech Collective (Fund II)

Investing in Macquarie capability

Award winning workplace experience at 50 Martin Place
Cloud-first strategy

Enhanced **cyber security** capabilities
Private Cloud (Asia)
Public Cloud (Global)

Network Transformation Program

Private Cloud (Australia)

Private Cloud (Americas and EMEA)

1990s 2011 2012 2013 2014 2015 2016 2017 2018 2019

Global opportunities in technology



\$US11 trillion

economic value created
a year by linking
physical and digital
worlds by 2020¹

\$US4.8 trillion

potential boost to global
revenues from **AI** by 2022²



\$US6.2 trillion

potential economic
impact of **cloud technology**
by 2025³

Volumes of business data
worldwide **doubles** every

1.2 years⁴

450 billion

business transactions
taking place on the internet
per day by 2020⁵

China accounts for

40%

of worldwide
digital transactions³

but

54%

of the Chinese
population are
not on the internet⁶

Helping entrepreneurs develop our future technologies

1. McKinsey & Company, 2015. 2. Accenture, Reworking the Revolution 2018.

3. McKinsey & Company, 2017. 4. Peter Fisk, Gamechangers, 2015. 5. IDC and EMC Corporation, 2010. 6. China Internet Watch, China Internet Statistics, 2017.

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Case studies

Technology

Maximising value in the disposition of semiconductor manufacturing equipment

Opportunity

A world leading memory and storage chip manufacturer required an optimal disposition strategy of an entire fabrication facility in Asia

Actions

With global expertise in semiconductor manufacturing, Macquarie provided a total solution, including global marketing, asset valuations and managed potential buyer opportunities

Outcomes

Global marketing campaign secured a strategic-buyer

18 months
before equipment release

Bids received were
260%
the manufacturer's expectations

Drawing on extensive
disposition advisory
and specialised equipment expertise

Accurate valuation of
1,100+
diverse fabrication tools

Sale amount higher than bids
230%
received prior to
Macquarie's involvement

Modernising Australia's property transactions

Opportunity

PEXA was formed in 2010 to fulfil the Council of Australian Governments' initiative to deliver a single, national e-conveyancing solution to the Australian property industry

Actions

Macquarie provided advisory services and significant equity investment to support the growth and evolution of this innovative digital enterprise

Outcomes

Australia's **first and only national property exchange**

245+ staff¹
operating in **5 states**

90%
of **Land Registry**
transactions by volume²

960,000+
PEXA transactions completed

\$A100 billion+
of **value settled³**

Driving innovation in the supply of mobile telecommunications



Opportunity

As smartphones are becoming increasingly expensive, mobile network operators are looking for innovative ways to make devices more affordable and accessible for their customers

Actions

By using the resale value of a smartphone, Macquarie has worked with operators globally to develop leasing programs that provide customers with improved affordability and flexibility to upgrade their device more regularly

Outcomes

Market innovation and disruption

Delivers improved **value for money**, flexibility and peace of mind

1,000,000

smartphones leased to customers worldwide

150+

global organisations in our remarketing network

Introducing an innovative way to pay property deposits

Opportunity

Despite instant payments in other areas, Australian homebuyers were still expected to bring a pre-issued bank cheque to property auctions

Actions

Macquarie created Australia's first mobile payment platform to allow buyers to pay deposits online

Outcomes

Improved customer experience for Australians in competitive property auctions

First-of-its kind digital platform:
DEFT Auction Pay

1,000+
transactions
since August 2017

Brought Australia's property auctions into the **digital age**

Reduced back office **administration** for agents

Enables deposits to be paid online in
2 minutes

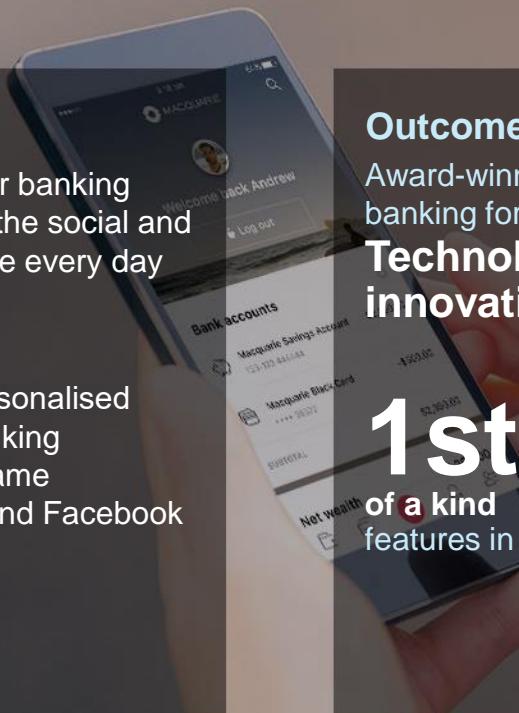
Digitally disrupting Australian retail banking

Opportunity

Australians expect their banking experience to feel like the social and digital services they use every day

Actions

Macquarie's highly personalised and intuitive digital banking experience uses the same technology as Netflix and Facebook



Outcomes

Award-winning digital banking for customers
Technology-led innovation

1st
of a kind
features in Australia

First Australian bank
with retail lending and deposits
on a real time banking platform

Australia's
1st
open banking
platform

Connecting global investors to China's sought-after unlisted technology companies

Opportunity

China's technology sector has been growing rapidly over the past decade, as home to six of the 10 largest "unicorns" (unlisted firms worth over \$US1b) in the world¹

Actions

Macquarie is bringing together global investors with China's leading private telecommunications, media and technology companies, to create opportunities for both sides

Outcomes

Pre-IPO investment in some of China's fastest-growing disruptive companies in:

Transportation and logistics
Lifestyle
Delivery
Online education
Travel and tourism

Executed

\$US1.5b+

of private placement transactions²

Providing a
gateway to investors

from the US, the Middle East, Europe and across Asia

Supplying
capital and liquidity
to China's entrepreneurs who are changing their society

Driving innovation in retail financial services

Opportunity

Australian consumers have continually sought advancements in the delivery of banking and financial services

Actions

Macquarie has a long history of introducing innovative products to the Australian market, improving competition and increasing efficiencies for consumers

Outcomes

Introduced Australia's first **Cash Management Trust in 1980** pooling retail funds to provide wholesale interest rates

Pioneered the **Australian RMBS market in 1992** promoting greater competition in the home loans market

Created **DEFT in 1995**, Australia's first rental collection payment system

Launched a **Wrap platform in 1999** which has since become one of Australia's **largest wrap platforms**

Created a leading **digital banking experience in 2016** with features that are firsts in Australian banking

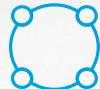
Introduced Australia's first **open banking platform in 2017** giving customers control over their own data



Our expertise in focus

Commodities

Our commodities expertise at a glance



115+ products

across 15+ market segments,
covering agriculture, energy
and metals



Specialist

staff include in-house schedulers,
structurers, logistics experts,
geologists, meteorologists and
mining and petroleum engineers



Derivatives House of the Year¹



Risk and capital
solutions
across physical and
financial markets



No.2

physical gas marketer
in North America – the highest
ranked non-producer²



~11 billion

cubic feet of natural
gas traded a day²



Natural Gas/ LNG House of the Year³



One of the longest **track records**

in metals markets globally
for a financial institution
– 40+ years

1. 2018 Energy Risk Awards. 2. Platts Q2 CY19. 3. 2019 Energy Risk Awards.

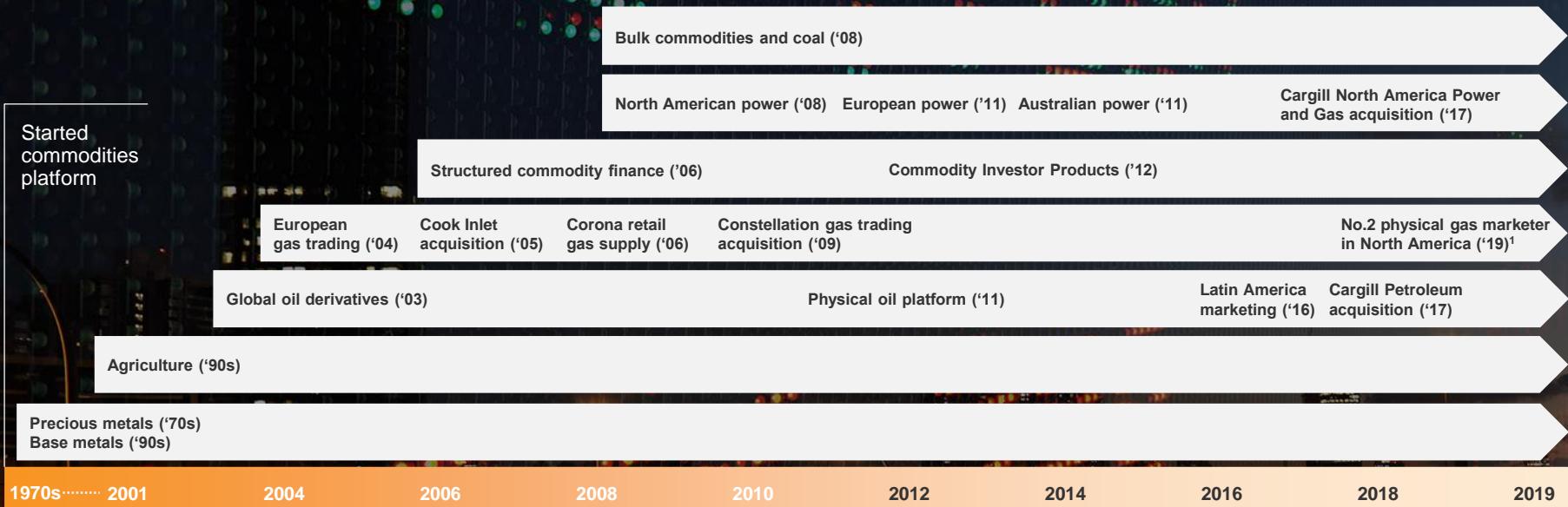
All other data at 30 September 2019.

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A core Macquarie business for four decades

How we built our commodities expertise

Expansion into adjacent spaces through acquisitions and organic growth



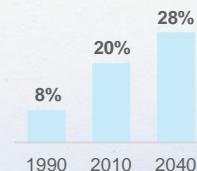
Global opportunities in commodities

Changing energy market dynamics

58% increase in global power demand by 2040¹



China's share of global energy consumption²



Almost 30% of demand growth from India³

US shale revolution



US regains position as largest crude oil producer⁴



US to become a **net exporter of energy** by 2020⁵



Mid-2020s – US becomes world's largest liquefied natural gas exporter⁶

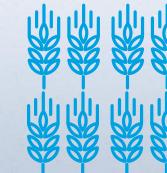


Global population
~10 billion by 2050⁷

Requires a

50% increase

in global food production⁸



Providing access across the commodities spectrum in a **dynamic global market**

1. Bloomberg, 2017. 2. Australian Treasury China Commodity Demand, Bloomberg, 2017. 3. US Energy Information Administration, 2019. 4. International Energy Agency, 2018. 5. US Energy Information Administration, 2019.

6. International Energy Agency, 2017. 7. United Nations. 8. Food and Agricultural Organisation, United Nations, 2017.

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Case studies

Commodities

Maximising primary production through precision farming

Opportunity

Demand for food is being driven by global population growth, and increasing urbanisation and wealth in emerging markets

Actions

Precision farming technologies have been introduced to the 90,000 hectares of cropping farmland owned by a Macquarie-managed fund

Outcomes

20 years
of **experience** in agriculture

Employs 300+ people
from local communities

32%
above Australian national average for **primary winter crop production yield** in 2017

90,000 hectares
managed down to 2cm accuracy

Drone and satellite technology monitors crops

60% reduction
in chemicals using weedseeker technology, reducing environmental impact

Powering the UK using sustainable biomass

Opportunity

To boost local economic activity and lower carbon emissions, MGT Power set out to construct the world's largest new-build biomass plant in Teesside, UK

Actions

Together, Macquarie's businesses partnered with MGT to commercialise, structure and finance the development, funding 50 per cent of the equity and raising the remaining funds needed to source this sustainable fuel supply

Outcomes

Will boost the economy of North-East England by **£20 million** each year

Power for
600,000 homes

£650 million+
of senior debt raised

600 jobs
during construction

100 jobs
during operation

2.3TWh
of low carbon electricity
each year

Offering clients a deeper, broader global energy team

Opportunity

Macquarie saw the opportunity to expand the depth and breadth of its global energy platform, adding new capabilities and expertise

Actions

Completing the acquisitions of the Cargill Petroleum and Cargill North America Power and Gas businesses, Macquarie has grown the services and support it provides to customers

Outcomes

Enhanced capability, adding

110+
energy specialists

Expanded
geographic coverage

Access to
new markets
and customers

Increased oil logistics

capability across Latin America, China, Africa, the Middle East

Greater oil insights

Expands coverage of North American
gas and power

Delivering capital to fund growth in metals mining

A large industrial conveyor belt system is shown against a backdrop of a clear blue sky with scattered white clouds. The conveyor belt is supported by a complex network of blue metal structures and cables. It appears to be moving material from one level to another in a mining or processing facility.

Opportunity

In 2016, diversified base metals miner MMG was looking to strengthen its balance sheet and fund project development, having recently acquired a flagship copper mine

Actions

Macquarie acted as sole financial adviser and underwriter on a successful rights issue, providing an important capital injection to fund the company's growth pipeline

Outcomes

Offer heavily oversubscribed **5.5x** with **97%** take-up from existing shareholders

Successfully completed a complex, cross border

\$US512 million
1-for-2 rights issue

Leveraged Macquarie's full suite of advisory services across **Australia and Asia**

Largest

rights issue executed in 2016 across the global metals and mining sector¹

Helping resources companies keep their fleet moving

Opportunity

With robust market conditions in commodities, resource companies need their fleet of machinery available and operational.

Actions

With longstanding industry relationships and the ability to manage complex logistics globally, Macquarie used its asset management expertise to provide long-term funding solutions for a fleet of near-new, high value trucks and equipment.

Outcomes

Secured a fleet of

19 near new

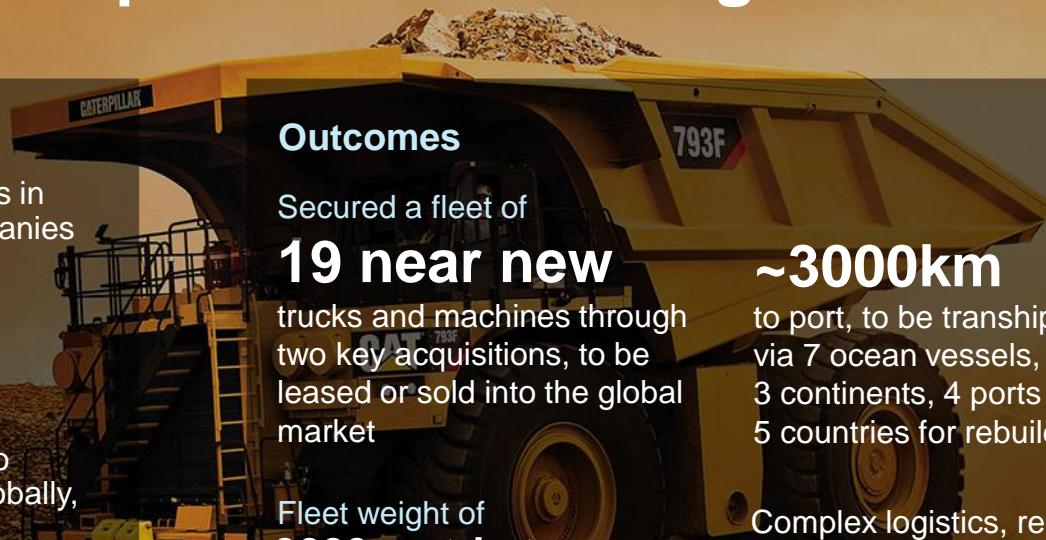
trucks and machines through two key acquisitions, to be leased or sold into the global market

~3000km

to port, to be transhipped via 7 ocean vessels, across 3 continents, 4 ports and 5 countries for rebuild

Fleet weight of
3000 metric tonnes
transported from two mine sites in the Arctic Circle

Complex logistics, requiring an on-the-ground presence and an **in-depth understanding** of both the assets and value chain



A wide-angle photograph of a solar farm at sunset. The sky is filled with warm, orange and yellow hues from the setting sun on the left. In the foreground, numerous solar panels are visible, stretching across the frame. In the middle ground, there's a small industrial building and several tall electrical pylons. The background shows distant hills or mountains under the colorful sky.

Our expertise in focus

Renewables

Our renewables expertise at a glance



22GW+

renewable generation assets¹



Leading global renewables
developer



Developed Europe's
largest single-site onshore wind farm,
in northern Sweden



No. 1

global renewables
advisor²



£4.4 billion
invested in or arranged
in green projects
in FY19



Developing Australia's first
thermal waste-to-energy facility in Western Australia



Developing the
world's largest new build dedicated biomass power station



400+

green energy and
investment specialists³

A global leader in the transition to a greener economy

How we built our renewables expertise



Global opportunities in renewables



What's going on in green energy globally is an exciting story presenting **opportunities that we have the expertise to pursue.**"

Daniel Wong
Co-Head of Macquarie Capital



\$8.4 trillion

to be invested in **wind** and **solar** globally by 2050¹



250%

expected increase in **green energy generation** globally from 2018 to 2025¹

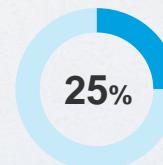


US battery storage capacity

set to **double** in 2019 and **double again** in 2020²



A quarter of US **coal-fired power** set to be **retired** by 2025¹



58% of total **electricity** globally will be **wind and solar** by 2025¹



A powerful platform supporting the **next phase of expansion** in renewable energy

A wide-angle photograph of a solar farm at sunset. The sky is filled with warm, orange and yellow hues from the setting sun on the left. In the foreground, numerous solar panels are visible, stretching across the frame. In the middle ground, there's a small industrial building and several tall electricity pylons. The overall scene conveys a sense of renewable energy and industrial activity.

Case studies

Renewables

Powering the first offshore wind farm in Taiwan



Opportunity

Taiwan is prioritising renewable energy development. The Government aims to increase electricity generated from renewable power from 5% now to 20% in 2025, including 5.5GW of offshore wind

Actions

Macquarie, alongside partners Swancor, Orsted and JERA, has been developing and investing in the Formosa projects, Taiwan's first offshore wind farms

Outcomes

Formosa 1 has

128MW

capacity and is Taiwan's first and only commercial-scale wind farm in operation

Recognised leader in the development, construction and operation of offshore wind farms

Powering over

120,000

homes in Taiwan

Industry recognition

PFI Renewables Deal of the Year 2018

IJ Global's Offshore Wind Deal of the Year in Asia-Pacific 2018

Delivering Australia's first thermal waste-to-energy facility

Opportunity

As Australia's population grows, establishing infrastructure that maximises the diversion of waste from landfill is critical, along with the ability to recover products and energy in a sustainable way

Actions

Macquarie is co-developer, financial adviser and equity investor for the ~\$A700 million Avertas Energy project in Western Australia, the country's first thermal waste-to-energy facility. Macquarie is also responsible for delivery of the facility, which is scheduled to open by the end of 2021, diverting significant amounts of waste from landfill and reducing CO2 emissions

Outcomes

400,000 tonnes of waste to be diverted from WA landfill annually, 25% of Perth's post-recycling rubbish

Reduction of
400,000 tonnes of CO2 emissions annually

Long-term waste supply agreements with Rivers Regional Council and City of Kwinana

36MW of reliable baseload energy to be exported to the grid, the electricity needs of >50,000 households

Will create **800+** jobs in WA during construction and 60 full-time positions once operational

Partnerships to develop new investment models

Opportunity

Sweden's ambitious goal to reach net zero emissions of greenhouse gases by 2045 is accelerating efforts to develop and build new renewable projects.

Actions

Macquarie's Green Investment Group (GIG) partnered with Swedish developer SCA Energy to commercialise, structure and finance a 235 MW onshore wind farm in central Sweden, including originating a 29-year fixed-volume corporate Power Purchase Agreement.

Outcomes

Secured €270m total funding – committing 100% of the equity and raising ~€160m of senior debt

Adding

235 MW
of renewable capacity
in the Nordic region

Will feature 56 4.2MW turbines from Siemens Gamesa creating some of the largest structures in Sweden

Originated a 29 year PPA with Norsk Hydro – one of the largest known European power purchase agreements to date

Contributing potential CO₂ savings of 33 ktonnes p.a.

– to support delivery of Sweden's climate change targets

Turning industry green with Scotland's waste resources

Opportunity

Following a ban on waste-to-landfill and a goal to improve industry productivity, Scotland's Climate Change Plan is creating demand for a new generation of energy-from-waste infrastructure

Actions

Macquarie's Green Investment Group (GIG) partnered with Covanta & Brockwell Energy to develop and fund a 21.5 MWe energy-from-waste combined heat and power facility in Scotland

Outcomes

The £210m facility is expected to create **500 construction jobs** and **30 long-term roles**

Transforming

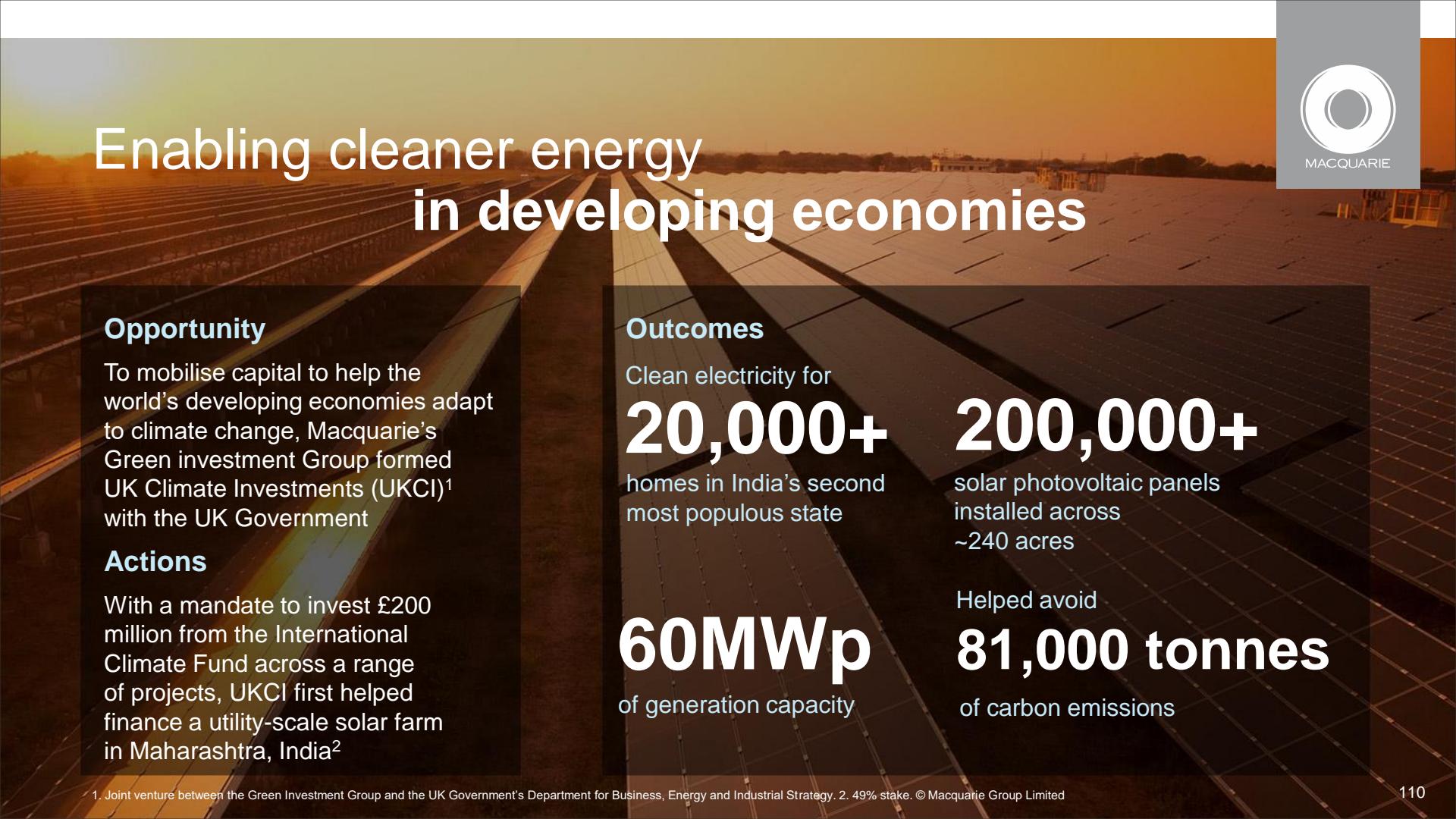
216,000

tonnes p.a of waste into
79 GWh power
81 GWh heat

Will supply 100% of chemical manufacturer CalaChem's heat and power needs through a tailored agreement

A direct source of **heat and power** for residents of Earls Gate Industrial Park

Estimated to avoid **95 ktCO₂e** per year equivalent to taking **41,500 cars** off the road



Enabling cleaner energy in developing economies



Opportunity

To mobilise capital to help the world's developing economies adapt to climate change, Macquarie's Green investment Group formed UK Climate Investments (UKCI)¹ with the UK Government

Actions

With a mandate to invest £200 million from the International Climate Fund across a range of projects, UKCI first helped finance a utility-scale solar farm in Maharashtra, India²

Outcomes

Clean electricity for

20,000+

homes in India's second most populous state

200,000+

solar photovoltaic panels installed across
~240 acres

60MWP

of generation capacity

Helped avoid

81,000 tonnes

of carbon emissions

Powering a cleaner future in Japan



Opportunity

Following the Fukushima nuclear crisis in 2011, Japan reformed its electricity system in favour of renewable energy generation

Actions

Macquarie is leveraging its global renewables expertise to accelerate the development of the Japanese market

Outcomes

Diversifying energy options
for consumers and businesses

Partnerships with local development companies have generated a solar and wind pipeline of

1GW+

Joint lead manager and bookrunner of Japan's largest renewable infrastructure fund IPO

Enough electricity to power
~475,000
households

Financing the largest onshore wind farm in Europe

Opportunity

The EU has ambitious climate and energy targets for 2030, aiming to provide affordable, secure and sustainable energy

Actions

In its first investment outside the UK, the Green Investment Group acted as financial adviser, development partner and equity investor in Sweden's Markbygden Ett wind farm

Outcomes

Largest known wind power purchase agreement in the world to underwrite supply

Committed
~€160 million
for 50% stake

Europe's
largest single-site
onshore wind farm

Uses **179 3.63MW**
best-in-class wind turbines

To provide
650MW
to Nordic region

Accelerating South Korea's waste-to-energy ambitions

Opportunity

To enable food waste recycling for energy generation on a larger scale, consistent with the South Korean Government's objective of achieving a "resource-circulating society"

Actions

Macquarie established ReClean Holdings, a renewable energy and environmental services company

Outcomes

Delivering
**clean and sustainable
energy generation**

to local communities

**540 tons
per day**

of food waste treated to produce compost, animal feed and bio-diesel fuel

**750 tons
per day**

of cleaner, solid fuels for power plants and manufacturing companies

Discover more about the outcomes Macquarie generates at
www.macquarie.com/discover/watchmore

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