







Operational Briefing

Presentation to Investors and Analysts

9 February 2021





Corporate Operations Group

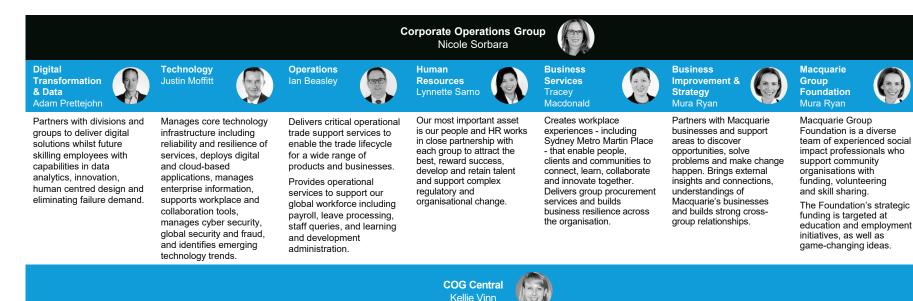
Nicole Sorbara, Group Head, Chief Operating Officer Justin Moffitt, Chief Information Officer Adam Prettejohn, Head of Digital Transformation and Data



MACQUARIE CAPITAL

CORPORATE OPERATIONS GROUP

Delivering service excellence and transformational change, we empower people to innovate and invest for a better future



Supports the day-to-day operations of COG including specialist accounting and financial reporting services, operational risk services and staff communication and engagement activities.

Regional COOs Ange Burt (Americas), Scott Harmer (Asia) and Tim Mulvihill (EMEA)





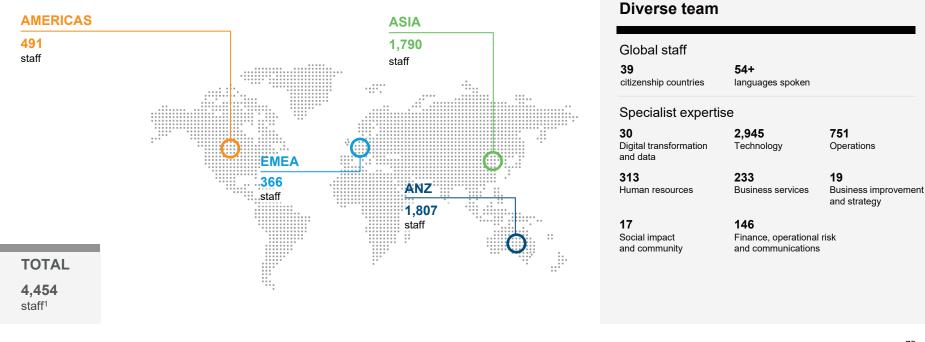
Supports the day-to-day management of the Group within region.

MACQUARIE CAPITAL

MACOUARIE

Global team with specialist expertise The organisation has access to a global network of more than 4,400 staff across 19 markets that provide a

wide range of specialist services



MACQUARIE ASSET MANAGEMENT

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Transforming our services

Over the past eight years COG has fundamentally improved and changed the services delivered – establishing new Group-wide services and enhancing existing services to increase quality, risk and agility

	2013	2014	2015	2016	2017	2018	2019	— 2020
Investment in people and capability	Formation of	New leadership program	 Enhanced cyber security capabilities New Futures Clearing team 	 New CIO Appointed Chief Data Officer Enterprise Data Management strategy DevOps established Agile methodologies 	 ED Leadership Program COG Directors Leadership Program COG Future Skilling Program 	 New Digital Transformation and Data Division Global Security function 	 Diversity & Inclusion refresh Macquarie Group Foundation 50th Anniversary Award 	 Director Masterclasses Work from home workplace health and safety training Technology Certification Program Macquarie Purpose
Investment in workplace	Corporate Operations Group	Award winning workplace experience at 50 Martin Place	 Enterprise social networking Third Party Risk Framework 	 Office 365 Webex video conferencing 	Workplace by Facebook	Commence Sydney Metro Martin Place	Macquarie Virtual Desktop	 Zoom virtual video technology Human Resources on-demand digital services for employees Digital procurement self-service
Investment in technology	-	Cloud-first strategy	 Private cloud (Asia) AWS public cloud (Global) 	 New Tech Assist support model 	 Network insource management Private cloud (Australia) 	 Private cloud (Americas and EMEA) 	 Significant global network upgrades 	 Macquarie.com and staff intranet refresh Google public cloud
Partnering with Groups	 BFS Core banking platform CGM Global oil platform 	CGM Front office strategic technology program	 BFS Mobile Banking RMG, FMG Expanded regulatory reporting platform 	 BFS Transaction and savings accounts BFS New digital banking experience 	 BFS Apple Pay and Android Pay MacCap Green Investment Bank CGM Cargill 	 MAM Global platform strategy BFS New payments platform FMG: Corporate Data Hub 	 RMG Credit risk transformation CGM Risk management platform BFS Data transformation MOD Client Lifecyle Management System CGM Data analytics platform 	 FMG Accounts payable, receivable and fixed assets platform MacCap Transaction Management System MAM Waddell & Reed

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Self-funding transformation and investing in technology Core to success has been our ability to transform ourselves, our significant investment in technology and maintaining strong operational risk culture

Reinvestment of operating efficiencies \$A132m since FY15	Investment in technology \$A1.3b FY20	Risk management 42% in high rated incidents (since FY15)
Cumulative years of generating operating efficiencies has enabled COG to self-fund transformation	19% of total technology investment is in change activity	Effective management of organisational change, regulatory complexity and risk

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COG leading Macquarie's response to COVID-19

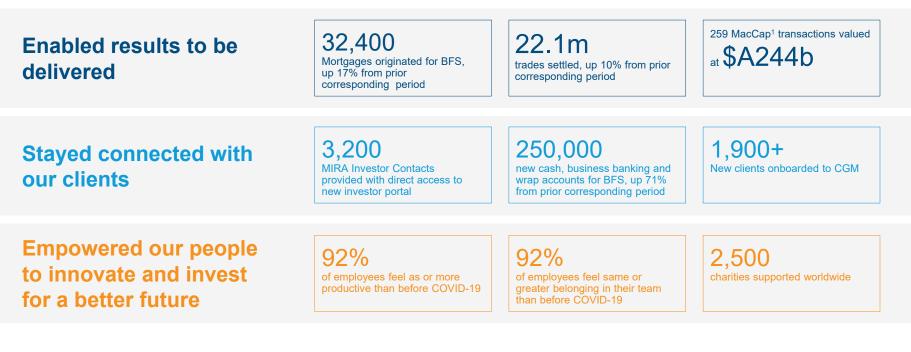
Our long-term focus on building resilience in our people and technology enabled a global workforce of over 16,400 employees across 34 markets to work from home



MACQUARIE CAPITAL

COG leading Macquarie's response to COVID-19

Our response enabled the business to continue to deliver for our clients despite global market disruption



MACQUARIE ASSET MANAGEMENT

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Accelerating the digital future

Developing leadership, culture and technology skills in our people has been a priority because we know these capabilities empower everyone to innovate and invest for a better future



TRANSFORMATION

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Digital Transformation and Data Division

We partner with Groups to realise client-led opportunities and accelerate delivery of COG's digital transformation

Equipping our people with the skills to deliver transformation outcomes

Digitalising COG services to enable clients and deliver operational efficiencies

Partnering with Groups to realise 'front-to-back' enterprise opportunities

1,500+ staff enabled with data literacy skills	1,000+ deeply trained in human centred design and eliminating failure demand		
35+ transformation programs initiated in 2020	Established COG data science capability		
Enterprise	Corporate		

CASE STUDY

Partnering with HR and Technology to deliver The HUB

 Accelerating on-demand digital Human Resource services to deliver client centric outcomes, operational efficiencies and employee lifecycle transformations

Partnering with Operations to automate processes using machine learning

• Leveraging eliminating failure demand, data science and human centred design practices to streamline our services

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Technology Division

Investing in accelerating cloud adoption, modernising systems and increasing agility, automation and scale of our services

Transforming Macquarie's technology risk profile, increasing network resilience and modernising our systems	99.9% system availability	↓24% decline in legacy servers (FY19 to FY20)	 CASE STUDY Data and machine learning driving opportunities for CGM Using open-source software and public cloud to analyse data and develop 		
Accelerating public cloud adoption, leveraging the benefits of agility, automation, scale and cost	750+ people with industry recognised agile and cloud certifications	775+ production apps in public cloud	 machine learning models to make data-driven decisions Partnering with BFS to accelerate data transformation Investing in public cloud technology to meet the needs of the next generation of 		
Using data-driven insights to deliver innovative digital solutions for our clients	1b+ rows of international trade data analysed for CGM	\$A15m+ invested in automation to deliver efficiencies and improved BFS client self-service	banking technology		

MACQUARIE CAPITAL

>1,500

businesses

50.000 +

every week

devices security scanned

staff using virtual application

supporting the breadth of our

MACQUARIE

Technology Division

Supporting new ways of working, investing in Cyber Security to detect and prevent threats and delivering front to bank transformation

Deploying web-based applications and virtual desktops across our business

Continuing to develop cyber security capabilities and deploying tools to detect and prevent threats

Delivering transformational change by eliminating failure demand and automating manual processes and controls

virtualised desktops in use

>5.000

1,750+ cyber security assessments completed

Targeting elimination of 12,500+ manual data changes per year **↓26%** decrease in Tech Assist support tickets **CASE STUDY**

Automating front-to-back processes in MacCap

 Investing in software-as-a-service solutions to accelerate business process digitalisation and automation

Data and digital technology driving opportunities for MAM

 Using data and digital technology to create a unified and single data platform to manage investments

UPDATE SINCE THE INTERIM RESULT

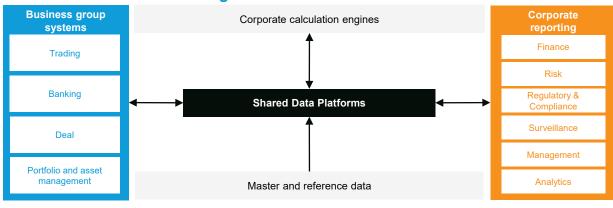
MACQUARIE ASSET MANAGEMENT

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CORPORATE OPERATIONS GROUP

What's next: Accelerating our enterprise data and digitalisation strategy

Macquarie's enterprise data and digitalisation strategy will enable us to better serve clients, adapt to changing regulations and transform front-to-back efficiency and risk



Target State Data Architecture

Data principles

- **True to source representation** provides data to meet different consumer perspectives
- Timely data delivery to meet increasing requirements for more timely reporting
- Embedded data quality to ensure consistency and quality of data and outcomes

- Calculations at point of expertise to ensure correct application of business rules
- Shared data models and definitions to ensure consistency of data understanding
- Authoritative sources to increase consistency and accuracy of data

Enabled by:

- Empowering our people to identify and deliver transformation opportunities through a data-centric culture, future skilling and talent acquisition
- Delivering enterprise digitalisation through aligned initiatives, shared metrics and endto-end solution architecture
- Leveraging Eliminating Failure Demand techniques and the enterprise change portfolio to incrementally re-engineer processes and technologies
- Investing in our common data 'building blocks' to accelerate how we manage, share and leverage data in the future

• Centrally shared to increase data availability and reduce duplication

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We are well positioned

We will continue to invest in our people, systems and operations to enable business outcomes and accelerate digitalisation for Macquarie



2021: INVESTMENT TO ACCELERATE DIGITALISATION









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