



CAPITAL MARKETS DAY

Accelerating our portfolio transformation to enable energy transitions



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01

STRATEGIC UPDATE

PRESENTATION: Sharpened strategy and value proposition underpins confidence in long-term commitments
Graham Ritchie, Group CEO

02

FINANCIAL UPDATE

PRESENTATION: Confidence in short-term guidance whilst investing for growth
Ian Gibson, Group CFO

03

CLEAN ENERGY AND ENVIRONMENTAL FOCUS

PRESENTATION: Leadership through our Clean Energy & Environmental Solutions portfolio
Rachel White, President, Clean Energy and Environmental Solutions

04

A CUSTOMER PERSPECTIVE

EXECUTIVE INTERVIEW: Stepping up sustainability in the financial industry
Sujith Kollamthodi, Practice Director, Policy, Strategy & Economics, Ricardo
Peter Bolton, Investment Director, Gresham House

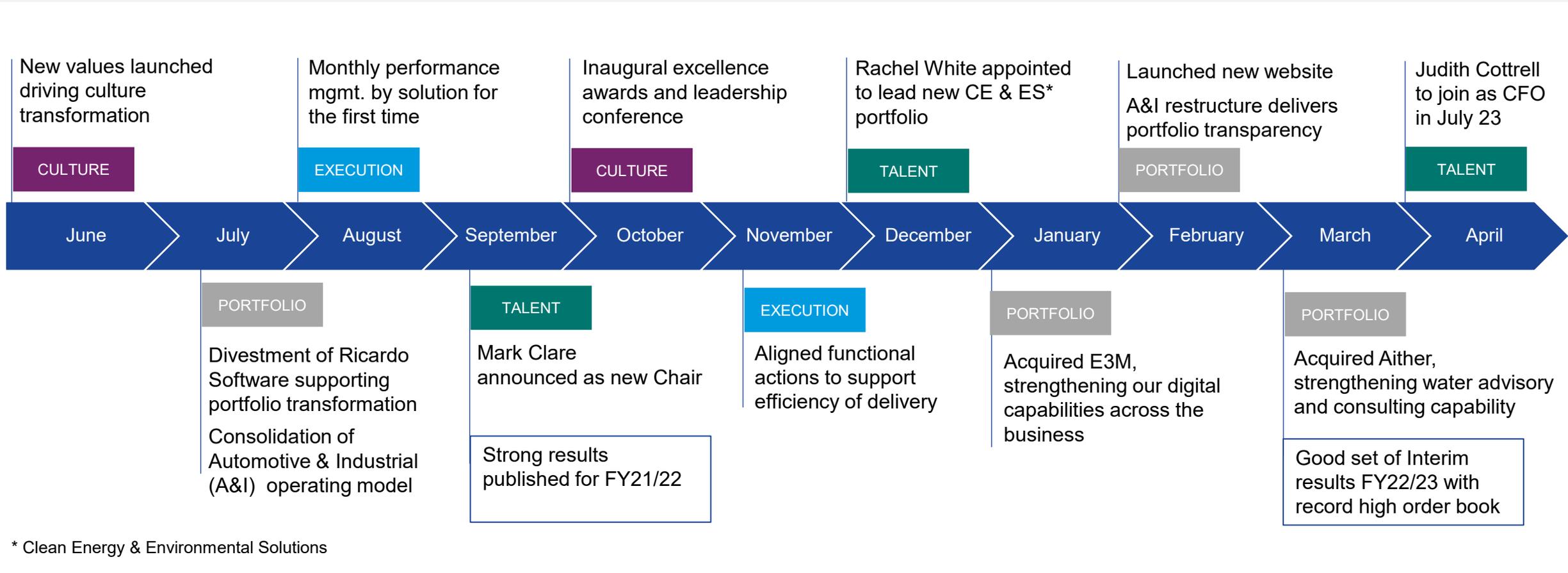
05

PROJECT SHOWCASE

DEMONSTRATION: Meet our experts to discover the role we play across the energy transition value chain

TRANSFORMING OUR CULTURE, TALENT AND PORTFOLIO

Significant progress since our last Capital Markets Day



CREATING LONG-TERM VALUE WHILE DELIVERING IN THE SHORT-TERM

Maintaining guidance for the full year 22/23



OPENING THOUGHTS FROM OUR CHAIR

Board priorities and governance to support execution of strategy

EXECUTING OUR GROWTH STRATEGY

- Restructuring our A&I business
- Extracting value from our acquisitions
- Driving organic growth
- Disciplined capital investment

PERFORMANCE FOCUSED TO DELIVER

- Driving efficiencies across the business
- Delivering for our customers
- Performance focused ethos
- Consistency of building “One Ricardo”

INVESTING AND RETAINING OUR PEOPLE

- Inclusive and engaged culture
- Increasing engagement with the Board
- Aligning reward with our success

DELIVERING OUR OWN ESG AGENDA

- Create ESG leadership position for our customers
- Responsible Business Committee chaired by SID*
- Utilising our consulting expertise to accelerate delivery



SID* Senior Independent Director

02 STRATEGIC PROGRESS

ENERGY TRANSITION MEGA TRENDS UNDERPIN LONG-TERM GROWTH

Ricardo environmental science and mobility engineering expertise helps optimise and navigate complexity

Our vision:

To create a safe and sustainable world

Our purpose:

We enable our customers to solve the most complex and dynamic challenges to achieve a safe and sustainable world

MEGA TRENDS



GLOBAL POLICY & FUNDING FOR CLIMATE CHANGE



ENERGY DECARBONISATION



ZERO EMISSION PROPULSION

DEMAND DRIVERS

- Complexity of environmental considerations, regulation and reporting
- Complexity of energy sources and supply chains

- Complexity of technology transition and supply chain

Differentiated, expert-led value proposition to optimise energy transition for target industries

INCREASING ANNUAL GLOBAL INVESTMENT ALIGNS TO STRATEGIC FOCUS

Unconstrained environmental and mobility demand for Ricardo

\$1.11 trillion

Global energy transition investment 2021-2022

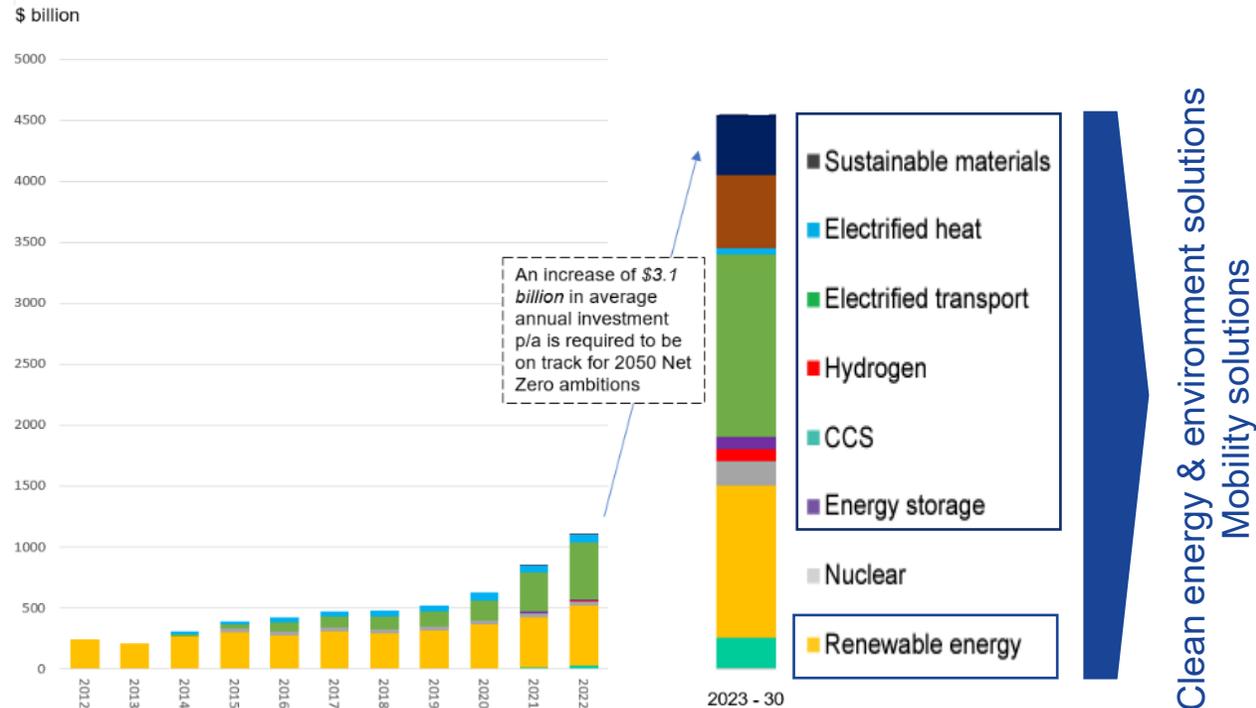
31%

2021-2022 increase in energy transition investment

3x

Investment required to get on track for net zero

GLOBAL ENERGY TRANSITION INVESTMENT BY SECTOR †



† BloombergNEF Energy Transition Investment Trends 2023

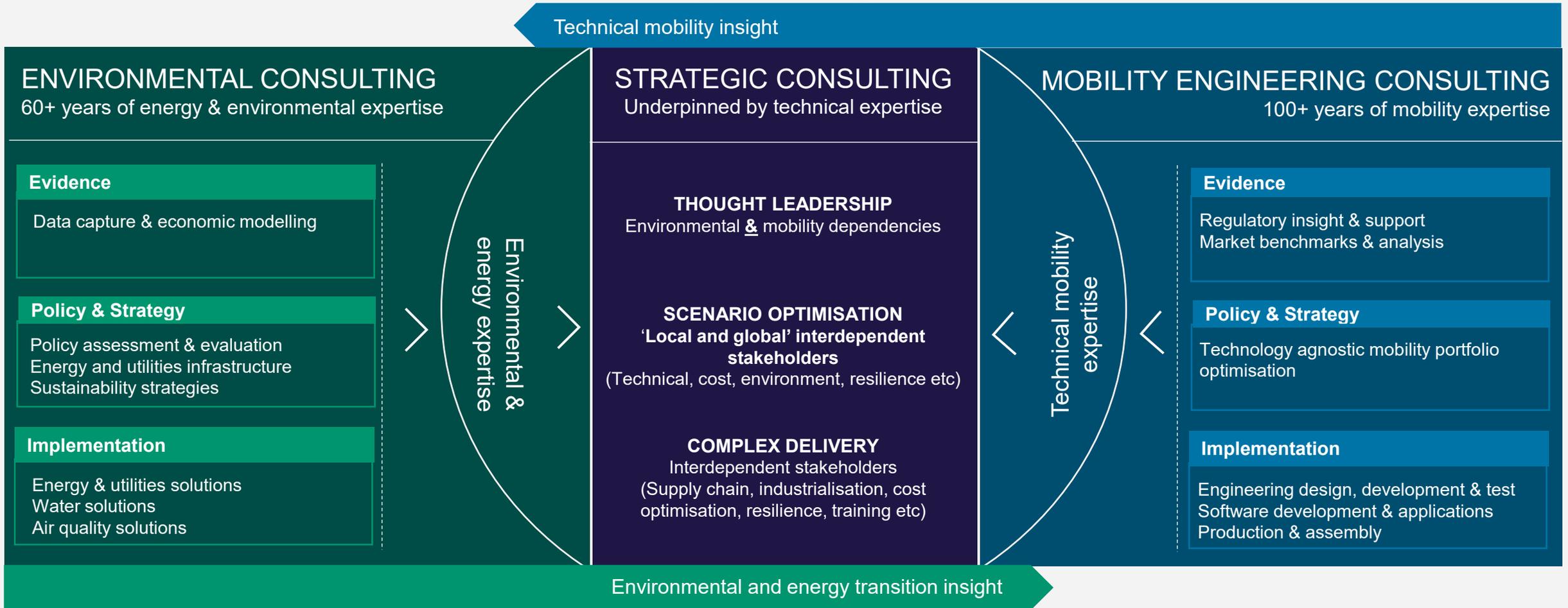
Clean energy & environment solutions
Mobility solutions

WHERE IS THE GREATEST INVESTMENT?

- Renewable energy is the largest sector by investment (\$495 billion, up 17% YoY)
- Electrified transport is a close second (\$466 billion, up 54% YoY)
- Investment in hydrogen tripled YoY to \$1.1 billion in 2022 and is forecast to continue to grow quickly

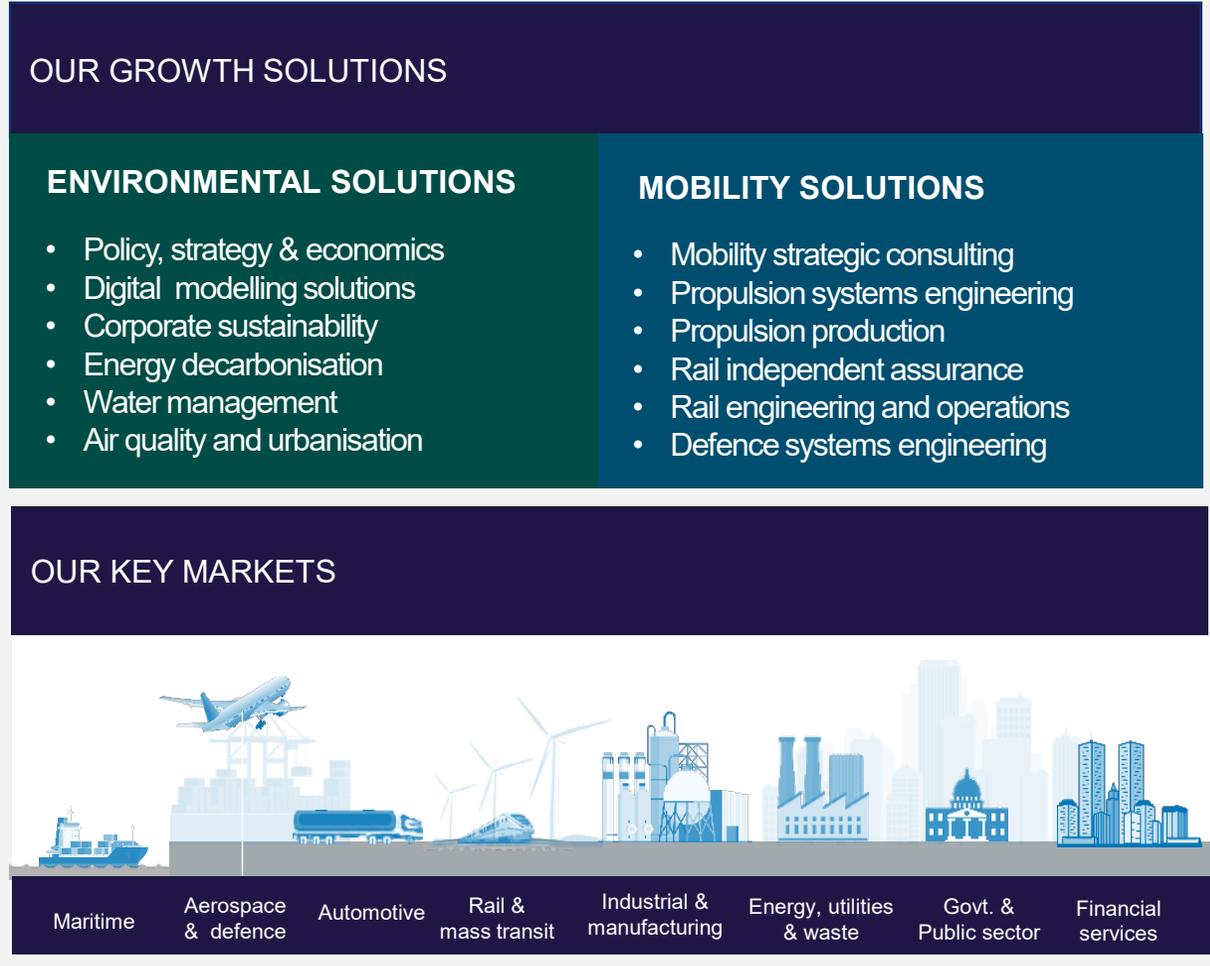
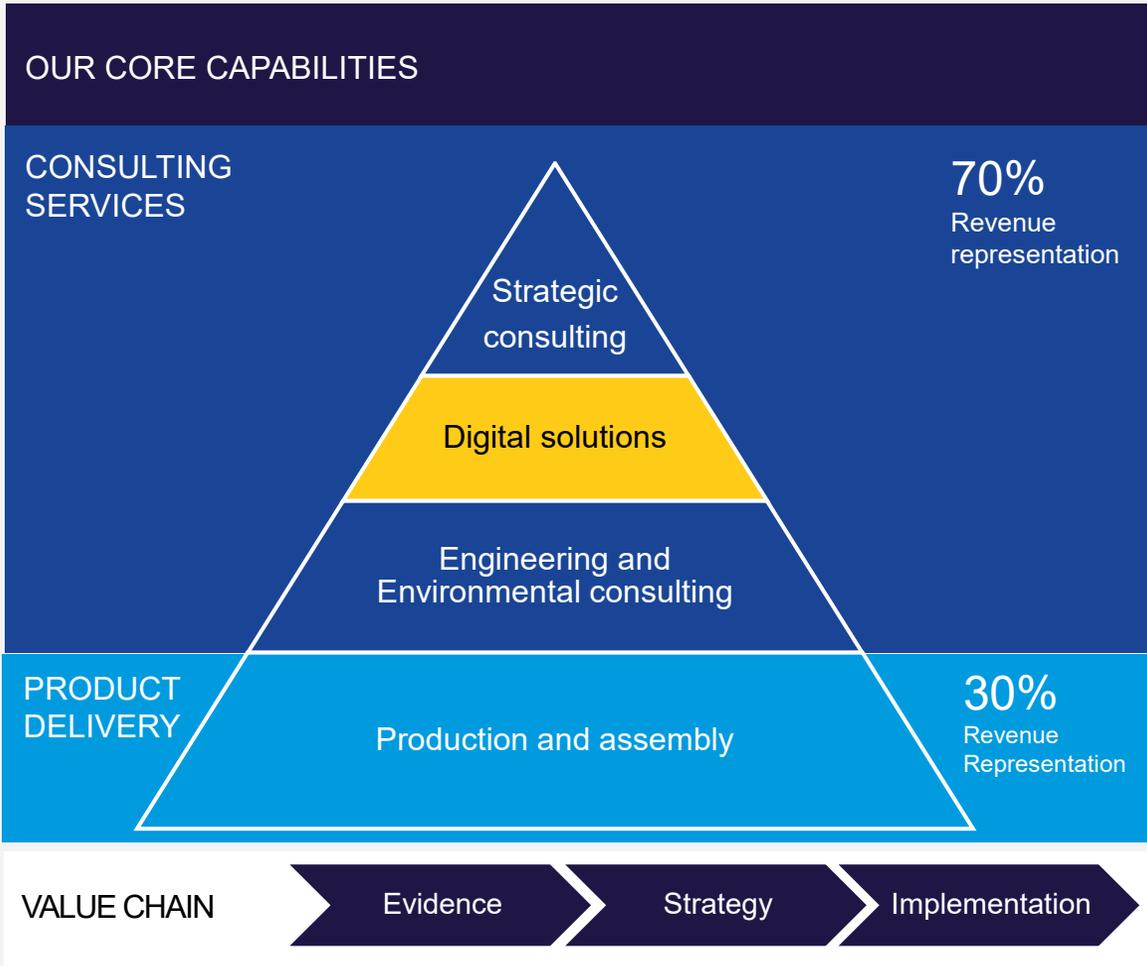
UNIQUE DEPTH AND BREADTH IN ENVIRONMENTAL & MOBILITY EXPERTISE

Energy transition optimisation through environmental, engineering and strategic consulting solutions



REPEATABLE, DIGITAL SOLUTIONS ENABLE THE FULL VALUE CHAIN

Targeted priority markets with most acute need for mobility and environmental solutions



CONSISTENT STRATEGIC GROWTH PRIORITIES

Strong progress underpins confidence in sustainable growth



PORTFOLIO PRIORITISATION

ENVIRONMENTAL & ENERGY TRANSITION FOCUS

- Clarity in our growth solutions
- Capital allocation to support growth
- Develop digital solutions
- Develop strategic consulting capability

ESTABLISHED MOBILITY FOCUS

- Extend existing projects
- Win new projects
- Grow electrification production
- Deliver profitability



MARKET EXPANSION

- Defined industry targets
- Strategic key accounts
- Value proposition by industry
- Geographic expansion in our chosen markets



M&A ACCELERATION

- Portfolio synergies
- Industry penetration
- Geographic scale
- High growth, high margin

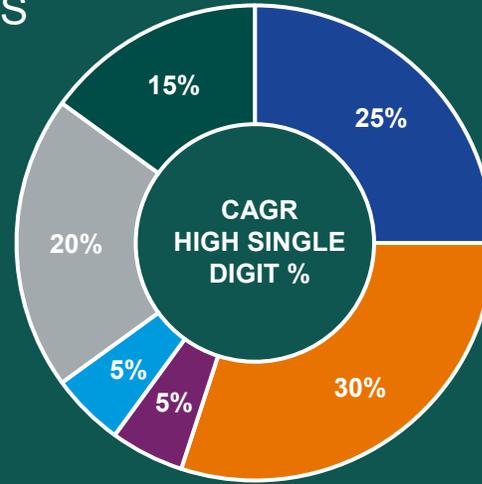


ESTABLISHED INDUSTRY AND GEOGRAPHIC FOOTPRINT UNDERPINS REVENUE GROWTH

Our balanced exposure across the markets and the key industries provides a good foundation for further expansion

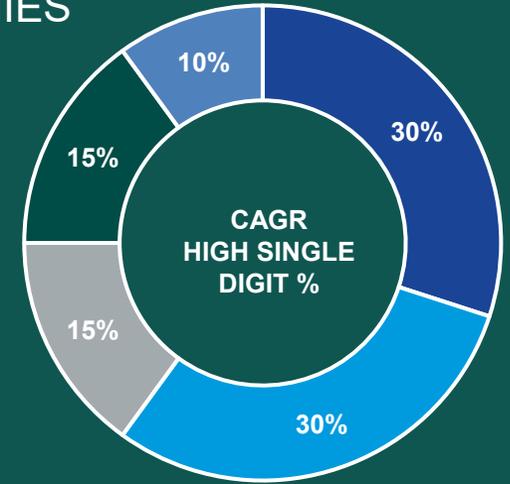
ENVIRONMENT & ENERGY-TRANSITION

KEY INDUSTRIES



FY 2022/23

KEY GEOGRAPHIES

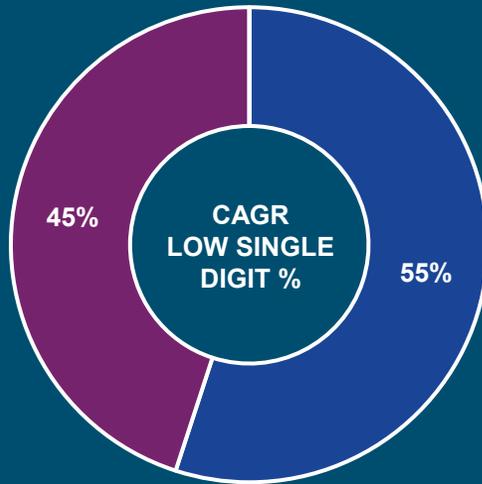


FY 2022/23

ESTABLISHED MOBILITY

Key:

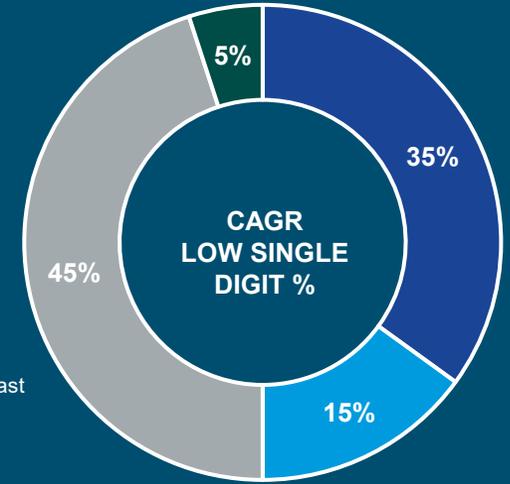
- Automotive
- Rail & mass transit
- Aerospace & Defence
- Maritime
- Govt. & Public sector
- Energy & Industrial



FY 2022/23

Key:

- United Kingdom
- Europe & Middle East
- North America
- APAC
- Australia



FY 2022/23



KEY ACCOUNT MANAGEMENT UNDERPINS ROUTE TO MARKET AND REVENUE GROWTH

Long-term customer relationships demonstrate the value and innovation we deliver across our chosen markets





DISCIPLINED M&A PROCESS UNDERPINS GROWTH AND MARGIN

Partnering in advance supports path to acquisition and benefits realisation

Ricardo's approach to M&A is focused on high growth, high margin and low capital-intensive businesses.

Recent acquisitions have:

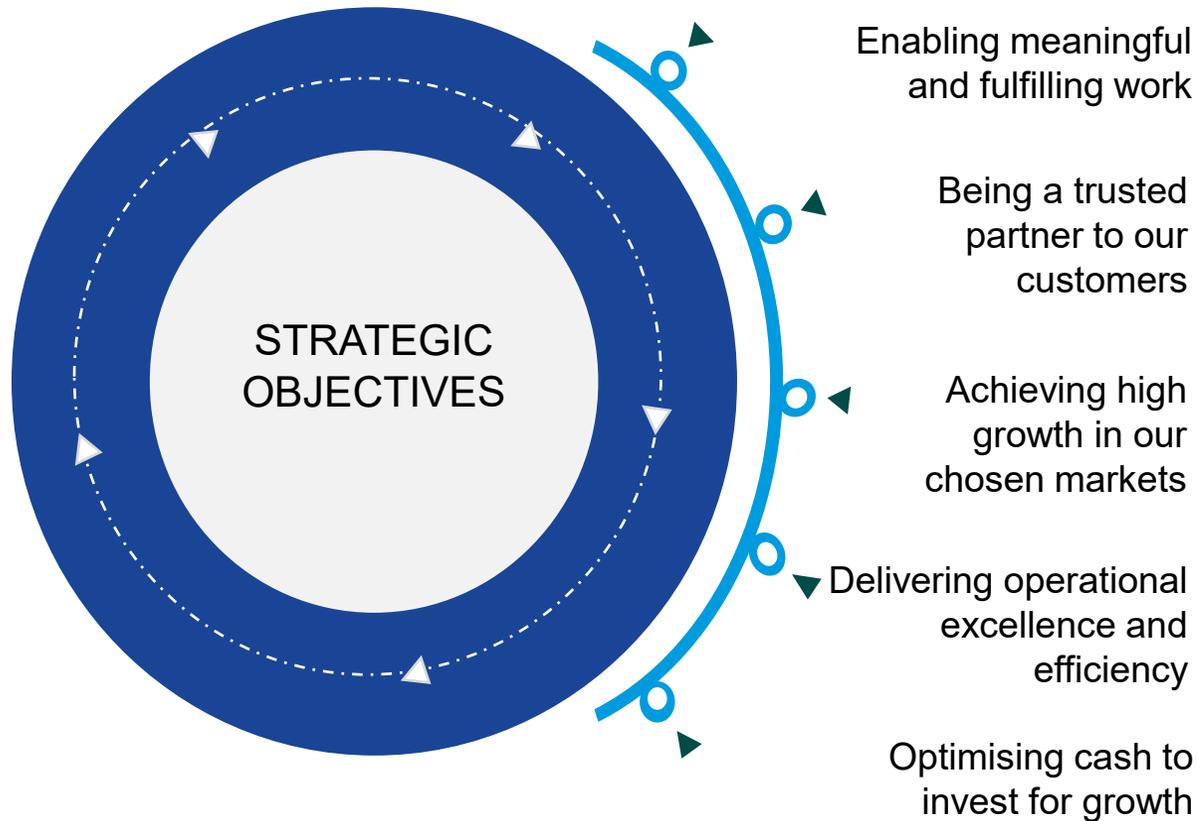
- Expanded our growth solutions and enhanced our current service portfolio
- Increased our digital footprint, creating more scalable offerings with recurring revenue
- Strengthened our geographic foothold in attractive markets
- Delivered profitable growth with increased synergies

Building rigour at each stage of our acquisition process



FOCUSED EXECUTION TO DRIVE PERFORMANCE, CULTURE AND ESG

Financial and non-financial targets aligned to our strategic objectives



Voluntary churn %	Scope 1&2 CO ₂ per head
Revenue per head	Customer satisfaction score
Order intake growth %	
Operating profit %	
Return on capital employed %	

DELIVERING ACCORDING TO OUR STRATEGIC MILESTONES

Gaining good momentum and delivering in line with our five-year ambition

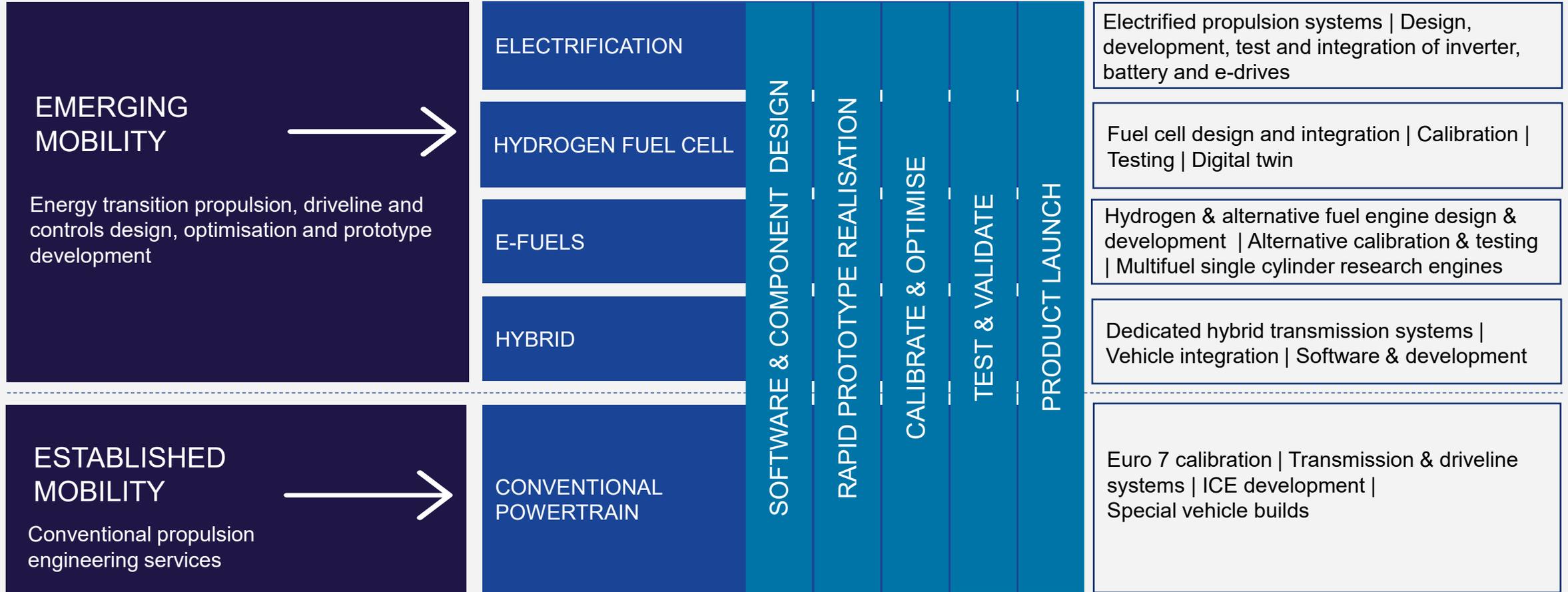
FY21/22	FY 22/23	FY23/24	FY24/26	FY26/27
				
Setting out our sharpened strategy	Organic growth focus and A&I recovery	Growth through portfolio transition	Growth and profit acceleration	Sustainable long-term value
<ul style="list-style-type: none">• Clear market-led portfolio• Develop enablers and performance focus	<ul style="list-style-type: none">Continued A&I recoveryProactive sales and differentiation	<ul style="list-style-type: none">• Increase R&D investment in digital capabilities• Geographic footprint expansion	<ul style="list-style-type: none">• Geographic footprint optimised to deliver scale and margin• Increased M&A with improved cash optimisation	<ul style="list-style-type: none">• A leading global strategy and engineering consultancy in Environmental & Energy Transition solutions

LEADING TECHNOLOGY EXPERTISE SUPPORTS ENERGY TRANSITIONS

End-to-end mobility expertise across the value chain

PROPULSION SOLUTIONS PORTFOLIO:

OUR EXPERTISE:



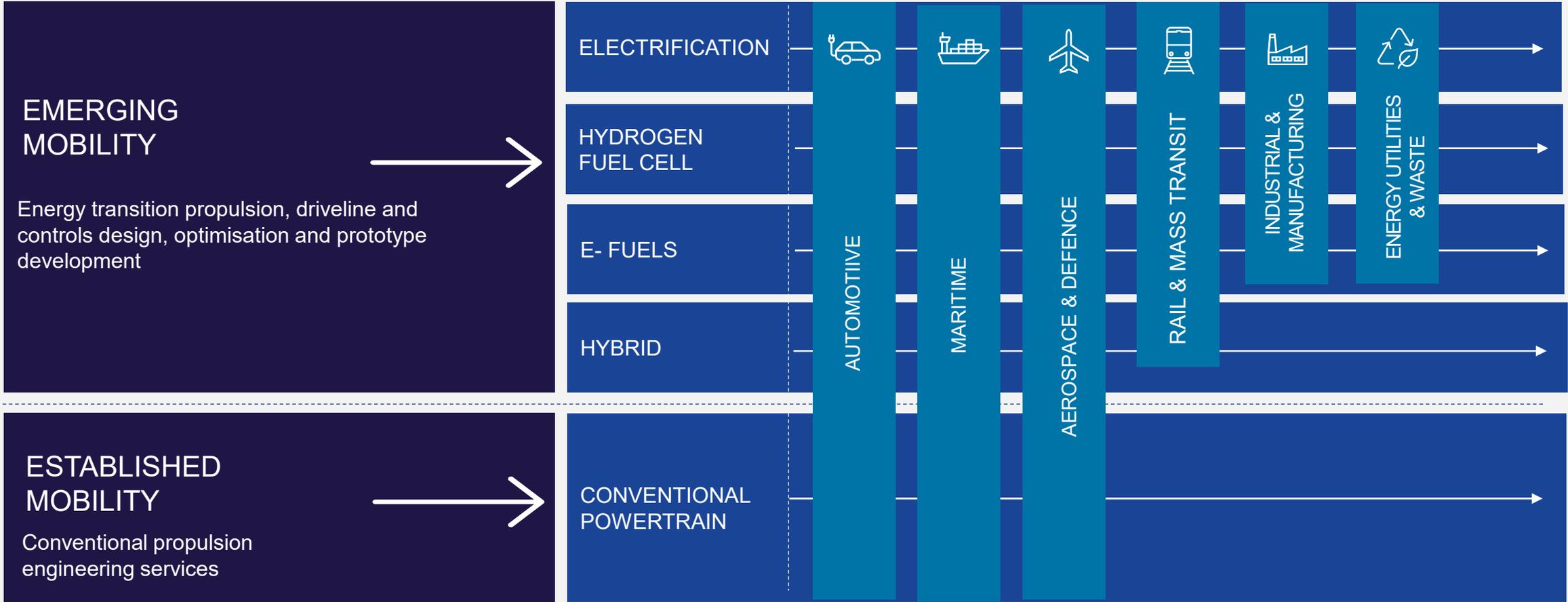
PROACTIVE SALES TO DELIVER GROWTH ACROSS OUR TARGET MARKETS

Optimising technology solutions for different industry applications

PROPULSION SOLUTIONS PORTFOLIO:

OUR EXPERTISE:

TRUSTED PARTNER TO OUR CUSTOMERS ACROSS KEY INDUSTRIES:



TRANSFORMING OUR DELIVERY MODEL FOR GROWTH

Variable cost model ensures resilience through the economic cycles

SKILLS TRANSFORMATION TO SUPPORT BOTH PORTFOLIOS

EMERGING MOBILITY

Energy transition propulsion, driveline and controls design, optimisation and prototype development

ESTABLISHED MOBILITY

Conventional propulsion engineering services

ELECTRIFICATION

HYDROGEN FUEL CELL

E- FUELS

HYBRID

CONVENTIONAL POWERTRAIN

Investing in our people to support skills and resource transfer

A VARIABLE COST MODEL

Scale capacity up/down and access to low-cost resource

RESTRUCTURING

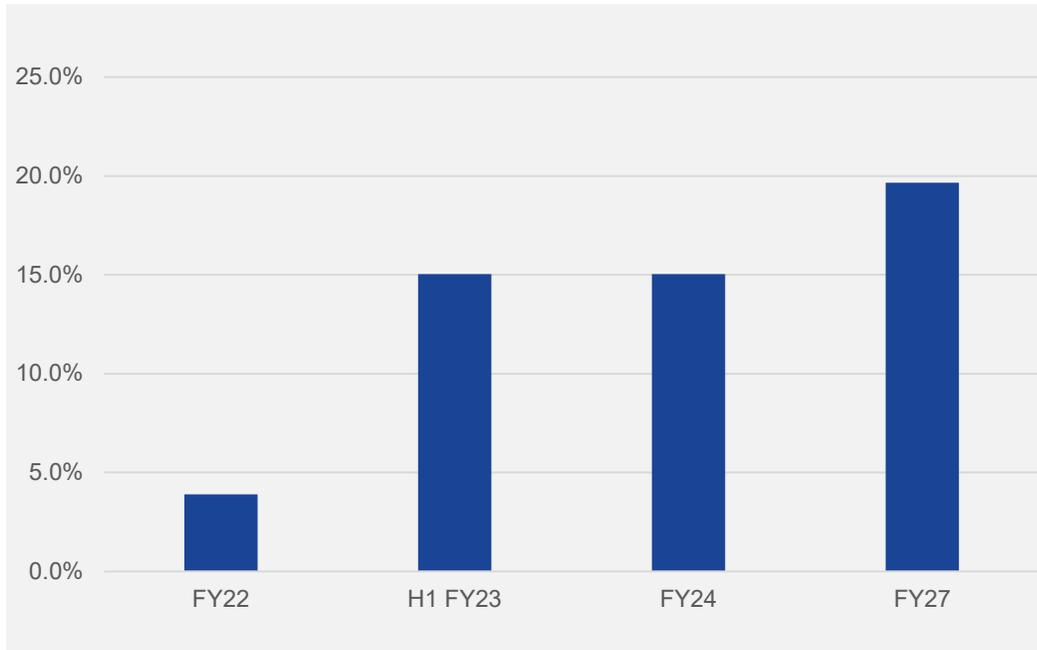
TRADITIONAL RESOURCING MODEL

FLEXIBLE RESOURCE

RIGHT SIZED FIXED RESOURCE MODEL

FOCUSED EXECUTION TO UNDERPIN SUSTAINABLE PROFITABLE GROWTH

High growth, margin and mix of emerging mobility



EMERGING MOBILITY →

Revenue CAGR – mid single digits
c.18% of Group revenue



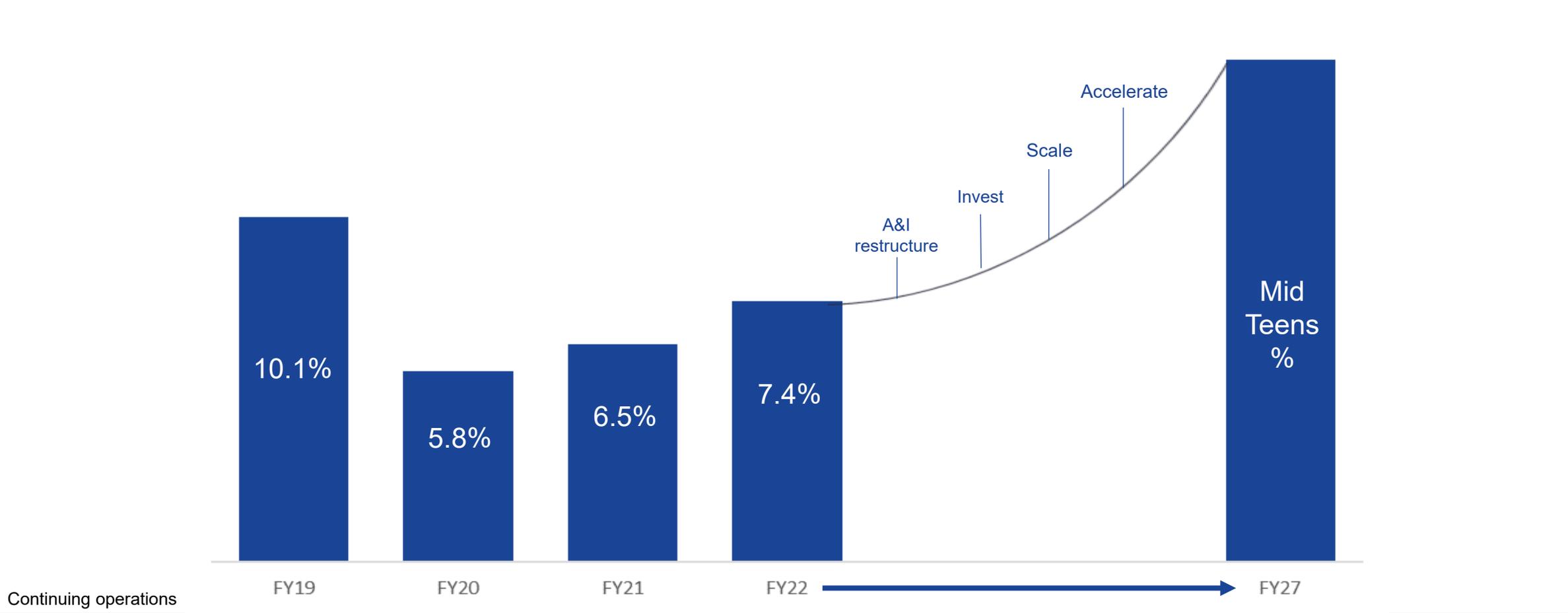
ESTABLISHED MOBILITY →

Revenue - flat from 23 levels
c.7% of Group revenue

02 FINANCIAL PROGRESS

STRATEGIC ACTIONS UNDERPIN OPERATING PROFIT MARGIN PROGRESSION

Operating margin accelerates through the period as benefits from transformation are realised



DISCIPLINED CAPITAL ALLOCATION TARGETS REMAIN UNCHANGED

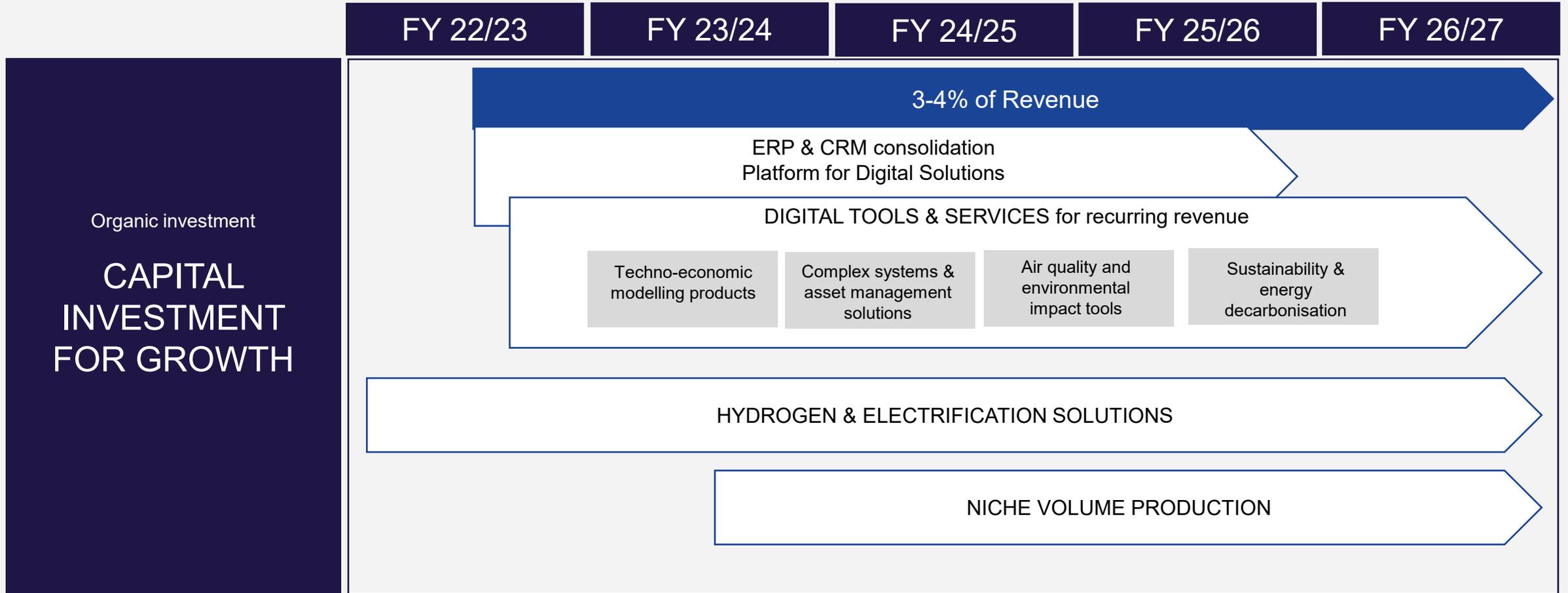
High return on capital with prudent net debt



(1) Leverage calculated on a pre-IFRS 16 basis

PRIORITISING INVESTMENT FOR GROWTH

Investing in repeatable, digital solutions to drive recurring revenue streams





BREAK

03 DEEP DIVE

OPENING THOUGHTS FROM RACHEL WHITE

Exponential growth opportunity accelerated by global mega trends

JOINING AT AN EXCITING TIME

- Supporting the energy and environmental transition in line with the Group's strategy

A GREAT DEAL OF UNTAPPED POTENTIAL

- 1,300 leading experts and transformational acquisitions to accelerate expansion

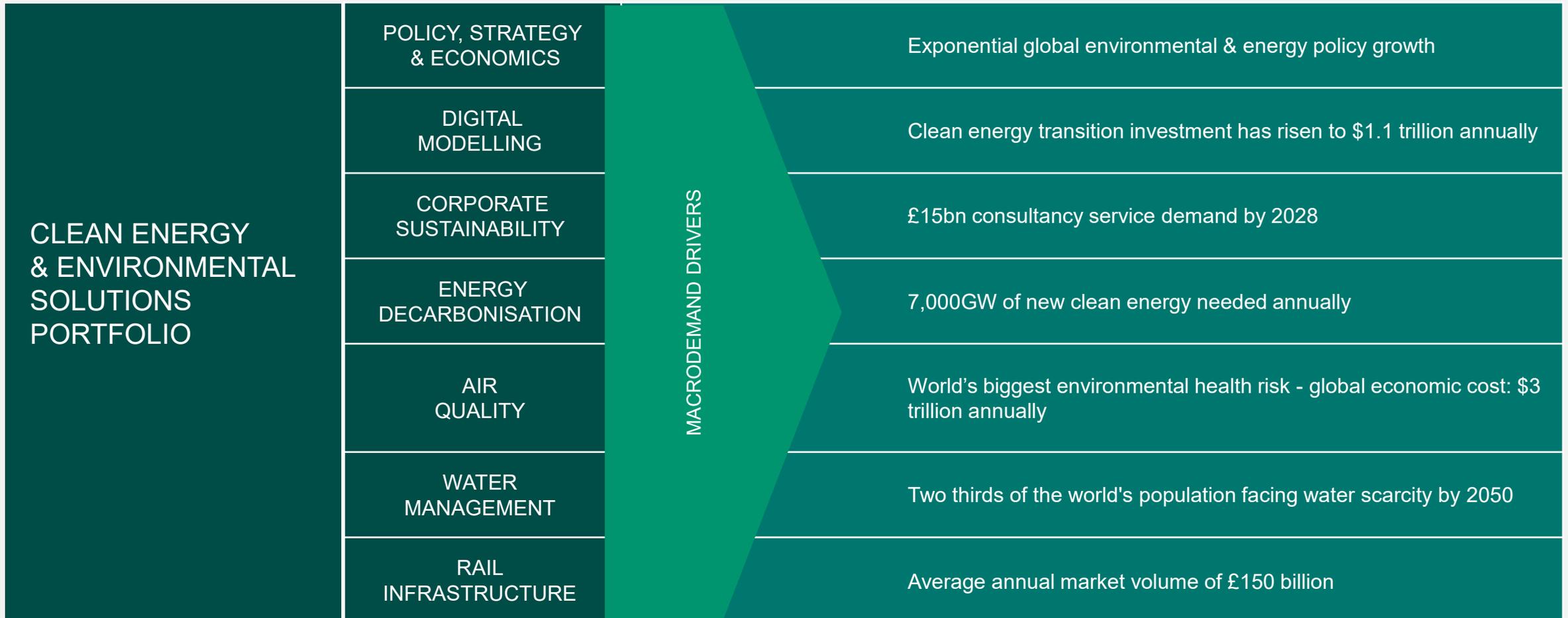
INFLUENCE REAL CHANGE

- Part of a refreshed leadership team, organised around market opportunity and our customers



STRONG DEMAND DRIVERS UNDERPIN OUR GROWTH STORY

Leveraging our unique access to deliver transformational growth across our entire portfolio



OUR GROWTH STRATEGY TO DELIVER MARKET OUTPERFORMANCE

We are accelerating growth through our three key levers aligned to Group's strategy



POLICY, STRATEGY & ECONOMICS

Developing policy initiatives and transformational strategies to address global energy and environmental challenges

FOCUS

- Trusted advisors to the European Commission, providing strategic advice and economic analysis
- Cutting-edge policy work for the European Commission
- Supporting the European Union enables Ricardo to replicate our capabilities with governments and corporates across the world



PROJECTS

- Supported EU's "Fit for 55" climate package
- Developed world's most comprehensive approach for life-cycle environmental impacts of road vehicles
- Supporting the Govt. of Abu Dhabi to assess carbon pricing policies
- Analysing market opportunities for production of sustainable aviation fuels in Colombia

DIGITAL MODELLING

Modelling the energy-environment economy to support the low carbon transition

FOCUS

- De facto provider of model-based climate and energy analysis to the European Commission
- Recognised position as a leading model-based provider to EU climate and energy policy analysis means corporate customers seek our advice
- Investing in our energy and climate modelling tools to bring them to a wider audience with subscription access to regular updates

PROJECTS

- Part of a consortium developing artificial intelligence framework for big climate datasets
- Supporting major financial institutions by analysing investment risks related to possible spikes in the EU carbon price
- Providing model-based analysis for banks on the transition and physical risks of climate change and impacts



CORPORATE SUSTAINABILITY

Expert advice to corporates on all aspects of sustainability

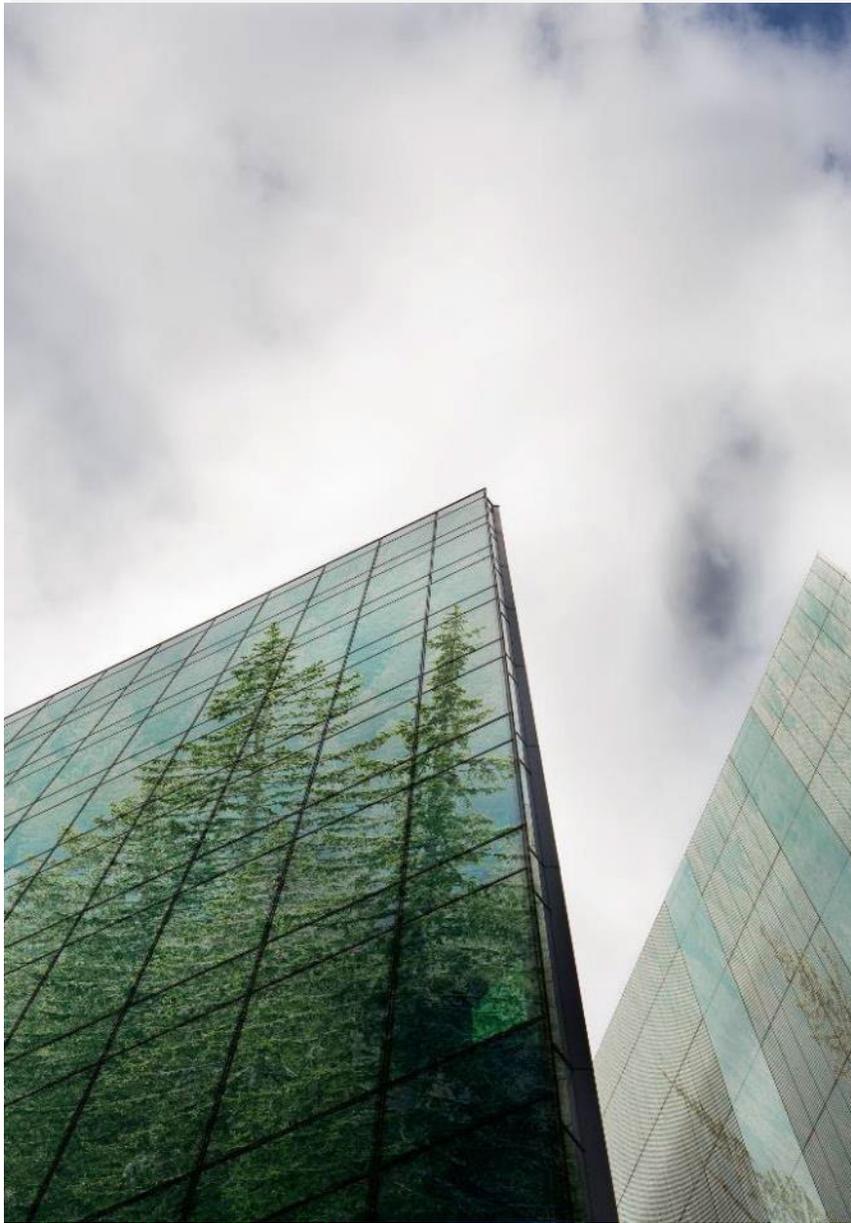
FOCUS

- Regulatory and investor pressure driving ESG strategy support
- Leading-edge policy and technology insights differentiates us
- Using digital modelling (E3M) to underpin credible sustainability strategy development
- European expertise highly-valued and 'door-opener' for international businesses



PROJECTS

- Strategic sustainability partner to FTSE 100 and FTSE 250 sector customers
- Taskforce on Climate - related Financial Disclosures (TCFD) for large multi-nationals
- Supporting energy-intensive and difficult to decarbonise businesses with ESG journey



ENERGY DECARBONISATION

Enabling the energy transition through innovative technology solutions

FOCUS

- Long-term established relationships with energy network operators
- Deep expertise in renewables, hydrogen and electrification
- Supporting financial institutions with clean energy investment decisions
- Regulatory drivers for innovation across the energy sector
- Resolving complex engineering challenges associated with renewables integration



PROJECTS

- Solving complex grid integration problems for investors
- Shipping sector decarbonisation from strategy to implementation
- Supporting the UK Government's Net Zero Innovation Portfolio programme
- Development of national hydrogen plan for Indonesia



AIR QUALITY

Longest established and largest air quality consultancy in Europe



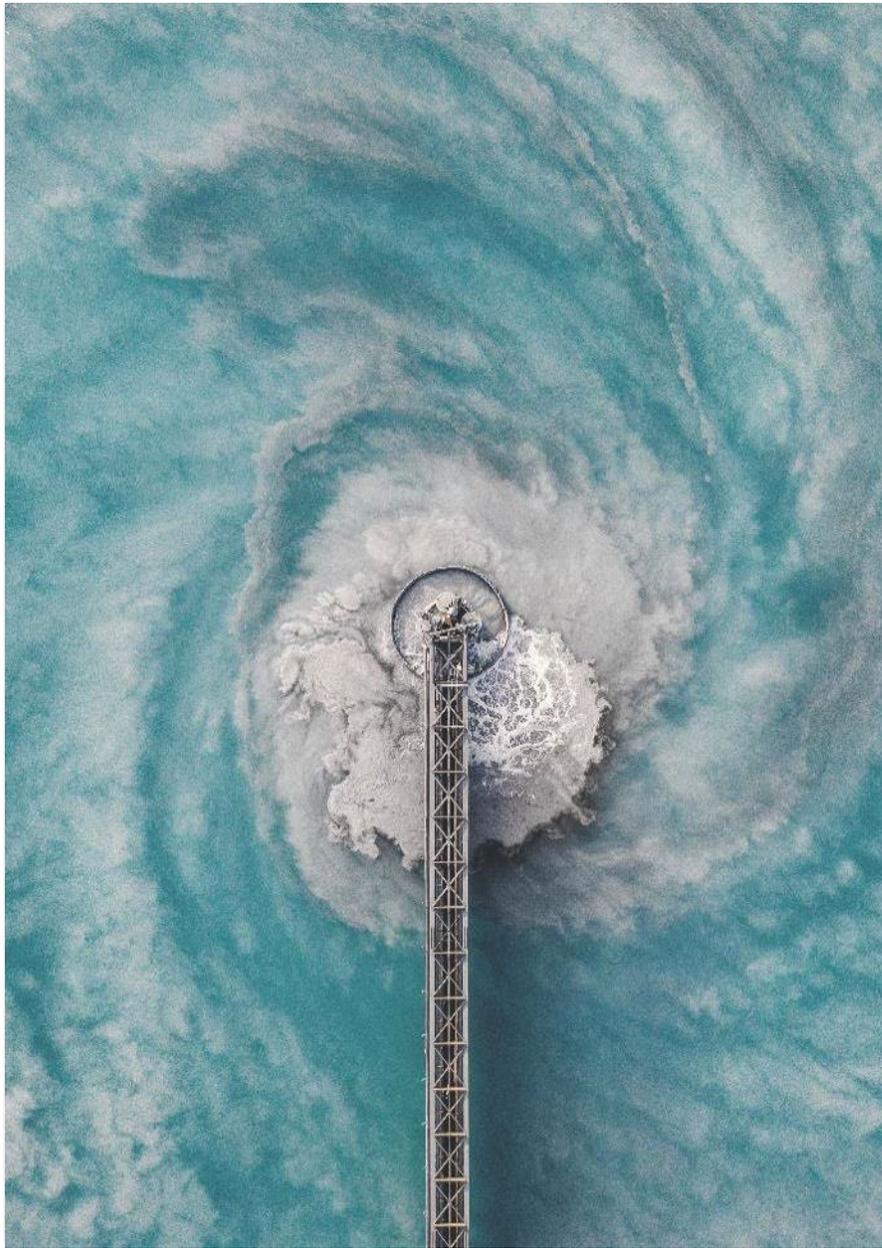
FOCUS

- Impacts of air quality on health has significantly increased in recent years with additional regulations
- Over 60 years as world-leaders in nationally critical air quality management, modelling and measurement systems
- Leveraging global technical leaders to develop cutting-edge and scalable digital products
- Supporting businesses with air quality compliance and regulator pressures



PROJECTS

- Design of Warsaw's first ever Low Emission Zone
- Design and manage UKs National Pollution modelling scenario support tool
- Supplying Abu Dhabi with a state-of-the-art air quality management system
- Supporting development of the world's first zero emissions zone



WATER MANAGEMENT

Delivering sustainable water management solutions in the face of climate change

FOCUS

- Water scarcity driving global demand for our services
- Supporting multi-billion-pound water infrastructure capital investment decisions
- Acquisitions of Inside Infrastructure and Aither creates leading water advisory in Australia
- Solutions to water pollution compliance unlocks built environment infrastructure opportunities



PROJECTS

- Created world's first net zero route map for UK water industry – now adopted in water sectors globally
- Delivering water regulation and policy advice into Saudi giga projects (NEOM)
- Strategic and technical advice to water scarce sites such as BHP's mines
- Strategic water resource analysis to assist in management national water scarcity



RAIL INFRASTRUCTURE

Diverse global portfolio of projects with increasing focus on decarbonisation

FOCUS

- Critical safety and sustainability support for mega-city rail projects
- Whole-life support across complex railway programmes
- Need to optimise and improve strategic resilience for existing investments in rail infrastructure
- Integrating renewable energy systems into the complex, safety-critical railway environment



PROJECTS

- Net zero commuter services to support Australian Govt. 2050 emissions targets
- Providing independent safety assessment (ISA) services for the European Train Control System
- London's Elizabeth Line, one of largest and most complex assurance projects
- Appointed safety auditor for Finch West Light Rail Transit in Canada

ASIA PACIFIC: REVENUE GROWTH TO £55M BY 2027

Well placed, particularly in Australia to take leading market positions



DEMAND DRIVERS

- Support demand from Asian Govts to meet climate commitments
- Australia is playing catch-up on the energy transition
- Leveraging the AUS-UK free trade agreement
- Decarbonising complex energy-intensive industries

ROUTE TO MARKET

- Acquired companies bring a significant client portfolio
- Targeting governments and corporates with heavy industry assets

EXAMPLES

- World-leading carbon pricing expertise for the Govt. of Indonesia
- Supporting the Philippines with its clean energy transition
- Infrastructure advisory for \$165 m, solar / battery facility in Adelaide
- Supporting BHP's water use requirements in Western Australia
- Shadow Operator for expansion of Sydney's metro system

NORTH AMERICA GROWTH THROUGH INCREASED FUNDING AND REGULATION

Significant opportunity for growth



DEMAND DRIVERS

- Increasing political pressure on energy decarbonisation especially where global business HQ in North America
- Increasing regulation and funding, driven by USA's Inflation Reduction Act and Canadian Net-Zero Emissions Accountability Act

ROUTE TO MARKET

- Opportunity to leverage strong position built from existing services in Canada and Automotive & Industrial presence in the USA
- Combining capabilities for energy transition and infrastructure

EXAMPLES

- Whole-life sustainability support for car manufacturers, chemical producers and data services
- Safety and security auditor and rail engineering for Metrolinx
- Supporting multi-national cloud solutions provider with service life cycle assessment
- Improving projected emissions for US Environmental Protection Agency

COMPLEMENTARY ACQUISITIONS ACCELERATE GROWTH

Extracting value from our acquisitions

E3- MODELLING



FOCUS

- Good strategic alignment
- Partnership spanning 10 years
- Opportunity to scale geographically
- Digital expansion in Ricardo key markets

STRATEGIC PROGRESS

- Supporting critical recruitment placement through Ricardo's established European footprint
- Digital investment in E3 Modelling platform to accelerate near to mid-term global scale

AITHER



FOCUS

- Enhance Policy, Strategy & Water
- Links with existing Australian entities
- International growth with existing customers
- Support with product delivery

STRATEGIC PROGRESS

- Submitted over \$4m of joint tenders
- Consolidated office footprint to enable the commencement of integration of Australian businesses

INVESTING FOR GROWTH

Accelerating our organic strategy to create value for all stakeholders



FINANCIAL
COMMITMENT



DIGITAL
INNOVATION



INVESTMENT IN
OUR PEOPLE

2x

Capital allocation increase in FY24 to invest in the development of new clean energy and environmental solutions to drive organic growth

Increased focus on repeatable and scalable solutions

Generate recurring revenue and pull-through consulting
Makes our expertise accessible to a wider global client base
Uniquely addresses client's challenges from policy to implementation



Increased investment in recruitment and retention

Graduate recruitment

Development of scalable training programmes to accelerate talent

Commercial and leadership development to complement our technical expertise

04 CUSTOMER PERSPECTIVE

CUSTOMER PERSPECTIVE:

GRESHAM HOUSE

A CONVERSATION WITH:

Peter Bolton

Investment Director - Gresham House

Sujith Kollamthodi

Practice Director - Policy, Strategy & Economics, Ricardo



CLOSING REMARKS

TRANSFORMING RICARDO TO OPTIMISE ENERGY TRANSITION

Technical expertise across mobility and environmental solutions

ENERGY TRANSITION OPPORTUNITIES

- Global mega trends in global policy, energy decarbonisation and sustainable mobility
- Global investment in mobility and renewable energy creates unconstrained demand
- Energy transition complexity requires alignment in energy supply and mobility demand
- Leveraging our in-house expertise to deliver our own ESG agenda

PORTFOLIO & MARKET TRANSFORMATION

- Strategic and digital investment accelerates growth and margin
- Strong momentum and growth needs in Clean Energy & Environmental solutions portfolio
- Repositioned Automotive & Industrial's portfolio and operating model for profitable growth
- Established industry and geographic footprint enables further expansion

CULTURAL TRANSFORMATION

- Refreshing our leadership team with high ambition and focus on execution
- Aligned purpose and objectives across the business to deliver end to end value
- Embedding a performance culture

THANK YOU
TIME FOR QUESTIONS

