



# Ricardo plc

## Preliminary Results 30 June 2008

Premium Brand

World Class Infrastructure

World Class Technology & Products

Right Team, Right Culture

Global

One Firm

DELIVERING VALUE THROUGH INNOVATION & TECHNOLOGY

- Revenue up 15% to £197.7m (June 2007: £171.5m)
- Profit before tax up 20% to £14.7m (June 2007: £12.2m)
- Order book £99m (June 2007: £92m)
- Net debt reduced to £0.3m (June 2007: £7.2m)
- Basic earnings per share of 24.2p (June 2007: 29.6p, or 19.3p excluding £5.2m of retrospective R and D tax credits)
- Full year dividend increased by 6% to 10.6p (June 2007: 10.0p)
- Improved performance driven by the right mix of people, products, services and geographic coverage gives confidence for the future

# KEY INDICATORS



	June 2008	June 2007
Order book	£99m	£92m
Gross profit %	35.0%	33.5%
Operating profit %	8.0%	7.7%
Tax rate	16%	(24)%
EPS (basic)	24.2p	29.6p*
Full year dividend	10.6p	10.0p
Net debt	£0.3m	£7.2m
Pension deficit (pre tax)	£19.9m	£16.7m
Average headcount	1,799	1,646

\* Or 19.3p, excluding 10.3p due to £5.2m of retrospective R&D tax credits

# INCOME STATEMENT



£ m	June 2008	June 2007
Revenue	<u>197.7</u>	<u>171.5</u>
Gross profit	69.2	57.5
Administration costs	<u>(53.3)</u>	<u>(44.3)</u>
Operating profit	15.9	13.2
Finance costs	<u>(1.2)</u>	<u>(1.0)</u>
Profit before tax	14.7	12.2
Taxation credit /(charge)	<u>(2.3)</u>	<u>2.9</u>
Profit after tax	<u>12.4</u>	<u>15.1</u>

# DIVISIONAL RESULTS

## Year ended 30 June 2008



£ m	Revenue Earned		Operating Profit/(Loss)	
	2008	2007	2008	2007
UK	116.0	102.0	12.3	9.8
US	39.4	37.4	2.3	1.2
Germany	29.9	24.2	(0.5)	0.9
Technical Consulting	<u>185.3</u>	<u>163.6</u>	<u>14.1</u>	<u>11.9</u>
Strategic Consulting	<u>12.4</u>	<u>7.9</u>	<u>1.8</u>	<u>1.3</u>
Total	<u><u>197.7</u></u>	<u><u>171.5</u></u>	<u><u>15.9</u></u>	<u><u>13.2</u></u>

# EARNINGS PER SHARE



	<b>June 2008</b>	<b>June 2007</b>
Profit before tax (£m)	14.7	12.2
Tax (£m)	(2.3)	2.9
Minority interest (£m)	(0.1)	(0.1)
Profit attributable to equity shareholders (£m)	<u>12.3</u>	<u>15.0</u>
Weighted average number of shares	<u>50.9m</u>	<u>50.7m</u>
Earnings Per Share	<u>24.2p</u>	<u>29.6p*</u>

\* Or 19.3p, excluding 10.3p due to £5.2m of retrospective R&D tax credits

# BALANCE SHEET SUMMARY



£ m	30 June 2008	30 June 2007
Tangible assets	48.0	44.5
Intangible assets	20.0	17.5
Stocks and debtors	63.3	63.1
Net debt	(0.3)	(7.2)
Trade creditors	(49.7)	(43.9)
Tax & other	0.1	(0.3)
Pension deficit (net of tax)	(14.3)	(12.0)
Net assets	<u>67.1</u>	<u>61.7</u>

# CASH FLOW



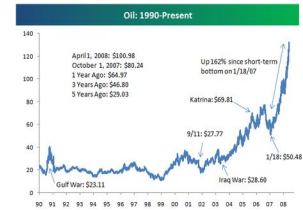
£ m	Year ended 30 June 2008	Year ended 30 June 2007
Operating profit	15.9	13.2
Depreciation and amortisation	8.8	8.8
Working capital reduction/(increase)	6.8	(3.9)
Dividends	(5.4)	(5.0)
Net interest paid	(1.2)	(1.0)
Tax paid	(2.0)	(1.6)
Capital expenditure	(10.8)	(9.5)
Pension payments in excess of pension costs	(2.5)	(2.7)
Other/forex movements	(2.7)	0.3
Cash inflow/(outflow)	<u>6.9</u>	<u>(1.4)</u>



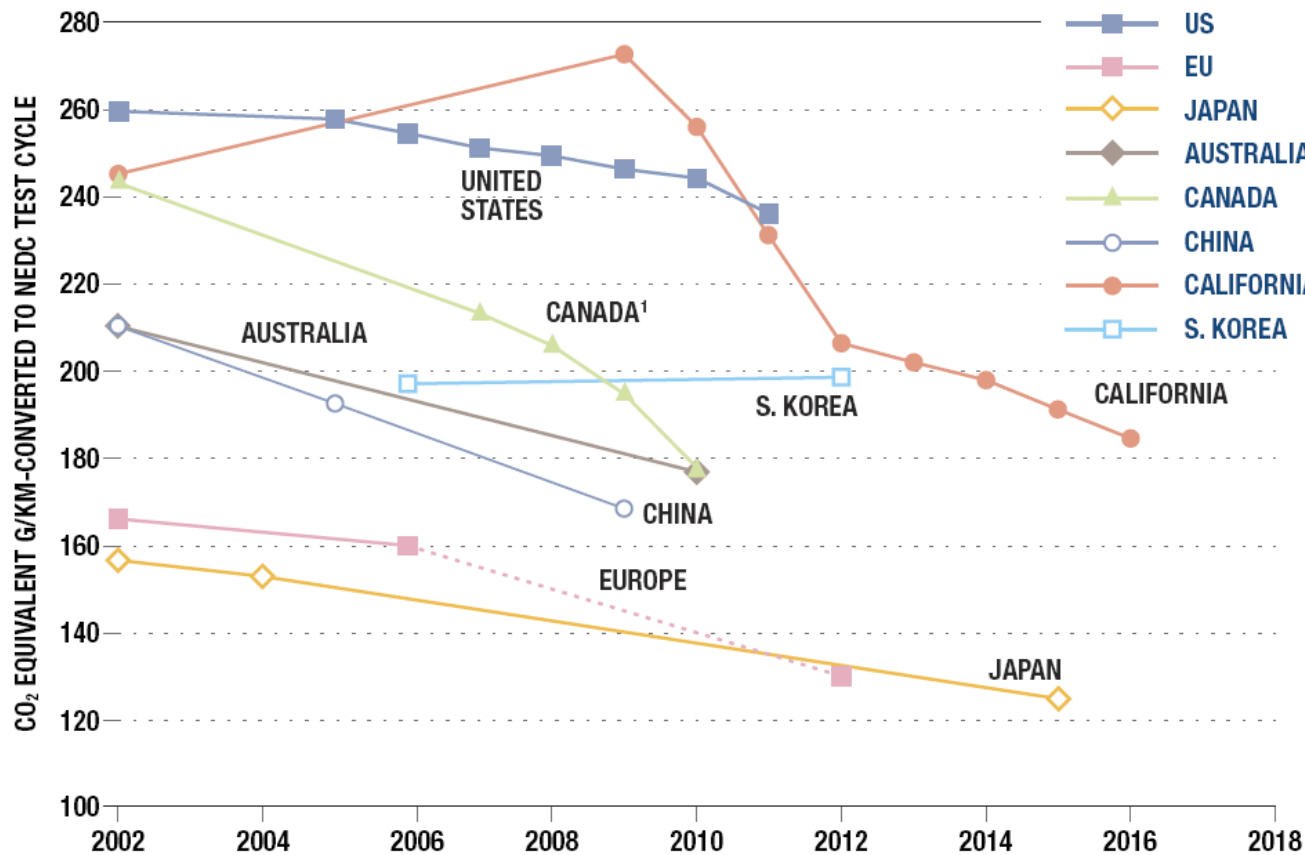
# Global emissions reduction, legislation, high fuel prices, industry dynamics and world instability continue to provide the core drivers for Ricardo



- **Fuel economy, energy security and CO<sub>2</sub>/emissions reduction legislation**
  - Fuel economy legislation for the first time: 130g/km CO<sub>2</sub> 2012 for Europe, 35mpg 2020 for US (40% increase)
  - Hybrids, US diesel, diesels for Japan and China – new product offensives
  - New Energy markets & sources looking at auto expertise to aid shift from niche to volume market
- **Record oil prices driving dramatic market share shift by customer and sector**
  - Move from large to efficient/smaller vehicles impacting US market
  - Japanese and Korean manufactures continue to strengthen positions in overseas markets
- **Globalisation and rapidly developing new regions, Asia and Eastern Europe**
  - China, India, Russia – developing new industries & markets
  - Similar regions attracting focus of established players for low cost development/production and market
  - Chinese and Indian players looking to export and acquire overseas companies & technology
- **Peace keeping for now and future, world instability**
  - Multi-fuel, safety/integrity, versatility, agility, rapid deployment, strategic development, European expansion



**CO<sub>2</sub> reduction / fuel economy legislation is being introduced across the world for the first time with very challenging targets. This is the major focus of the automotive industry, and is changing the market already**

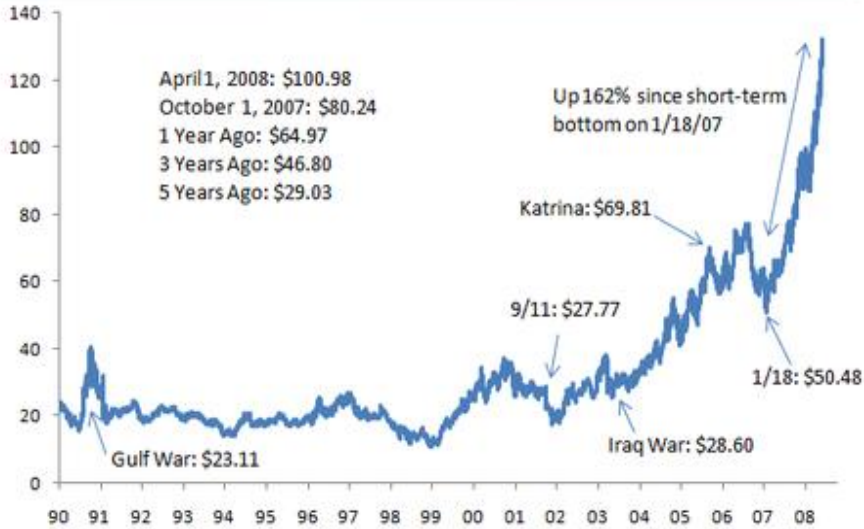


- **In Europe**, the Commission have proposed legislation requiring fleet average CO<sub>2</sub> to be reduced to 130 g/km by 2012-15
- **Japan** has set targets for fuel economy in 2010 and has been the first to introduce fuel economy legislation for heavy duty vehicles (15% reduction from 2002 by 2015)
- **US EPA** to initiate a regulatory process for improved fuel economy through the Clean Air Act by 2008
  - Senate vote for 35 mpg by 2020
  - California setting target for over 6% p.a. reduction 2009-2012

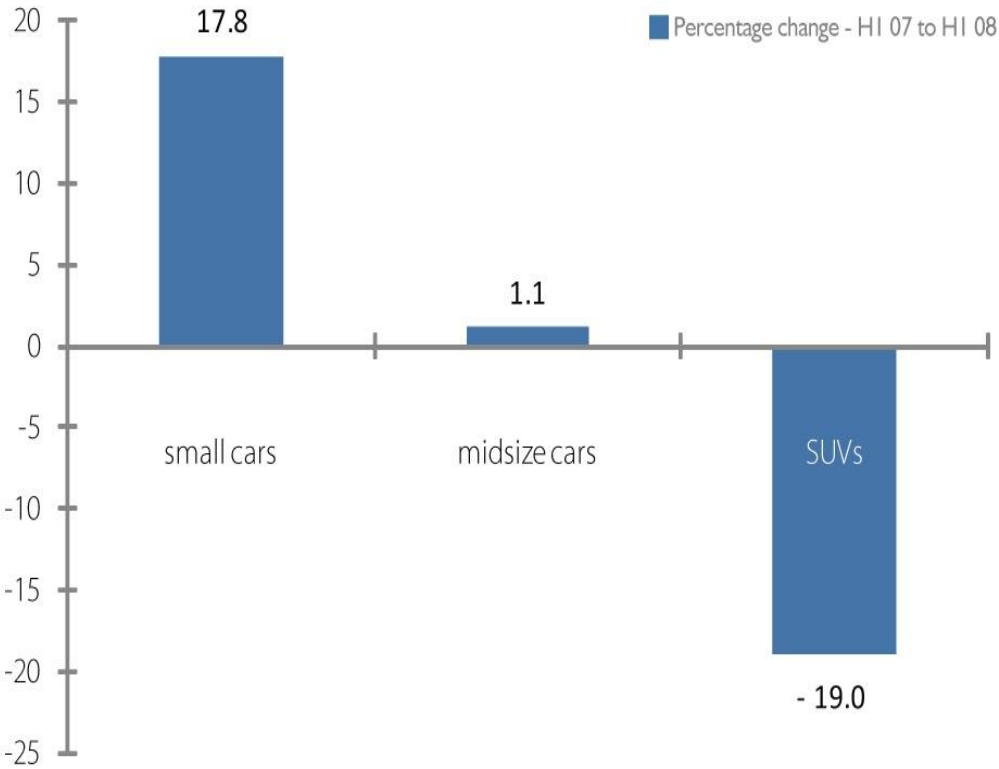
# The oil price surge and consumer reaction has hit very fast and has caught a number of major automotive companies off guard in terms of product portfolio and skill base – this is changing the market and demand



Oil: 1990-Present



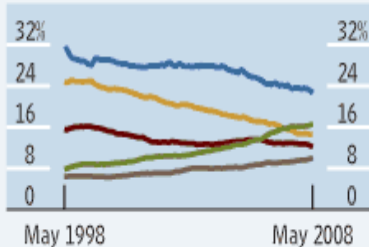
US market trend towards smaller cars



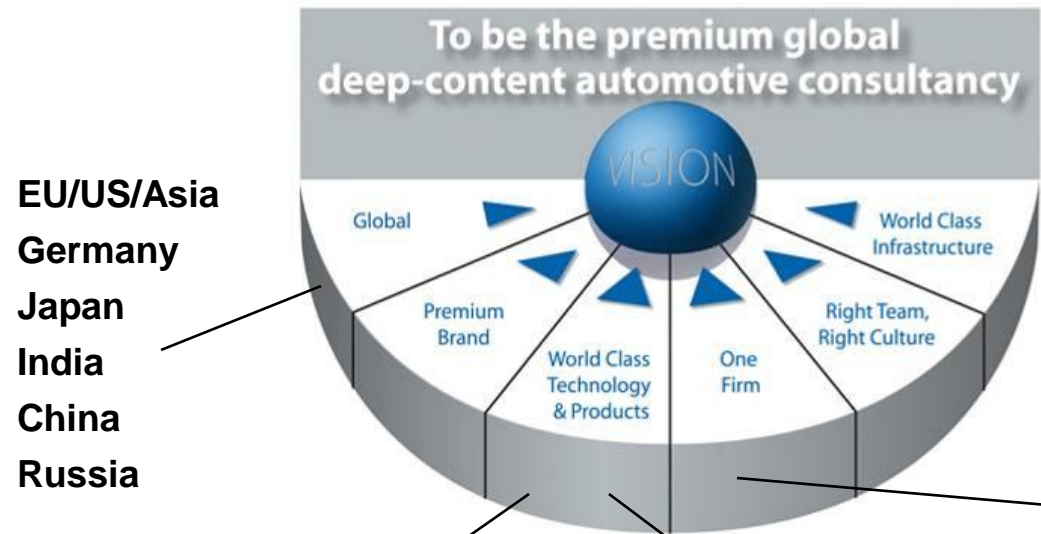
## The U.S. market

### The big five

Share of the total U.S. market for each month. At right, 12-month rolling averages from May. 1998 through May. 2008; below, for the past year.



Ricardo strategy, technology and capability puts the company in the centre of these global drivers - exploiting the global market providing CO<sub>2</sub> reduction solutions, while de-risking against geographical and automotive cyclicity.



CO<sub>2</sub> reduction & fuel economy  
 Diesel & Hybrid  
 Transmissions (DCT & TV)  
 Safety, Electronics

Exploiting auto expertise, technology & process into new markets, new customers:  
 Defence  
 New Energy / Clean Tech  
 Aerospace

Win where buoyant – deliver where appropriate  
 Work passing from division to division  
 Joint divisional client delivery

Ricardo is a global management and technical consulting firm with global multi-industry client base

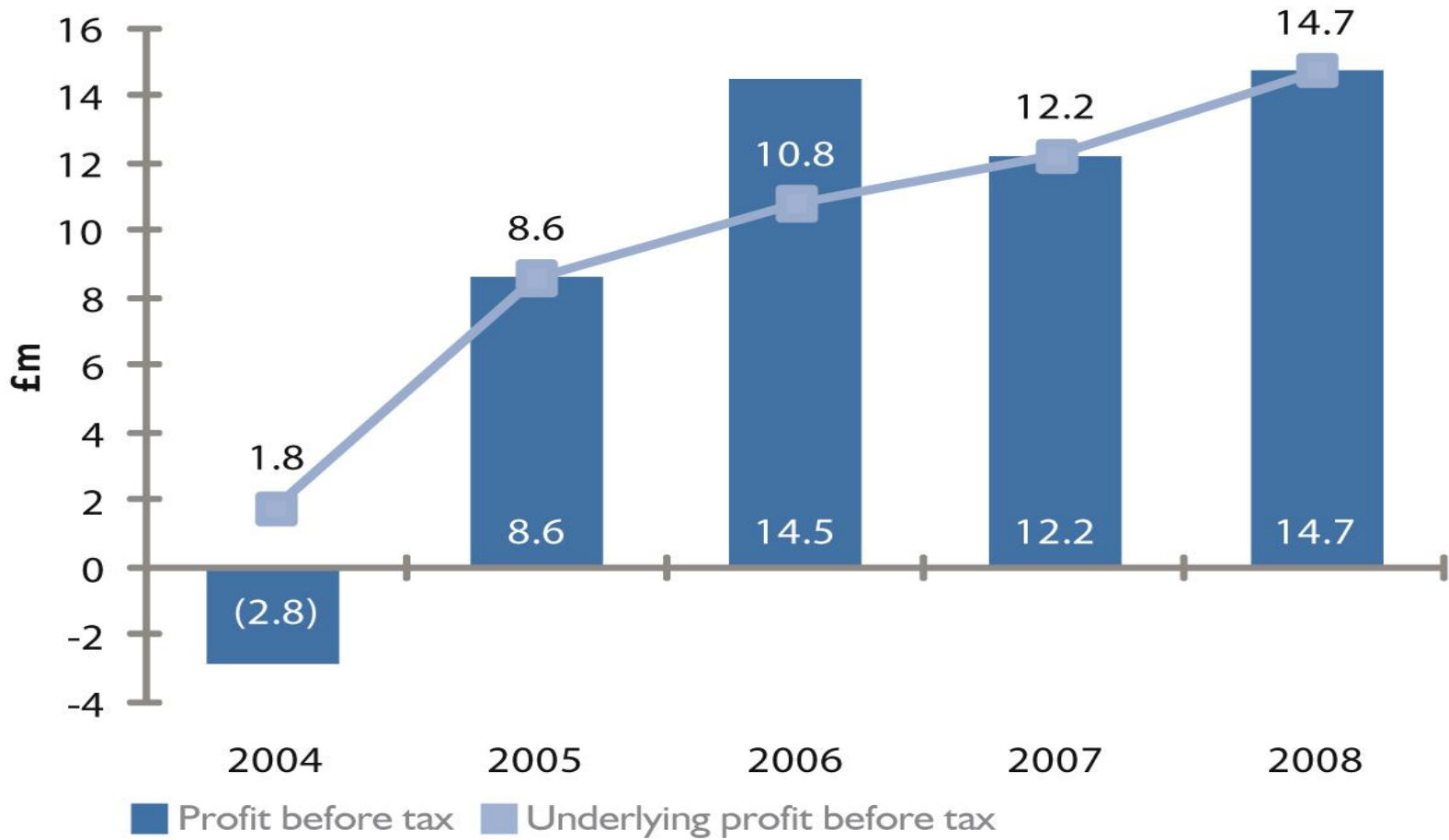


Partial List

Global Client Base

New energy	Financial firms	Oil companies and utilities	Governmental agencies
Automotive OEM	Heavy duty diesel	Production and aftermarket	Defence
			<p>Ministry of Defence (various countries)</p> <p>Defence contractors / suppliers</p> <p>Vehicle / powertrain OEMs</p>

# Profit before tax



## RICARDO UK – continuing to grow on the back of in-demand technology and increasing global exposure. Asia & Germany continue to be core contributors with Japanese and Russian business expanding strongly

- Revenue, profits, orders and orderbook all increasing
- Opportunity pipeline remains strong from a diverse portfolio of clients, geographies, sectors and technologies
- Continued demand for technology, in particular CO<sub>2</sub> reducing engine technology, advanced drivelines, hybrids and electronics
- A very global programme portfolio including Japan, India, China, Malaysia, Korea, Europe and Russia. New and repeat business from Japan, large programme pass through from Germany and new business from Russia
- Strong performances from the motorsport business and vehicle business with application programmes and special vehicle projects
- Defence Systems and Technology business busy with current and future product development. Interest in application of automotive technology and process
- Increased investment in R&D and facilities to house expansion
- Facilities and labour heavily utilised with Prague increasing to over 140 staff



# RICARDO US – Re-energised business delivered increase profits, turnover and order book from a more diverse customer base



- Business improvement initiatives in first half delivered full year benefit and a more dynamic business from a wider customer base
- Governmental agencies, military, new domestics, oil companies and new energy clients add to traditional automotive with generally better commercial terms
- Uplift in marketing to put Ricardo in the fuel economy space, engaged with industry and government in key areas driven by energy security & high oil prices
- Significant product and technology offensives underway to counteract market share shifts, high oil prices and pending legislation
- Key programmes include, US diesel and enhanced gasoline engines for both US and Asian clients, hybrid powertrains, safety and intelligent vehicle related electronic developments
- Greater diversification of business driven by successes in military and new energy. Strategic reviews, technology development and demonstrator programmes in vehicle, windfarm and solar programmes
- Ricardo Software delivered a solid year recovering from the downturn in F1 business by additional global expansion and new product introduction

Hybrid Military Vehicle



Plug-In Hybrid



Electric Vehicle Transmission



Solar array sterling engine

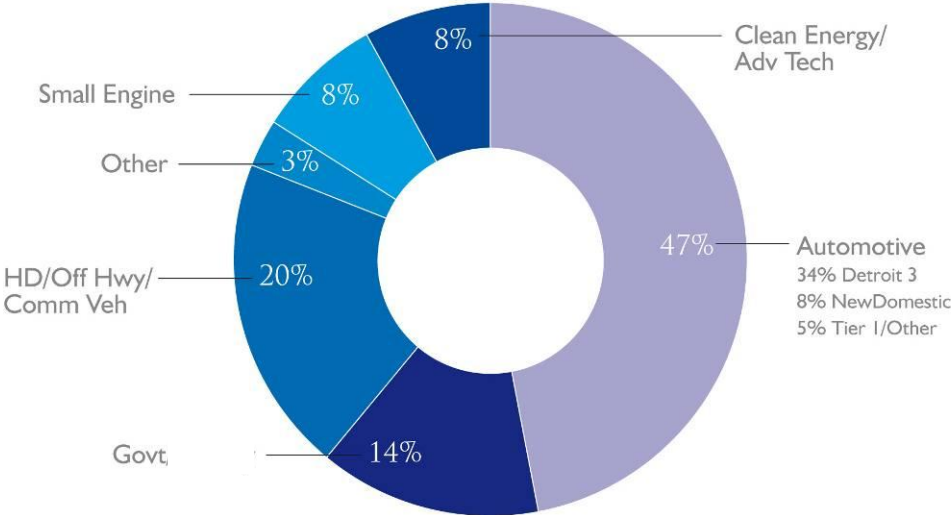




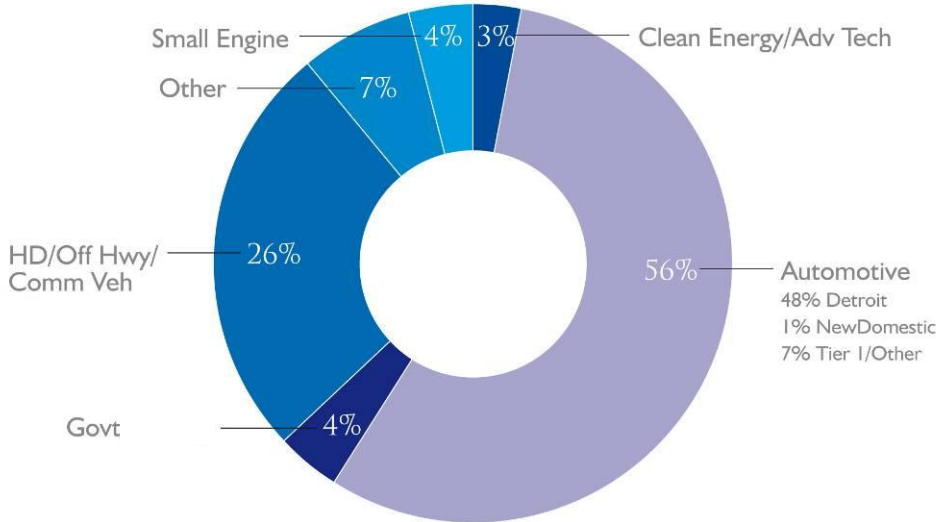
# RICARDO US – Re-energised business delivered increase profits, turnover and order book from a more diverse customer base



**2008 FY Order Intake**



**2007 FY Order Intake**



## RICARDO GERMANY – Repeat engineering business, new customers and large programmes secured. Successful recruitment but demand still in excess of local supply, significant pass through to UK

- German market remains very active with engine & transmission product developments for passenger car, motorcycle, truck and off highway.
- Strong demand for turnkey programme delivery, engineers, test facilities and strategic partners for the major premium OEMs and Tier 1s, driven by CO<sub>2</sub> reduction, emissions legislation and shortage of engineers
- High labour and facility utilisation, soaking up new recruits and test beds as they come on line. Demand still higher than local supply. Investment continuing, to grow business, brand, staff levels, client base and capability
- Significant pass through to the UK and close collaboration to deliver large and technical programmes while the capability and capacity of Germany grows
- Core niche exhaust supply programme ramped down, follow on contract secured, in engineering phase before follow-on supply ramps up in April 09
- Unable to fully fill the interim volume gap with quality prototyping, leading to disappointing performance, cost reduction programme underway to support interim period and improve margin when ramp up commences.

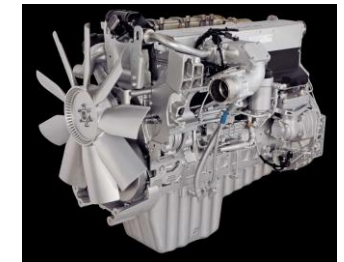


## STRATEGIC CONSULTING – Increasing diversity of client base, larger programmes, expanding team size, broadening geographically and high levels of utilisation

- Growing with repeat and new business from a more diverse customer base and portfolio of service offerings with clients in the US, EU and Asia
- Driven by intensifying competition, growth in developing markets, cost challenges in established markets, technology challenges to meet CO<sub>2</sub> reduction, and oil price/fuel economy impacts
- Extended client base within vehicle (passenger car and truck) manufacturers, tier 1's and investor groups, whilst adding new clients in Formula 1, new energy, rail and aerospace – all exploiting automotive practices
- Extended geographical client base with increased senior presence in Asia – large programmes in India and Korea often in conjunction with technical consulting
- Continuous selling, while delivering business. Recruiting additional experienced senior staff, new consultants from leading business schools and mechanisms in place to retain and secure talent in an active market



Ricardo supports Daimler Trucks in the implementation of its India strategy



# Asia continues to be a strong contributor – good order intake in Japan, engineering expansion in China, new office in India and a new Russian market

- Continued record order intake from multiple Japanese clients, new and repeat business as they embrace turnkey outsourcing and Ricardo as a trusted partner
- Shanghai engineering centre developing to plan, new larger premises, increased recruitment, local engineers performing well, delivery of in-region projects to service demand from within China and elsewhere
- Delivery for Japanese & Chinese clients from UK, US and local facility as technology and market entry dictates. Hybrid, gasoline, transmissions and electronics for passenger car and commercial vehicles
- New office opened in Delhi, to provide Ricardo expertise to the leading OEMs who wish to play on the world stage and domestically
- Long term Malaysian client continues to provide good-sized programmes and Russia has become a very active market in its first year of focus with many large programmes and opportunities



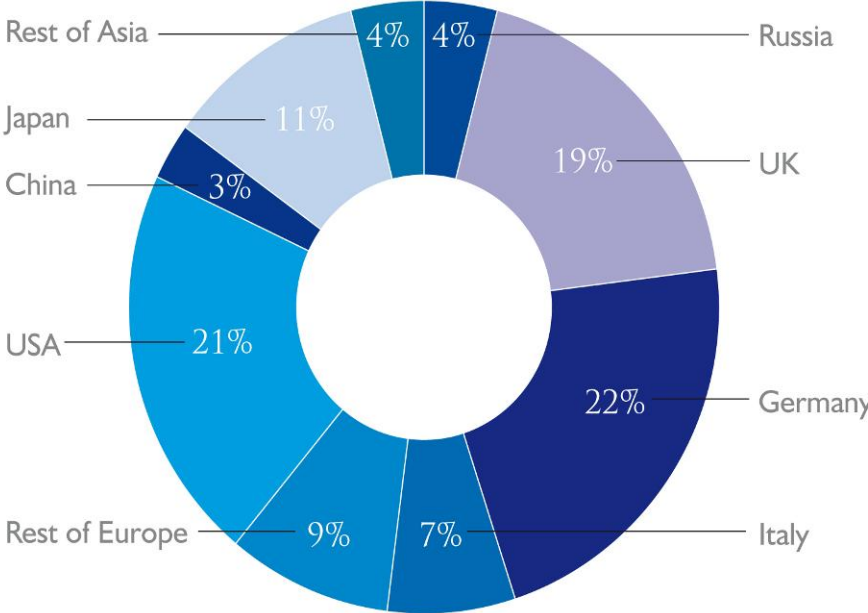
Launch of Ricardo India at the ITC Maurya Hotel, New Delhi, 2 November 2007.  
© Richard Stagg, British High Commissioner to India, Surjit Singh Kalra, Chairman of Ricardo India, Clive Stammers, CEO of Ricardo, and Dr. Rajendra Pachauri, Chairman of the IPCC, Inter-governmental Panel on Climate Change



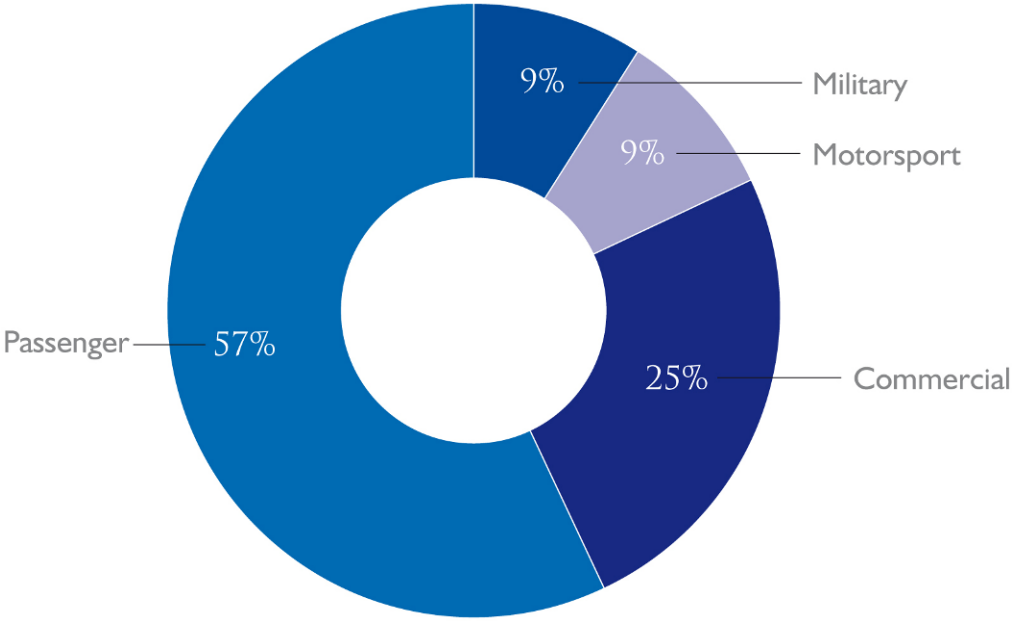
Order intake for the year 07/08 continues to grow with sector and geographical spread, de-risking and providing a platform for growth. Japan driving good business from Asia.



**Geographic Spread FY 07/08**



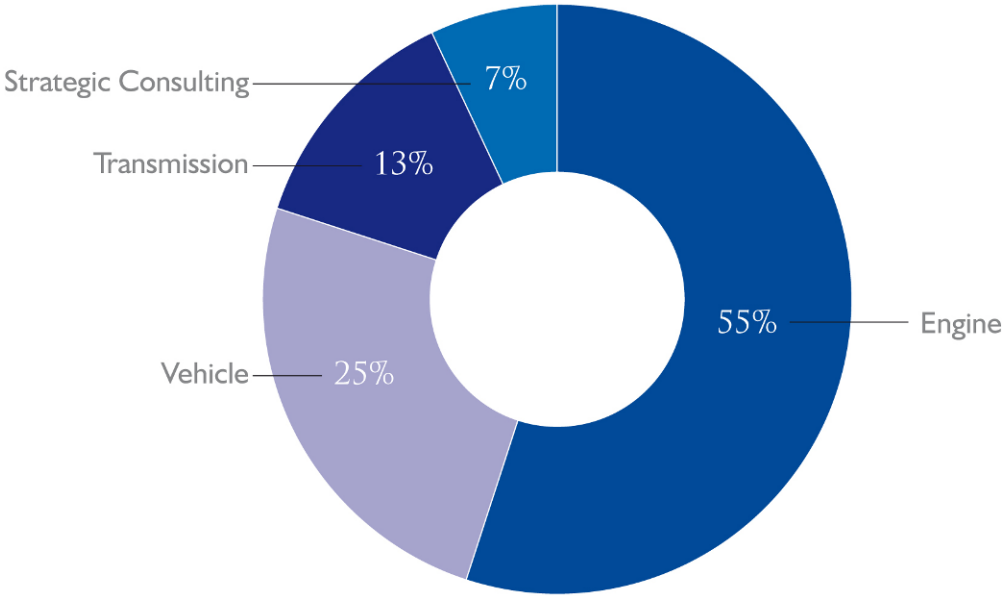
**Sector Spread FY 07/08**



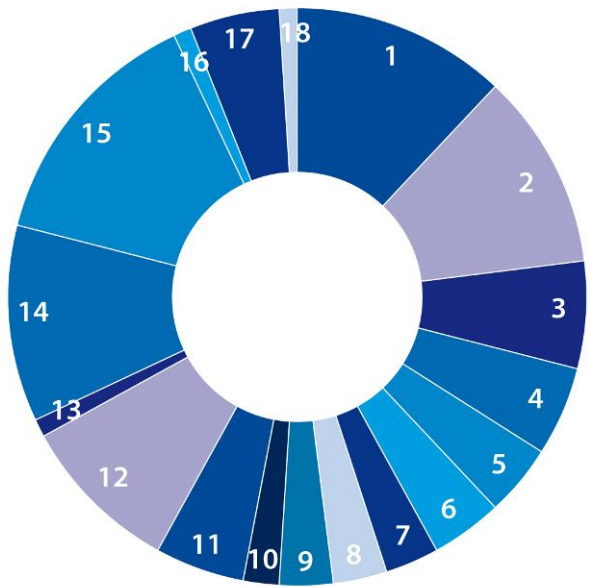
Order intake for the year 07/08 demonstrates Product and Customer spread also de-risking and providing a platform for growth. New and repeat premium customers globally.



**Product Spread FY 07/08**



**Customer Spread FY 07/08**



- 1. Global Key Client - Germany
- 2. Global Key Client - USA
- 3. Key Client - UK
- 4. Key Client - Germany
- 5. Global Key Client - Asia
- 6. Global Key Client - UK
- 7. Global Key Client - UK
- 8. Global Key Client - Asia
- 9. Key Client - Asia
- 10. Key Client - Asia
- 11. Rest of UK
- 12. Rest of Germany
- 13. Rest of Italy
- 14. Rest of Europe
- 15. Rest of USA
- 16. Rest of China
- 17. Rest of Japan
- 18. Rest of Asia

# Safety, Congestion & Efficiency challenges have led to a surge of interest in “Intelligent” Vehicle & Infrastructure – Ricardo investing & well placed to exploit this new market for technology



## Improving Road Safety

- Continuing traffic growth
- Targets for reduction of road fatalities



## Reducing Congestion

- Continuing traffic growth



## Cutting Emissions/Pollution

- Emissions legislation continues to be tightened globally – EU6 – LEV3
- Increasing regulatory focus on CO<sub>2</sub> – Kyoto and supporting agreements (e.g. CARB, EU 130g/km, Japan)
- Air quality targets

## Demand for ‘comfort functions’

- Consumer demand for: Navigation systems, Integrated multi-media systems, Optimised routing etc.

**Intelligent  
Vehicle &  
Infrastructure**

# The rise in oil and fuel price has justified our focused investment in fuel efficient technologies – Solutions to address safety & congestion challenges are also driving our R&D programme

- **Increasing Collaborative Support**

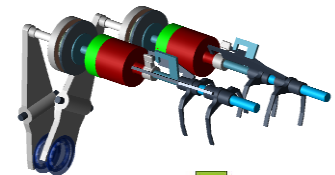
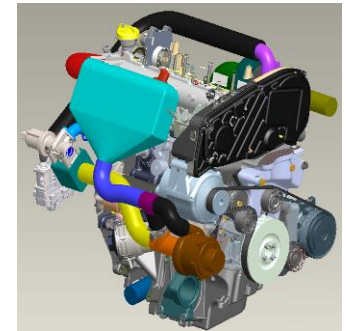
- All major R&D programmes supported with industry/government co-funding
- Current portfolio includes £16m of co-funding with over £6m in consideration

- **Powertrain: Clean Diesel, Efficient Gasoline, Advanced Hybrid Transmissions & Cleaner Fuels**

- Costs effective clean pass car diesel for US market – with improved economy
- 2/4 stroke switching of gasoline engine – 27% more fuel efficient – Vehicle demonstrator in 2009
- Dry dual clutch e-actuated hybridised transmission now designed
- Our leading study on the future of Hydrogen for stationary and transport applications has played a key role in planning European public investment

- **Active Safety and Dynamics: Steer by Wire & Intelligent Transport Systems**

- Active dynamics, telematics, electronic horizon and partial self driving
- 4 new collaborative programmes in vehicle telematics for improved efficiency/safety and links to infrastructure



Roads2HyCom





- Exploiting the strong and enduring global drivers for the business
- Well balanced geographic, customer and programme portfolio
- Good order book and lead pipeline
- Good pipeline of technology
- Strong and focused team in play
- Balanced focus on growth, efficiency margin and cash
- Strong balance sheet
- “Momentum”, but conscious of global economic environment



- ❑ “The first half trading has started well. Order prospects continue to build across the board. Our strong order book together with our continued order intake provide us with confidence for good progress this year.”

# Questions



**Ricardo UK MTC**



**Ricardo UK STC**



**Ricardo UK Cambs**



**Ricardo Japan**



**Ricardo Prague**



**Ricardo US**



**Ricardo Deutschland**



**Ricardo China**



**Ricardo India**



**Ricardo Chicago**



**Ricardo Munich**