



Rolls-Royce

2016 Half Year Results

Data Appendix

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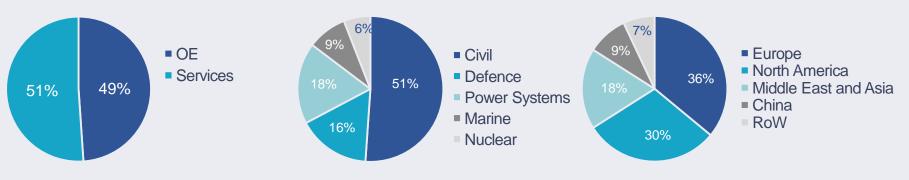




Group 2016 half year results

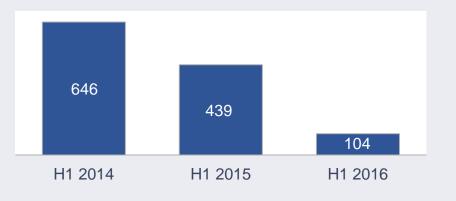


Underlying group revenue £6.1 billion

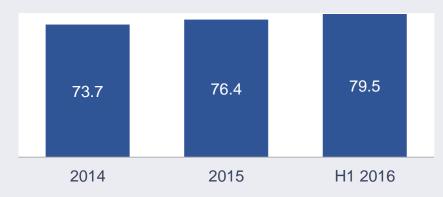


* By geography refers to FY15

Underlying profit before tax £104 million



Order book £79.5 billion



Order book*



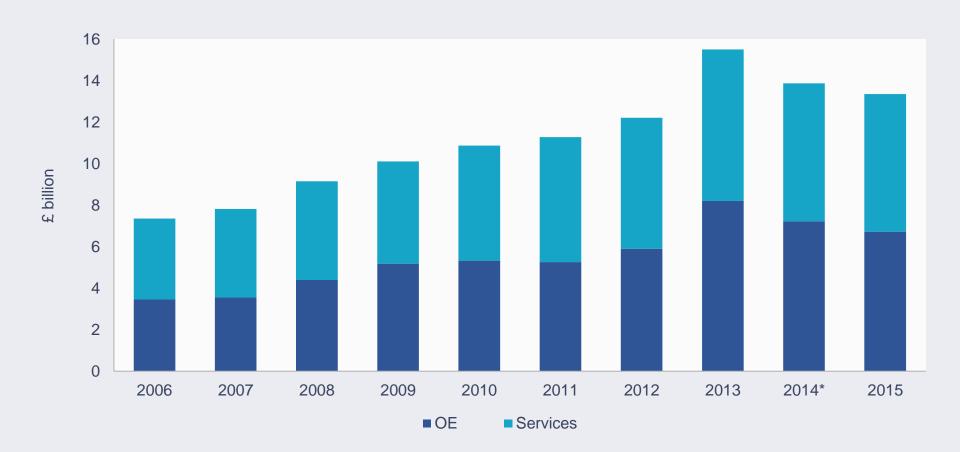


* Firm and announced order book stated on a constant currency basis (Long-term planning rate changed in H1 2016 +£2.1bn)

** Excludes the Energy business sold to Siemens

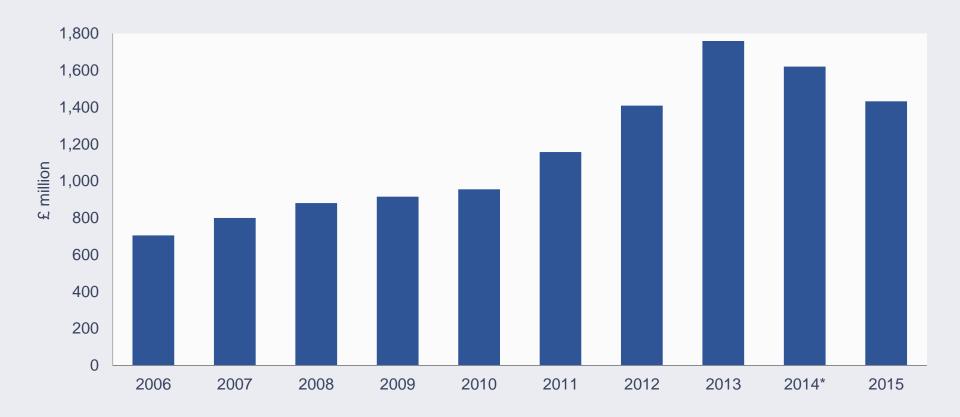
Full year underlying group revenue





Full year underlying profit before tax

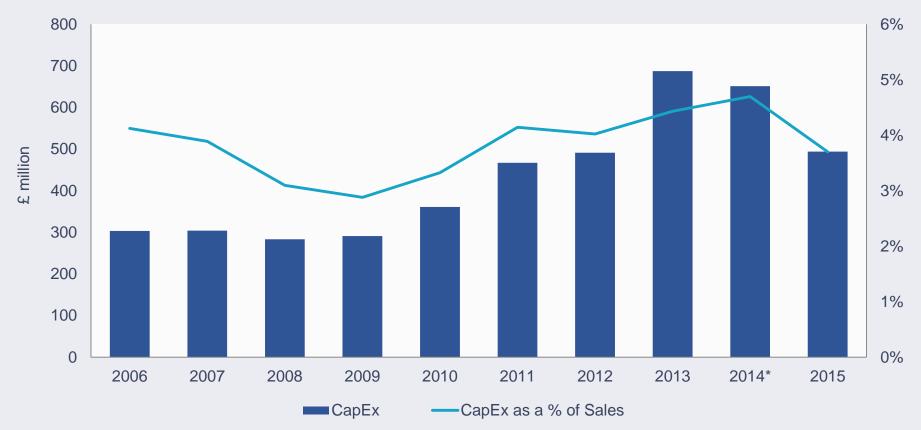




Full year capital expenditure



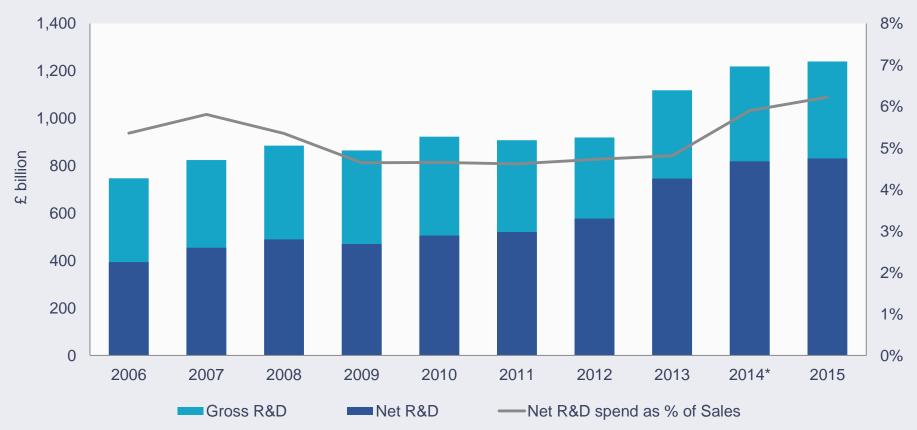




Full year research & development



Continued investment in future technology



Balance sheet



Strong liquidity position – total liquidity ~£4.5 billion

Total Liquidity (£ billion)

Debt Maturities (£ billion)



'A' credit rating and liquidity provide confidence and flexibility for:

- Customers signing long-term service agreements spanning decades
- Customer and supplier financing
- Investing in opportunities at the right time
- Suppliers and JV partners making long-term investments
- Weathering financial market uncertainties





Historic financials



			Including	g Energy		Exc	luding En	ergy	
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2013	FY 2014	FY 2015	H1 2015	H1 2016
Underlying revenue (£m)	11,277	12,209	15,505	14,588	14,634	13,864	13,354	6,256	6,143
Underlying profit before tax (£m)	1,157	1,434	1,759	1,617	1,695	1,620	1,432	439	104
EPS	48.54p	59.59p	65.59p	65.31p	62.99p	65.42p	58.73p	18.27p	4.20p
Free cash flow (£m)	581	548	781	254	778	447	179	(576)	(399)
Order intake (£b)	16.3	16.1	26.9	19.4	25.9	19.0	18.2	10.2	10.3
Order book (£b)	62.2	60.1	71.6	73.7	70.4	73.7	76.4	76.5	79.5
Payment to shareholders (p/share)	17.5p	19.5p	22.0p	23.1p	22.0p	23.1p	16.4p	9.27p	4.6p

Underlying income statement



		Excluding Energy	
(£ million)	FY 2015	H1 2015	H1 2016
Revenue	13,354	6,256	6,143
Gross profit	3,182	1,332	1,033
Commercial and administrative costs	(1,004)	(496)	(538)
Net R&D charge	(765)	(378)	(378)
Other income & costs	79	(2)	41
Profit before finance charge and tax (PBFCT)	1,492	456	158
Net financing charge	(60)	(17)	(54)
Profit before tax (PBT)	1,432	439	104

Cash flow



		Excluding Energy	
(£ million)	FY 2015	H1 2015	H1 2016
Underlying profit before tax (PBT)	1,432	439	104
Depreciation & amortisation	613	317	335
Net working capital	(544)	(747)	(235)
Capital expenditure & intangibles	(887)	(391)	(539)
Other	(229)	(90)	8
Trading cash flow	385	(472)	(327)
Pension / tax / other	(206)	(104)	(72)
Free Cash Flow	179	(576)	(399)
Shareholder payments	(421)	(165)	(168)
Base cash flow (exc. acquisitions & FX)	(242)	(741)	(567)
Share buy back	(414)	(433)	0
Base cash	(656)	(1,174)	(567)

Research & development



			Including	Energy	Excluding Energy						
(£m)	FY 2011	FY 2012	FY 2013	FY 2014	FY 2013	FY 2014	FY 2015	H1 2015	H1 2016		
Gross R&D	(908)	(919)	(1,118)	(1,249)	(1,083)	(1,222)	(1,240)	(580)	(638)		
Net R&D	(520)	(577)	(746)	(844)	(721)	(819)	(831)	(405)	(433)		
Net R&D spend as % of underlying revenues	4.6%	4.7%	4.8%	5.8%	4.9%	5.9%	6.2%	6.5%	7.0%		
Capitalised	93	38	108	83	108	83	52	9	54		
Amortised / impairment	(36)	(50)	(69)	(65)	(69)	(65)	(80)	(37)	(43)		
R&D charged to income statement (before RRSA entry fees)	(463)	(589)	(707)	(826)	(682)	(801)	(859)	(433)	(422)		
Net RRSA entry fee impact		58	83	71	83	71	94	55	42		
R&D charge to Income Statement	(463)	(531)	(624)	(755)	(599)	(730)	(765)	(378)	(380)		

Foreign exchange - transactional



Rolls-Royce hedges transactional FX

- Transactional exposure arises when revenue currencies differ from cost currencies
- Achieved rate is not typically affected by short-term spot rate movements unless new cover is taken; this impact is usually diluted
- \$35 billion GBPUSD hedge book provides ~6 years' cover
- Hedge book average rate is £/\$1.57
- \$2.4 billion EURUSD hedge book provides ~3 years' cover
- Hedge book average rate is €/\$1.33

Rolls-Royce does not hedge against the impact of **translational** FX

- Translational exposure varies by source of revenues and profits
- Translational FX impact is driven by period average spot rates
- Translational impact increases as rate reduces

Reconciliation to reported profit H1 2016



	£m
Underlying profit	104
Mark-to-market adjustment	(2,151)
Realised losses / (gains) on settled derivative contracts	136
Other adjustments	(239)
Reported profit	(2,150)

Foreign exchange – H1 2016 translational impact



The impact of translational foreign exchange is driven by period average spot rates

H1 2016 vs. H1	2015	Exp	osure	Revenue	e Impact	PBFCT	Impact
£m (excluding e	energy)	Revenue	Profit	Inc. FX	FX	Inc. FX	FX
Group*				6,143	183	158	19
Civil Aerospace	;	USD, EUR	USD, EUR	3,171	45	31	9
Defence Aerosp	bace	USD	USD	1,002	37	128	5
Power Systems	5	EUR	EUR	1,084	75	13	2
Marine	I	USD, NOK, EUR	USD, NOK, EUR	548	24	(13)	1
Nuclear		USD	USD	356	3	18	1
			Half year translat	tional imp	act of 0.	01 unit of c	urrency
Period			change in period	average r	ates:		
average rates	H1 201	5 H1 2016		Revenue)	PB	т
USD	1.53	1.43	USD	~£5 millio	n	~£1.2 r	million
EUR	1.37	1.28	EUR	~£13 millio	on	~£0.5 r	million
NOK	11.80	12.08	NOK	~£0.2 millio	on	~£0.0 r	million

* Figures will not sum due to intersegment eliminations

Customer finance



Financial strength allows the Group to provide finance support to customers

Selective and designed to minimize risk:

- Gross and net exposures by counterparty, product type and year are limited by Board guidelines
- Commitments continually monitored with suitable exposure management policies in place
- Exposures audited every six months
- Exposures quantified using independent asset value appraisals

Broadly similar contingent liabilities – as of 30 June 2016:

- Total Discounted Gross Exposure: US\$339m (2015 \$399m)
- Total Discounted Net Exposure (less security): US\$84m (2015 \$80m)
- Total Discounted Net Stressed Exposure (assumes 20% asset discount): US\$122m (2015 \$115m)
- Liabilities are spread across multiple geographies, customers and aircraft

Pensions

Reduced risk through prudent pension management UK schemes

- Around 86% of gross liabilities and 95% of gross assets
- Defined benefit (DB) schemes closed to new members
- Around 90% of assets in lower risk, Liability Driven Investments (LDIs), gilts and bonds
- Longevity swap provides greater certainty over future funding requirements
- Surplus of £1,527m (IAS19 basis*) increase of £484m in year largely reflects:
 - Reduction in gilt/swap rates increased assets by ~ £2.2bn
 - Reduction in discount rates (AA bonds) increased liabilities by ~ £1.7bn (on a funding basis, the liabilities would increase broadly in line with the increase in assets above)
- 2016 contributions of £88m included £4m of deficit reduction payments
 - Cash contributions in 2016 are expected to be around £175m (2015 £188m), including deficit reductions of around £8m.



Overseas schemes

- Around 14% of gross liabilities and 5% of gross assets
- Deficit of £1,386m (IAS19 basis*) principally made up of unfunded US healthcare schemes (£546m) and unfunded Power Systems schemes (£583m)
- 2016 contributions of £40m (2015 £31m)
- Increase in deficit includes £139m of exchange differences from weaker sterling





Civil Aerospace



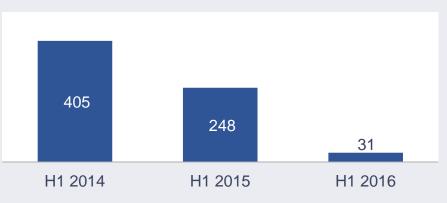
Revenue £3,171 million



Order book £70.5 billion



PBFCT £31 million



Growth Drivers

- OE volume drives revenue growth
- Operational leverage in OE and services
- Competitive advantage of high LTSA%

Products



Leading widebody market share

Engine	Airframe	Market share*	Installed engines	Engines on order**
Trent 7000	Airbus A330neo	100%	0	372
Trent XWB	Airbus A350	100%	62	1,550
Trent 1000	Boeing 787	40%	324	520
Trent 900	Airbus A380	53%	328	304
Trent 800	Boeing 777 "Classic"	40%	426	0
Trent 700	Airbus A330	58%	1 484	78
Trent 500	Airbus A340	100%	500	0
			3,124	2,824

* Share of total firm programme sales with an engine decision (excludes cancelled orders)

** According to Ascend

Installed thrust 2006 – H1 2016



Millions of pounds (m/lbs) of installed thrust*

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	H1 2016
Large engines	199	205	209	219	226	236	249	261	278	288**	295
Small engines	81	84	88	91	94	96	100	104	109	113	115
Total	280	289	297	310	320	332	349	365	387	401	410

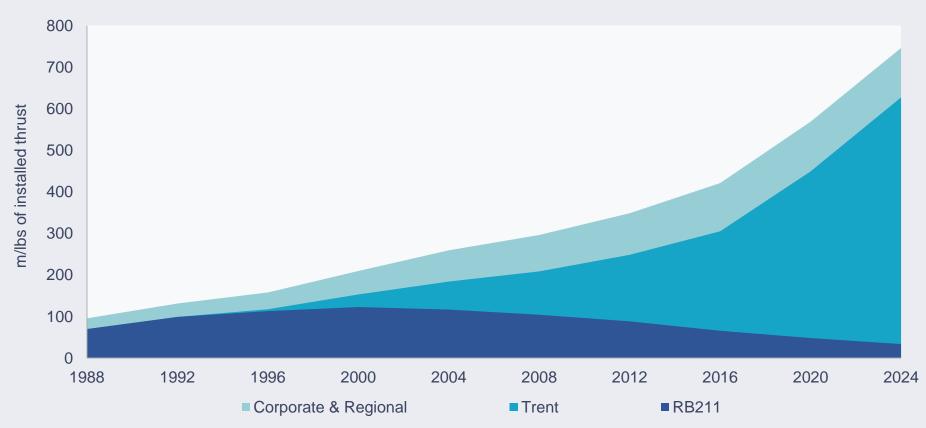
* Installed thrust is shown net of retirements (but does include aircraft which are parked or in storage)

** Numbers revised following retrospective retirements made by Ascend

Installed thrust



Growing market opportunities

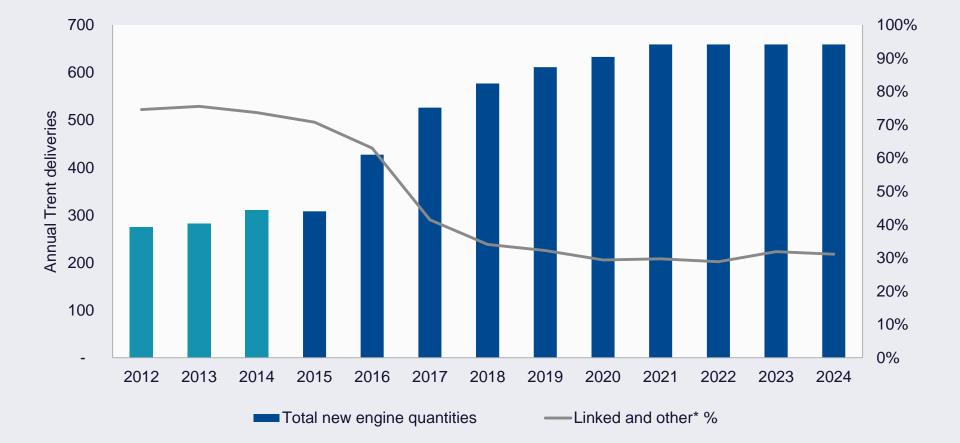






	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	H1 2015	H1 2016
Large engines	203	145	193	225	185	224	275	282	311	308	142	164
Small engines	334	398	443	272	290	320	393	471	428	404	184	148
Total	537	543	636	497	475	544	668	753	739	712	326	312

Projected large engine deliveries to 2024





Civil engine deliveries



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	H1 201
By engine															
RB211 22B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RB211 524	4	2	5	7	0	5	4	0	0	0	0	0	0	0	0
RB211 535	26	14	6	0	2	0	1	1	0	0	0	0	0	0	0
RB211 Total	30	16	11	7	2	5	5	1	0	0	0	0	0	0	0
Trent 500	37	88	115	88	97	45	45	57	16	1	8	0	0	0	0
Trent 700	30	35	30	54	59	75	88	125	139	135	157	181	184	140	35
Trent 800	54	30	15	21	25	10	7	9	0	0	0	0	0	0	
Trent 900					20	10	48	33	30	70	64	42	35	6	20
Trent 1000									0	18	46	59	79	106	68
Trent XWB-84													13	56	41
Trent	121	153	160	163	201	140	188	224	185	224	275	282	311	308	164
Civil Large Engines	151	169	171	170	203	145	193	225	185	224	275	282	311	308	164
Spey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Тау	66	48	43	55	66	80	92	68	51	57	60	67	46	38	18
AE3007	288	217	242	168	113	135	135	32	55	31	43	78	48	34	12
BR700	127	96	131	161	155	183	216	172	184	232	290	326	334	332	118
Civil Small Engines	481	361	416	384	334	398	443	272	290	320	393	471	428	404	148
V2500*	224	216	237	327	319	308	351	347	371	418	220	0	0	0	0
Civil Total	856	746	824	881	856	851	987	844	846	962	888	753	739	712	312

*V2500 deliveries are recorded until the sale of Rolls-Royce's stake in International Aero Engines on 29th June 2012

Civil engine installed base**



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	H1 2016
By engine															
RB211 22B	165	156	132	120	81	66	42	30	21	12	12	6	6	6	9
RB211 524	1,042	1,019	1,003	994	953	944	895	848	783	752	685	626	574	436+	407
RB211 535	1,196	1,206	1,218	1,214	1,210	1,206	1,204	1,196	1,196	1,172	1,166	1,154	1,138	1,110+	1,094
RB211 Total	2,403	2,381	2,353	2,328	2,244	2,216	2,141	2,074	2,000	1,936	1,863	1,786	1,718	1,552	1,510
Trent 500	48	132	220	300	388	424	456	508	520	524	524	520	516	500	500
Trent 700	206	234	264	306	364	424	494	608	724	840	980	1,144	1,308	1,444	1,484
Trent 800	344	376	392	408	432	444	442	450	450	450	450	444	436	428	426
Trent 900					16	20	36	68	96	152	216	252	296	320	328
Trent 1000										14	52	94	178	270	324
Trent XWB													12	38	62
Trent	598	742	876	1,014	1,200	1,312	1,428	1,634	1,790	1,980	2,222	2,454	2,746	3,000	3,124
Civil Large Engines	3,001	3,123	3,229	3,342	3,444	3,528	3,569	3,708	3,790	3,916	4,085	4,240	4,464	4,552	4,634
Spey	1,408	1,376	1,342	1,246	1,204	1,158	1,132	1,056	1,000	892	848	768	690	590	540
Тау	1,772	1,830	1,847	1,866	1,890	1,903	1,951	2,017	2,057	2,077	2,119	2,155	2,177	2,201	2,189
AE3007	1,718	1,966	2,200	2,370	2,476	2,596	2,710	2,782	2,814	2,850	2,896	2,950	2,976	2,970	2,978
BR700	792	904	1,006	1,164	1,312	1,480	1,650	1,832	2,032	2,226	2,448	2,744	3,084	3,432	3,570
Civil Small Engines	5,690	6,076	6,395	6,646	6,882	7,137	7,443	7,687	7,903	8,045	8,311	8,617	8,927	9,193	9,277
V2500*	871	971	1,080	1,217	1,361	1,496	1,650	1,794	1,949	2,119					
Civil Total	9,562	10,170	10,704	11,205	11,687	12,161	12,662	13,189	13,642	14,080	12,396	12,857	13,391	13,745	13,911

*50% of the total V2500 fleet included

+ 2015 numbers revised following restrospective retirements made by Ascend

Civil installed thrust base (millions lbs)**



		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	H1 2016
	Thrust per															
By engine	Engine															
	(lbs)															
RB211 22B	60,000	10	9	8	7	5	4	3	2	1	1	1	0	0	0	1
RB211 524	60,000	63	61	60	60	57	57	54	51	47	45	41	38	34	26	24
RB211 535	40,000	48	48	49	49	48	48	48	48	48	47	47	46	46	44	44
RB211 Total		120	119	117	115	110	109	104	101	96	93	88	84	80	71	69
Trent 500	56,000	3	7	12	17	22	24	26	28	29	29	29	29	29	28	28
Trent 700	72,000	15	17	19	22	26	31	36	44	52	60	71	82	94	104	107
Trent 800	92,000	32	35	36	38	40	41	41	41	41	41	41	41	40	39	39
Trent 900	70,000	0	0	0	0	1	1	3	5	7	11	15	18	21	22	23
Trent 1000	71,000	0	0	0	0	0	0	0	0	0	1	4	7	13	19	23
Trent XWB	84,000													1	3	5
Trent		49	59	67	76	89	97	104	118	129	143	160	177	198	217	226
Civil Large Engines		169	178	184	192	199	205	209	219	225	236	249	261	278	288	295
Spey	11,000	15	15	15	14	13	13	12	12	11	10	9	8	8	6	6
Тау	15,000	27	27	28	28	28	29	29	30	31	31	32	32	33	33	33
AE3007	7,500	13	15	17	18	19	19	20	21	21	21	22	22	22	22	22
BR700	15,000	12	14	15	17	20	22	25	27	30	33	37	41	46	51	54
Civil Small Engines		67	71	74	77	80	83	87	90	93	96	100	104	109	113	115
V2500*	27,500	24	27	30	33	37	41	45	49	54	58	0	0	0	0	0
Civil Total		260	275	288	302	317	329	341	358	372	390	348	365	387	401	410
Fleet Growth			6%	5%	5%	5%	4%	3%	5%	4%	5%	-11%	5%	6%	4%	2%

*50% of the total V2500 fleet included

**Installed engine base is net of retirements but does include aircraft which are parked or in storage

***In an effort to provide greater accuracy in our installed thrust calculations, Trent engines are now shown using engine-specific thrust levels, rather than a Trent average thrust. This table shows a full restatement of thrust figures to the new method.

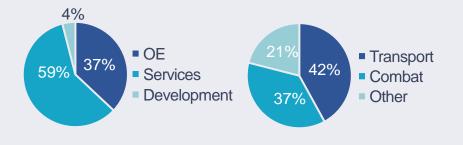
Defence Aerospace



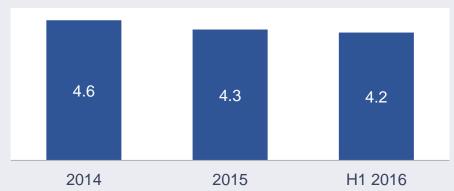
Defence Aerospace



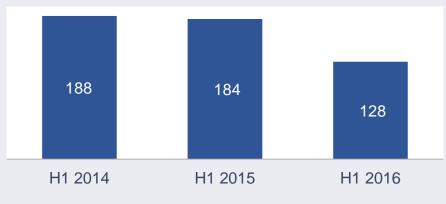
Revenue £1,002 million



Order book £4.2 billion



PBFCT £128 million



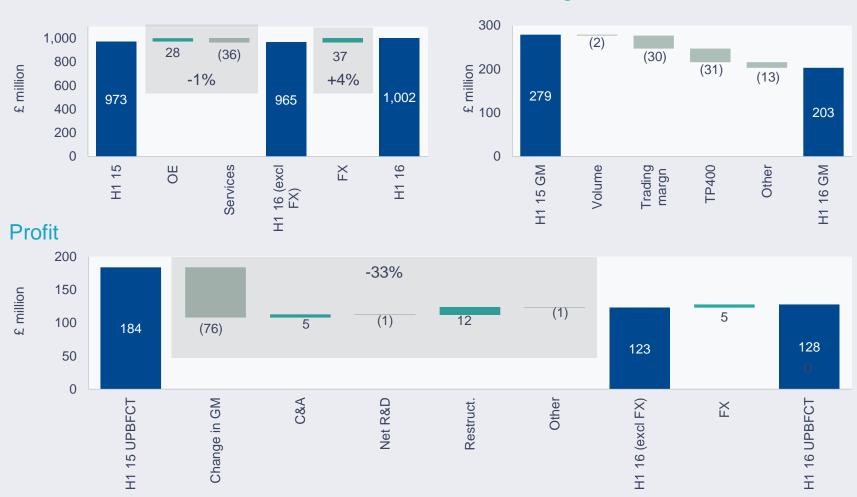
Growth Drivers

- Portfolio breadth: 24 engine programmes
- Resilient military transport market 50% Defence revenue

Defence revenue, profit and gross margin

Revenue





Gross Margin

Products



Market	Engine	Application							
Transport / UAV	Trent 700 – 772B	Airbus Defence and Space A330-200 MRTT							
	AE 1107C – Liberty	Bell Boeing V-22 Osprey							
	TP400-D6	Airbus Defence and Space A400M							
	AE 2100	Lockheed Martin C-130J Hercules / Alenia Aermacchi C-27J Spartan							
	T56*	Lockheed Martin C-130 (A-H) Hercules / C-2 Greyhound							
	AE 3007	Embraer Legacy / Northrop Grumman RQ-4A Global Hawk / MQ-4C Triton							
	M250	Northrop Grumman MQ-8C Fire Scout VTUAV							
	Adour	BAE Systems Hawk / T-45 Goshawk / Taranis demonstrator / NeuroN demonstrator							
	BR710	Global Express / Gulfstream G550							
	RB211*	Boeing 757							
	Gem*	AgustaWestland Lynx							
	Gnome*	AgustaWestland Sea King / Commando							
	Tay*	Gulfstream G300, G400 & G450							
	Tyne*	C-160 Transall / A-7 / Secbat Alantique 2							
	Dart *	HS368							
Combat	Rolls-Royce LiftSystem	Lockheed Martin F-35B Lightning II							
	Pegasus*	BAE Systems Sea Harrier / Boeing BAE Systems AV8B Harrier II							
	EJ200	Eurofighter Typhoon							
	RB199*	Panavia Tornado IDS / ECR							
	Adour	SEPECAT Jaguar							
	M250	Bell OH-58 Kiowa Warrior							
	MTR390	Eurocopter Tiger							
	CTS800	ATAK Team T129							
Trainer	Spey*	AMX International							
	Adour	BAE Systems Hawk / Boeing BAE Systems T-45 Goshawk							
	Viper*	AerMacchi MB339 / HAL HJT Kiran							
	M250 (Turboprop)	Fuji T-5 / T-7							

* In service with operators, but out of production

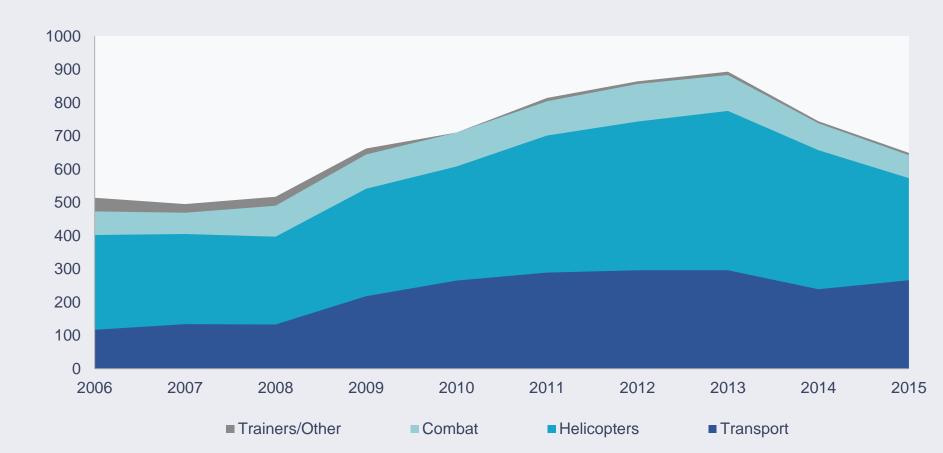




	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	H1 2016
Transport	117	134	133	218	265	289	305	296	239	266	122
Helicopters	285	271	264	323	343	412	438	479	418	307	125
Combat	71	64	93	103	102	103	113	108	81	69	34
Trainers/Other	41	26	27	18	0	10	8	10	6	7	10
Total	514	495	517	662	710	814	864	893	744	649	291

Defence engine deliveries 2006 – 2015





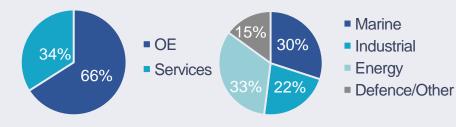
Power Systems



Power Systems



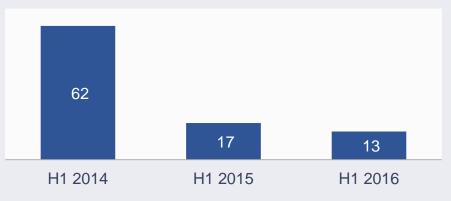
Revenue £1,084 million



Order book £2 billion



PBFCT £13 million



Growth Drivers

Global power demand

Power Systems revenue, profit and gross margin





Products



Rolls-Royce Power Systems AG

High-speed engines	Distributed ener	ду	Medium-speed engines	Components
Power. Passion. Partnership.		nsite nergy	Bergen Engines AS	
	<u></u>			24
				3,61
Complete Drive and Propulsion Systems up to 10,000 kW	Gas Gensets up to 2,530kW Diesel Gensets for 8,300 kW	Diesel Gensets up to 3,250kW NPP up to	Diesel and Gas Engines up to 9,620 kW	Injection Systems





Marine



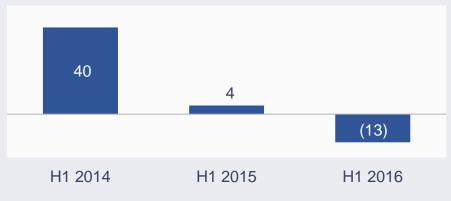
Revenue £548 million



Order book £1 billion



PBFCT £(13) million

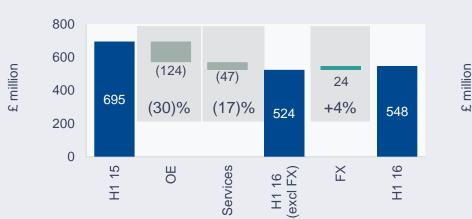


Growth Drivers

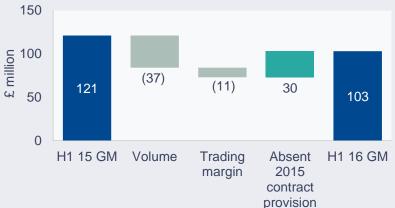
- Integrated ship solution capability: Design + OE
- Opportunities through stricter emissions requirements

Marine revenue, profit and gross margin



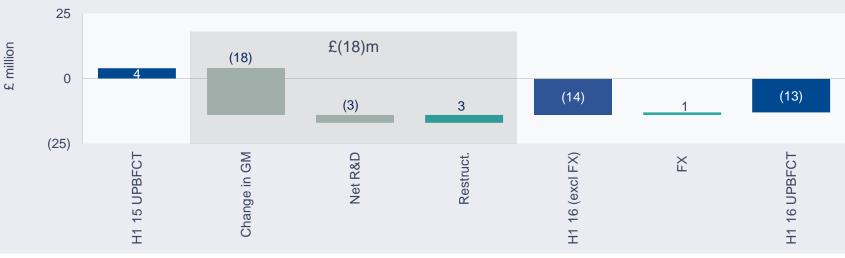


Gross Margin



Profit

Revenue



Products



World-leading range of capabilities

Market Sector	Description	Products
Offshore Equipment on > 6,000 vessels	Products and systems for the supply & service, subsea & construction and exploration & production vessels, including our UT ship design; the benchmark in the offshore oil & gas industry	Ship design, automation & control, power electrics, reciprocating engines, gas turbines, propulsion equipment, deck machinery, motion control and handling systems
Merchant Equipment on > 17,000 vessels	Products and systems for the cargo, passenger and coastal vessels, including our reciprocating gas engines; efficient and environmentally-friendly power	
Naval Equipment on > 2,000 vessels	Products and systems for naval, coast guard and constabulary vessels, including our MT30; the world's most powerful marine gas turbine	

Order trends 2011 – H1 2016









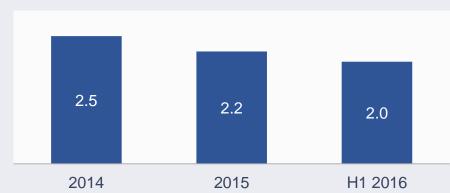
Nuclear



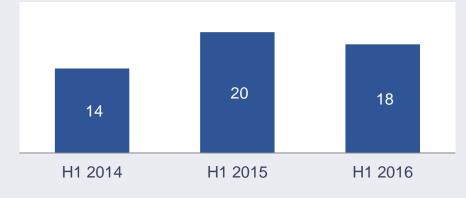
Revenue £356 million



Order book £2 billion



PBFCT £18 million

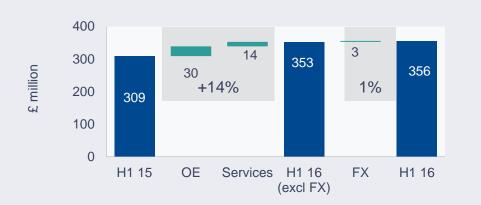


Growth Drivers

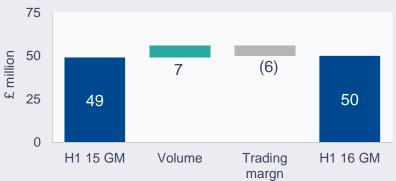
- Expanding capability
- Unique capabilities in Instrumentation & Controls

Nuclear revenue, profit and gross margin



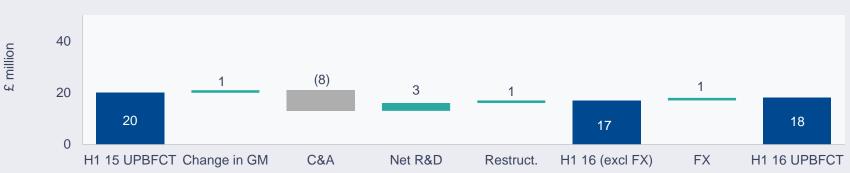


Gross Margin



Profit

Revenue



Products



Growing demand for systems and services

Market Sector	Description	Products
Nuclear	Systems, engineering and support services to enable plant efficiency and reliability for reactor vendor and utility customers. Components and systems installed in around half of the world's operational nuclear reactors	Instrumentation & Control Systems Mechanical Systems & Component Engineering Safety, Licensing & Environmental
	Supply and support of nuclear power systems covering the entire UK submarine fleet	Engineering Nuclear services

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Safe harbour statement



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