CONSOLIDATED INCOME STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2017

	Notes	*Business performance US$m	Exceptional items and certain re-measurements US$m	Total 2017 US$m	*Business performance US$m	Exceptional items and certain re-measurements US$m	Total 2016 US$m
Revenue	4a	**6,395**	**–**	**6,395**	7,873	–	7,873
Cost of sales	4b	**(5,628)**	**–**	**(5,628)**	(7,134)	–	(7,134)
Gross profit		**767**	**–**	**767**	739	–	739
Selling, general and administration expenses	4c	**(235)**	**–**	**(235)**	(244)	–	(244)
Exceptional items and certain re-measurements	5	**–**	**(438)**	**(438)**	–	(322)	(322)
Other operating income	4f	**20**	**–**	**20**	27	–	27
Other operating expenses	4g	**(10)**	**–**	**(10)**	(14)	–	(14)
Profit/(loss) from operations before tax and finance (costs)/income		**542**	**(438)**	**104**	508	(322)	186
Finance costs	6	**(80)**	**–**	**(80)**	(101)	–	(101)
Finance income	6	**10**	**–**	**10**	3	–	3
Share of profits of associates/joint ventures	16	**11**	**–**	**11**	8	4	12
Profit/(loss) before tax		**483**	**(438)**	**45**	418	(318)	100
Income tax (expense)/credit	7a	**(138)**	**66**	**(72)**	(85)	(1)	(86)
Profit/(loss)		**345**	**(372)**	**(27)**	333	(319)	14
Attributable to:							
Petrofac Limited shareholders		**343**	**(372)**	**(29)**	320	(319)	1
Non-controlling interests	12	**2**	**–**	**2**	13	–	13
		345	**(372)**	**(27)**	333	(319)	14
Earnings/(loss) per share (US cents) on profit/(loss) attributable to Petrofac Limited shareholders							
Basic	8	**100.9**	**(109.4)**	**(8.5)**	94.1	(93.8)	0.3
Diluted	8	**100.9**	**(109.4)**	**(8.5)**	93.3	(93.0)	0.3

* This measurement is shown by Petrofac as a means of measuring underlying business performance, see note 2.

The attached notes 1 to 34 form part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 2017

	Notes	2017 US$m	2016 US$m
(Loss)/profit		**(27)**	14
Other comprehensive income to be reclassified to consolidated income statement in subsequent periods			
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	26	**46**	49
Foreign currency translation (losses)/gains	26	**(9)**	31
Other comprehensive income to be reclassified to consolidated income statement in subsequent periods		**37**	80
Other comprehensive income reclassified to consolidated income statement			
Net losses/(gains) on maturity of cash flow hedges recycled in the year	26	**13**	(3)
Unrealised loss on the fair value of available-for-sale investment reclassified to consolidated income statement	26, 5	**–**	16
Foreign currency losses recycled to consolidated income statement upon disposal of a subsidiary	26	**–**	11
Other comprehensive income reclassified to consolidated income statement		**13**	24
Total comprehensive income for the year		**23**	118
Attributable to:			
Petrofac Limited shareholders		**10**	96
Non-controlling interests	12	**13**	22
		23	118

The attached notes 1 to 34 form part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AT 31 DECEMBER 2017

	Notes	2017 US$m	2016 US$m
Assets			
Non-current assets			
Property, plant and equipment	11	**1,092**	1,418
Goodwill	13	**76**	72
Intangible assets	15	**76**	96
Investments in associates/joint ventures	16	**74**	65
Other financial assets	18	**553**	318
Deferred tax assets	7c	**101**	63
		1,972	2,032
Current assets			
Inventories	19	**8**	11
Work in progress	20	**2,223**	2,182
Trade and other receivables	21	**2,020**	2,162
Related party receivables	31	**1**	4
Other financial assets	18	**146**	546
Income tax receivable		**9**	9
Cash and short-term deposits	22	**967**	1,167
		5,374	6,081
Assets held for sale	14	**217**	128
		5,591	6,209
Total assets		**7,563**	8,241
Equity and liabilities			
Equity			
Share capital	23	**7**	7
Share premium	23	**4**	4
Capital redemption reserve	23	**11**	11
Treasury shares	24	**(102)**	(105)
Other reserves	26	**110**	73
Retained earnings		**882**	1,107
Equity attributable to Petrofac Limited shareholders		**912**	1,097
Non-controlling interests	12	**36**	26
Total equity		**948**	1,123
Non-current liabilities			
Interest-bearing loans and borrowings	27	**854**	1,423
Provisions	28	**269**	224
Other financial liabilities	18	**443**	348
Deferred tax liabilities	7c	**67**	94
		1,633	2,089
Current liabilities			
Trade and other payables	29	**1,675**	1,974
Interest-bearing loans and borrowings	27	**725**	361
Other financial liabilities	18	**151**	368
Income tax payable		**251**	188
Billings in excess of cost and estimated earnings	20	**198**	44
Accrued contract expenses	32	**1,956**	2,060
Provisions	28	**26**	–
		4,982	4,995
Liabilities associated with assets held for sale	14	**–**	34
		4,982	5,029
Total liabilities		**6,615**	7,118
Total equity and liabilities		**7,563**	8,241

The financial statements on pages 115 to 168 were approved by the Board of Directors on 28 February 2018 and signed on its behalf by Alastair Cochran – Chief Financial Officer.

The attached notes 1 to 34 form part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31 DECEMBER 2017

	Notes	2017 US$m	2016 US$m
Operating activities			
Profit before tax		**45**	100
Exceptional items and certain re-measurements	5	**438**	318
Profit before tax, exceptional items and certain re-measurements		**483**	418
Adjustments to reconcile profit before tax, exceptional items and certain re-measurements to net cash flows:			
Depreciation, amortisation and write-offs	4b, 4c	**177**	188
Share-based payments	4d	**19**	17
Difference between other long-term employment benefits paid and amounts recognised in the consolidated income statement	28	**11**	7
Net finance costs	6	**70**	98
Provision for onerous contracts	28	**39**	20
Share of profits of associates/joint ventures	16	**(11)**	(8)
Net other non-cash items		**1**	(1)
		789	739
Working capital adjustments:			
Inventories		**–**	2
Work in progress		**(41)**	(388)
Trade and other receivables		**(10)**	(112)
Related party receivables		**3**	(2)
Other current financial assets	18	**67**	384
Assets held for sale		**(1)**	–
Trade and other payables		**(272)**	(441)
Related party payables		**–**	(1)
Billings in excess of cost and estimated earnings		**154**	(157)
Accrued contract expenses		**(113)**	800
		576	824
Long-term receivables from customers	18	**–**	(62)
Net other non-current items		**(1)**	44
Cash generated from operations		**575**	806
Restructuring, redundancy and migration costs paid		**(14)**	(21)
Interest paid		**(70)**	(94)
Net income taxes paid		**(69)**	(40)
Net cash flows generated from operating activities		**422**	651
Investing activities			
Purchase of property, plant and equipment		**(108)**	(165)
Payments for intangible oil and gas assets	15	**(9)**	(2)
Investment in available-for-sale investment	17	**–**	(12)
Investment in associates/joint ventures	16	**–**	(5)
Dividend received from associates/joint ventures	16	**4**	28
Net loans paid to associates/joint ventures	16	**(2)**	–
Loan in respect of the development of the Greater Stella Area	18	**(51)**	(119)
Proceeds from disposal of property, plant and equipment		**12**	6
Proceeds from disposal of assets held for sale/subsidiary		**10**	1
Interest received		**3**	3
Net cash flows used in investing activities		**(141)**	(265)
Financing activities			
Interest-bearing loans and borrowings, net of debt acquisition cost	18	**1,105**	2,293
Repayment of interest-bearing loans, borrowings and finance leases	18	**(1,346)**	(2,385)
Treasury shares purchased	24	**(39)**	(36)
Dividends paid		**(192)**	(224)
Net cash flows used in financing activities		**(472)**	(352)
Net (decrease)/increase in cash and cash equivalents		**(191)**	34
Net foreign exchange difference		**4**	(12)
Cash and cash equivalents at 1 January		**1,123**	1,101
Cash and cash equivalents at 31 December	22	**936**	1,123

The attached notes 1 to 34 form part of these consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEAR ENDED 31 DECEMBER 2017

	Attributable to Petrofac Limited shareholders								
	Issued share capital US$m	Share premium US$m	Capital redemption reserve US$m	*Treasury shares US$m (note 24)	Other reserves US$m (note 26)	Retained earnings US$m	Total US$m	Non-controlling interests US$m	Total equity US$m
Balance at 1 January 2017	7	4	11	(105)	73	1,107	1,097	26	1,123
Profit	–	–	–	–	–	(29)	(29)	2	(27)
Other comprehensive income	–	–	–	–	39	–	39	11	50
Total comprehensive income	–	–	–	–	39	(29)	10	13	23
Share-based payments charge (note 25)	–	–	–	–	19	–	19	–	19
Transfer to share-based payments reserve (note 25)	–	–	–	–	16	–	16	–	16
Share-based payments vested (note 24)	–	–	–	42	(38)	(4)	–	–	–
Treasury shares purchased (note 24)	–	–	–	(39)	–	–	(39)	–	(39)
Income tax on share-based payments reserve	–	–	–	–	1	–	1	–	1
Dividends (note 9 and note 12)	–	–	–	–	–	(192)	(192)	(3)	(195)
Balance at 31 December 2017	**7**	**4**	**11**	**(102)**	**110**	**882**	**912**	**36**	**948**

	Attributable to Petrofac Limited shareholders								
	Issued share capital US$m	Share premium US$m	Capital redemption reserve US$m	*Treasury shares US$m (note 24)	Other reserves US$m (note 26)	Retained earnings US$m	Total US$m	Non-controlling interests US$m	Total equity US$m
Balance at 1 January 2016	7	4	11	(111)	(16)	1,335	1,230	2	1,232
Profit	–	–	–	–	–	1	1	13	14
Other comprehensive income	–	–	–	–	95	–	95	9	104
Total comprehensive income	–	–	–	–	95	1	96	22	118
Share-based payments charge (note 25)	–	–	–	–	17	–	17	–	17
Transfer to share-based payments reserve (note 25)	–	–	–	–	17	–	17	–	17
Share-based payments vested (note 24)	–	–	–	42	(39)	(3)	–	–	–
Treasury shares purchased (note 24)	–	–	–	(36)	–	–	(36)	–	(36)
Income tax on share-based payments reserve	–	–	–	–	(1)	–	(1)	–	(1)
Adjustment to non-controlling interest	–	–	–	–	–	(2)	(2)	2	–
Loan from non-controlling interest converted to equity	–	–	–	–	–	–	–	1	1
Dividends (note 9 and note 12)	–	–	–	–	–	(224)	(224)	(1)	(225)
Balance at 31 December 2016	7	4	11	(105)	73	1,107	1,097	26	1,123

* Shares held by Petrofac Employee Benefit Trust and Petrofac Joint Venture Companies Employee Benefit Trust.

The attached notes 1 to 34 form part of these consolidated financial statements.

1 Corporate information

Petrofac Limited (the 'Company') is a limited liability company registered and domiciled in Jersey under the Companies (Jersey) Law 1991 and is the holding company for the international group of Petrofac subsidiaries. The Company's 31 December 2017 financial statements are shown on pages 170 to 185. The Group's principal activity is the provision of services to the oil and gas production and processing industry.

The consolidated financial statements of Petrofac Limited and its subsidiaries (the 'Group') for the year ended 31 December 2017 were authorised for issue in accordance with a resolution of the Board of Directors on 28 February 2018.

Information on the Group's subsidiaries, associates and joint arrangements is contained in note 34 to these consolidated financial statements. Information on other related party transactions of the Group is provided in note 31.

2 Summary of significant accounting policies

Basis of preparation
The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and applicable requirements of Jersey law.

The consolidated financial statements have been prepared on a historical cost basis, except for available-for-sale (AFS) investment, derivative financial instruments, financial assets held at fair value through profit and loss and contingent consideration that have been measured at fair value. The consolidated financial statements are presented in United States dollars and all values are rounded to the nearest million (US$m), except when otherwise indicated.

Presentation of results
Petrofac presents business performance, an alternative performance measure, in the consolidated income statement as a means of measuring underlying financial performance. The business performance measure excludes the contribution of impairments, certain re-measurements, restructuring and redundancy costs, contract migration costs, material deferred tax movements arising due to foreign exchange differences in jurisdictions where tax is computed based on the functional currency of the country and material forward rate movements in Kuwaiti dinar forward currency contracts. The intention of this measure is to provide readers with a clear and consistent presentation of underlying business performance.

Adoption of new financial reporting standards, amendments and interpretations
Effective new financial reporting amendments
The Group has adopted amendments issued by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) of the IASB that are relevant to its operations and effective for accounting periods beginning on or after 1 January 2017. These were:

- Amendments to IAS 7 Statement of Cash Flows: Disclosure Initiative
- Amendments to IAS 12 Income Taxes: Recognition of Deferred Tax Assets for Unrealised Losses

These amendments did not have a material impact on the Group's financial performance or position. However, the disclosures required by IAS 7 have been provided in note 18 on page 150. No comparative information is presented as it is not mandatory in the first year of application.

Financial reporting standards and amendments issued but not yet effective
Standards issued but not yet effective up to the date of issuance of the Group's consolidated financial statements are listed below and include only those standards and amendments that are likely to have an impact on the financial performance, position and disclosures of the Group at a future date. The Group intends to adopt these standards when they become effective.

IFRS 9 Financial Instruments
IFRS 9 brings together all three aspects of the accounting for financial instruments: classification and measurement, impairment and hedge accounting. IFRS 9 is effective for annual periods beginning on or after 1 January 2018, with early application permitted. Except for hedge accounting, retrospective application is required but providing comparative information is not compulsory. For hedge accounting, the requirements are generally applied prospectively, with some limited exceptions.

The Group plans to adopt the new standard on the required effective date and will not restate comparative information. During 2017, the Group performed a detailed impact assessment of all three aspects of IFRS 9. This assessment is based on currently available information and may be subject to changes arising from further reasonable and supportable information being made available to the Group during 2018 when the Group adopts the standard. Overall, the Group expects no significant impact on its consolidated statement of financial position except for the effect of applying the impairment requirements of IFRS 9. The Group does not expect the transition adjustment impact at 1 January 2018 to be material.

Classification and measurement
The Group does not expect a significant impact on its consolidated statement of financial position on applying the classification and measurement requirements of IFRS 9. It expects to continue measuring at fair value all financial assets currently held at fair value.

Impairment
IFRS 9 requires the Group to record expected credit losses on all applicable financial assets e.g. loans and receivables, trade receivables, retention receivables, work-in-progress and bank balances, either on a 12-month or lifetime basis. The Group will apply the simplified approach and record lifetime expected losses on all loans and receivables, trade receivables, retention receivables, work-in-progress and bank balances. The Group has determined that, due to a change in the loss allowance recognition from an incurred loss model to an expected credit loss model and the impairment requirements under IFRS 9 being applied for the first time to its retention receivables and work-in-progress balances, the initial application of the standard will not have a material impact on the opening retained earnings at 1 January 2018.

Hedge accounting
The Group has determined that all existing hedge relationships that are currently designated in effective hedging relationships will continue to qualify for hedge accounting under IFRS 9. The Group has chosen not to retrospectively apply IFRS 9 on transition to the hedges where the Group excluded the forward points from the hedge designation under IAS 39. As IFRS 9 does not change the general principles of how an entity accounts for effective hedges, applying the hedging requirements of IFRS 9 will not have a significant impact on the Group's financial statements.

The new standard also introduces expanded disclosure requirements and changes in presentation. These are expected to change the nature and extent of the Group's disclosures about its financial instruments particularly in the year of the adoption of the new standard.

IFRS 15 Revenue from Contracts with Customers
IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers. Under IFRS 15, revenue is recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

The Group completed its detailed analysis in 2017 although this assessment is based on currently available information and may be subject to changes arising from further reasonable and supportable information being made available to the Group during the first half of 2018. The Group does not expect the transition adjustment impact at 1 January 2018 to be material.

The Group plans to adopt the new standard on 1 January 2018 using the modified retrospective method.

Rendering of services
The Group provides lump-sum engineering, procurement and construction project execution services and reimbursable engineering and production services to the oil and gas production and processing industry.

Lump-sum engineering, procurement and construction project execution services
The Group currently accounts for lump-sum engineering, procurement and construction project execution services contracts as a single performance obligation and recognises revenue by reference to the stage of completion method (output method), based on surveys of work performed once the outcome of a contract can be estimated reliably. Variation orders and claims are only included in revenue when it is probable that these will be accepted and can be measured reliably (see current revenue recognition policies on page 127). The Group provides for liquidated damages claims where the customer has the contractual right to apply liquidated damages and it is considered probable that the customer will successfully pursue such a claim.

For its lump-sum engineering, procurement and construction project execution services contracts, the Group has reached the following main conclusions when applying IFRS 15 to its current project portfolio at 1 January 2018:

- lump-sum engineering, procurement and construction project execution services contracts contain distinct goods and services but these are not distinct in the context of the contract. It is therefore appropriate to combine the services into a single performance obligation which is consistent with the current accounting treatment
- services are satisfied over time given that the customer simultaneously receives and consumes the benefits provided by the Group. Consequently, under IFRS 15 the Group will continue to recognise revenue from its lump-sum engineering, procurement and construction project execution services contracts over time rather than at a point of time
- contract modifications, e.g. variation orders, will be accounted for as part of the existing contract, with a cumulative catch up adjustment to revenue. For material contract modifications, based on management's assessment, a separate contract may be recognised in line with current practice
- variable consideration, e.g. variation orders, claims and liquidated damages, will be assessed at contract inception and re-assessed at each reporting period using the expected outcome approach. The requirement to estimate variable consideration at contract inception is new, and its application will not result in any significant impact to opening retained earnings at 1 January 2018. This new requirement could however alter the amount and timing of revenue and margin recognition in future reporting periods depending upon the facts and circumstances of individual contracts
- no risk adjustment will be applied to the survey of work performed percentage-of-completion since IFRS 15 requires that revenue is recognised when control of a good or service transfers to the customer. This will result in revenue and margin being recognised earlier in future reporting periods
- contract costs are currently recognised in the consolidated income statement by reference to percentage-of-completion. IFRS 15 does not prescribe the accounting for contract costs and therefore management will estimate cost accruals to arrive at the total contract costs to be recognised in the consolidated income statement. Estimating these cost accruals may result in a greater degree of margin variability between reporting periods
- percentage-of-completion based thresholds for initial margin recognition will continue to be applied. Management believes these thresholds allow a reasonable measurement of the performance obligation outcome to be performed and margin to be recognised. Revenue, only to the extent of the costs incurred, will be recognised until percentage-of-completion based thresholds are met
- the advance payments for lump-sum engineering, procurement and construction project execution services contracts are structured primarily for reasons other than the provision of finance to the Group, and they do not provide customers with an alternative to pay in arrears. In addition, the length of time between when the customer pays and the Group transfers goods and services to the customer is relatively short. Therefore, the Group has concluded that there is not a significant financing component within such contracts. Currently, the Group does not have any contracts where payments by customer are over a number of years after the Group has transferred goods and services to the customer; if such cases arise in future the transaction price for such contracts will be determined by discounting the amount of promised consideration using an appropriate discount rate
- the Group concluded that it operates as principal in all its lump-sum engineering, procurement and construction project execution services contracts
- pre-contract/bid costs are currently recognised as an expense until there is a high probability that the contract will be awarded. The Group currently capitalises pre-contract/bid costs, where such costs are incremental to the contract and are expected to be recovered, as an asset and will expense it over the life of the contract. This is in line with the requirements of IFRS 15 therefore no material change is expected
- IFRS 15 requires contract assets and contract liabilities for individual customers to be presented on a net basis. This will impact the presentation of these contract assets and contract liabilities in the consolidated statement of financial position

Reimbursable engineering and production services
The Group currently recognises service revenue for its reimbursable engineering and production services contracts as and when the services are rendered based on the agreed contract schedule of rates. Incentive payments are included in revenue when the contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded and the amount of the incentive payments can be measured reliably (see current revenue recognition policies on page 127).

For its reimbursable engineering and production services contracts, the Group has reached the following main conclusions when applying IFRS 15 to its current project portfolio at 1 January 2018:

- services are satisfied over time given that the customer simultaneously receives and consumes the benefits provided by the Group. Consequently, under IFRS 15 the Group will continue to recognise revenue from its reimbursable engineering and production services contracts over time rather than at a point of time using the input method for measuring progress towards complete satisfaction of the performance obligation

2 Summary of significant accounting policies continued

- distinct performance obligations based on the assessment that the service is capable of being distinct both individually and within the context of the contract. The Group currently accounts for reimbursable engineering and production services contracts as separate deliverables of bundled sales, as generally the contract includes separate transaction prices for each performance obligation. If not the Group allocates consideration between these deliverables using the relative stand-alone prices and recognises service revenue as and when the services are rendered. The Group does not expect any impact on revenue as the current revenue recognition policy is consistent with the requirements under IFRS 15
- contract modifications will be accounted for as a separate contract or as part of an existing contract depending on facts and circumstances. The current policy is consistent with IFRS 15 requirements and revenue recognition is not expected to be impacted
- incentive payments (referred to as 'variable consideration' under IFRS 15) will be estimated at contract inception and at the end of each reporting period using the single most likely outcome approach. The impact is unlikely to be significant as the expected change will not be material
- the Group will continue its assessment of when the outcome of a contract can be estimated reliably for recognising margin, as the current policy is in line with the requirements of IFRS 15
- the Group does not generally receive advances from customers for its reimbursable engineering and production services contracts. If advances are received these will only be short-term. The Group has concluded that in such cases it will use the practical expedient provided in IFRS 15, and will not adjust the promised amount of the consideration for the effects of a significant financing components in the contracts, where the Group expects at contract inception that the period between the Group transfer of a promised good or service to a customer and when the customer pays for that good or service will be one year or less. Therefore, for short-term advances, the Group will not account for a financing component even if it is a significant amount
- the Group has concluded that it operates as principal in all its reimbursable engineering and production services contracts.
- currently, material pre-contract/bid costs that relate directly to the contract and are expected to be recovered are capitalised as an asset and expensed over the life of the contract which is consistent with the new requirements

Sale of goods

Contracts with customers in which the sale of crude oil is expected to be the only performance obligation will not have any impact on the Group's profit or loss upon adoption of IFRS 15. The Group expects the revenue recognition to occur at a point in time when control of the goods is transferred to the customer, generally on delivery of the goods.

The Group's Equity Upstream Investments and Production Enhancement Contracts are not expected to be affected by the adoption of IFRS 15.

Warranty obligations

The Group provides warranties to customers with assurance that the related product will function as the parties intended because it complies with agreed-upon specifications. The Group does not provide warranties as a service, in addition to the assurance that the product complies with agreed-upon specifications, in its contracts with customers. As such, the Group expects that such warranties will be assurance-type warranties which will continue to be accounted for under IAS 37 Provisions, Contingent Liabilities and Contingent Assets consistent with its current practice.

Presentation and disclosure requirements

The presentation and disclosure requirements in IFRS 15 are more detailed than under current IFRS. The presentation requirements represent a significant change from current practice and significantly increase the volume of disclosures required in the Group's financial statements. Many of the disclosure requirements in IFRS 15 are new and the Group has assessed that the impact of some of these disclosure requirements will be significant. The Group expects that the notes to the financial statements will be expanded because of the disclosure of significant judgements. In addition, as required by IFRS 15, the Group will disaggregate revenue recognised from contracts with customers into categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. In 2017, the Group continued preparing and testing the appropriate systems, internal controls, policies and procedures necessary to collect and disclose the required information.

IFRS 16 Leases

IFRS 16 was issued in January 2016 and it replaces IAS 17 Leases, IFRIC 4 Determining whether an Arrangement contains a Lease, SIC-15 Operating Leases-Incentives and SIC-27 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g. personal computers) and short-term leases (e.g. leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e. the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e. the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g. a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the re-measurement of the lease liability as an adjustment to the right-of-use asset.

Lessor accounting under IFRS 16 is substantially unchanged from today's accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between two types of leases: operating and finance leases.

IFRS 16 also requires lessees and lessors to make more extensive disclosures than under IAS 17.

IFRS 16 is effective for annual periods beginning on or after 1 January 2019. Early application is permitted, but not before an entity applies IFRS 15. A lessee can choose to apply the standard using either a full retrospective or a modified retrospective approach. The standard's transition provisions permit certain reliefs.

In 2018, the Group will continue to assess the potential effect of IFRS 16 on its consolidated financial statements and intends to adopt the standard at the required effective date.

Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture

The amendments address the conflict between IFRS 10 and IAS 28 in dealing with the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that the gain or loss resulting from the sale or contribution of assets that constitute a business, as defined in IFRS 3, between an investor and its associate or joint venture, is recognised in full. Any gain or loss resulting from the sale or contribution of assets that do not constitute a business, however, is recognised only to the extent of unrelated investors' interests in the associate or joint venture. The IASB has deferred the effective date of these amendments indefinitely, but if early adopted the amendments must be applied prospectively. These amendments will be applied in the future when applicable.

Basis of consolidation
The consolidated financial statements comprise the financial statements of Petrofac Limited (the 'Company') and entities controlled by the Company (its subsidiaries) as at 31 December 2017. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption, and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- contractual arrangements with the other vote holders of the investee
- rights arising from other contractual arrangements
- voting rights and potential voting rights the Group

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the reporting period are included in the consolidated statement of other comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the Petrofac Limited shareholders and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intra-group transactions, balances, income and expenses are eliminated on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognises the related assets (including goodwill), liabilities, non-controlling interest and other components of equity while any resultant gain or loss is recognised in the consolidated income statement. Any investment retained is recognised at fair value.

Business combinations and goodwill
Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. All transaction costs associated with business combinations are charged to the consolidated income statement in the reporting period of such combination.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree. If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date fair value and any resulting gain or loss is recognised in the consolidated income statement.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognised for non-controlling interests, and any previous interest held, over the net fair value of the identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group reassesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognised at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain from a bargain purchase is recognised in the consolidated income statement.

Following initial recognition, goodwill is measured at cost less any accumulated impairment losses. Goodwill is reviewed for impairment annually or more frequently if events or changes in circumstances indicate that such carrying amount may be impaired.

For the purpose of impairment testing, goodwill is allocated to the cash-generating units that are expected to benefit from the synergies of the combination. Each unit or units to which goodwill is allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purposes and is not larger than an operating segment determined in accordance with IFRS 8 'Operating Segments'.

Impairment is determined by assessing the recoverable amount of the cash-generating units to which the goodwill relates. Where the recoverable amount of the cash-generating units is less than the carrying amount of the cash-generating units and related goodwill, an impairment loss is recognised.

Where goodwill has been allocated to cash-generating units and part of the operation within those units is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the value portion of the cash-generating units retained.

Contingent consideration payable on a business combination
When, as part of a business combination, the Group defers a proportion of the total purchase consideration payable for an acquisition, the amount provided for is the acquisition date fair value of the consideration. The unwinding of the discount element is recognised as a finance cost in the consolidated income statement. Changes in estimated contingent consideration payable on acquisition are recognised in the consolidated income statement unless they are measurement period adjustments which arise as a result of additional information obtained after the acquisition date about the facts and circumstances existing at the acquisition date, which are adjusted against carried goodwill. Contingent consideration that is classified as equity is not re-measured and subsequent settlement is accounted for within equity.

Investment in associates and joint ventures
An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control. Joint arrangements are of two types: joint venture and joint operation. A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. A joint operation is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities relating to the arrangement.

2 Summary of significant accounting policies continued

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries.

The Group's investments in its associates and joint ventures are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognised at cost. The carrying amount of the investment is adjusted to recognise changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The consolidated income statement reflects the Group's share of the profits of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's consolidated statement of other comprehensive income. In addition, when there has been a change recognised directly in the equity of the associate or joint venture, the Group recognises its share of any changes, when applicable, in the consolidated statement of changes in equity.

The Group's share of profit or loss of an associates and joint ventures is presented separately in the consolidated income statement outside operating profit and represents profit or loss after tax and non-controlling interests.

Any unrealised gains and losses resulting from transactions between the Group and the associates and joint ventures are eliminated to the extent of the Group's ownership interest in these associates and joint ventures.

The financial statements of the associates and joint ventures are prepared for the same reporting period as the Group. When necessary, adjustments are made to align the accounting policies with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At end of each reporting period, the Group determines whether there is objective evidence that its investment in the associates or joint ventures is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying amount and recognises any loss as an exceptional item in the consolidated income statement.

Upon loss of significant influence over an associate or joint control over a joint venture, the Group measures and recognises any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognised in the consolidated income statement.

Joint operations

The Group's interests in joint operations are recognised in relation to its interest in a joint operation's:

- Assets, including its share of any assets held jointly
- Liabilities, including its share of any liabilities incurred jointly
- Revenue from the sale of its share of the output arising from the joint operation
- Share of the revenue from the sale of the output by the joint operation
- Expenses, including its share of any expenses incurred jointly

Under joint operations, the expenses that the Group incurs and its share of the revenue earned are recognised in the consolidated income statement. Assets controlled and liabilities incurred by the Group are recognised in the consolidated statement of financial position.

Foreign currency translation

The Group's consolidated financial statements are presented in United States dollars, which is also the Parent Company's functional currency.

Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Functional currency is defined as the currency of the primary economic environment in which the entity operates. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to profit or loss reflects the amount that arises from using this method.

Transactions and balances

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date.

Differences arising on settlement or translation of monetary items are recognised in profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognised in the consolidated statement of other comprehensive income until the net investment is disposed of, at which time the cumulative amount is reclassified to profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in the consolidated statement of other comprehensive income.

Non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e. translation differences on items whose fair value gain or loss is recognised in the consolidated statement of other comprehensive income or profit or loss are also recognised in the consolidated statement of other comprehensive income or profit or loss, respectively).

Group companies

On consolidation, the assets and liabilities of foreign operations are translated into United States dollars at the rate of exchange prevailing at the reporting date and their statements of profit or loss are translated at exchange rates prevailing at the transaction dates. The exchange differences arising on translation for consolidation are recognised in the consolidated statement of other comprehensive income. On disposal of a foreign operation, the component of the consolidated statement of other comprehensive income relating to that particular foreign operation is recognised in the consolidated income statement.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot rate of exchange at the reporting date.

Significant accounting judgements and estimates

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations, which have the most significant effect on the amounts recognised in the consolidated financial statements:

- Revenue recognition on lump-sum engineering, procurement and construction project execution services contracts: the Group recognises revenue on fixed-price engineering, procurement and construction contracts using the percentage-of-completion method, based on client certified surveys of work performed – this is an output method of measuring progress and recognising revenue. The Group has determined this basis of revenue recognition is the best available measure of progress on such contracts
- Revenue recognition on consortium contracts: the Group recognises its share of revenue from contracts agreed as part of a consortium. The Group uses the percentage-of-completion method based on client certified surveys of work performed to recognise revenue for the period and recognises its share of revenue and costs in accordance with the agreed consortium contractual arrangement. In selecting the appropriate accounting treatment, the main considerations are:
  - Determination of whether the joint arrangement is a joint operation or joint venture (though not directly related to revenue recognition this element has a material impact on the presentation of revenue or share of profit/loss of the joint venture, in the consolidated income statement)
  - At what point can the revenues, costs and margin from service contract be reliably measured in accordance with IAS 11 'Construction Contracts', and
  - Whether there are any other remaining features unique to the contract that are relevant to the assessment

In selecting the most relevant and reliable accounting policies for Integrated Energy Services (IES) contracts, the main considerations are as follows:

- Determination of whether the joint arrangement is a joint operation or joint venture (though not directly related to revenue recognition this element has a material impact on the presentation of revenue or share of profit/loss of the joint venture, in the consolidated income statement)
- Whether the Group has legal rights to the production output and therefore is able to book reserves in respect of the project
- The nature and extent, if any, of volume and price financial exposures under the terms of the contract
- The extent to which the Group's capital investment is at risk and the mechanism for recoverability under the terms of the contract
- At what point can the revenues from each type of contract be reliably measured in accordance with IAS 18 'Revenue'
- Whether there are any other remaining features unique to the contract that are relevant to the assessment

Revenue recognition of IES contracts:

- The Group assesses on a case by case basis the most appropriate treatment for its various commercial structures which include Risk Service Contracts (RSCs), Production Enhancement Contracts (PECs) and Equity Upstream Investments including Production Sharing Contracts (PSCs) (see accounting policies note on page 127 for further details)

IES contracts are classified in the consolidated statement of financial position as follows:

- The Group assesses on a case by case basis the most appropriate consolidated statement of financial position classification of its Production Enhancement Contracts and Equity Upstream Investments (see accounting policy notes on page 127)
- In selecting the most appropriate policies for IES contracts the main judgements are as follows:
  - The Greater Stella Area (GSA) asset was treated in the consolidated statement of financial position as a financial asset and measured at fair value through profit and loss (FVTPL) until it was converted to a 20% ownership interest in the GSA field. On 21 September 2017, the Group obtained Oil and Gas Authority approval in the UK and the financial asset was converted to a 20% equity share in the GSA licence and is now accounted for as a Production Sharing Contract (PSC) type arrangement (note 10). The acquisition of 20% ownership interest in the GSA field was treated as a joint operation since contractually all the decisions concerning the relevant activities of the unincorporated joint arrangement require unanimous consent of the joint arrangement partners
  - The Mexican PEC assets are classified as oil and gas assets within property, plant and equipment in the consolidated statement of financial position as there is direct exposure to variable field production levels, and indirect exposure to changes in oil and gas prices. These exposures impact the generation of cash from the assets and any financial return thereon, including the risk of negative financial return. We believe this classification is most appropriate due to the nature of expenditure and it is aligned with our treatment in respect of PSC arrangements where the risk/reward profile is similar
  - Upon migration to PSC arrangements, the existing net assets of the PEC assets will be derecognised and an oil and gas asset within property, plant and equipment, representing the Group's ownership interest in the PSC, will be recognised. Any gain or loss arising on the migration will be recognised as an exceptional item in the consolidated income statement. During 2017, the Group migrated the Santuario PEC in Mexico to a PSC (note 10) and recognised a loss of US$20m on migration (note 5). The migrated PSC arrangements will be treated as a joint operation since contractually all the decisions concerning the relevant activities of the unincorporated joint arrangement will require unanimous consent of the joint arrangement partners
  - JSD6000 installation vessel (the 'vessel') had a pre-impairment carrying amount of US$393m at 31 December 2017, and was reclassified from assets under construction within property, plant and equipment to assets held for sale, since the vessel's carrying amount is expected to be recovered principally through a disposal transaction rather than through its intended use. Based on discussions with potential counterparties, Management has determined that the recoverable amount of the vessel (fair value less costs of disposal) was lower than its carrying amount and as a result has recognised an impairment charge of US$176m as an exceptional item (note 5) in the consolidated income statement. The vessel is available for immediate sale in its present condition and location. The disposal is expected to be completed within 12 months from the end of the reporting period and relates to the Engineering & Construction reporting segment

Estimation uncertainty

The key assumptions concerning the future and other key sources of estimation uncertainty at the end of the reporting period that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

- Liquidated damages claims (LDs): the Group provides for LD claims where the customer has the contractual right to apply LDs and it is considered probable that the customer will successfully pursue such a claim. This requires an estimate of the amount of LDs payable under a claim which involves a number of management judgements and assumptions regarding the amounts to recognise in contract accounting. US$4m was provided during the year for LD claims (2016: US$153m)

2 Summary of significant accounting policies continued

- Project costs to complete estimates: at the end of the reporting period the Group is required to estimate costs to complete on fixed-price contracts. Estimating costs to complete on such contracts requires the Group to make estimates of future costs to be incurred, based on work to be performed beyond the reporting period. This estimate will impact revenues, cost of sales, work-in-progress, billings in excess of costs and estimated earnings and accrued contract expenses
- Recognition of variation orders (VOs): the Group recognises revenues and margins from VOs where it is considered probable that the VOs will be settled by the customer and this requires management to assess the likelihood of such a settlement being made by reference to the contract, customer communications and other forms of documentary evidence. At 31 December 2017, the work in progress line item in the consolidated statement of financial position includes variation orders of US$374m (2016: US$525m)
- Onerous contract provisions: the Group provides for future losses on contracts where it is considered probable that contract costs are likely to exceed revenues in future years. Estimating these future losses involves a number of assumptions about the achievement of contract performance targets and the likely levels of future cost escalation over time. The carrying amount of onerous contract provisions at 31 December 2017 was US$16m (2016: US$29m). See note 28
- Onerous operating lease provision: the Group provides for future costs on its non-cancellable operating leases where it is considered probable that the leasehold office buildings will remain vacant in future years due to reduced business activity. Assumptions involve an estimate of future business growth and the likely levels of occupancy over time. The carrying amount of onerous operating lease provision at 31 December 2017 was US$18m (2016: US$11m). See note 28
- Impairment of goodwill: the Group determines whether goodwill is impaired at least on an annual basis. This requires an estimation of the value in use of the cash-generating units to which the goodwill is allocated. Estimating the value in use requires the Group to make an estimate of the expected future cash flows from each cash-generating unit and also to determine a suitable discount rate in order to calculate the present value of those cash flows. The carrying amount of goodwill at 31 December 2017 was US$76m (2016: US$72m). See note 13
- Deferred tax assets: the Group recognises deferred tax assets on all applicable temporary differences where it is probable that the tax assets estimated are realised and future taxable profits will be available for utilisation. This requires management to make judgements and assumptions regarding the interpretation of tax laws and regulations as they apply to events in the period and the amount of deferred tax that can be recognised based on the magnitude and likelihood of future taxable profits which are estimated from management assumptions with respect to the outcome of future events. The carrying amount of net deferred tax assets at 31 December 2017 was US$101m (2016: US$63m). Included within the gross assets is US$33m (2016: US$nil) on which a management judgement has been made on the probable treatment of the Migration of Santuario Production Enhancement Contract (PEC) to Production Sharing Contract (PSC) for tax purposes, based on professional external advice
- Income tax: Group entities are routinely subject to tax audits and assessments including processes whereby tax return filings are discussed and agreed with the relevant tax authorities. Whilst the ultimate outcome of such tax audits and discussions cannot be determined with certainty, management estimates the level of tax provisioning required for amounts where there is a probable future outflow, based on the applicable law and regulations, historic outcomes of similar audits and discussions, professional external advice and consideration of the progress on, and nature of, current discussions with the tax authority concerned. The ultimate outcome following resolution of such audits and assessments may be materially higher or lower than the amount provided. The carrying amount of tax provisions at 31 December 2017 was US$93m (2016: US$73m)
- Other taxes payable: the Group accrues indirect taxes, such as value added tax, to the extent it is probable that there will be an associated tax payment or receipt in respect of relevant income and expenses. This requires management to make judgements and assumptions on the application of tax laws and regulations to events in the period. The ultimate outcome may result in materially higher or lower payments or receipts
- Recoverable amount of property, plant and equipment, intangible assets and other financial assets: the Group determines at the end of the reporting period whether there are indicators of impairment in the carrying amount of its property, plant and equipment, intangible assets and other financial assets. Where indicators exist, an impairment test is undertaken which requires management to estimate the recoverable amount of its assets which is initially based on its value in use. When necessary, fair value less costs of disposal is estimated, for example, by reference to quoted market values, similar arm's length transactions involving these assets or risk adjusted discounted cash flow models. For the following specific assets, certain assumptions and estimates have been made in determining recoverable amounts. Should any changes occur in these assumptions, further impairment may be required in future periods:
  - Impairment testing performed for the Mexican PEC assets and fair value re-measurement of the Panuco contingent consideration which have a combined carrying amount of US$412m at 31 December 2017 (2016: US$676m); the recoverable amount is influenced by the outcome of ongoing contractual negotiations in respect of the outstanding PEC migration to equity type arrangements. Key assumptions include the expected working interest in the PSC and financial and fiscal terms achieved upon migration. During 2017, the Group successfully migrated the Santuario PEC to a PSC type arrangement and has used similar assumptions to determine the recoverable amounts for other PEC assets. An estimate was also undertaken in respect of the deferred consideration amount receivable, arising from the disposal of Pánuco PEC, when determining the recoverable amount for this asset, with key assumptions relating to the terms under which other assets will be migrated to a PSC type arrangement. There is currently political uncertainty in Mexico in the lead up to the general election in July 2018 which may delay migration negotiations or, ultimately, have a negative impact on the contractual terms and conditions anticipated in the migrations. This would result in a loss on migration through lower fair value re-measurements of the net assets being contributed into the equity interest
  - Block PM304 oil and gas asset in Malaysia had a carrying amount of US$244m (2016: US$286m); the recoverable amount was determined with reference to the expected terms under which the current contract will be re-negotiated and extended with the concession holder

In 2017 there were pre-tax impairment charges and fair value re-measurements of US$422m (2016: US$260m) post-tax US$367m (2016: US$257m) which are explained in note 5. The key sources of estimation uncertainty for these measurements are consistent with those disclosed in note 5:

- Units of production depreciation: estimated proven plus probable reserves are used in determining the depreciation of oil and gas assets such that the depreciation charge is proportional to the depletion of the remaining reserves over the shorter of: life of the field or the end of the respective licence/concession period. These calculations require the use of estimates including the amount of economically recoverable reserves and future oil and gas capital expenditure (note 11)
- Decommissioning costs: the recognition and measurement of decommissioning provisions involves the use of estimates and assumptions which include the existence of an obligation to dismantle and remove a facility or restore the site on which it is located, the

appropriate discount and inflation rates to use in determining the net present value of the liability, the estimated costs of decommissioning based on internal and external estimates and the payment dates for expected decommissioning costs. As a result, actual costs could differ from estimated cost estimates used to provide for decommissioning obligations. The provision for decommissioning at 31 December 2017 of US$138m (2016: US$116m) represents management's best estimate of the present value of future decommissioning costs

Revenue recognition

Revenue is recognised to the extent that it is probable economic benefits will flow to the Group and the revenue can be reliably measured. The following specific recognition criteria also apply:

Engineering & Construction (E&C) revenues from fixed-price lump-sum contracts are recognised using the percentage-of-completion method, based on client certified surveys of work performed once the outcome of a contract can be estimated reliably. In the early stages of contract completion, when the outcome of a contract cannot be estimated reliably, contract revenues are recognised only to the extent of costs incurred that are expected to be recoverable.

Revenues from cost-plus-fee contracts are recognised on the basis of costs incurred during the year plus the fee earned measured by the cost-to-cost method.

Revenues from reimbursable contracts are recognised in the period in which the services are provided based on the agreed contract schedule of rates.

Provision is made for all losses expected to arise on completion of contracts entered into at the reporting date, whether or not work has commenced on these contracts.

Incentive payments are included in revenue when the contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded and the amount of the incentive payments can be measured reliably. Variation orders are only included in revenue when it is probable they will be accepted and can be measured reliably and claims are only included in revenue when negotiations have reached an advanced stage such that it is probable that the claim will be accepted and can be measured reliably.

Engineering & Production Services (EPS)

Revenues from reimbursable contracts are recognised in the period in which the services are provided based on the agreed contract schedule of rates.

Revenues from fixed-price contracts are recognised on the percentage-of-completion method, measured by milestones completed or earned value once the outcome of a contract can be estimated reliably. In the early stages of contract completion, when the outcome of a contract cannot be estimated reliably, contract revenues are recognised only to the extent of costs incurred that are expected to be recoverable.

Incentive payments are included in revenue when the contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded and the amount of the incentive payments can be measured reliably. Claims are only included in revenue when negotiations have reached an advanced stage such that it is probable the claim will be accepted and can be measured reliably.

Integrated Energy Services (IES)

Production Enhancement Contracts (PEC)

Revenue from PECs is recognised based on the volume of hydrocarbons produced in the period and the agreed tariff and the reimbursement arrangement for costs incurred.

Equity Upstream Investments

Oil and gas revenues comprise the Group's share of sales from the processing or sale of hydrocarbons from the Group's Equity Upstream Investments on an entitlement basis, when the significant risks and rewards of ownership have been passed to the buyer.

Borrowing costs

Borrowing costs directly attributable to the construction of qualifying assets, which are assets that necessarily take a substantial period of time to prepare for their intended use, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use. All other borrowing costs are recognised as interest payable within the finance costs line item in the consolidated income statement in the period in which they are incurred.

Property, plant and equipment

Property, plant and equipment is measured at cost less accumulated depreciation and accumulated impairment charges. Cost comprises the purchase price or construction cost and any costs directly attributable to making that asset capable of operating as intended. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset. Depreciation is provided on a straight-line basis, other than on oil and gas assets, at the following rates:

Oil and gas facilities	10% – 12.5%
Plant and equipment	4% – 33%
Buildings and leasehold improvements	5% – 33% (or lease term if shorter)
Office furniture and equipment	25% – 50%
Vehicles	20% – 33%

Tangible oil and gas assets are depreciated, on a field-by-field basis, using the unit-of-production method based on entitlement to proven and probable reserves, taking account of estimated future development expenditure relating to those reserves; refer to page 41 for life of these fields.

Each asset's estimated useful life, residual value and method of depreciation are reviewed and adjusted if appropriate at the end of the reporting period.

No depreciation is charged on land or assets under construction.

The carrying amount of an item of property, plant and equipment is derecognised on disposal or when no future economic benefits are expected from its use or disposal. The gain or loss arising from the derecognition of an item of property, plant and equipment is included in the other operating income line item in the consolidated income statement when the asset is derecognised. Gains are not classified as revenue.

Intangible assets – non oil and gas assets

Intangible assets acquired in a business combination are initially measured at cost being their fair values at the date of acquisition and are recognised separately from goodwill where the asset is separable or arises from a contractual or other legal right and its fair value can be measured reliably. After initial recognition, intangible assets are carried at cost less accumulated amortisation and any accumulated impairment charges. Intangible assets with a finite life are amortised over their useful economic life using a straight-line method unless a better method reflecting the pattern in which the asset's future economic benefits are expected to be consumed can be determined. The amortisation charge in respect of intangible assets is included in the selling, general and administration expenses line of the consolidated income statement. The expected useful lives of assets are reviewed on an annual basis. Any change in the useful life or pattern of consumption of the intangible asset is treated as a change in accounting estimate and is accounted for prospectively by changing the amortisation period or method. Intangible assets are tested for impairment whenever there is an indication that the asset may be impaired.

2 Summary of significant accounting policies continued

Oil and gas assets

Capitalised costs

The Group's activities in relation to oil and gas assets are limited to assets in the evaluation, development and production phases.

Oil and gas evaluation and development expenditure is accounted for using the successful efforts method of accounting.

Evaluation expenditures

Expenditure directly associated with evaluation (or appraisal) activities is capitalised as an intangible oil and gas asset. Such costs include the costs of acquiring an interest, appraisal well drilling costs, payments to contractors and an appropriate share of directly attributable overheads incurred during the evaluation phase. For such appraisal activity, which may require drilling of further wells, costs continue to be recognised as an asset whilst related hydrocarbons are considered capable of commercial development. Such costs are subject to technical, commercial and management review to confirm the continued intent to develop, or otherwise extract value. When this is no longer the case, the costs are written-off in the consolidated income statement. When such assets are declared part of a commercial development, related costs are transferred to tangible oil and gas assets. All intangible oil and gas assets are assessed for any impairment prior to transfer and any impairment charge is recognised in the consolidated income statement.

Development expenditures

Expenditures relating to development of assets which includes the construction, installation and completion of infrastructure facilities such as platforms, pipelines and vessels are capitalised within property, plant and equipment as oil and gas facilities. Expenditures relating to the drilling and completion of production wells are capitalised within property, plant and equipment as oil and gas assets.

Changes in unit-of-production factors

Changes in factors which affect unit-of-production calculations are dealt with prospectively in accordance with the treatment of changes in accounting estimates, not by immediate adjustment of amounts recognised in prior reporting periods.

Decommissioning

Provision for future decommissioning costs is made in full when the Group has an obligation to dismantle and remove a facility or an item of plant and to restore the site on which it is located, and when a reasonable estimate of that liability can be made. The amount recognised is the present value of the estimated future decommissioning costs. An amount equivalent to the discounted initial provision for decommissioning costs is capitalised and amortised over the life of the underlying asset on a unit-of-production basis over proven and probable reserves. Any change in the present value of the estimated decommissioning costs is reflected as an adjustment to the provision and the oil and gas asset.

The unwinding of the discount applied to future decommissioning provisions is included in the finance costs line in the consolidated income statement.

Impairment of assets (excluding goodwill)

At each reporting date, the Group reviews the carrying amounts of its property, plant and equipment and intangible assets to assess whether there is an indication that those assets may be impaired. If any such indication exists, the Group makes an estimate of the asset's recoverable amount. An asset's recoverable amount is the higher of its fair value less costs of disposal and its value in use. In assessing value in use, the estimated future cash flows attributable to the asset are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Fair value less costs of disposal is based on the risk-adjusted discounted cash flow models and includes value attributable to contingent resources. A post-tax discount rate is used in such calculations.

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment charge is recognised immediately in the consolidated income statement, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset in prior reporting periods. A reversal of an impairment loss is recognised immediately in the consolidated income statement, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment is treated as a revaluation increase.

Non-current assets held for sale

Non-current assets or disposal groups are classified as held for sale when it is highly probable that the carrying amount of the asset will be recovered principally through a sale transaction rather than through continuing use and the non-current assets or disposal group are available for immediate sale in their present condition. Assets are not depreciated when classified as held for sale.

Inventories

Inventories are valued at the lower of cost and net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale. Cost comprises purchase price, cost of production, transportation and other directly allocable expenses. Costs of inventories, other than raw materials, are determined using the first-in-first-out method. Costs of raw materials are determined using the weighted average method.

Work in progress and billings in excess of cost and estimated earnings

Fixed-price lump-sum engineering, procurement and construction contracts are presented in the consolidated statement of financial position as follows:

- For each contract, the accumulated cost incurred, as well as the estimated earnings recognised at the contract's percentage-of-completion less provision for any anticipated losses, after deducting the progress payments received or receivable from the customers, is presented in the work in progress line item in the consolidated statement of financial position
- Where the payments received or receivable for any contract exceeds the cost and estimated earnings less provision for any anticipated losses, the excess is presented in the billings in excess of cost and estimated earnings line item in the consolidated statement of financial position

Pre-contract/bid costs

Pre-contract/bid costs incurred are recognised as an expense until there is a high probability that the contract will be awarded, after which all further costs are recognised as assets and expensed over the life of the contract.

Trade and other receivables

Trade receivables are recognised at original invoice amount less an allowance for any amounts estimated to be uncollectable. An estimate for doubtful debts is made when there is objective evidence that the collection of the full amount is no longer probable under the terms of the original invoice. Impaired debts are derecognised when they are assessed as uncollectable.

Cash and cash equivalents
Cash and cash equivalents consist of cash at bank and in hand and short-term deposits with an original maturity of three months or less. For the purpose of the consolidated statement of cash flow, cash and cash equivalents consists of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

Provisions
Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. If the time value of money is material, provisions are discounted using a pre-tax rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised in the consolidated income statement as a finance cost.

Fair value measurement
The Group measures financial instruments, such as derivatives, and the Pánuco deferred consideration at fair value at each reporting date. Fair value related disclosures for financial instruments are disclosed in note 18.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data is available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 – Unadjusted quoted prices in active markets for identical financial assets or liabilities
- Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)
- Level 3 – Inputs for the asset or liability that are not based on observable market data (unobservable inputs)

For assets and liabilities that are recognised in the consolidated financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

Financial assets
Initial recognition and measurement
Financial assets are classified, at initial recognition, as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial assets are recognised initially at fair value plus, in the case of financial assets not recorded at fair value through profit or loss, transaction costs that are attributable to the acquisition of the financial asset.

Subsequent measurement
For purposes of subsequent measurement financial assets are classified in the following categories:

- Financial assets at fair value through profit or loss
- Loans and receivables

Financial assets at fair value through profit or loss
Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments as defined by IAS 39 'Financial Instruments – Recognition and Measurement'. Financial assets at fair value through profit or loss are carried in the consolidated statement of financial position at fair value with net changes in fair value reported in the consolidated income statement.

The fair value changes to undesignated forward currency contracts are reported within the other operating income/expenses line item in the consolidated income statement. The fair value changes relating to the amounts receivable in respect of the development of the Greater Stella Area are recorded as an exceptional item in the consolidated income statement, see note 5. The unwinding of discount on the Pánuco deferred consideration is recognised as finance income in the consolidated income statement. No other fair value movements occurred during 2017.

Loans and receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortised cost using the effective interest rate (EIR) method, less accumulated impairment charges. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the consolidated income statement. This category generally applies to trade and other receivables.

Financial liabilities
Initial recognition and measurement
Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognised initially at fair value and, in the case of loans and borrowings and trade and other payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

Subsequent measurement
For purposes of subsequent measurement financial liabilities are classified in the following categories:

- Financial liabilities at fair value through profit or loss
- Loans and borrowings

2 Summary of significant accounting policies continued

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by IAS 39 'Financial Instruments – Recognition and Measurement'. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognised in the consolidated income statement.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in IAS 39 are satisfied. The Group has not designated any financial liability as at fair value through profit or loss.

Loans and borrowings

This is the category most relevant to the Group. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in the other operating income/expenses line item in the consolidated income statement when the liabilities are derecognised as well as through the EIR amortisation process.

Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included as finance costs in the consolidated income statement.

This category generally applies to interest-bearing loans and borrowings. For more information, refer to note 27.

Derecognition of financial assets and liabilities

Financial assets

A financial asset (or, where applicable, a part of a financial asset) is derecognised where:

- The rights to receive cash flows from the asset have expired
- The Group retains the right to receive cash flows from the asset, but has assumed an obligation to pay them in full without material delay to a third party under a 'pass-through' arrangement; or
- The Group has transferred its rights to receive cash flows from the asset and either (a) has transferred substantially all the risks and rewards of the asset, or (b) has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset

Financial liabilities

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires.

If an existing financial liability is replaced by another from the same lender, on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability such that the difference in the respective carrying amounts together with any costs or fees incurred are recognised in the consolidated income statement.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, to realise the assets and settle the liabilities simultaneously.

Derivative financial instruments and hedging

The Group uses derivative financial instruments such as forward currency contracts and oil price collars and forward contracts to hedge its risks associated with foreign currency and oil price fluctuations. Such derivative financial instruments are initially recognised at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives that do not qualify for hedge accounting are taken to the consolidated income statement.

The fair value of forward currency contracts is calculated by reference to current forward exchange rates for contracts with similar maturity profiles. The fair value of oil price collar contracts is determined by reference to market values for similar instruments.

For the purposes of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognised asset or liability; or
- Cash flow hedges when hedging exposure to variability in cash flows that is either attributable to a particular risk associated with a recognised asset or liability or a highly probable forecast transaction

The Group formally designates and documents the relationship between the hedging instrument and the hedged item at the inception of the transaction, as well as its risk management objectives and strategy for undertaking various hedge transactions. The documentation also includes identification of the hedging instrument, the hedged item or transaction, the nature of risk being hedged and how the Group will assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in the hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items.

The treatment of gains and losses arising from revaluing derivatives designated as hedging instruments depends on the nature of the hedging relationship, as follows:

Cash flow hedges

For cash flow hedges, the effective portion of the gain or loss on the hedging instrument is recognised directly in the consolidated statement of other comprehensive income in net unrealised gains/(losses) on derivatives, while the ineffective portion is recognised in the consolidated income statement. Amounts taken to other comprehensive income are transferred to the consolidated income statement when the hedged transaction affects the consolidated income statement. The material forward rate movements in the Kuwaiti dinar forward currency contracts are recorded as an exceptional item in the consolidated income statement.

If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognised in other comprehensive income remains separately in equity until the forecast transaction occurs and affects the consolidated income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately transferred to the consolidated income statement.

Embedded derivatives

Contracts are assessed for the existence of embedded derivatives at the date that the Group first becomes party to the contract, with reassessment only if there is a change to the contract that significantly modifies the cash flows. Embedded derivatives which are not clearly and closely related to the underlying asset, liability or transaction are separated and accounted for as standalone derivatives.

Petrofac Employee Benefit Trusts
The Petrofac Employee Benefit Trust and the Petrofac Joint Venture Companies Employee Benefit Trust warehouse ordinary shares purchased to satisfy various new share scheme awards made to the employees of the Company and its joint venture partner employees, which will be transferred to the members of the schemes on their respective vesting dates subject to satisfying any performance conditions of each scheme. The trusts continue to be included in the Group financial statements under IFRS 10.

Treasury shares
For the purpose of making awards under the Group's employee share schemes, shares in the Company are purchased and held by the Petrofac Employee Benefit Trust and the Petrofac Joint Venture Companies Employee Benefit Trust. All these shares have been classified in the statement of financial position as treasury shares within equity. Shares vested during the year are satisfied with these shares.

Share-based payment transactions
Employees (including Directors) of the Group receive remuneration in the form of share-based payment, whereby employees render services in exchange for shares or rights over shares ('equity-settled transactions').

Equity-settled transactions
The cost of equity-settled transactions with employees is measured by reference to the fair value at the date on which they are granted.

The cost of equity-settled transactions is recognised in the selling, general and administration expenses line item in the consolidated income statement, together with a corresponding increase in other reserves in the consolidated statement of financial position, over the period in which the relevant employees become entitled to the award (the 'vesting period'). The cumulative expense recognised for equity-settled transactions at the end of the reporting period until the vesting date reflects the extent to which the vesting period has expired and the Group's best estimate of the number of equity instruments that will ultimately vest. The charge or credit to the consolidated income statement for a period represents the movement in cumulative expense recognised from the beginning to the end of the reporting period.

No expense is recognised for awards that do not ultimately vest because non-market performance and/or service conditions have not been met. Where awards include a market or non-vesting condition, the transactions are treated as vested irrespective of whether the market or non-vesting condition is satisfied, provided that all other performance and/or service conditions are satisfied.

Equity awards cancelled, e.g. in case of good leavers, are treated as vesting immediately on the date of cancellation, and any expense not recognised for the award at that date is recognised in the consolidated income statement.

Pensions and other long-term employment benefits
The Group has various defined contribution pension schemes in accordance with the local conditions and practices in the countries in which it operates. The amount charged to the consolidated income statement in respect of pension costs reflects the contributions payable in the year. Differences between contributions payable during the year and contributions actually paid are shown as either accrued liabilities or prepaid assets in the consolidated statement of financial position.

The Group's other long-term employment benefits are provided in accordance with the labour laws of the countries in which the Group operates, further details of which are given in note 28.

Income taxes
Income tax expense represents the sum of current income tax and deferred tax.

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from, or paid to the taxation authorities. Taxable profit differs from profit as reported in the consolidated income statement because it excludes items of income or expense that are taxable or deductible in other years and it further excludes items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the statement of financial position date.

Deferred tax is recognised on all temporary differences at the statement of financial position date between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, with the following exceptions:

- Where the temporary difference arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, where the timing of reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future, and
- Deferred tax assets are recognised only to the extent that it is probable that a taxable profit will be available against which the deductible temporary differences and carried forward tax credits or tax losses can be utilised

The carrying amount of deferred tax assets is reviewed at each statement of financial position date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax assets to be utilised. Unrecognised deferred tax assets are reassessed at each statement of financial position date and are recognised to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured on an undiscounted basis at the tax rates that are expected to apply when the asset is realised or the liability is settled, based on tax rates and tax laws enacted or substantively enacted at the statement of financial position date.

Current and deferred tax is charged or credited directly to other comprehensive income or equity if it relates to items that are credited or charged to, respectively, other comprehensive income or equity. Otherwise, income tax is recognised in the consolidated income statement.

Leases
The determination of whether an arrangement is or contains a lease is based on the substance of the arrangement at inception date and whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys the right to use the asset.

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Assets held under finance leases are recognised as non-current assets of the Group at the lower of their fair value at the date of commencement of the lease and the present value of the minimum lease payments. These assets are depreciated on a straight-line basis over the shorter of the useful life of the asset and the lease term. The corresponding liability to the lessor is included in the consolidated statement of financial position as a finance lease obligation. Lease payments are apportioned between finance costs in the consolidated income statement and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. The Group has entered into various operating leases the payments for which are recognised as an expense in the consolidated income statement on a straight-line basis over the lease terms.

3 Segment information

The Group organisational structure comprises the following three reporting segments:

- Engineering & Construction (E&C), which provides lump-sum engineering, procurement and construction project execution services to the onshore and offshore oil and gas industry
- Engineering & Production Services (EPS), which includes all reimbursable engineering and production services activities to the oil and gas industry
- Integrated Energy Services (IES), which is focused on delivering value from the existing asset portfolio

Management separately monitors the trading results of its three reporting segments for the purpose of making an assessment of their performance and for making decisions about how resources are allocated. Interest costs and income arising from borrowings and cash balances which are not directly attributable to individual reporting segments are allocated to Corporate. In addition, certain shareholder services related overheads, intra-group financing and consolidation adjustments are managed at a corporate level and are not allocated to reporting segments.

The presentation of the Group results below also separately identifies the effect of the Laggan-Tormore loss, asset impairments, certain re-measurements, restructuring and redundancy costs, contract migration costs, material deferred tax movements arising due to foreign exchange differences in jurisdictions where tax is computed based on the functional currency of the country and material forward rate movements in Kuwaiti dinar forward currency contracts. Results excluding these exceptional items and certain re-measurements are used by management and presented in order to provide readers with a clear and consistent presentation of underlying business performance.

The following tables represent revenue and profit/(loss) information relating to the Group's reporting segments for the year ended 31 December 2017 and the comparative information for the year ended 31 December 2016.

Year ended 31 December 2017

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Business performance US$m	Exceptional items and certain re-measurements US$m	Total US$m
Revenue								
External sales	4,782	1,385	228	–	–	6,395	–	6,395
Inter-segment sales	19	7	–	–	(26)	–	–	–
Total revenue	**4,801**	**1,392**	**228**	**–**	**(26)**	**6,395**	**–**	**6,395**
Profit/(loss) from operations before tax and finance (costs)/income	477	117	(38)	(13)	(1)	542	(438)	104
Finance costs	–	–	(21)	(59)	–	(80)	–	(80)
Finance income	–	–	7	3	–	10	–	10
Share of profits/(losses) of associates/joint ventures	–	(1)	12	–	–	11	–	11
Profit/(loss) before tax	477	116	(40)	(69)	(1)	483	(438)	45
Income tax (expense)/credit	(132)	(27)	19	2	–	(138)	66	(72)
Profit/(loss) after tax	345	89	(21)	(67)	(1)	345	(372)	(27)
Non-controlling interests	(3)	1	–	–	–	(2)	–	(2)
Profit/(loss) for the year attributable to Petrofac Limited shareholders	**342**	**90**	**(21)**	**(67)**	**(1)**	**343**	**(372)**	**(29)**
EBITDA[1]	**522**	**123**	**97**	**(12)**	**–**	**730**		

1 Earnings before interest, tax, depreciation and amortisation (unaudited).

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Total US$m
Other segment information						
Capital expenditures:						
Property, plant and equipment (note 11)	**44**	**2**	**66**	**3**	**–**	**115**
Intangible oil and gas assets (note 15)	**–**	**–**	***(1)**	**–**	**–**	**(1)**
Charges:						
Depreciation (note 11)	**45**	**7**	**116**	**1**	**1**	**170**
Amortisation and write off (note 15)	**–**	**–**	**7**	**–**	**–**	**7**
Exceptional items and certain re-measurements (pre-tax)	**155**	**22**	**245**	**16**	**–**	**438**
Other long-term employment benefits (note 28)	**21**	**1**	**–**	**–**	**–**	**22**
Share-based payments (note 25)	**15**	**1**	**1**	**2**	**–**	**19**

* Negative capital expenditure includes reversal of excess accruals of US$9m in the current year (note 15).

Year ended 31 December 2016

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Business performance US$m	Exceptional items and certain re-measurements US$m	Total US$m
Revenue								
External sales	5,895	1,707	271	–	–	7,873	–	7,873
Inter-segment sales	33	18	–	–	(51)	–	–	–
Total revenue	5,928	1,725	271	–	(51)	7,873	–	7,873
Segment results	520	132	(35)	(7)	(1)	609	(322)	287
Laggan-Tormore loss[1]	(101)	–	–	–	–	(101)	–	(101)
Profit/(loss) from operations before tax and finance (costs)/ income	419	132	(35)	(7)	(1)	508	(322)	186
Finance costs	–	–	(44)	(57)	–	(101)	–	(101)
Finance income	–	–	–	3	–	3	–	3
Share of profits of associates/joint ventures	–	1	7	–	–	8	4	12
Profit/(loss) before tax	419	133	(72)	(61)	(1)	418	(318)	100
Income tax (expense)/credit	(95)	(22)	30	2	–	(85)	(1)	(86)
Profit/(loss) after tax	324	111	(42)	(59)	(1)	333	(319)	14
Non-controlling interests	(13)	–	–	–	–	(13)	–	(13)
Profit/(loss) for the year attributable to Petrofac Limited shareholders	311	111	(42)	(59)	(1)	320	(319)	1
EBITDA[2]	463	140	99	2	–	704		

1 The Laggan-Tormore loss for the year comprises application of liquidated damages of US$80m and cost overruns of US$21m agreed as part of the final commercial settlement with our client in respect of the project.
2 Earnings before interest, tax, depreciation and amortisation (unaudited).

3 Segment information continued

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	Corporate & others US$m	Consolidation adjustments & eliminations US$m	Total US$m
Other segment information						
Capital expenditures:						
Property, plant and equipment (note 11)	122	1	15	5	–	143
Intangible oil and gas assets (note 15)	–	–	*(8)	–	–	(8)
Charges:						
Depreciation (note 11)	44	5	123	9	1	182
Amortisation and write off (note 15)	–	2	4	–	–	6
Exceptional items and certain re-measurements (pre-tax)	35	4	272	7	–	318
Other long-term employment benefits (note 28)	22	2	–	–	–	24
Share-based payments (note 25)	15	1	1	–	–	17

* Negative capital expenditure includes reversal of excess accruals of US$11m in the current year (note 15).

Geographical segments

The following tables present revenue from external customers based on their location and selected non-current assets by geographical segments for the years ended 31 December 2017 and 2016.

Year ended 31 December 2017

	Kuwait US$m	Saudi Arabia US$m	Oman US$m	United Arab Emirates US$m	United Kingdom US$m	Algeria US$m	Malaysia US$m	Other countries US$m	Consolidated US$m
Revenues from external customers	**2,028**	**1,181**	**850**	**562**	**514**	**386**	**231**	**643**	**6,395**

	Malaysia US$m	Mexico US$m	United Kingdom US$m	United Arab Emirates US$m	Tunisia US$m	Kuwait US$m	Other countries US$m	Consolidated US$m
Non-current assets:								
Property, plant and equipment (note 11)	**373**	**389**	**152**	**93**	**42**	**31**	**12**	**1,092**
Intangible oil and gas assets (note 15)	**55**	**–**	**11**	**–**	**1**	**–**	**–**	**67**
Other intangible assets (note 15)	**–**	**9**	**–**	**–**	**–**	**–**	**–**	**9**
Goodwill (note 13)	**3**	**–**	**44**	**29**	**–**	**–**	**–**	**76**

Year ended 31 December 2016

	Kuwait US$m	Oman US$m	United Arab Emirates US$m	United Kingdom US$m	Saudi Arabia US$m	Algeria US$m	Malaysia US$m	Other countries US$m	Consolidated US$m
Revenues from external customers	2,185	1,477	1,326	668	798	463	357	599	7,873

	Malaysia US$m	Mexico US$m	United Kingdom US$m	United Arab Emirates US$m	Tunisia US$m	Singapore US$m	Other countries US$m	Consolidated US$m
Non-current assets:								
Property, plant and equipment (note 11)	456	336	22	507	51	20	26	1,418
Intangible oil and gas assets (note 15)	68	–	11	–	1	–	–	80
Other intangible assets (note 15)	–	14	2	–	–	–	–	16
Goodwill (note 13)	3	–	40	29	–	–	–	72

Revenues disclosed in the above tables are based on where the project is located. Revenues representing greater than 10% of Group revenues arose from two customers amounting to US$2,756m in the Engineering & Construction reporting segment (2016: two customers, US$1,967m in the Engineering & Construction reporting segment).

4 Revenues and expenses

a. Revenue

	2017 US$m	2016 US$m
Rendering of services	**6,266**	7,764
Sale of crude oil and gas	**129**	109
	6,395	7,873

Revenue from rendering of services includes Engineering & Production Services reporting segment revenues of a 'pass-through' nature with zero or low margins amounting to US$461m (2016: US$644m). The revenues are included as external revenues of the Group since the risks and rewards associated with recognition are assumed by the Group.

b. Cost of sales

Included in cost of sales is depreciation charged on property, plant and equipment of US$153m (2016: US$162m), intangible amortisation of US$1m (2016: US$1m) and an oil and gas intangible write off amounting to US$6m (2016: US$nil).

Also included in cost of sales are forward points and ineffective portions on derivatives designated as cash flow hedges and losses on undesignated derivatives of US$5m (2016: US$1m). These amounts are an economic hedge of foreign exchange risk but do not meet the criteria within IAS 39 'Financial instruments – recognition and measurement' and are most appropriately recognised in cost of sales.

c. Selling, general and administration expenses

	2017 US$m	2016 US$m
Staff costs	**151**	151
Depreciation (note 11)	**17**	20
Amortisation and write off (note 15)	**–**	5
Other operating expenses	**67**	68
	235	244

Other operating expenses consist mainly of office, travel, professional services fees and contracting staff costs.

d. Staff costs

	2017 US$m	2016 US$m
Total staff costs:		
Wages and salaries	**955**	957
Social security costs	**39**	38
Defined contribution pension costs	**14**	21
Other long-term employee benefit costs (note 28)	**22**	24
Share-based payments costs (note 25)	**19**	17
	1,049	1,057

Of the US$1,049m (2016: US$1,057m) of staff costs shown above, US$898m (2016: US$906m) is included in cost of sales, with the remainder in selling, general and administration expenses.

The average number of payrolled staff employed by the Group during the year was 13,000 (2016: 13,852).

e. Auditor's remuneration

The Group paid the following amounts to its auditor in respect of the audit of the financial statements and for other non-prohibited services provided to the Group:

	2017 US$m	2016 US$m
Group audit fee	**2**	2
Audit of accounts of subsidiaries	**1**	2
Others	**1**	1
	4	5

Others include audit related assurance services of US$427,000 (2016: US$430,000), tax advisory services of US$75,000 (2016: US$130,000), tax compliance services of US$nil (2016: US$690,000) and other non-audit services of US$496,000 (2016: US$50,000).

f. Other operating income

	2017 US$m	2016 US$m
Foreign exchange gains	**12**	22
Other income	**8**	5
	20	27

Other income includes US$4m recognised on re-recognition of finance leases relating to Block PM304 in Malaysia (note 11).

4 Revenues and expenses continued

g. Other operating expenses

	2017 US$m	2016 US$m
Foreign exchange losses	**5**	12
Other expenses	**5**	2
	10	14

5 Exceptional items and certain re-measurements

	2017 US$m	2016 US$m
Impairment of assets	**345**	212
Fair value re-measurements on receivable in respect of the development of the Greater Stella Area (GSA)	**77**	3
Forward rate movements in Kuwaiti dinar forward currency contracts in the E&C reporting segment	**(18)**	35
Group reorganisation and redundancy costs	**4**	6
Onerous leasehold property provisions	**12**	–
Other exceptional items	**18**	9
Fair value re-measurements and net costs relating to the cessation of the Berantai RSC contract	**–**	33
Ticleni onerous contract provision and foreign currency translation losses on disposal of subsidiary	**–**	20
	438	318
Foreign exchange translation (gains)/losses on deferred tax balances	**(11)**	5
Tax relief on exceptional items and certain re-measurements	**(55)**	(4)
	(66)	1
Consolidated income statement charge for the year	**372**	319

Impairment of assets

During the year, the Group reviewed the carrying amount of its Block PM304 oil and gas assets on a fair value basis using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair value measurement') discounted at a post-tax rate of 9.5% (2016: 9.5%) which resulted in a pre-tax impairment charge of US$54m (post-tax US$33m) in the Integrated Energy Services reporting segment (2016: pre-tax US$nil, post-tax US$nil). which was allocated proportionately to property, plant and equipment and intangible oil and gas assets. The oil price assumptions used by Management are the same as those disclosed in the 'oil price assumptions' section on page 137. A 10% decrease in oil prices would result in an additional pre-tax impairment charge of US$87m (post-tax US$54m).

A further impairment charge of US$8m (post-tax US$8m) was also recognised in the Integrated Energy Services reporting segment on the FPSO Opportunity reflecting the recoverable amount of the vessel (2016: US$15m, post-tax US$15m). The FPSO Opportunity vessel was disposed during the year, and disposal proceeds of US$10m were realised against the carrying amount.

The JSD6000 installation vessel (the 'vessel') had a pre-impairment carrying amount of US$393m at 31 December 2017, and was reclassified from assets under construction within property, plant and equipment to assets held for sale, since the vessel's carrying amount is expected to be recovered principally through a disposal transaction rather than through its intended use. Based on discussions with potential counterparties, Management has determined that the recoverable amount of the vessel (fair value less costs of disposal) was lower than its carrying amount and as a result has recognised an impairment charge of US$176m (post-tax US$176m) as an exceptional item in the consolidated income statement. The vessel is available for immediate sale in its present condition and location. The disposal is expected to be completed within 12 months from the end of the reporting period and relates to the Engineering & Construction reporting segment (note 14).

On 18 December 2017, the Group migrated its existing Santuario Production Enhancement Contract (PEC) to acquire a 36% ownership interest in the Production Sharing Contract (PSC). At the time of migration, the existing oil and gas assets of the Santuario PEC were fair valued and this resulted in an impairment charge of US$29m (post-tax US$20m) being recognised as an exceptional item in the consolidated income statement (note 10). The Group re-assessed the recoverable amount of the Santuario PSC oil and gas asset at 31 December 2017, using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair value measurement') discounted at a post-tax rate of 9.5% and using the same oil price assumptions as those disclosed in the 'oil price assumptions' section on page 137, and has concluded that no further impairment was required. A 10% decrease in oil prices would result in an additional pre-tax impairment charge of US$45m (post-tax US$31m).

At 31 December 2017, the Group re-assessed the recoverable amount of the Greater Stella Area (GSA) oil and gas asset using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair value measurement') discounted at a post-tax rate of 9.5% and using the same oil price assumptions as those disclosed in the 'oil price assumptions' section on page 137, and as a result recognised an impairment charge of US$77m (post-tax US$52m). A 10% decrease in oil prices would result in an additional pre-tax impairment charge of US$23m (post-tax US$23m).

During 2016, an impairment charge of US$197m (post-tax US$197m) was recognised as an exceptional item in the Integrated Energy Services reporting segment relating to the Seven Energy available-for-sale investment.

Fair value less costs of disposal is determined by discounting the post-tax cash flows expected to be generated from oil and gas production net of disposal costs taking into account assumptions that market participants would typically use in estimating fair values. Post-tax cash flows are derived from projected production profiles for each asset taking into account forward market commodity prices over the relevant period and, where external forward prices are not available, the Group's Board-approved five-year business planning assumptions were used. As each field has different reservoir characteristics and contractual terms the post-tax cash flows for each asset are calculated using individual economic models, which include assumptions around the amount of recoverable reserves, production costs, life of the field/licence period and the selling price of the commodities produced.

Oil price assumptions

For determining the recoverable amount of property, plant and equipment and intangible oil and gas assets, Management has used forward curve oil prices of US$65 per barrel for 2018 and US$62 per barrel for 2019. For later periods, the long-term planning oil price assumptions used were US$65 per barrel for 2020, US$70 per barrel for 2021 and US$75 per barrel for 2022 and beyond (2016: forward curve oil prices of US$59 per barrel for 2017 and US$58 per barrel for 2018. For later periods, the long-term planning oil price assumptions used were US$70 per barrel for 2019, and US$75 per barrel for 2020 and beyond).

Fair value re-measurements on receivable in respect of the development of the Greater Stella Area (GSA)

On 21 September 2017, upon receiving Oil and Gas Authority (OGA) approval in the UK, the Group converted its existing receivable in respect of the development of the Greater Stella Area to acquire a 20% ownership interest in the GSA field in the North Sea, UK (note 10). The Group revalued its loan receivable at the date of acquisition on a fair value basis using risk adjusted cash flow projections (a Level 3 measurement) discounted at a post-tax rate of 9.5% (2016: 9.5%) which resulted in a US$77m pre-tax impairment charge (post-tax US$77m) for the period up to the date of acquisition, including a gain of US$6m between 30 June 2017 and the date of acquisition, in the Integrated Energy Services reporting segment (2016: pre-tax US$3m, post-tax US$3m). The oil price assumptions used were the same as those disclosed in note 10 on page 141.

Group reorganisation and redundancy costs

The Group recognised a charge of US$4m, post-tax US$4m relating to staff redundancy costs and office closure costs mainly attributable to the Engineering & Production Services reporting segment (2016: US$6m, post-tax US$5m).

Onerous leasehold property provision

An onerous leasehold property provision of US$12m was recognised for the estimated future costs relating to vacant and under utilised leasehold office buildings in the UK for which the leases expire in 2024 and 2026 respectively (note 28).

Other exceptional items

Other exceptional items include US$16m (post-tax US$16m) of legal and professional fees incurred in relation to the ongoing SFO investigation into the Group (2016: US$8m, post-tax US$8m) and Mexican Production Enhancement Contract (PEC) migration costs of US$1m, post-tax US$1m (2016: US$1m, post-tax US$1m).

Taxation

US$11m of foreign exchange gains on the retranslation of deferred tax balances denominated in Malaysian ringgits have been recognised during the year in respect of oil and gas activities in Malaysia, relating to the Integrated Energy Services reporting segment, due to an approximate 10% strengthening in the Malaysian ringgit against the US dollar (2016: US$5m loss).

Fair value re-measurements and net costs relating to the cessation of the Berantai RSC contract

During 2016, the Group reached mutual agreement with PETRONAS for the cessation of the Berantai Risk Service Contract (RSC) with effect from 30 September 2016 and as a result recognised an exceptional charge of US$33m (post-tax US$30m) in the consolidated income statement in the Integrated Energy Services reporting segment.

Ticleni onerous contract provision and foreign currency translation losses on disposal of subsidiary

During 2016, an onerous contract provision of US$9m (post-tax US$9m) was recognised in the Integrated Energy Services reporting segment principally to reflect the final commercial settlement in respect of the exit from the Ticleni Production Enhancement Contract (PEC) in Romania. In addition, foreign currency translation losses of US$11m (post-tax US$11m) were reclassified from the consolidated statement of other comprehensive income to exceptional items in the Integrated Energy Services reporting segment upon disposal of the Ticleni PEC in Romania (note 26).

6 Finance (costs)/income

	2017 US$m	2016 US$m
Finance costs		
Group borrowings	**(59)**	(54)
Finance leases	**(14)**	(37)
Unwinding of discount on provisions (note 28)	**(7)**	(8)
Others	**–**	(2)
Total finance costs	**(80)**	(101)
Finance income		
Bank interest	**3**	3
Unwinding of discount on receivable from Greater Stella Area joint operation partners (note 18)	**4**	–
Unwinding of discount on Pánuco deferred consideration (note 18)	**3**	–
Total finance income	**10**	3

The decrease in finance lease finance costs is mainly due to the transfer of the Berantai FPSO finance lease upon cessation of the Berantai RSC contract on 30 September 2016.

7 Income tax

a. Tax on ordinary activities

The major components of income tax expense/(credit) are as follows:

	*Business performance US$m	Exceptional items and certain re-measurements US$m	Total 2017 US$m	Business performance US$m	Exceptional items and certain re-measurements US$m	Total 2016 US$m
Current income tax						
Current income tax expense	**137**	**(2)**	**135**	110	16	126
Adjustments in respect of previous years	**(4)**	**–**	**(4)**	(5)	–	(5)
Deferred tax						
Relating to origination and reversal of temporary differences	**(34)**	**(64)**	**(98)**	(21)	(15)	(36)
Derecognition of deferred tax previously recognised	**39**	**–**	**39**	–	–	–
Adjustments in respect of previous years	**–**	**–**	**–**	1	–	1
Income tax expense/(credit) reported in the consolidated income statement	**138**	**(66)**	**72**	85	1	86
Income tax reported in equity						
Deferred tax related to items charged directly to equity	**–**	**–**	**–**	1	–	1
Foreign exchange movements on translation	**(5)**	**–**	**(5)**	–	–	–
Income tax reported in equity	**(1)**	**–**	**(1)**	9	–	9
Income tax expense reported in equity	**(6)**	**–**	**(6)**	10	–	10

* This measurement is shown by Petrofac as a means of measuring underlying business performance, see note 2.

The split of the Group's tax charge between current and deferred tax varies from year to year depending largely on:

- the variance between tax provided on the percentage of completion of projects compared to that paid on accrued income for engineering, procurement and construction contracts; and
- the tax deductions available for expenditure on Production Sharing Contract (PSC) and Production Enhancement Contracts (PECs), which are partially offset by the creation of losses.

See 7c below for the impact on the movements in the year.

Included within the US$39m deferred tax derecognition is $38m resulting from a combination of the previously announced changes in UK tax loss relief rules, which were enacted in October 2017, and reduction in UK profit forecasts.

The increase in the sterling to US dollar exchange rate resulted in an increase on translation of the net deferred tax asset in the UK.

b. Reconciliation of total tax charge

A reconciliation between the income tax expense and the product of accounting profit multiplied by the Company's domestic tax rate is as follows:

	*Business performance US$m	Exceptional items and certain re-measurements US$m	Total 2017 US$m	Business performance US$m	Exceptional items and certain re-measurements US$m	Total 2016 US$m
Accounting profit before tax	**483**	**(438)**	**45**	418	(318)	100
At Jersey's domestic income tax rate of 0.0% (2016: 0.0%)	**–**	**–**	**–**	–	–	–
Expected tax charge in higher rate jurisdictions	**73**	**(66)**	**7**	58	(15)	43
Expenditure not allowable for income tax purposes	**15**	**10**	**25**	21	9	30
Income not subject to tax	**(4)**	**–**	**(4)**	(8)	–	(8)
Adjustments in respect of previous years	**(4)**	**–**	**(4)**	(4)	–	(4)
Adjustments in respect of deferred tax previously recognised/unrecognised	**39**	**(2)**	**37**	–	–	–
Unrecognised deferred tax	**21**	**3**	**24**	13	1	14
Other permanent differences	**1**	**(11)**	**(10)**	3	6	9
Effect of change in tax rates	**(3)**	**–**	**(3)**	2	–	2
At the effective income tax rate of 160.0% (2016: 86.0%)	**138**	**(66)**	**72**	85	1	86

* This measurement is shown by Petrofac as a means of measuring underlying business performance, see note 2.

The Group's effective tax rate for the year ended 31 December 2017 is 160.0% (2016: 86.0%). The Group's effective tax rate, excluding the impact of impairments and certain re-measurements, for the year ended 31 December 2017 is 28.6% (2016: 20.3%).

A number of factors have impacted the overall effective tax rate, with the key drivers being: the realisation of impairments without tax benefits and certain re-measurements which are not subject to tax, changes in the recognition of deferred tax and expenditure which is not deductible for tax purposes.

In line with prior years, the effective tax rate is also driven by the tax laws in the jurisdictions where the Group operates and generates profits.

c. Deferred tax

Deferred tax relates to the following:

	Consolidated statement of financial position		Consolidated income statement	
	2017 US$m	2016 US$m	**2017 US$m**	2016 US$m
Deferred tax liabilities				
Fair value adjustment on acquisitions	**–**	3	**–**	–
Accelerated depreciation for tax purposes	**204**	198	**(75)**	(43)
Profit recognition	**42**	56	**(14)**	(14)
Overseas earnings	**8**	6	**2**	3
Other temporary differences	**6**	–	**5**	(4)
Gross deferred tax liabilities	**260**	263		
Deferred tax assets				
Losses available for offset	**221**	170	**34**	(10)
Decelerated depreciation for tax purposes	**3**	3	**–**	2
Share-based payment plans	**4**	3	–	–
Profit recognition	**–**	–	**–**	3
Decommissioning	**39**	36	**(3)**	21
Other temporary differences	**27**	20	**(8)**	7
Gross deferred tax assets	**294**	232		
Net deferred tax (asset)/liability and income tax credit	**(34)**	31	**(59)**	(35)
Of which:				
Deferred tax assets	**101**	63		
Deferred tax liabilities	**67**	94		

Included within the net deferred tax asset are tax losses of US$688m (2016: $659m). This represents the losses which are expected to be utilised based on Management's projection of future taxable profits in the jurisdictions in which the losses reside.

The movements in deferred tax balances include foreign exchange on consolidation and elements included within business combinations within exceptional items and certain re-measurements (notes 5 and 10) and are therefore not part of the tax charge/(credit) to the consolidated income statement for the year. These include deferred tax assets and liabilities, which net to US$nil, with respect to the acquisition of Greater Stella Area (GSA) licence and reclassification of deferred tax balances with respect to the migration of Santuario from a Production Enhancement Contract (PEC) to a Production Sharing Contract (PSC).

d. Unrecognised tax losses and tax credits

Deferred income tax assets are recognised for tax loss carry forwards and tax credits to the extent that the realisation of the related tax benefit through offset against future taxable profits is probable. The Group did not recognise gross deferred income tax assets on tax losses of US$1,157m (2016: US$524m).

	2017 US$m	2016 US$m
Expiration dates for tax losses		
No later than 2025	**5**	–
No expiration date	**1,140**	512
	1,145	512
Tax credits (no expiration date)	**12**	12
	1,157	524

During 2017, there has been no recognition of previously unrecognised losses (2016: US$nil).

8 Earnings per share

Basic earnings per share is calculated by dividing the profit for the year attributable to Petrofac Limited shareholders by the weighted average number of ordinary shares outstanding during the year.

Diluted earnings per share is calculated by dividing the profit attributable to Petrofac Limited shareholders, after adjusting for any dilutive effect, by the weighted average number of ordinary shares outstanding during the year, adjusted for the effects of ordinary shares granted under the share-based payment plans which are held in trust.

The following reflects the profit and share data used in calculating basic and diluted earnings per share:

	2017 US$m	2016 US$m
Profit attributable to Petrofac Limited shareholders for basic and diluted earnings per share excluding exceptional items and certain re-measurements	**343**	320
(Loss)/profit attributable to Petrofac Limited shareholders for basic and diluted earnings per share including exceptional items and certain re-measurements	**(29)**	1

	2017 Shares million	2016 Shares million
Weighted average number of ordinary shares for basic earnings per share	**340**	340
Effect of dilutive potential ordinary shares granted under share-based payment plans[1]	**–**	3
Adjusted weighted average number of ordinary shares for diluted earnings per share	**340**	343

1 For the year ended 31 December 2017, potentially issuable ordinary shares under the share-based payment plans are excluded from the diluted earnings per ordinary share calculaton, as their inclusion would decrease the loss per ordinary share.

9 Dividends paid and proposed

	2017 US$m	2016 US$m
Declared and paid during the year		
Equity dividends on ordinary shares:		
Final dividend for 2015: 43.8 cents per share	**–**	149
Interim dividend 2016: 22.0 cents per share	**–**	75
Final dividend for 2016: 43.8 cents per share	**148**	–
Interim dividend 2017: 12.7 cents per share	**44**	–
	192	224

	2017 US$m	2016 US$m
Proposed for approval at AGM		
(not recognised as a liability as at 31 December)		
Equity dividends on ordinary shares		
Final dividend for 2017: 25.3 cents per share (2016: 43.8 cents per share)	**88**	152

10 Business combination

Greater Stella Area (GSA) licence

On 21 September 2017, upon receiving Oil and Gas Authority (OGA) approval in the UK, the Group acquired a 20% ownership interest in the GSA field in the North Sea. The transaction was treated as an acquisition of an interest in a joint operation and IFRS 3 'Business combination' requirements were applied. The interest acquired is classified as a joint operation, as contractually all the decisions concerning the relevant activities of the unincorporated joint arrangement require unanimous consent of the joint arrangement partners. The acquisition related to the Integrated Energy Services reporting segment.

The Group's share of the fair value of the identifiable assets and liabilities of the joint operation recognised at the date of acquisition was as follows:

	US$m
Property, plant and equipment (note 11)	**149**
Receivable from the Greater Stella Area joint operation partners (note 18)	**80**
	229
Less:	
Provision for decommissioning (note 28)	**(19)**
Fair value of net assets acquired	**210**

At the date of acquisition, the receivable in respect of the GSA development had a carrying amount of US$250m (note 18) of which, US$210m was contributed to acquire a 20% ownership interest in the joint operation which resulted in no gain or loss on the transaction. The remaining US$40m was recognised as a long-term receivable from the GSA joint operation partners (note 18).

The fair value of property, plant and equipment was determined using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair value measurement') discounted at a post-tax rate of 9.5%. Management used forward curve oil prices of US$53 per barrel and forward curve gas prices of US$6 per mcf from the date of acquisition until June 2019. For later periods, the long-term planning oil price assumptions used were US$70 per barrel from July 2019 to December 2019, and US$75 per barrel for 2020 and beyond. The long-term planning gas price assumptions used were US$8 per mcf from July 2019 to December 2019, and US$9 per mcf for 2020 and beyond.

The financial asset represents the discounted value of the long-term receivables due from the GSA joint operation partners and is accounted for on an amortised cost basis using a contractually agreed discount rate of 8.5% with the unwinding interest income being recognised as finance income in the consolidated income statement.

There are no cash outflows arising from the transaction.

From the date of acquisition, the joint operation contributed US$20m of revenue and US$3m of profit to the Group. If the above business combination had taken place upon achieving first oil in February 2017, the Group's share of revenue and profit for the year ended 31 December 2017 from the GSA joint operation would have been US$37m and US$4m respectively.

Migration of Santuario Production Enhancement Contract (PEC) to Production Sharing Contract (PSC)
On 18 December 2017, the Group migrated its existing Santuario PEC to acquire a 36% ownership interest in the PSC. The Group now has a proportional interest in the PSC assets, operates under a different commercial model and acts as an Operator on behalf of the joint arrangement partners. The PSC will run for 25 years, with two optional five-year extensions. The PSC was treated as a joint operation since contractually all the decisions concerning the relevant activities of the unincorporated joint arrangement require unanimous consent of the joint arrangement partners. The transaction was treated as an acquisition of an interest in a joint operation and IFRS 3 'Business combination' requirements were applied. The acquisition related to the Integrated Energy Services reporting segment.

At the date of acquisition, the existing oil and gas assets of the Santuario PEC were fair valued using the risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair value measurement') discounted at a post-tax rate of 9.5%. The oil price assumptions used by Management were the same as those disclosed in note 5 on page 137. This resulted in an impairment charge of US$29m (post-tax US$20m) being recognised as an exceptional item in the consolidated income statement (note 5). The carrying amount of the assets and liabilities shown below relating to the Santuario PEC were derecognised from the consolidated statement of financial position and represented the fair value of consideration for acquiring a 36% ownership interest in the PSC.

	US$m
Property, plant and equipment (note 11)	**100**
Intangible assets (note 15)	**5**
Inventories (note 19)	**2**
Trade and other receivables (note 21)	**128**
Provision for decommissioning (note 28)	**(10)**
Deferred tax liabilities (note 7)	**(2)**
Trade and other payables (note 29)	**(17)**
Carrying amount of net assets derecognised	**206**

The Group's share of fair value of the identifiable assets and liabilities of the PSC at the date of acquisition was as follows:

	US$m
Property, plant and equipment (note 11)	**213**
Less:	
Provision for decommissioning (note 28)	**(5)**
Deferred tax liabilities (note 7)	**(2)**
Fair value of net assets acquired	**206**

The fair value of property, plant and equipment was determined using risk adjusted cash flow projections (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair value measurement') discounted at a post-tax rate of 9.5%. The oil price assumptions used by Management were the same as those disclosed in note 5 on page 137.

There are no cash outflows arising from the transaction.

From the date of acquisition, the PSC contributed US$1m of revenue and US$293,000 of profit to the Group. If the above business combination had taken place at the beginning of the year, the Group's share of revenue and loss for the year ended 31 December 2017 from the PSC would have been US$24m and US$2m respectively.

11 Property, plant and equipment

	Oil and gas assets US$m	Oil and gas facilities US$m	Land, buildings and leasehold improvements US$m	Plant and equipment US$m	Vehicles US$m	Office furniture and equipment US$m	Assets under construction US$m	Total US$m
Cost								
At 1 January 2016	1,426	621	364	50	25	193	318	2,997
Additions	15	–	37	1	1	9	80	143
Revision to decommissioning estimates (note 28)	(101)	–	–	–	–	–	–	(101)
Disposals	(103)	(201)	(45)	(8)	(2)	(17)	(29)	(405)
Transfer from intangible oil and gas assets (note 15)	(5)	–	–	–	–	–	–	(5)
Transfers	–	–	10	–	–	–	(10)	–
Transfer to assets held for sale (note 14)	(86)	–	–	–	–	–	–	(86)
Write off	–	–	(1)	–	–	(1)	–	(2)
Exchange difference	–	–	(4)	(3)	–	(11)	–	(18)
At 1 January 2017	1,146	420	361	40	24	173	359	2,523
Recognised on acquisition (note 10)	362	–	–	–	–	–	–	362
Additions	65	–	7	–	–	8	35	115
Derecognised on migration of Santuario PEC to PSC (note 10)	(218)	–	–	–	–	–	–	(218)
Derecognised due to change in finance lease terms	–	(239)	–	–	–	–	–	(239)
Re-recognised due to change in finance lease terms	–	179	–	–	–	–	–	179
Disposals	–	(47)	–	–	–	(2)	–	(49)
Transfer from intangible oil and gas assets (note 15)	(1)	–	–	–	–	–	–	(1)
Transfer to assets held for sale (note 14)	–	–	–	–	–	–	(393)	(393)
Write off	–	–	–	–	–	(1)	–	(1)
Exchange difference	–	–	2	1	–	4	–	7
At 31 December 2017	**1,354**	**313**	**370**	**41**	**24**	**182**	**1**	**2,285**
Depreciation & impairment								
At 1 January 2016	(525)	(254)	(211)	(38)	(22)	(143)	(29)	(1,222)
Charge for the year	(82)	(38)	(35)	(3)	(2)	(22)	–	(182)
Charge for impairment (note 5)	–	(15)	–	–	–	–	–	(15)
Disposals	103	62	41	8	2	16	29	261
Transfer to assets held for sale (note 14)	38	–	–	–	–	–	–	38
Write off	–	–	1	–	–	1	–	2
Exchange difference	–	–	3	2	–	8	–	13
At 1 January 2017	(466)	(245)	(201)	(31)	(22)	(140)	–	(1,105)
Charge for the year	(92)	(22)	(35)	(2)	(1)	(18)	–	(170)
Charge for impairment (note 5)	(135)	(25)	–	–	–	–	(176)	(336)
Derecognised on migration of Santuario PEC to PSC (note 10)	118	–	–	–	–	–	–	118
Derecognised due to change in finance lease terms	–	91	–	–	–	–	–	91
Disposals	–	37	–	–	–	2	–	39
Transfer to assets held for sale (note 14)	–	–	–	–	–	–	176	176
Write off	–	–	–	–	–	1	–	1
Exchange difference	–	–	(2)	(1)	–	(4)	–	(7)
At 31 December 2017	**(575)**	**(164)**	**(238)**	**(34)**	**(23)**	**(159)**	**–**	**(1,193)**
Net carrying amount:	**779**	**149**	**132**	**7**	**1**	**23**	**1**	**1,092**
At 31 December 2016	680	175	160	9	2	33	359	1,418

The Group recognised US$149m (note 10) of oil and gas assets from the acquisition of a 20% ownership interest in the Greater Stella Area (GSA) field in the North Sea, UK and US$213m (note 10) from the acquisition of a 36% ownership interest in the Santuario Production Sharing Contract (PSC).

Additions to oil and gas assets mainly comprise GSA capital expenditure of US$63m (2016: Santuario, Magallanes and Arenque PECs of US$12m). Additions to land, buildings and leasehold improvements mainly comprise project camps and temporary facilities linked to the Engineering & Construction reporting segment.

During 2017, oil and gas assets having a carrying amount of US$129m (note 10) relating to Santuario Production Enhancement Contract (PEC) in Mexico were derecognised and converted to a 36% ownership interest in Production Sharing Contract (PSC).

During 2017, the Group renegotiated its existing finance leases relating to Block PM304 in Malaysia. As a result, the Group derecognised its existing finance lease assets included within oil and gas facilities with a carrying amount of US$148m and re-recognised finance lease assets of US$179m, under the revised finance lease terms, also within oil and gas facilities. A net gain of US$4m (note 4e) was recognised on the re-recognition since the gain on re-recognition of finance lease asset was partly offset by a loss on re-recognition of finance lease liability, refer note 18 on page 150.

The negative transfer from intangible oil and gas assets of US$1m relating to Block PM304 in Malaysia is due to the reversal of excess capital expenditure accruals recorded in the prior year (2016: US$5m).

The disposal of oil and gas facilities having a carrying amount of US$10m relates to a disposal of the FPSO Opportunity vessel attributable to the Integrated Energy Services reporting segment (note 5).

Of the total charge for depreciation in the consolidated income statement, US$149m (2016: US$162m) is included in cost of sales and US$17m (2016: US$20m) in selling, general and administration expenses.

At 31 December 2017, US$393m relating to the JSD6000 installation vessel was reclassified from assets under construction to assets held for sale (note 14). Borrowing costs capitalised on construction of the JSD6000 installation vessel in 2017 amounted to US$2m (2016: US$2m).

Included in 'oil and gas facilities' and 'plant and equipment' is property, plant and equipment under finance lease agreements, for which the net book values are as follows:

Net book value	2017 US$m	2016 US$m
At 1 January	**174**	351
Disposal	**–**	(139)
Derecognised due to change in finance lease terms	**(148)**	–
Re-recognised due to change in finance lease terms	**179**	–
Impairment	**(18)**	–
Depreciation	**(37)**	(38)
At 31 December	**150**	174

Disposal of finance lease assets in 2016 related to the cancellation of Berantai FPSO finance lease and subsequent transfer of ownership of the vessel to the customer.

12 Non-controlling interests

Petrofac Emirates LLC, a non-wholly owned subsidiary, is determined to be material to the Group. The proportion of the nominal value of issued shares controlled by the Group is disclosed in note 34.

Movement of non-controlling interest in Petrofac Emirates LLC	2017 US$m	2016 US$m
At 1 January	**25**	4
Profit for the year	**3**	13
Net unrealised gains on derivatives	**11**	9
Dividend paid	**(3)**	(1)
At 31 December	**36**	25

The balance of non-controlling interests relates to other non-wholly owned subsidiaries that are not considered to be material to the Group.

12 Non-controlling interests continued

Summarised financial information for Petrofac Emirates LLC, a non-wholly owned subsidiary, which has non-controlling interests that are material to the Group is shown below:

Summarised income statement	2017 US$m	2016 US$m
Revenue	**534**	1,194
Cost of sales	**(495)**	(1,095)
Gross profit	**39**	99
Selling, general and administration expenses	**(19)**	(41)
Finance expense	**(8)**	(6)
Profit for the year	**12**	52
Attributable to non-controlling interest	**3**	13
Net unrealised losses on derivatives		
Net unrealised losses on derivatives at 1 January	**(48)**	(83)
Other comprehensive income during the year	**43**	35
Net unrealised losses on derivatives at 31 December	**(5)**	(48)
Net unrealised losses on derivatives attributable to non-controlling interest (note 26)	**(1)**	(12)
Total comprehensive income attributable to non-controlling interest	**14**	22
Summarised statement of financial position		
Non-current assets	**200**	221
Current assets	**592**	715
Total assets	**792**	936
Non-current liabilities	**3**	4
Current liabilities	**646**	832
Total liabilities	**649**	836
Total equity	**143**	100
Attributable to non-controlling interest	**36**	25
Summarised cash flow information		
Operating	**(187)**	80
Investing	**(1)**	(10)

Dividends of US$12m were declared during 2017 (2016: US$4m), of which US$3m was attributable to the non-controlling interest (2016: US$1m). There was no cash outflow to the non-controlling interest since the dividends were adjusted against the receivable balance included within current assets in the individual financial statements of Petrofac Emirates LLC.

13 Goodwill

A summary of the movements in goodwill is presented below:

	2017 US$m	2016 US$m
At 1 January	**72**	80
Exchange difference	**4**	(8)
At 31 December	**76**	72

Goodwill resulting from business combinations has been allocated to two cash-generating units for impairment testing as follows:

- Engineering & Construction
- Engineering & Production Services

These cash-generating units represent the lowest level within the Group at which goodwill is monitored for internal management purposes. The Group considers cash-generating units to be individually significant where they represent greater than 25% of the total goodwill balance.

Recoverable amounts have been determined based on value in use calculations, using discounted pre-tax cash flow projections. Management has adopted projection periods appropriate to each unit's value in use. For the Engineering & Construction and Engineering & Production Services cash-generating units the cash flow projections are based on a five-year business plan approved by the Board.

Carrying amount of goodwill allocated to each group of cash-generating units

	2017 US$m	2016 US$m
Engineering & Construction	**32**	32
Engineering & Production Services	**44**	40
	76	72

Key assumptions used in value in use calculations

Market share: the key management assumptions relate to maintaining existing levels of business and growing organically in international markets.

Discount rate: management has used a pre-tax discount rate of 11.6% per annum (2016: 11.6% per annum) derived from the estimated weighted average cost of capital of the Group. A 100 basis point increase in the pre-tax discount rate to 12.6% would result in no additional impairment charges.

14 Assets held for sale

The JSD6000 installation vessel (the 'vessel') had a pre-impairment carrying amount of US$393m at 31 December 2017, and was reclassified from assets under construction within property, plant and equipment to assets held for sale, since the vessel's carrying amount is expected to be recovered principally through a disposal transaction rather than through its intended use. Based on discussions with potential counterparties, Management has determined that the recoverable amount of the vessel (fair value less costs of disposal) was lower than its carrying amount and as a result has recognised an impairment charge of US$176m as an exceptional item (note 5) in the consolidated income statement. The vessel is available for immediate sale in its present condition and location. The disposal is expected to be completed within 12 months from the end of the reporting period and relates to the Engineering & Construction reporting segment.

The fair value less cost of disposal of the vessel used in the impairment calculation on reclassifying the vessel as an asset held for sale was considered by Management to be a reasonable estimate. Commercial negotiations with the counterparty had not concluded at the end of the reporting period and the final contractual fair value less cost of disposal in the sale and purchase agreement may be less than the amount used in the reclassification impairment calculation. If this were to occur then an additional impairment charge would be recognised in the consolidated income statement.

The assets and liabilities shown below are classified as held for sale at 31 December:

	2017 US$m	2016 US$m
Assets held for sale		
Property, plant and equipment (note 11)	**217**	48
Other intangible assets (note 15)	**–**	2
Trade and other receivables (note 21)	**–**	78
	217	128

	2017 US$m	2016 US$m
Liabilities associated with assets held for sale		
Provision for decommissioning (note 28)	**–**	21
Trade and other payables (note 29)	**–**	13
	–	34

During 2016, the Group signed a sale and purchase agreement with Schlumberger for the disposal of its Pánuco Production Enhancement Contract (PEC) in Mexico. The disposal, which related to Integrated Energy Services reporting segment, was completed in 2017 and no gain or loss was recognised. The net assets of Pánuco PEC at the time of disposal were US$95m, where US$1m represented a working capital change during the year. As part of the disposal proceeds, US$10m was received in cash during August 2017 and the balance of US$85m (note 18), discounted using post-tax rate of 9.5%, represents deferred consideration recoverable over a period of 12 years and is primarily contingent upon Pánuco PEC being migrated to a Production Sharing Contract (PSC). The deferred consideration was initially recorded at fair value and will subsequently be also measured at fair value through profit or loss with any fair value gains and losses recorded as an exceptional item in the consolidated income statement. The unwinding of the discount on the deferred consideration of US$3m was recognised as finance income in the consolidated income statement.

15 Intangible assets

	2017 US$m	2016 US$m
Intangible oil and gas assets		
Cost:		
At 1 January	**80**	86
Additions	**8**	3
Accrual adjustment	**(9)**	(11)
Transfer to oil and gas assets (note 11)	**1**	5
Impairment (note 5)	**(7)**	–
Write off (note 4b and note 4c)	**(6)**	(3)
Net book value of intangible oil and gas assets at 31 December	**67**	80
Other intangible assets		
Cost:		
At 1 January	**41**	48
Derecognised on Santuario PEC to PSC (note 10)	**(6)**	–
Disposal	**–**	(2)
Impairment (note 5)	**(1)**	–
Write off	**(9)**	–
Transfer to assets held for sale (note 14)	**–**	(2)
Exchange difference	**1**	(3)
At 31 December	**26**	41
Accumulated amortisation:		
At 1 January	**(25)**	(27)
Amortisation (note 4b and note 4c)	**(1)**	(3)
Derecognised on Santuario PEC to PSC (note 10)	**1**	–
Disposal	**–**	2
Write off	**9**	–
Exchange difference	**(1)**	3
At 31 December	**(17)**	(25)
Net book value of other intangible assets at 31 December	**9**	16
Total intangible assets	**76**	96

Intangible oil and gas assets
Oil and gas assets (part of the Integrated Energy Services reporting segment) additions comprise US$7m (2016: US$3m) of capitalised expenditure on the Group's assets in Malaysia.

Accrual adjustment of US$9m (2016: US$11m) represents a reversal of excess capital expenditure accruals in the prior year.

During 2017, intangible oil and gas assets having a carrying amount of US$5m (note 10) relating to Santuario Production Enhancement Contract (PEC) in Mexico were derecognised and converted to a 36% ownership interest in a Production Sharing Contract (PSC).

Other intangible assets
Other intangible assets comprising project development expenditure, customer contracts, proprietary software and patent technology are being amortised over their estimated economic useful life on a straight-line basis and the related amortisation charges included in cost of sales and selling, general and administration expenses (note 4b and 4c).

16 Investments in associates and joint ventures

	Associates US$m	Joint ventures US$m	Total US$m
As at 1 January 2016	69	5	74
Additions	7	–	7
Share of profits	11	1	12
Dividends received	(27)	(1)	(28)
As at 1 January 2017	60	5	65
Loans advanced/(repaid) by associates/joint ventures	(8)	10	2
Share of profits/(losses)	12	(1)	11
Dividends received	(3)	(1)	(4)
As at 31 December 2017	**61**	**13**	**74**

Dividends received during the year include US$2m received from PetroFirst Infrastructure Limited, US$1m received from PetroFirst Infrastructure 2 Limited and US$1m received from TTE Petrofac Limited (2016: US$24m received from PetroFirst Infrastructure Limited, US$2m received from PetroFirst Infrastructure 2 Limited, US$1m received from TTE Petrofac Limited and US$1m receivable from PetroFirst Infrastructure Limited).

During 2016, the Group acquired 10% of the share capital of PetroFirst Infrastructure 2 Limited amounting to US$7m out of which US$5m was paid in cash and the balance of US$2m represented deferred consideration. The investment is classified as an associate due to the Group's representation on the board of directors and ability to exercise significant influence over the investee.

Associates

	2017 US$m	2016 US$m
PetroFirst Infrastructure Limited	**16**	15
Petrofac FPF1 Limited	**40**	40
PetroFirst Infrastructure 2 Limited	**5**	5
	61	60

Interest in associates

Summarised financial information of associates[1], based on their IFRS financial statements, and a reconciliation with the carrying amount of the investment in associates in the consolidated statement of financial position are set out below:

	2017 US$m	2016 US$m
Revenue	**104**	118
Cost of sales	**(38)**	(40)
Gross profit	**66**	78
Finance expense, net	**(11)**	(19)
Profit	**55**	59
Group's share of profit for the year	**12**	11
Non-current assets	**418**	444
Current assets	**39**	71
Total assets	**457**	515
Non-current liabilities	**123**	161
Current liabilities	**43**	63
Total liabilities	**166**	224
Net assets	**291**	291
Group's share of net assets	**61**	60
Carrying amount of the investment in associates	**61**	60

1 A list of all associates is disclosed in note 34.

No associates had contingent liabilities or capital commitments as at 31 December 2017 and 2016.

16 Investments in associates and joint ventures continued

Joint ventures

	2017 US$m	2016 US$m
Takatuf Petrofac Oman LLC	**10**	–
Spiecapag – Petrofac International Limited	**2**	2
TTE Petrofac Limited	**1**	2
China Petroleum Petrofac Engineering Services Coöperatief U.A.	**–**	1
	13	5

Interest in joint ventures

Summarised financial information of the joint ventures[1], based on their IFRS financial statements, and a reconciliation with the carrying amount of the investment in joint ventures in the consolidated statement of financial position are set out below:

	2017 US$m	2016 US$m
Revenue	**1**	12
Cost of sales	**(1)**	(7)
Gross profit	**–**	5
Selling, general and administration expenses	**(2)**	(2)
(Loss)/profit before income tax	**(2)**	3
Income tax	**–**	(1)
(Loss)/profit	**(2)**	2
Group's share of (loss)/profit for the year	**(1)**	1
Non-current assets	**34**	9
Current assets	**8**	13
Total assets	**42**	22
Non-current liabilities	**–**	1
Current liabilities	**11**	11
Total liabilities	**11**	12
Net assets	**31**	10
Group's share of net assets	**13**	5
Carrying amount of the investment in joint ventures	**13**	5

1 A list of all joint ventures is disclosed in note 34.

The Group's share of capital commitments relating to the construction of a new training centre in Oman was US$5m (2016: US$6m). No joint ventures had contingent liabilities as at 31 December 2017 and 2016. The joint ventures cannot distribute their distributable reserves until they obtain consent from the venturers.

17 Available-for-sale investment

	2017 US$m	2016 US$m
As at 1 January	**–**	169
Additions	**–**	12
Impairment (note 5)	**–**	(181)
As at 31 December	**–**	–

During 2016, an impairment charge of US$181m was recognised relating to the Seven Energy available-for-sale investment which, together with the US$16m reduction previously recognised through the reserve for unrealised gains/(losses) on available-for-sale investment which had been reclassified to the consolidated income statement, amounted to a total exceptional charge of US$197m (note 5).

At 31 December 2017, the fair value of Seven Energy available-for-sale investment was re-assessed and no fair value changes were noted.

18 Other financial assets and other financial liabilities

Other financial assets	Classification	2017 US$m	2016 US$m
Non-current			
Receivable from joint operation partners for finance leases	Loans and receivables	**305**	235
Receivable from the Greater Stella Area joint operation partners (note 10)	Loans and receivables	**124**	–
Pánuco deferred consideration (note 14)	Fair value through profit and loss	**49**	–
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**23**	42
Restricted cash	Loans and receivables	**40**	41
Advances relating to provision for decommissioning liability	Loans and receivables	**12**	–
		553	318
Current			
Receivable in respect of the development of the Greater Stella Area	Fair value through profit and loss	**–**	276
Receivable from joint operation partners for finance leases	Loans and receivables	**76**	179
Pánuco deferred consideration (note 14)	Fair value through profit and loss	**39**	–
Receivable under the Berantai RSC	Fair value through profit and loss	**–**	71
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**21**	9
Forward currency contracts undesignated (note 33)	Fair value through profit and loss	**1**	5
Restricted cash	Loans and receivables	**9**	6
		146	546
Other financial liabilities			
Non-current			
Finance lease creditors (note 30)	Loans and borrowings	**435**	336
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**8**	12
		443	348
Current			
Finance lease creditors (note 30)	Loans and borrowings	**112**	260
Forward currency contracts designated as hedges (note 33)	Designated as cash flow hedges	**16**	88
Forward currency contracts undesignated (note 33)	Fair value through profit and loss	**9**	4
Oil derivative (note 33)	Designated as cash flow hedges	**2**	2
Interest payable	Fair value through profit and loss	**12**	14
		151	368

A reconciliation of the fair value measurement of the Pánuco deferred consideration is presented below:

	2017 US$m	2016 US$m
Initial recognition (note 14)	**85**	–
Unwinding of discount	**3**	–
As at 31 December	**88**	–

The receivable in respect of the development of the Greater Stella Area was converted into a 20% ownership interest in the GSA joint operation on 21 September 2017 upon receiving OGA approval (note 10). The fair value changes during the year have been calculated using the risk adjusted cash flow projections discounted at a post-tax rate of 9.5% (2016: 9.5%). A reconciliation of the fair value measurement of the amounts receivable in respect of the development of the Greater Stella Area is presented below:

	2017 US$m	2016 US$m
As at 1 January	**276**	160
Advances during the year to the partners	**51**	119
Fair value loss (note 5)	**(77)**	(3)
Converted to 20% interest in GSA joint operation (note 10)	**(250)**	–
As at 31 December	**–**	276

18 Other financial assets and other financial liabilities continued

During 2016, the cessation of the Berantai Risk Sharing Contract (RSC) was completed with PETRONAS and the outstanding receivable of US$71m at 31 December 2016 was recovered in full during the year ended 31 December 2017. A reconciliation of the fair value measurement of the amounts receivable under the Berantai RSC is presented below:

	2017 US$m	2016 US$m
As at 1 January	71	357
Billings during the year	–	62
Fair value loss included in revenue	–	(45)
Receipts during the year[1]	(71)	(303)
As at 31 December	–	71

1 Receipts during the year includes US$45m from non-recourse factoring (2016: US$257m).

The receivable from the Greater Stella Area (GSA) joint operation partners represents the discounted value of the long-term receivables due from the GSA joint operation partners, recognised from the acquisition of a 20% ownership interest in the GSA field in the North Sea, UK (note 10) and is accounted for on an amortised cost basis using a contractually agreed discount rate of 8.5% with the unwinding interest income being recognised as finance income in the consolidated income statement. During the year, the Group recognised unwinding interest income of US$4m (2016: US$nil).

The current and non-current receivable from joint operation partners represents the 70% gross up on the finance lease liability in respect of oil and gas facilities relating to Block PM304 in Malaysia that are included 100% in the Group's consolidated statement of financial position. This treatment is necessary to reflect the legal position of the Group as the contracting entity for this lease. The Group's 30% share of this liability is US$163m (2016: US$177m).

During 2017, advances relating to the decommissioning provision of US$12m were reclassified from trade and other receivables to non-current other financial assets and represents advance payments to PETRONAS for settling decommissioning liability, relating to Block PM304 in Malaysia, when they become due.

Restricted cash comprises deposits with financial institutions and joint operation partners securing various guarantees and performance bonds associated with the Group's operating activities (note 30). This cash will be released on the maturity of these guarantees and performance bonds assuming that the related conditions to release such amounts were satisfied.

Changes in liabilities arising from financing activities

	1 January 2017 US$m	Cash inflows US$m	Cash outflows US$m	Derecognised US$m	New leases US$m	Cash outflows paid by joint operation partners US$m	31 December 2017 US$m
Interest-bearing loans and borrowings*	1,762	1,106	(1,303)	–	–	–	1,565
Finance lease creditors	596	–	(43)	(506)	597	(97)	547
At 31 December 2017	**2,358**	**1,106**	**(1,346)**	**(506)**	**597**	**(97)**	**2,112**

* Interest-bearing loans and borrowings excludes overdrafts since these are included within cash and equivalents. Debt acquisition costs paid during the year amounted to US$1m.

The Group records the gross liability for finance leases in its financial statements, however the cashflows above represent the Group's 30% share of the payments.

During 2017, the Group renegotiated its existing finance leases relating to Block PM304 in Malaysia. As a result, the Group derecognised its existing finance lease liabilities of US$506m (Group's 30% ownership interest US$152m) and re-recognised finance lease liabilities of US$597m (Group's 30% ownership interest US$179m), under the revised finance lease terms. A net gain of US$4m (note 4e) was recognised on the re-recognition since the gain on re-recognition of finance lease asset was partly offset by a loss on re-recognition of finance lease liability, refer note 11 on page 143.

Fair value measurement

The following financial instruments are measured at fair value using the hierarchy below for determination and disclosure of their respective fair values:

Level 1: Unadjusted quoted prices in active markets for identical financial assets or liabilities

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)

Level 3: Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

Set out below is a comparison of the carrying amounts and fair values of financial instruments as at 31 December:

	Level	Carrying amount		Fair value	
		2017 US$m	2016 US$m	**2017 US$m**	2016 US$m
Financial assets					
Cash and short-term deposits	Level 2	**967**	1,167	**967**	1,167
Restricted cash	Level 2	**49**	47	**49**	47
Receivable from joint operation partners for finance leases	Level 2	**381**	414	**381**	414
Receivable from the Greater Stella Area joint operation partners	Level 2	**124**	–	**124**	–
Pánuco deferred consideration	Level 3	**88**	–	**88**	–
Receivable in respect of the development of the Greater Stella Area	Level 3	**–**	276	**–**	276
Receivable under Berantai RSC	Level 2	**–**	71	**–**	71
Euro forward currency contracts – designated as cash flow hedge	Level 2	**43**	47	**43**	47
Kuwaiti dinar forward currency contracts – designated as cash flow hedge	Level 2	**–**	1	**–**	1
Sterling forward currency contracts – designated as cash flow hedge	Level 2	**1**	3	**1**	3
Sterling forward currency contracts – undesignated	Level 2	**1**	5	**1**	5
Financial liabilities					
Interest-bearing loans and borrowings					
Senior Notes	Level 2	**676**	674	**677**	677
Term loans	Level 2	**198**	300	**200**	300
Revolving Credit Facility	Level 2	**550**	637	**555**	645
Export Credit Agency funding	Level 2	**124**	129	**133**	140
Bank overdrafts	Level 2	**31**	44	**31**	44
Finance lease creditors	Level 2	**547**	596	**547**	596
Interest payable	Level 2	**12**	14	**12**	14
Oil derivative	Level 2	**2**	2	**2**	2
Euro forward currency contracts – designated as cash flow hedge	Level 2	**11**	45	**11**	45
Malaysian ringgit forward currency contracts – designated as cash flow hedge	Level 2	**1**	15	**1**	15
Kuwaiti dinar forward currency contracts – designated as cash flow hedge	Level 2	**12**	30	**12**	30
Japanese yen forward currency contracts – designated as cash flow hedge	Level 2	**–**	5	**–**	5
Sterling forward currency contracts – designated as cash flow hedge	Level 2	**–**	5	**–**	5
Sterling forward currency contracts – undesignated	Level 2	**9**	1	**9**	1
Euro forward currency contracts – undesignated	Level 2	**–**	2	**–**	2
Kuwaiti dinar forward currency contracts – undesignated	Level 2	**–**	1	**–**	1

The Group considers that the carrying amounts of trade and other receivables, work-in-progress, trade and other payables, other current and non-current financial assets and liabilities approximate their fair values and are therefore excluded from the above table.

The fair value of the financial assets and liabilities is included at the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

The following methods and assumptions were used to estimate the fair values:

- The Group enters into derivative financial instruments with various counterparties, principally financial institutions with investment grade credit ratings. Derivatives valued using valuation techniques with market observable inputs are mainly foreign exchange forward contracts and oil derivatives. Externally provided sources of quoted market prices have been used to determine the fair values of forward currency contracts and oil derivatives.
- The fair values of long-term interest-bearing loans and borrowings and finance lease creditors are equivalent to their amortised costs determined as the present value of discounted future cash flows using the effective interest rate.
- The Pánuco deferred consideration, discounted using a post-tax rate of 9.5%, represents deferred consideration recoverable over a period of 12 years and is primarily contingent upon the Pánuco Production Enhancement Contract (PEC) being migrated to a Production Sharing Contract (PSC). The carrying amount of the deferred consideration is not considered to be sensitive to any changes to these inputs since the terms of the deferred consideration ensure that the Group will recover the carrying amount of the deferred consideration over the 12 year period.

19 Inventories

	2017 US$m	2016 US$m
Crude oil	**2**	2
Stores and raw materials	**6**	9
	8	11

During 2017, inventories having a carrying amount of US$2m (note 10) relating to the Santuario Production Enhancement Contract (PEC) in Mexico were derecognised and converted to a 36% ownership interest in a Production Sharing Contract (PSC). Inventories relating to the FPSO Opportunity vessel were impaired during the year and an impairment charge of US$1m (2016: US$nil) was recognised as an exceptional item in the consolidated income statement (note 5).

Included within cost of sales in the consolidated income statement are costs of inventories expensed of US$97m (2016: US$115m).

20 Work in progress and billings in excess of cost and estimated earnings

	2017 US$m	2016 US$m
Cost and estimated earnings	**22,799**	25,161
Less: billings	**(20,576)**	(22,979)
Work in progress	**2,223**	2,182
Billings	**5,897**	288
Less: cost and estimated earnings	**(5,699)**	(244)
Billings in excess of cost and estimated earnings	**198**	44
Total cost and estimated earnings	**28,498**	25,405
Total billings	**26,473**	23,267

21 Trade and other receivables

	2017 US$m	2016 US$m
Trade receivables	**1,108**	1,377
Retentions receivables	**379**	305
Advances	**261**	293
Prepayments and deposits	**35**	28
Receivables from joint operation partners	**96**	50
Other receivables	**141**	109
	2,020	2,162

Trade receivables are non-interest bearing and credit terms are generally granted to customers on 30 to 60 days' basis. Trade receivables are reported net of provision for impairment. The movements in the provision for impairment against trade receivables are as follows:

	2017			2016		
	Specific impairment US$m	General impairment US$m	Total US$m	Specific impairment US$m	General impairment US$m	Total US$m
At 1 January	**11**	**2**	**13**	11	1	12
Charge/(reversal) for the year	**3**	**(1)**	**2**	–	1	1
Amounts written off	**(1)**	**–**	**(1)**	–	–	–
At 31 December	**13**	**1**	**14**	11	2	13

At 31 December, the analysis of trade receivables is as follows:

		Number of days past due						
	Neither past due nor impaired US$m	< 30 days US$m	31–60 days US$m	61–90 days US$m	91–120 days US$m	121–360* days US$m	> 360* days US$m	Total US$m
Unimpaired	**769**	**84**	**59**	**19**	**3**	**39**	**110**	**1,083**
Impaired	**–**	**–**	**–**	**–**	**4**	**20**	**15**	**39**
	769	**84**	**59**	**19**	**7**	**59**	**125**	**1.122**
Less: impairment provision	**–**	**–**	**–**	**–**	**–**	**(1)**	**(13)**	**(14)**
Net trade receivables 2017	**769**	**84**	**59**	**19**	**7**	**58**	**112**	**1,108**
Unimpaired	1,049	78	55	21	25	64	70	1,362
Impaired	–	1	–	–	1	16	10	28
	1,049	79	55	21	26	80	80	1,390
Less: impairment provision	–	(1)	–	–	–	(3)	(9)	(13)
Net trade receivables 2016	1,049	78	55	21	26	77	71	1,377

* Included within these aged trade receivables at 31 December 2017 are US$96m in the Engineering & Construction reporting segment which will be recovered from the customers as part of the final settlement on the projects. Management reviewed the recoverability of these receivables and concluded that these will be recovered in full and no impairment provision is necessary at the end of the reporting period.

The credit quality of trade receivables that are neither past due nor impaired is assessed by management with reference to the historic payment track records of the counterparties together with the relevant current information.

In the ordinary course of business in engineering, procurement and construction project execution services contracts, customers retain amounts of progress billings (retentions receivables) that are not paid until the satisfaction of conditions specified in the contract for the payment of such amounts or until defects have been rectified.

During 2017, trade receivables amounting to US$128m (note 10) relating to the Santuario Production Enhancement Contract (PEC) in Mexico were derecognised and converted to a 36% ownership interest in Production Sharing Contract (PSC). Also trade receivables of US$12m relating to advance payments to PETRONAS for settling decommissioning liabilities relating to Block PM304 in Malaysia when they become due, were reclassified to non-current other financial assets, note 18 (2016: trade and other receivables of US$78m were reclassified to assets held for sale, note 14).

Advances represent payments made to certain subcontractors for projects in progress, that will be adjusted against the future progress billings by the subcontractors.

Receivables from joint operation partners are amounts recoverable from partners on Block PM304, Santuario PSC and on consortium contracts in the Engineering & Construction reporting segment.

Other receivables mainly consist of Value Added Tax recoverable of US$77m (2016: US$66m).

All trade and other receivables are expected to be settled in cash. Certain trade and other receivables will be settled in cash using currencies other than the reporting currency of the Group, and will be largely paid in sterling, euros and Kuwaiti dinars.

22 Cash and short-term deposits

	2017 US$m	2016 US$m
Cash at bank and in hand	**808**	1,009
Short-term deposits	**159**	158
Total cash and bank balances	**967**	1,167

Short-term deposits are made for varying periods of between one day and three months depending on the immediate cash requirements of the Group, and earn interest at respective short-term deposit rates. The fair value of cash and bank balances is US$967m (2016: US$1,167m).

For the purposes of the consolidated statement of cash flows, cash and cash equivalents comprise the following:

	2017 US$m	2016 US$m
Cash at bank and in hand	**808**	1,009
Short-term deposits	**159**	158
Bank overdrafts (note 27)	**(31)**	(44)
	936	1,123

23 Share capital

The share capital of the Company as at 31 December was as follows:

	2017 US$m	2016 US$m
Authorised		
750,000,000 ordinary shares of US$0.020 each (2016: 750,000,000 ordinary shares of US$0.020 each)	**15**	15
Issued and fully paid		
345,912,747 ordinary shares of US$0.020 each (2016: 345,912,747 ordinary shares of US$0.020 each)	**7**	7

There was no movement in the number of issued and fully paid ordinary shares during the year.

The share capital comprises only one class of ordinary shares. The ordinary shares carry a voting right and the right to a dividend.

Share premium: The balance on the share premium account represents the amount received in excess of the nominal value of the ordinary shares.

Capital redemption reserve: The balance on the capital redemption reserve represents the aggregated nominal value of the ordinary shares repurchased and cancelled.

24 Treasury shares

For the purpose of making awards under the Group's share-based payment plans, shares in the Company are purchased and held by the Petrofac Employee Benefit Trust and the Petrofac Joint Venture Companies Employee Benefit Trust. These shares have been classified in the consolidated statement of financial position as treasury shares within equity.

The movements in total treasury shares are shown below:

	2017		2016	
	Number	**US$m**	Number	US$m
At 1 January	**5,932,474**	**105**	6,015,520	111
Treasury shares purchased during the year	**3,406,314**	**39**	2,673,796	36
Share-based payments vested during the year	**(3,112,413)**	**(42)**	(2,756,842)	(42)
At 31 December	**6,226,375**	**102**	5,932,474	105

Shares vested during the year include dividend shares of 303,554 shares (2016: 186,369 shares).

25 Share-based payment plans

Performance Share Plan (PSP)
Under the PSP, share awards are granted to Executive Directors and a restricted number of other senior executives of the Group. The shares vest at the end of three years subject to continued employment and the achievement of certain pre-defined market and non-market-based performance conditions. The Group revised its PSP during 2017, and the market performance based element of new awards will be 70% dependent on the total shareholder return (TSR) of the Group compared with an index composed of selected relevant companies (for earlier awards TSR was 50%). The fair value of the shares vesting under this portion of the award is determined by an independent valuer using a Monte Carlo simulation model taking into account the terms and conditions of the plan rules and using the following assumptions at the date of grant:

	Executive Directors 2017 awards	**Other participants 2017 awards**	All participants 2016 awards	All participants 2015 awards	All participants 2014 awards
Expected share price volatility (based on median of comparator group's three-year volatilities)	**39.1%**	**39.1%**	31.9%	28.5%	32.7%
Share price correlation with comparator group	**26.6%**	**26.6%**	28.9%	26.4%	40.4%
Risk-free interest rate	**0.2%**	**0.2%**	0.6%	0.7%	1.2%
Expected life of share award	**3 years**	**3 years**	3 years	3 years	3 years
Fair value of TSR portion	**99p**	**124p**	747p	562p	827p

The non-market-based condition governing the vesting of the remaining 30% of the 2017 awards is subject to achieving certain strategic targets i.e. cumulative Engineering & Construction business performance net income, cumulative Engineering & Production Services business performance net income, cumulative divestment proceeds and cumulative cash conversion over a three-year period. Each strategic target accounts for 7.5% for the purposes of awards vesting. For earlier awards 50% of the total award is subject to achieving between 0.0% and 7.5% earnings per share (EPS) growth targets over a three-year period. The fair value of the equity-settled award relating to the non-market-based condition is estimated, based on the quoted closing market price of the Company's ordinary shares at the date of grant with an assumed annual vesting rate built into the calculation (subsequently trued up to the end of the reporting period on the actual leaver rate during the period from award date to the end of the reporting period) over the three-year vesting period of the plan.

Deferred Bonus Share Plan (DBSP)
Under the DBSP selected employees are required to defer a proportion of their annual cash bonus into Company shares ('Invested Shares'). Following such an award, the Company will generally grant the participant an additional award of shares ('Matching Shares') bearing a specified ratio to the number of Invested Shares, typically a 1:1 ratio. Subject to a participant's continued employment, Invested and Matching Share awards may either vest 100% on the third anniversary of the grant date; or alternatively, vest one-third on the first anniversary of the grant, one-third on the second anniversary and the final proportion on the third anniversary of the grant date.

At the end of the reporting period the value of bonuses to be settled by shares cannot be determined until the Remuneration Committee has approved the portion of the employee bonuses to be settled in shares. Once the portion of the bonus to be settled in shares is determined, the final bonus liability to be settled in shares is transferred to the reserve for share-based payments. The costs relating to Matching Shares are recognised over the corresponding vesting period and the fair values of the equity-settled Matching Shares granted to employees are based on the quoted closing market price at the date of grant with the charge to the consolidated income statement adjusted to reflect the expected vesting rate of the plan.

Share Incentive Plan (SIP)
All UK employees, including UK Executive Directors, are eligible to participate in the SIP. Employees may invest up to sterling £1,800 per tax year of gross salary (or, if lower, 10% of salary) to purchase ordinary shares in the Company. There is no holding period for these shares.

Restricted Share Plan (RSP)
Selected employees are allocated grants of shares on an ad hoc basis. The RSP is primarily, but not exclusively, used to make awards to individuals who join the Group part way through the year, having left accrued benefits with a previous employer. The fair values of the awards granted under the RSP at various grant dates during the year are based on the quoted market price at the date of grant adjusted for an assumed vesting rate over the relevant vesting period.

Share-based payment plans information

The details of the fair values and assumed vesting rates of the share-based payment plans are below:

	PSP (non-market based condition)						DBSP		RSP	
	2017: other participants Earlier awards: all participants		Executive Directors		October awards					
	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate	Fair value per share	Assumed vesting rate
2017 awards	**441p**	**95.0%**	**353p**	**95.0%**	**–**	**–**	**839p**	**94.8%**	**572p**	**95.0%**
2016 awards	982p	0.0%	–	–	911p	0.0%	982p	88.6%	859p	91.9%
2015 awards	890p	0.0%	–	–	–	–	890p	85.7%	927p	95.0%
2014 awards	1,376p	0.0%	–	–	–	–	1,376p	79.9%	1,157p	76.5%

The following table shows the movements in the number of shares held under the share-based payment plans outstanding but not exercisable:

	PSP		DBSP		RSP		Total	
	2017 Number	2016 Number	**2017 *Number**	2016 *Number	**2017 Number**	2016 Number	**2017 Number**	2016 Number
Outstanding at 1 January	**1,457,306**	1,484,976	**5,055,234**	5,352,633	**397,891**	268,345	**6,910,431**	7,105,954
Granted during the year	**1,213,622**	751,664	**3,087,292**	2,560,678	**65,983**	312,262	**4,366,897**	3,624,604
Vested during the year	**–**	–	**(2,727,254)**	(2,469,065)	**(161,638)**	(163,393)	**(2,888,892)**	(2,632,458)
Forfeited during the year	**(403,010)**	(779,334)	**(254,284)**	(389,012)	**(25,964)**	(19,323)	**(683,258)**	(1,187,669)
Outstanding at 31 December	**2,267,918**	1,457,306	**5,160,988**	5,055,234	**276,272**	397,891	**7,705,178**	6,910,431

*Includes Invested and Matching Shares.

The number of shares still outstanding but not exercisable at 31 December for each award is as follows:

	PSP		DBSP		RSP		Total	
	2017 Number	2016 Number	**2017 *Number**	2016 *Number	**2017 Number**	2016 Number	**2017 Number**	2016 Number
2017 awards	**1,213,622**	–	**2,925,254**	–	**65,983**	–	**4,204,859**	–
2016 awards	**540,266**	623,237	**1,406,064**	2,362,804	**190,594**	312,262	**2,136,924**	3,298,303
2015 awards	**514,030**	567,548	**829,670**	1,848,146	**19,695**	45,154	**1,363,395**	2,460,848
2014 awards	**–**	266,521	**–**	844,284	**–**	40,475	**–**	1,151,280
Total awards	**2,267,918**	1,457,306	**5,160,988**	5,055,234	**276,272**	397,891	**7,705,178**	6,910,431

* Includes Invested and Matching Shares.

All Value Creation Plan (VCP) awards lapsed in 2016 and hence are excluded from the above tables.

The average share price of the Company shares during 2017 was US$7.83, sterling equivalent of £6.06 (2016: US$11.03, sterling equivalent of £8.18).

The number of outstanding shares excludes the 8% uplift adjustment made in respect of the EnQuest demerger and dividend shares shown below:

	PSP		DBSP		RSP		Total	
	2017 Number	2016 Number	**2017 *Number**	2016 *Number	**2017 Number**	2016 Number	**2017 Number**	2016 Number
EnQuest 8% uplift	**–**	–	**–**	318	**–**	83	**–**	401
Dividend shares	**199,135**	134,947	**573,987**	471,745	**25,204**	14,405	**798,326**	621,097
Outstanding at 31 December	**199,135**	134,947	**573,987**	472,063	**25,204**	14,488	**798,326**	621,498

* Includes Invested and Matching Shares.

The charge in respect of share-based payment plans recognised in the consolidated income statement is as follows:

	PSP		*DBSP		RSP		Total	
	2017 US$m	2016 US$m	**2017 US$m**	2016 US$m	**2017 US$m**	2016 US$m	**2017 US$m**	2016 US$m
Share-based payment charge/(credit)	**2**	(1)	**15**	17	**2**	1	**19**	17

* Represents the charge on Matching Shares only.

The Group has recognised a total charge of US$19m (2016: US$17m) in the consolidated income statement during the year relating to the above employee share-based plans (see note 4d) which has been transferred to the reserve for share-based payments along with US$16m of the bonus liability accrued for the year ended 31 December 2016 which has been settled in shares granted during the year (2016: 2015 bonus of US$17m).

For further details on the above employee share-based payment schemes refer to pages 95 to 98, 100 and 105 of the Directors' remuneration report.

26 Other reserves

	Net unrealised gains/(losses) on derivatives US$m	Net unrealised gains/(losses) on available-for-sale investment US$m	Foreign currency translation US$m	Reserve for share-based payments US$m	Total US$m
Balance at 1 January 2016	(65)	(16)	(51)	95	(37)
Net gains on maturity of cash flow hedges recycled in the year	(3)	–	–	–	(3)
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	49	–	–	–	49
Unrealised loss on the fair value of available-for-sale investment reclassified during the year (note 17)	–	16	–	–	16
Foreign currency translation	–	–	31	–	31
Foreign currency losses recycled to consolidated income statement upon disposal of a subsidiary (note 5)	–	–	11	–	11
Share-based payments charge (note 25)	–	–	–	17	17
Transfer during the year (note 25)	–	–	–	17	17
Shares vested during the year	–	–	–	(39)	(39)
Income tax on share-based payments reserve	–	–	–	(1)	(1)
Balance at 31 December 2016	(19)	–	(9)	89	61
Attributable to:					
Petrofac Limited shareholders	(7)	–	(9)	89	73
Non-controlling interests	(12)	–	–	–	(12)
Balance at 31 December 2016	(19)	–	(9)	89	61
Balance at 1 January 2017	(19)	–	(9)	89	61
Net losses on maturity of cash flow hedges recycled in the year	13	–	–	–	13
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	46	–	–	–	46
Foreign currency translation	–	–	(9)	–	(9)
Share-based payments charge (note 25)	–	–	–	19	19
Transfer during the year (note 25)	–	–	–	16	16
Shares vested during the year	–	–	–	(38)	(38)
Income tax on share-based payments reserve	–	–	–	1	1
Balance at 31 December 2017	**40**	**–**	**(18)**	**87**	**109**
Attributable to:					
Petrofac Limited shareholders	41	–	(18)	87	110
Non-controlling interests	(1)	–	–	–	(1)
Balance at 31 December 2017	**40**	**–**	**(18)**	**87**	**109**

Net unrealised gains/(losses) on derivatives
The portion of gains or losses on cash flow hedging instruments that are determined to be effective hedges is included within this reserve net of related deferred tax effects. When the hedged transaction occurs or is no longer forecast to occur, the gain or loss is transferred from equity to the consolidated income statement. Realised net loss amounting to US$13m (2016: US$3m net gain) relating to foreign currency forward contracts and financial instruments designated as cash flow hedges have been recognised in cost of sales.

The forward currency points element and ineffective portion of derivative financial instruments relating to forward currency contracts and losses on undesignated derivatives amounting to US$5m (2016: US$1m) have been recognised in cost of sales.

Net unrealised gains/(losses) on available-for-sale investment
This reserve recognises fair value changes, net of deferred tax effects on available-for-sale investment held by the Group. Realised gains and losses on the sale of available-for-sale investment are recognised as other operating income or other operating expenses in the consolidated income statement. Unrealised losses are recognised as exceptional items in the consolidated income statement.

Foreign currency translation reserve
The assets and liabilities of operations which have a non-United States dollar functional currency are translated into the Group's reporting currency, United States dollar, at the exchange rate prevailing at the end of the reporting period. The exchange rate differences arising on the translation are recognised in other reserves in equity.

Reserve for share-based payments

The reserve for share-based payments is used to recognise the value of equity-settled share-based payments awarded to employees and transfers out of this reserve are made upon vesting of the original share awards.

The transfer during the year reflects the transfer from accrued expenses within trade and other payables of the bonus liability in the consolidated statement of financial position relating to the year ended 2016 of US$16m (2015 bonus of US$17m) which has been voluntarily elected or mandatorily obliged to be settled in shares (note 25).

27 Interest-bearing loans and borrowings

	2017 US$m	2016 US$m
Non-current		
Senior Notes	–	677
Revolving Credit Facility (RCF)	555	645
Export Credit Agency funding (SACE and UKEF Facility)	115	123
Term loans	200	–
	870	1,445
Less: Debt acquisition costs net of accumulated amortisation and effective interest rate adjustments	(16)	(22)
	854	1,423
Current		
Senior Notes	677	–
Export Credit Agency funding (SACE and UKEF Facility)	18	17
Term loans	–	300
Bank overdrafts	31	44
	726	361
Less: Debt acquisition costs net of accumulated amortisation and effective interest rate adjustments	(1)	–
	725	361
Total interest-bearing loans and borrowings	1,579	1,784

Details of the Group's interest-bearing loans and borrowings are as follows:

Senior Notes

Petrofac has an outstanding aggregate principal amount of US$677m Senior Notes due in 2018 (Notes). The Group pays interest on the Senior Notes at an annual rate equal to 3.40% of the outstanding principal amount. Interest on the Notes is payable semi-annually in arrears in April and October each year.

Revolving Credit Facility

Petrofac has a US$1,200m committed Revolving Credit Facility with a syndicate of international banks, which is available for general corporate purposes. US$1,000m of the facility was extended in May 2017 and will mature in June 2021. The remaining US$200 million will mature in June 2020. As at 31 December 2017, US$555m was drawn under this facility (2016: US$645m).

Interest is payable on the drawn balance of the facility and in addition utilisation fees are payable depending on the level of utilisation.

Export Credit Agency funding

In 2015, Petrofac entered into two term loan facilities guaranteed, respectively, by the Italian Export Credit Agency SACE and the UK Export Credit Agency UKEF. Drawings were made up to February 2017 and no further drawings can be made. Both facilities amortise over eight and a half years ending in 2025. As at 31 December 2017, US$50m was drawn under the SACE facility (2016: US$54m) and US$83m was drawn under the UKEF facility (2016: US$86m).

Term loans

In August 2016, Petrofac entered into two term loans of US$200m and AED368m. These facilities matured and were repaid in August 2017 and November 2017 respectively.

In August 2017, Petrofac entered into two new term loans of $100m each, which mature in February 2019 and August 2019 respectively.

Bank overdrafts

Bank overdrafts are drawn down in United States dollar and sterling denominations to meet the Group's working capital requirements. These are repayable on demand.

The Revolving Credit Facility, the Export Credit Agency loans facilities and the term loans (together, the Senior Loans) are subject to two financial covenants relating to leverage and interest cover. The Group was in compliance with these covenants for the year ending 31 December 2017.

The Senior Loans and the Senior Notes (together, the Senior Facilities) are senior unsecured obligations of the Company and will rank equally in right of payment with each other and with the Company's other existing and future unsecured and unsubordinated indebtedness. Petrofac International Ltd and Petrofac International (UAE) LLC irrevocably and unconditionally guarantee, jointly and severally, the due and prompt payment of all amounts at any time becoming due and payable in respect of the Senior Facilities.

28 Provisions

Non-current provisions

	Other long-term employment benefits provision US$m	Provision for decommissioning US$m	Onerous operating lease provision US$m	Other provisions US$m	Total US$m
At 1 January 2016	94	230	–	7	331
Additions during the year	24	–	–	1	25
Paid during the year	(17)	–	–	–	(17)
Revision of estimates	–	(101)	–	–	(101)
Unwinding of discount	–	8	–	–	8
Transfer to liabilities associated with assets held for sale (note 14)	–	(21)	–	–	(21)
Exchange difference	–	–	–	(1)	(1)
At 1 January 2017	101	116	–	7	224
Additions during the year	22	1	12	–	35
Recognised on acquisition (note 10)	–	24	–	–	24
Derecognised on migration of existing Santuario PEC to PSC (note 10)	–	(10)	–	–	(10)
Paid during the year	(11)	–	–	–	(11)
Unwinding of discount	–	7	–	–	7
At 31 December 2017	**112**	**138**	**12**	**7**	**269**

Other long-term employment benefits provision

Labour laws in the United Arab Emirates require employers to provide for other long-term employment benefits. These benefits are payable to employees on being transferred to another jurisdiction or on cessation of employment based on their final salary and number of years' service. All amounts are unfunded. The long-term employment benefits provision is based on an internal end of service benefits valuation model with the key underlying assumptions being as follows:

	Senior employees	Other employees
Average number of years of future service	5	3
Average annual % salary increases	2%	2%
Discount factor	4%	4%

Senior employees are those earning a base of salary of over US$96,000 per annum.

Discount factor used represents basis yield on US high quality corporate bonds with duration corresponding to the liability at the end of the reporting period.

Provision for decommissioning

The decommissioning provision primarily relates to the Group's obligation for the removal of facilities and restoration of the sites at the Block PM304 in Malaysia, Chergui in Tunisia and Santuario, Magallanes and Arenque in Mexico.

The Group recognised US$19m (note 10) of provision for decommissioning from the acquisition of a 20% ownership interest in the Greater Stella Area (GSA) field in the North Sea, UK and US$5m (note 10) from the acquisition of a 36% ownership interest in the Santuario Production Sharing Contract (PSC).

Additional provision of US$1m was recognised for Block PM304 in Malaysia relating to drilling of new wells during the year (2016: revision to decommissioning cost estimates of US$101m (note 11) were made in respect of Santuario, Magallanes, Arenque and Pánuco in Mexico of US$97m and Block PM304 in Malaysia of US$4m).

The liability is discounted at the rate of 4.5% on Block PM304 (2016: 4.5%), 6.0% on Chergui (2016: 6.0%) and 7.5% on Santuario, Magallanes and Arenque (2016: 6.2%).

The unwinding of the discount is recognised in the finance costs (note 6) line item of the consolidated income statement. The Group estimates that the cash outflows associated with these provisions will materialise in 2026 on Block PM304, 2031 on Chergui, 2042 on Santuario, 2033 on Magallanes and 2040 on Arenque.

Onerous operating lease provision

Onerous operating lease provision represents the non-current amount of the estimated future costs relating to vacant and under utilised leasehold office buildings in the UK, for which the leases expire between 2024 to 2026. Additions to onerous operating lease provision of US$12m during the year were recognised as an exceptional item in the consolidated income statement and relate to the Engineering & Productions Services reporting segment (note 5).

Other provisions

This represents claims amounts against the Group which will be settled through the captive insurance company Jermyn Insurance Company Limited.

Current provisions

	Onerous operating lease provision US$m	Onerous contract provisions US$m	Other provisions US$m	Total US$m
Reclassified from accrued contract expenses (note 32)	9	29	–	38
Amounts provided during the year	–	35	4	39
Utilised during the year	(3)	(48)	–	(51)
At 31 December 2017	**6**	**16**	**4**	**26**

Onerous operating lease provision

Onerous operating lease provision represents current amount of the estimated future costs relating to vacant and under utilised leasehold office buildings in the UK, for which the leases expire between 2024 to 2026.

Onerous contract provisions

The Group provides for future losses on contracts where it is considered probable that the contract costs are likely to exceed revenues in future years. The amount of US$35m provided during the year relates to projects in the Engineering & Construction reporting segment (2016: US$20m).

Other provisions

These include amounts provided by the Group for potential claims from vendors, disputes with customers and other claims. The amount of US$4m provided during the year relates to projects in the Engineering & Production Services reporting segment (2016: US$nil).

29 Trade and other payables

	2017 US$m	2016 US$m
Trade payables	**419**	538
Advances received from customers	**536**	703
Accrued expenses	**499**	546
Other taxes payable	**67**	30
Other payables	**154**	157
	1,675	1,974

During 2017, the Santuario Production Enhancement Contract (PEC) in Mexico was migrated to a Production Sharing Contract (PSC). Other payables amounting to US$17m (note 10) relating to the Santuario PEC in Mexico were derecognised and converted to a 36% ownership interest in the PSC (2016: trade and other payables of US$13m relating to Pánuco PEC in Mexico were reclassified to liabilities associated with assets held for sale, note 14).

Accrued expenses include capital expenditure accruals relating to property, plant and equipment of US$74m (2016: US$69m) and Group's 30% share of intangible oil and gas assets relating to Block PM304 in Malaysia of US$2m (2016: US$12m). The balance of accrued expenses primarily represent project cost accruals relating to the Engineering & Construction reporting segment and the Engineering & Production Services reporting segment.

Advances received from customers represent payments received for contracts, that will be adjusted against the future progress billings to be made to the customers.

Other payables mainly consists of retentions held against subcontractors of US$115m (2016: US$88m) and amounts payable to joint operation partners of US$20m (2016: US$27m).

Certain trade and other payables will be settled in currencies other than the reporting currency of the Group, mainly in sterling, euros and Kuwaiti dinars.

30 Commitments and contingent liabilities

Commitments

In the normal course of business the Group will obtain surety bonds, letters of credit and guarantees, which are contractually required to secure performance, advance payment or in lieu of retentions being withheld. Some of these facilities are secured by issue of corporate guarantees by the Company in favour of the issuing banks.

At 31 December 2017, the Group had outstanding letters of guarantee, including performance, advance payments and bid bonds of US$4,923m (2016: US$4,862m) against which the Group had pledged or restricted cash balances of, in aggregate, US$49m (2016: US$47m).

At 31 December 2017, the Group had outstanding forward exchange contracts amounting to US$3,045m (2016: US$3,754m). These commitments consist of future gross obligations either to acquire or to sell designated amounts of foreign currency at agreed rates and value dates (note 33).

30 Commitments and contingent liabilities continued

Operating leases

The Group has financial commitments in respect of non-cancellable operating leases for offices and equipment. These non-cancellable leases have remaining non-cancellable lease terms of between one and 15 years and, for certain property leases, are subject to renegotiation at various intervals as specified in the lease agreements. The future minimum rental commitments under these non-cancellable leases are as follows:

	2017 US$m	2016 US$m
Within one year	**19**	14
After one year but not more than five years	**46**	21
More than five years	**39**	76
	104	111

Included in the above are commitments relating to the lease of office buildings in Aberdeen, United Kingdom of US$82m (2016: US$70m).

Minimum lease payments recognised as an operating lease expense during the year amounted to US$36m (2016: US$53m), of which US$17m relates to cancellable operating leases and US$19m relates to non-cancellable operating leases.

Finance leases

Long-term finance lease commitments are as follows:

	Future minimum lease payments US$m	Finance cost US$m	Present value US$m
Oil and gas facilities and plant and equipment			
The commitments are as follows:			
Within one year	**153**	**41**	**112**
After one year but not more than five years	**414**	**64**	**350**
More than five years	**95**	**10**	**85**
	662	**115**	**547**

The finance lease assets mainly comprise oil and gas facilities in Block PM304 in Malaysia and the lease terms for these leases range between one to nine years. The above finance lease commitments include a 70% gross up of US$381m (2016: US$414m) on finance leases in respect of oil and gas facilities relating to Block PM304 in Malaysia, which is necessary to reflect the legal position of the Group as the contracting entity for these finance leases. The finance leases relating to Block PM304 in Malaysia include a renewal option of up to two years and a purchase option at the end of the lease term.

Capital commitments

At 31 December 2017, the Group had capital commitments of US$48m (2016: US$264m) excluding the above lease commitments.

Included in the US$48m of commitments are:

	2017 US$m	2016 US$m
Building of the Petrofac JSD6000 installation vessel	**–**	50
Production Enhancement Contracts (PEC) in Mexico	**18**	7
Further appraisal and development of wells as part of Block PM304 in Malaysia	**13**	38
Costs in respect of Greater Stella Area Field development in the North Sea	**12**	163
Commitments in respect of the construction of a new training centre in Oman	**5**	6

Contingent liabilities

As described in pages 6, 7, 31, 66 and 78 of the Annual Report, on 12 May 2017, the UK Serious Fraud Office (SFO) announced an investigation into the activities of Petrofac, its subsidiaries, and their officers, employees and agents for suspected bribery, corruption, and/or money laundering. The SFO investigation is ongoing. The existence, timing and amount of any future financial obligations (such as fines or penalties) or other consequences are unable to be determined at this time and no liability has been recognised in relation to this matter in the consolidated statement of financial position at the end of the reporting period.

31 Related party transactions

The consolidated financial statements include the financial statements of Petrofac Limited and the subsidiaries listed in note 34. Petrofac Limited is the ultimate parent entity of the Group.

The following table provides the total amount of transactions which have been entered into with related parties:

		Amounts owed by related parties US$m	Amounts owed to related parties US$m
Joint ventures	**2017**	**1**	**–**
	2016	3	–
Associates	**2017**	**–**	**–**
	2016	1	–

All sales to and purchases from related parties are conducted on an arm's length basis and are approved by the reporting segment's management. There were no sales to and purchases from related parties during the year (2016: US$nil).

All related party balances will be settled in cash.

Compensation of key management personnel

The following details remuneration of key management personnel of the Group comprising Executive and Non-executive Directors of the Company and other senior personnel. Further information relating to individual Directors of the Company is provided in the Directors' remuneration report on pages 90 to 105.

	2017 US$m	2016 US$m
Short-term employee benefits	**11**	12
Share-based payments	**2**	1
Fees paid to Non-executive Directors	**1**	1
	14	14

32 Accrued contract expenses

	2017 US$m	2016 US$m
Accrued contract expenses	**1,956**	2,022
Reserve for contract losses	**–**	38
	1,956	2,060

During 2017, reserve for contract losses of US$38m were reclassified to current provisions (note 28).

33 Risk management and financial instruments

Risk management objectives and policies

The Group's principal financial assets and liabilities, other than derivatives, comprise trade and other receivables, related party receivables, cash and short-term deposits, work-in-progress, interest-bearing loans and borrowings, trade and other payables and contingent consideration.

The Group's activities expose it to various financial risks particularly associated with interest rate risk on its variable rate cash and short-term deposits, loans and borrowings and foreign currency risk on conducting business in currencies other than reporting currency as well as translation of the assets and liabilities of foreign operations to the reporting currency. These risks are managed from time to time by using a combination of various derivative instruments, principally forward currency contracts in line with the Group's hedging policies. The Group has a policy not to enter into speculative trading of financial derivatives.

The Board of Directors of the Company has established an Audit Committee which performs, amongst other roles, reviews on the effectiveness of the risk management and internal control systems to mitigate a range of risks, including financial risks, faced by the Group which is discussed in detail on pages 82 to 87.

The other main risks besides interest rate and foreign currency risk arising from the Group's financial instruments are credit risk, liquidity risk and commodity price risk and the policies relating to these risks are discussed in detail below:

Interest rate risk

Interest rate risk arises from the possibility that changes in interest rates will affect the value of the Group's interest-bearing financial liabilities and assets.

The Group's exposure to market risk arising from changes in interest rates relates primarily to the Group's long-term variable rate debt obligations and its cash and bank balances. The Group's policy is to manage its interest cost using a mix of fixed and variable rate debt. The Group's cash and bank balances are at floating rates of interest.

33 Risk management and financial instruments continued

Debt is primarily in US dollar, linked to US dollar LIBOR (London Interbank Offered Rate). The Group uses derivatives to swap between fixed and floating rates. No such derivatives were outstanding at 31 December 2017. The proportion of floating rate debt at 31 December 2017 was 58% of the total financial debt outstanding (2016: 63%).

Interest rate sensitivity analysis

The impact on the Group's profit before tax and equity due to a reasonably possible change in interest rates on loans and borrowings at the reporting date is demonstrated in the table below. The analysis assumes that all other variables remain constant.

	Pre-tax profit		Equity	
	100 basis point increase US$m	100 basis point decrease US$m	100 basis point increase US$m	100 basis point decrease US$m
31 December 2017	**(16)**	**16**	**–**	**–**
31 December 2016	(18)	18	–	–

The following table reflects the maturity profile of the financial liabilities and assets that are subject to interest rate risk:

Year ended 31 December 2017

	Within 1 year US$m	1–2 years US$m	2–3 years US$m	3–4 years US$m	4–5 years US$m	More than 5 years US$m	Total US$m
Financial liabilities							
Floating rates							
Bank overdrafts (note 27)	**31**	**–**	**–**	**–**	**–**	**–**	**31**
Interest-bearing loans and borrowings (note 27)	**18**	**218**	**572**	**18**	**18**	**44**	**888**
	49	**218**	**572**	**18**	**18**	**44**	**919**
Financial assets							
Floating rates							
Cash and short-term deposits (note 22)	**967**	**–**	**–**	**–**	**–**	**–**	**967**
Restricted cash balances (note 18)	**9**	**39**	**–**	**–**	**1**	**–**	**49**
	976	**39**	**–**	**–**	**1**	**–**	**1,016**

Year ended 31 December 2016

	Within 1 year US$m	1–2 years US$m	2–3 years US$m	3–4 years US$m	4–5 years US$m	More than 5 years US$m	Total US$m
Financial liabilities							
Floating rates							
Bank overdrafts (note 27)	44	–	–	–	–	–	44
Interest-bearing loans and borrowings (note 27)	317	16	16	661	16	59	1,085
	361	16	16	661	16	59	1,129
Financial assets							
Floating rates							
Cash and short-term deposits (note 22)	1,167	–	–	–	–	–	1,167
Restricted cash balances (note 18)	6	40	–	–	1	–	47
	1,173	40	–	–	1	–	1,214

Financial liabilities in the above table are disclosed gross of debt acquisition costs and effective interest rate adjustments of US$16m (2016: US$19m).

Interest on financial instruments classified as floating rate is re-priced at intervals of less than one year. The other financial instruments of the Group that are not included in the above tables are non-interest bearing and are therefore not subject to interest rate risk.

Foreign currency risk

The Group is exposed to foreign currency risk on sales, purchases, and translation of assets and liabilities that are in a currency other than the functional currency of its operating units. The Group is also exposed to the translation of the functional currencies of its units to the United States dollar reporting currency of the Group.

The following table summarises the percentage of foreign currency denominated revenues, costs, financial assets and financial liabilities, expressed in United States dollar terms, of the Group totals.

	2017 % of foreign currency denominated items	2016 % of foreign currency denominated items
Revenues	**43.7%**	17.1%
Costs	**43.8%**	28.0%
Non-current financial assets	**4.5%**	13.1%
Current financial assets	**23.0%**	18.8%
Non-current financial liabilities	**0.0%**	0.0%
Current financial liabilities	**26.4%**	30.2%

The Group uses forward currency contracts to manage the currency exposure on transactions significant to its operations. It is the Group's policy not to enter into forward contracts until a highly probable forecast transaction is in place and to negotiate the terms of the derivative instruments used for hedging to match the terms of the hedged item to maximise hedge effectiveness.

Foreign currency sensitivity analysis

The income statements of foreign operations are translated into the reporting currency using a weighted average exchange rate of conversion. Foreign currency monetary items are translated using the closing rate at the reporting date. Revenues and costs in currencies other than the functional currency of an operating unit are recorded at the prevailing rate at the date of the transaction. The following significant exchange rates applied during the year in relation to United States dollars:

	2017		2016	
	Average rate	**Closing rate**	Average rate	Closing rate
Sterling	**1.29**	**1.35**	1.35	1.23
Kuwaiti dinar	**3.30**	**3.32**	3.30	3.27
Euro	**1.13**	**1.20**	1.10	1.05

The following table summarises the impact on the Group's profit before tax and equity (due to change in the fair value of monetary assets, liabilities and derivative instruments) of a reasonably possible change in United States dollar exchange rates with respect to different currencies:

	Profit before tax		Equity	
	+10% US dollar rate increase US$m	–10% US dollar rate decrease US$m	+10% US dollar rate increase US$m	–10% US dollar rate decrease US$m
31 December 2017	**(1)**	**1**	**(28)**	**28**
31 December 2016	(6)	6	(29)	29

Derivative instruments designated as cash flow hedges

At 31 December, the Group had foreign exchange forward contracts as follows:

	Contract value		Fair value (undesignated)		Fair value (designated)		Net unrealised gain/(loss)*	
	2017 US$m	2016 US$m	**2017 US$m**	2016 US$m	**2017 US$m**	2016 US$m	**2017 US$m**	2016 US$m
Euro purchases	**105**	241	**–**	(2)	**32**	2	**50**	11
Sterling sales	**(485)**	(278)	**(8)**	4	**1**	(2)	**–**	(16)
Kuwaiti dinar sales	**(1,531)**	(1,966)	**–**	(1)	**(12)**	(29)	**(8)**	24
Malaysian ringgit purchases	**23**	85	**–**	–	**(1)**	(15)	**(1)**	(18)
Japanese yen (sales)/purchases	**(3)**	59	**–**	–	**–**	(5)	**–**	(4)
Arab Emirates dirham purchases	**–**	102	**–**	–	**–**	–	**–**	–
Indian rupee purchases	**–**	7	**–**	–	**–**	–	**–**	–
Canadian dollar purchases	**11**	–	**–**	–	**–**	–	**–**	–
			(8)	1	**20**	(49)	**41**	(3)

* Attributable to Petrofac Limited shareholders.

The above foreign exchange contracts mature and will affect income between January 2017 and February 2020 (2016: between January 2017 and June 2019).

33 Risk management and financial instruments continued

At 31 December 2017, the Group had cash and short-term deposits designated as cash flow hedges with net unrealised gains of US$2m (2016: US$2m loss) as follows:

	Fair value		Net unrealised gain/(loss)	
	2017 US$m	2016 US$m	**2017 US$m**	2016 US$m
Euro cash and short-term deposits	**30**	18	**2**	(1)
Sterling cash and short-term deposits	**5**	6	**–**	(1)
			2	(2)

During 2017, net changes in fair value resulted in a gain of US$48m (2016: gain of US$54m) relating to these derivative instruments and financial assets were taken to equity and losses of US$11m (2016: loss of US$7m) were recycled from equity into cost of sales in the consolidated income statement. The forward points and ineffective portions of the above foreign exchange forward contracts and loss on undesignated derivatives of US$5m (2016: US$1m) were recognised in the consolidated income statement (note 4b).

Commodity price risk – oil prices

The Group is exposed to the impact of changes in oil and gas prices on its revenues and profits generated from sales of crude oil and gas. The Group's policy is to manage its exposure to the impact of changes in oil and gas prices using derivative instruments, primarily swaps and collars. Hedging is only undertaken once sufficiently reliable and regular long-term forecast production data is available.

During the year the Group entered into various crude oil swaps hedging oil production of 388,816 barrels (bbl) (2016: 174,875 bbl) with maturities ranging from January 2018 to June 2018.

The fair value of oil derivatives at 31 December 2017 was a liability of US$2m (2016: US$2m liability) with net unrealised loss deferred in equity of US$2m (2016: US$2m loss). During the year, US$2m loss (2016: US$10m gain) was recycled from equity into the consolidated income statement on the occurrence of the hedged transactions and a loss in the fair value recognised in equity of US$2m (2016: US$5m loss).

The following table summarises the impact on the Group's pre-tax profit and equity (due to a change in the fair value of oil derivative instruments and the underlifting asset/overlifting liability) of a reasonably possible change in the oil price:

	Profit before tax		Equity	
	+30 US$/bbl increase US$m	–30 US$/bbl decrease US$m	+30 US$/bbl increase US$m	–30 US$/bbl decrease US$m
31 December 2017	**–**	**–**	**(19)**	**19**
31 December 2016	–	–	(5)	5

Credit risk

The Group trades only with recognised, creditworthy third parties. Business Unit Risk Review Committees (BURRC) evaluate the creditworthiness of each individual third party at the time of entering into new contracts. Limits have been placed on the approval authority of the BURRC above which the approval of the Board of Directors of the Company is required. Receivable balances are monitored on an ongoing basis with appropriate follow-up action taken where necessary. At 31 December 2017, the Group's five largest customers accounted for 62.3% of outstanding trade receivables, retention receivables, work in progress, receivable under Berantai RSC and receivable in respect of the development of the Greater Stella Area (2016: 56.9%).

With respect to credit risk arising from the other financial assets of the Group, which comprise cash and cash equivalents, current and non-current receivables from customers (including the Berantai RSC and Greater Stella Area projects) and certain derivative instruments, the Group's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments.

Liquidity risk

The Group's objective is to ensure sufficient liquidity to support operations and future growth is available. The provision of financial capital and the potential impact on the Group's capital structure is reviewed regularly. The Group is not exposed to any external capital constraints. The maturity profiles of the Group's financial liabilities at 31 December are as follows:

Year ended 31 December 2017

	6 months or less US$m	6–12 months US$m	1–2 years US$m	2–5 years US$m	More than 5 years US$m	Contractual undiscounted cash flows US$m	Carrying amount US$m
Financial liabilities							
Interest-bearing loans and borrowings	**40**	**686**	**218**	**608**	**44**	**1,596**	**1,579**
Finance lease creditors	**86**	**67**	**122**	**292**	**95**	**662**	**547**
Trade and other payables (excluding advances from customers and other taxes payable)	**1,022**	**50**	**–**	**–**	**–**	**1,072**	**1,072**
Derivative instruments	**25**	**2**	**8**	**–**	**–**	**35**	**35**
Interest payments	**25**	**20**	**22**	**30**	**1**	**98**	**–**
	1,198	**825**	**370**	**930**	**140**	**3,463**	**3,233**

Year ended 31 December 2016

	6 months or less US$m	6–12 months US$m	1–2 years US$m	2–5 years US$m	More than 5 years US$m	Contractual undiscounted cash flows US$m	Carrying amount US$m
Financial liabilities							
Interest-bearing loans and borrowings	21	340	693	693	59	1,806	1,784
Finance lease creditors	221	84	238	141	37	721	596
Trade and other payables (excluding advances from customers and other taxes payable)	1,200	41	–	–	–	1,241	1,241
Derivative instruments	60	34	12	–	–	106	106
Interest payments	22	22	49	33	9	135	–
	1,524	521	992	867	105	4,009	3,727

The Group uses various funded facilities provided by banks and its own financial assets to fund the above mentioned financial liabilities.

Capital management

The Group's policy is to maintain a robust capital base to support future operations, growth and maximise shareholder value.

The Group seeks to optimise shareholder returns by maintaining a balance between debt and equity attributable to Petrofac Limited shareholders and monitors the efficiency of its capital structure on a regular basis. The gearing ratio and return on shareholders' equity is as follows:

	2017 US$m	2016 US$m
Cash and short-term deposits	**967**	1,167
Interest-bearing loans and borrowings (A)	**(1,579)**	(1,784)
Net debt (B)	**(612)**	(617)
Equity attributable to Petrofac Limited shareholders (C)	**912**	1,097
(Loss)/profit for the year attributable to Petrofac Limited shareholders (D)	**(29)**	1
Gross gearing ratio (A/C)	**173.1%**	162.6%
Net gearing ratio (B/C)	**67.1%**	56.2%
Shareholders' return on investment (D/C)	**(3.2%)**	0.1%

34 Subsidiaries, associates and joint arrangements

At 31 December 2017, the Group had investments in the following active subsidiaries, associates and joint arrangements:

Name of entity	Country of incorporation	Proportion of nominal value of issued shares controlled by the Group 2017	2016
Active subsidiaries			
Petrofac Algeria EURL	Algeria	**100**	100
Petrofac International (Bahrain) S.P.C.	Bahrain	**100**	100
Petrofac (Cyprus) Limited	Cyprus	**100**	100
Eclipse Petroleum Technology Limited	England	**100**	100
K W Limited	England	**100**	100
Oilennium Limited	England	**100**	100
Petrofac (Malaysia-PM304) Limited	England	**100**	100
Petrofac Contracting Limited	England	**100**	100
Petrofac Engineering Limited	England	**100**	100
Petrofac Services Limited	England	**[1]100**	[1]100
PetroHealth Limited	England	**100**	100
Petrofac Treasury UK Limited	England	**[1]100**	[1]100
Petrofac UK Holdings Limited	England	**[1]100**	[1]100
Caltec Limited	England	**100**	100
Petrofac Energy Developments UK Limited	England	**100**	[1]100
Petrofac Deutschland GmbH	Germany	**100**	100
Jermyn Insurance Company Limited	Guernsey	**[1]100**	[1]100
Petrofac Engineering India Private Limited	India	**100**	100
Petrofac Engineering Services India Private Limited	India	**100**	100
Petrofac Information Services Private Limited	India	**100**	100
Petrofac Integrated Energy Services Limited	Jersey	**[1]100**	[1]100
Petrofac Energy Developments (Ohanet) Jersey Limited	Jersey	**100**	100
Petrofac Energy Developments International Limited	Jersey	**[1]100**	[1]100
Petrofac Facilities Management International Limited	Jersey	**[1]100**	[1]100
Petrofac FPF004 Limited	Jersey	**100**	100
Petrofac GSA Holdings Limited (formerly Petrofac Energy Development West Africa Limited)	Jersey	**[1]100**	[1]100
Petrofac GSA Limited	Jersey	**100**	100
Petrofac International Ltd	Jersey	**[1]100**	[1]100
Petrofac Offshore Management Limited	Jersey	**100**	100
Petrofac Platform Management Services Limited	Jersey	**100**	100
Petrofac Training International Limited	Jersey	**[1]100**	[1]100
Petroleum Facilities E & C Limited	Jersey	**[1]100**	[1]100
Petrofac (JSD 6000) Limited	Jersey	**100**	100
Petrofac E&C Sdn Bhd	Malaysia	**100**	100
Petrofac Energy Developments Sdn Bhd	Malaysia	**100**	100
Petrofac Engineering Services (Malaysia) Sdn Bhd	Malaysia	**70**	70
PFMAP Sdn Bhd	Malaysia	**100**	100
SPD Well Engineering Sdn Bhd	Malaysia	**[2]49**	[2]49
H&L/SPD Americas S. de R.L.	Mexico	**100**	100
Petrofac Mexico SA de CV	Mexico	**100**	100
Petrofac Mexico Servicios SA de CV	Mexico	**100**	100
Operadora de Campos del Noreste S.A. de C.V.	Mexico	**100**	100
Petrofac Kazakhstan B.V.	Netherlands	**100**	100
Petrofac Netherlands Coöperatief U.A.	Netherlands	**100**	100
Petrofac Netherlands Holdings B.V.	Netherlands	**100**	100
Petrofac Treasury B.V.	Netherlands	**100**	100
PTS B.V.	Netherlands	**100**	100

Name of entity	Country of incorporation	Proportion of nominal value of issued shares controlled by the Group 2017	2016
Petrofac Nigeria B.V.	Netherlands	**100**	100
Petrofac Norge B.V.	Netherlands	**100**	100
Petrofac Energy Services Nigeria Limited	Nigeria	**100**	100
Petrofac International (Nigeria) Limited	Nigeria	**[2]40**	[2]40
Petrofac Norge AS	Norway	**100**	100
Petrofac E&C Oman LLC	Oman	**100**	100
PKT Technical Services Ltd	Russia	**[2]50**	[2]50
PKT Training Services Ltd	Russia	**100**	100
Sakhalin Technical Training Centre	Russia	**100**	100
Petrofac Saudi Arabia Company Limited	Saudi Arabia	**100**	100
Atlantic Resourcing Limited	Scotland	**100**	100
Petrofac Facilities Management Group Limited	Scotland	**100**	100
Petrofac Facilities Management Limited	Scotland	**100**	100
Petrofac Training Limited	Scotland	**100**	100
Scotvalve Services Limited	Scotland	**100**	100
SPD Limited	Scotland	**100**	100
Stephen Gillespie Consultants Limited	Scotland	**100**	100
Petrofac Training Group Limited	Scotland	**100**	100
Petrofac Training Holdings Limited	Scotland	**100**	100
Petrofac South East Asia Pte Ltd	Singapore	**[1]100**	[1]100
Petrofac Emirates LLC (note 12)	United Arab Emirates	**75**	75
Petrofac E&C International Limited	United Arab Emirates	**100**	100
Petrofac FZE	United Arab Emirates	**100**	100
Petrofac International (UAE) LLC	United Arab Emirates	**100**	100
Petrofac Energy Developments (Ohanet) LLC	United States	**100**	100
Petrofac Inc.	United States	**[1]100**	[1]100
Petrofac Training Inc.	United States	**100**	100
SPD Group Limited	British Virgin Islands	**100**	100

34 Subsidiaries, associates and joint arrangements continued

Associates

Name of associate	Principal activities	Country of incorporation	Proportion of nominal value of issued shares controlled by the Group 2017	2016
PetroFirst Infrastructure Limited	Leasing of floating platforms to oil and gas industry	Jersey	**20**	20
Petrofac FPF1 Limited	Leasing of floating platforms to oil and gas industry	Jersey	**25**	25
PetroFirst Infrastructure 2 Limited	Leasing of floating platforms to oil and gas industry	Jersey	**10**	10
Joint arrangements				
Joint ventures				
Spiecapag – Petrofac International Limited	Engineering, procurement and construction management services	Jersey	**50**	50
TTE Petrofac Limited	Operation and management of a training centre	Jersey	**50**	50
China Petroleum Petrofac Engineering Services Cooperatief U.A.	Consultancy for Petroleum and chemical engineering	Netherlands	**49**	49
Takatuf Petrofac Oman LLC	Construction, operation and management of a training centre	Oman	**40**	40
Joint operations				
PetroAlfa Servicios Integrados de Energia SAPI de CV	Services to oil and gas industry	Mexico	[3]**50**	[3]50
Petro-SPM Integrated Services S.A. de C.V.	Production enhancement for Pánuco	Mexico	**–**	[4]50
Bechtel Petrofac JV	Engineering, procurement and construction management of a project in UAE	Unincorporated	[5]**35**	[5]35
NGL 4 JV	EPC for a project in UAE	Unincorporated	[5]**45**	[5]45
Petrofac/Black & Veatch JV	Tendering and execution of a project in Kazakhstan	Unincorporated	[5]**80**	[5]80
Petrofac/Bonatti JV	EPC for a project in Algeria	Unincorporated	[5]**70**	[5]70
Petrofac/Daelim JV	EPC for a project in Oman	Unincorporated	[5]**50**	[5]50
Petrofac/ETAP JV	Oil and gas exploration and production from Chergui concession	Unincorporated	[5]**45**	[5]45
PM304 JV	Oil and gas exploration and production in Malaysia	Unincorporated	[5]**30**	[5]30
Petrofac/Samsung/CB&I CFP	EPC for a project in Kuwait	Unincorporated	[5]**47**	[5]47
Greater Stella Area joint operation	Oil and gas exploration and production in UK	Unincorporated	[5]**20**	–
Santuario Production Sharing Contract	Oil and gas exploration and production in Mexico	Unincorporated	[5]**36**	–

Please note that only active entities are shown in the above tables. All dormant entities have been omitted.

1 Directly held by Petrofac Limited.

2 Entities consolidated as subsidiaries on the basis of control.

3 Joint arrangement classified as joint operation on the basis of contractual arrangement, whereby the activities of the arrangement are primarily designed for the provision of output to the venturers; this indicates that the venturers have rights to substantially all the economic benefits of the assets of the arrangement.

4 Joint arrangement classified as joint operation on the basis of contractual arrangement between the joint venturers to be jointly and severally liable for performance under the Pánuco Integrated Service Contract (ISC).

5 The unincorporated arrangement between the venturers is a joint arrangement as, contractually, all the decisions about the relevant activities require unanimous consent by the venturers. Unincorporated joint arrangements are recognised in the Group's financial statements as joint operations.

The Group's ownership interest in associates and joint ventures is disclosed on page 147 and page 148 respectively.