CONSOLIDATED INCOME STATEMENT

FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2019 US$m	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2018 US$m
Revenue	3	5,530	–	5,530	5,829	–	5,829
Cost of sales	5a	(4,909)	–	(4,909)	(5,110)	–	(5,110)
Gross profit		621	–	621	719	–	719
Selling, general and administration expenses	5b	(228)	–	(228)	(216)	–	(216)
Exceptional items and certain re-measurements	6	–	(189)	(189)	–	(356)	(356)
Other operating income	5e	27	–	27	22	–	22
Other operating expenses	5f	(11)	–	(11)	(10)	–	(10)
Operating profit/(loss)		409	(189)	220	515	(356)	159
Finance income	7	13	–	13	14	–	14
Finance expense	7	(58)	–	(58)	(81)	–	(81)
Share of net profit of associates and joint ventures	17	17	–	17	15	–	15
Profit/(loss) before tax		381	(189)	192	463	(356)	107
Income tax (expense)/credit	8a	(112)	(14)	(126)	(113)	67	(46)
Net profit/(loss)		269	(203)	66	350	(289)	61
Attributable to:							
Petrofac Limited shareholders		276	(203)	73	353	(289)	64
Non-controlling interests	13	(7)	–	(7)	(3)	–	(3)
		269	(203)	66	350	(289)	61
Earnings/(loss) per share (US cents)							
Basic	9	82.1	(60.4)	21.7	104.4	(85.5)	18.9
Diluted	9	80.4	(59.1)	21.3	102.3	(83.7)	18.6

1 This measurement is shown by the Group as a means of measuring underlying business performance; see note 2 and Appendix A on page 174.

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	2019 US$m	2018 US$m
Reported net profit		**66**	61
Other comprehensive income/(loss) 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	(2)	(24)
Foreign currency translation (losses)/gains	26	(13)	17
Other comprehensive loss to be reclassified to consolidated income statement in subsequent periods		(15)	(7)
Other comprehensive income/(loss) reclassified to consolidated income statement			
Net gains on maturity of cash flow hedges recycled in the year	26	–	(3)
Other comprehensive loss reclassified to consolidated income statement		–	(3)
Total comprehensive income for the year		**51**	51
Attributable to:			
Petrofac Limited shareholders		58	53
Non-controlling interests	13	(7)	(2)
		51	51

CONSOLIDATED BALANCE SHEET
AT 31 DECEMBER 2019

	Notes	2019 US$m	2018 US$m
Assets			
Non-current assets			
Property, plant and equipment	12	398	685
Goodwill	14	99	73
Intangible assets	16	66	56
Investments in associates and joint ventures	17	38	30
Other financial assets	18	316	406
Contract assets	21	–	40
Deferred consideration	11b	61	61
Deferred tax assets	8c	50	126
		1,028	1,477
Current assets			
Inventories	19	17	21
Trade and other receivables	20	1,102	1,431
Contract assets	21	2,064	1,998
Related party receivables	32	1	1
Other financial assets	18	135	144
Income tax receivable		4	8
Cash and short-term deposits	22	1,025	726
		4,348	4,329
Assets held for sale	15	600	–
		4,948	4,329
Total assets		5,976	5,806
Equity and liabilities			
Equity			
Share capital	23	7	7
Share premium	23	4	4
Capital redemption reserve	23	11	11
Employee Benefit Trust shares	24	(110)	(107)
Other reserves	26	84	95
Retained earnings		637	697
Equity attributable to Petrofac Limited shareholders		633	707
Non-controlling interests	13	281	302
Total equity		914	1,009
Non-current liabilities			
Interest-bearing loans and borrowings	27	599	376
Provisions	28	189	243
Other financial liabilities	18	315	341
Deferred tax liabilities	8c	37	43
		1,140	1,003
Current liabilities			
Trade and other payables	29	1,075	962
Contract liabilities	21	273	504
Interest-bearing loans and borrowings	27	411	260
Other financial liabilities	18	166	139
Income tax payable		231	244
Accrued contract expenses		1,599	1,645
Provisions	28	47	40
		3,802	3,794
Liabilities associated with assets held for sale	15	120	–
		3,922	3,794
Total liabilities		5,062	4,797
Total equity and liabilities		5,976	5,806

The consolidated financial statements on pages 118 to 173 were approved by the Board of Directors on 25 February 2020 and signed on its behalf by Alastair Cochran – Chief Financial Officer.

CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 31 DECEMBER 2019

	Notes	2019 US$m	2018 US$m*
Operating activities			
Profit before tax		**192**	107
Exceptional items and certain re-measurements	6	**189**	356
Profit before tax, exceptional items and certain re-measurements		**381**	463
Adjustments to reconcile profit before tax, exceptional items and certain re-measurements to net cash flows:			
Depreciation, amortisation and write-offs	5a, 5b	**133**	141
Expected credit loss allowance recognised	20, 21	**16**	1
Share-based payments	5c	**18**	17
Difference between other long-term employment benefits paid and amounts recognised in the consolidated income statement	28	**7**	7
Net finance expense	7	**45**	67
Net movement to provision for onerous contracts and other provisions	28	**(10)**	15
Share of net profit of associates and joint ventures	17	**(17)**	(15)
Net other non-cash items		**4**	(3)
		577	693
Working capital adjustments:			
Inventories		**1**	(17)
Trade and other receivables		**35**	(23)
Contract assets		**(184)**	316
Other current financial assets	18	**27**	11
Trade and other payables		**161**	(103)
Contract liabilities		**(231)**	121
Accrued contract expenses		**12**	(320)
		398	678
Net other non-current items		**1**	3
Cash generated from operations		**399**	681
Restructuring, redundancy, migration costs and other exceptional items paid		**(28)**	(24)
Net income taxes paid		**(133)**	(104)
Net cash flows generated from operating activities		**238**	553
Investing activities			
Purchase of property, plant and equipment		**(62)**	(90)
Payments for intangible assets	16	**(30)**	(8)
Acquisition of subsidiary	11a	**(21)**	–
Dividends received from associates and joint ventures	17	**11**	11
Net loans (paid to)/repaid by associates and joint ventures	17	**(2)**	13
Disposal costs paid/proceeds from disposal of property, plant and equipment		**(9)**	152
Proceeds from disposal of subsidiaries, including receipt against contingent consideration		**12**	130
Advance received	15	**37**	–
Interest received		**5**	5
Net cash flows (used in)/generated from investing activities		**(59)**	213
Financing activities			
Interest-bearing loans and borrowings, net of debt acquisition cost	18	**1,390**	1,858
Repayment of interest-bearing loans, borrowings and lease liabilities	18	**(1,157)**	(2,833)
Interest paid		**(51)**	(69)
Amounts received from non-controlling interest		**10**	224
Purchase of Company's shares by Employee Benefit Trust	24	**(33)**	(44)
Dividends paid		**(129)**	(128)
Net cash flows generated from/(used in) financing activities		**30**	(992)
Net increase/(decrease) in cash and cash equivalents		**209**	(226)
Net foreign exchange difference		**–**	(5)
Cash and cash equivalents at 1 January		**705**	936
Cash and cash equivalents at 31 December	22	**914**	705

* Re-presented due to reclassification of interest paid of US$69m for the year ended 31 December 2018, previously reported within operating activity to financing activity as this presentation provides better comparability with Petrofac's peer group and more faithfully represents the nature of the item in accordance with IAS 7 'Statement of Cash Flows'; consequently, net cash flows generated from operating activities increased by US$69m and net cash flows used in financing activities increased by US$69m.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2019

	Attributable to Petrofac Limited shareholders								
	Issued share capital US$m	Share premium US$m	Capital redemption reserve US$m	Employee Benefit Trust shares[1] US$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 2019	**7**	**4**	**11**	**(107)**	**95**	**697**	**707**	**302**	**1,009**
Reported net profit/(loss)	**–**	**–**	**–**	**–**	**–**	**73**	**73**	**(7)**	**66**
Other comprehensive loss	**–**	**–**	**–**	**–**	**(15)**	**–**	**(15)**	**–**	**(15)**
Total comprehensive(loss)/income	**–**	**–**	**–**	**–**	**(15)**	**73**	**58**	**(7)**	**51**
Purchase of Company's shares by Employee Benefit Trust (note 24)	**–**	**–**	**–**	**(33)**	**–**	**–**	**(33)**	**–**	**(33)**
Issue of Company's shares by Employee Benefit Trust (note 24)	**–**	**–**	**–**	**30**	**(26)**	**(4)**	**–**	**–**	**–**
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	**–**	**–**	**–**	**–**	**12**	**–**	**12**	**–**	**12**
Credit to equity for share-based payments charge (note 25)	**–**	**–**	**–**	**–**	**18**	**–**	**18**	**–**	**18**
Dividends (note 10 and note 13)	**–**	**–**	**–**	**–**	**–**	**(129)**	**(129)**	**(14)**	**(143)**
Balance at 31 December 2019	**7**	**4**	**11**	**(110)**	**84**	**637**	**633**	**281**	**914**

	Attributable to Petrofac Limited shareholders								
	Issued share capital US$m	Share premium US$m	Capital redemption reserve US$m	Employee Benefit Trust shares[1] US$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 2018	7	4	11	(102)	110	766	796	39	835
Reported net profit/(loss)	–	–	–	–	–	64	64	(3)	61
Other comprehensive (loss)/income	–	–	–	–	(11)	–	(11)	1	(10)
Total comprehensive (loss)/income	–	–	–	–	(11)	64	53	(2)	51
Purchase of Company's shares by Employee Benefit Trust (note 24)	–	–	–	(44)	–	–	(44)	–	(44)
Issue of Company's shares by Employee Benefit Trust (note 24)	–	–	–	39	(34)	(5)	–	–	–
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	–	–	15	–	15	–	15
Credit to equity for share-based payments charge (note 25)	–	–	–	–	17	–	17	–	17
Income tax on share-based payments reserve	–	–	–	–	(2)	–	(2)	–	(2)
Recognised on disposal of 49% non-controlling interest of the Group's operations in Mexico (note 11b)	–	–	–	–	–	–	–	266	266
Dividends (note 10 and note 13)	–	–	–	–	–	(128)	(128)	(1)	(129)
Balance at 31 December 2018	7	4	11	(107)	95	697	707	302	1,009

1 Shares held by Petrofac Employee Benefit Trust.

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. Petrofac Limited and its subsidiaries at 31 December 2019 comprise the Petrofac Group (the "Group"). Information on the Group's subsidiaries, associates and joint arrangements is contained in note 34 to these consolidated financial statements. Information on the Group's related party transactions is provided in note 32. The Group's principal activity is the provision of services to the oil and gas production and processing industry.

The Group's financial statements (the "consolidated financial statements") for the year ended 31 December 2019 were authorised for issue in accordance with a resolution of the Board of Directors on 25 February 2020. The Company's financial statements for the year ended 31 December 2019 are shown on pages 179 to 194.

2 Summary of significant accounting policies

2.1 Basis of preparation

The consolidated financial statements 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 derivative financial instruments, financial assets measured at fair value through profit and loss, and deferred consideration that has 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"), unless otherwise stated.

2.2 Presentation of results

The Group uses Alternative Performance Measures ("APMs") when assessing and discussing the Group's financial performance, financial position and cash flows that are not defined or specified under IFRS. The Group uses these APMs, which are not considered to be a substitute for or superior to IFRS measures, to provide stakeholders with additional useful information by adjusting for exceptional items and certain re-measurements which impact upon IFRS measures or, by defining new measures, to aid the understanding of the Group's financial performance, financial position and cash flows (refer to note 6 and Appendix A on page 174 for details).

2.3 Adoption of new financial reporting standards, amendments and interpretations

Effective new financial reporting standards

The Group adopted IFRS 16 'Leases' and IFRIC 23 'Uncertainty over Income Tax Treatments' on 1 January 2019. The nature and effect of the changes are described below.

IFRS 16 'Leases'

IFRS 16 replaced 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' for annual periods beginning on or after 1 January 2019. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for most leases on their balance sheets as lease liabilities with corresponding right-of-use assets.

Leases previously accounted for as operating leases

The Group applied IFRS 16 retrospectively, using the modified retrospective method, to contracts that were previously identified as operating leases in accordance with IAS 17 and IFRIC 4. Comparative information was not restated. The Group applied IFRS 16 to all non-cancellable leases except for those with low-value assets or with a lease term of 12 months or less containing no purchase options. Under this method, the Group measured the lease liability at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate at the date of initial application. A right-of-use asset was recognised within the property, plant and equipment line item of the consolidated balance sheet at an amount equal to the lease liability, subject to adjustments for prepaid or accrued lease payments, provision for onerous operating leases and rent-free periods relating to such leases recognised in the consolidated balance sheet immediately before the date of initial application. On adoption of IFRS 16, these adjustments to the right-of use asset comprised a provision for onerous operating leases of US$12m and rent-free period adjustment of US$9m.

The application of IFRS 16 at 1 January 2019, had no impact on the opening reserves but impacted the following consolidated balance sheet line items:

	Impact US$m
Property, plant and equipment	47
Other financial assets	10
Total non-current assets	57
Other financial assets	7
Total current assets	7
Total assets	64
Other financial liabilities	65
Provisions	(9)
Total non-current liabilities	56
Trade and other payables	(9)
Other financial liabilities	20
Provisions	(3)
Total current liabilities	8
Total liabilities	64

Leases previously classified as finance leases

The Group did not change the initial carrying amounts of recognised assets and liabilities at the date of initial application for leases previously classified as finance leases (i.e. the right-of-use assets and lease liabilities equal the lease assets and liabilities recognised under IAS 17). The requirements of IFRS 16 were applied to these leases from 1 January 2019.

Refer to note 12 and note 30 for specific lease disclosures.

Nature of the effect of adoption of IFRS 16

The Group has lease contracts for various items of property, plant and equipment. Before the adoption of IFRS 16, the Group, as lessee, classified each of its leases at the inception date as either a finance lease or an operating lease. A lease was classified as a finance lease if it transferred substantially all the risks and rewards incidental to ownership of the leased asset to the Group; otherwise it was classified as an operating lease. Finance leases were capitalised at the commencement of the lease at the inception date fair value of the leased asset or, if lower, at the present value of the minimum lease payments. Lease payments were apportioned between interest (recognised as a finance expense in the consolidated income statement) and a reduction of the lease liability using the effective interest rate method. In an operating lease, the leased asset was not capitalised, and the lease payments were recognised either in the cost of sales or selling, general and administration expenses line items of the consolidated income statement on a straight-line basis over the lease term.

2 Summary of significant accounting policies continued

Upon adoption of IFRS 16, the Group, as a lessee, applied a single recognition and measurement approach for all leases, except for short-term leases (i.e. lease term of 12 months or less and containing no purchase options) and leases of low-value assets (i.e. below US$5,000). The Group recognised lease liabilities for making lease payments and right-of-use assets representing the right to use the underlying assets.

As at 1 January 2019:

- For leases previously classified as operating leases under IAS 17, right-of-use assets of US$47m were recognised within the property, plant and equipment line item of the consolidated balance sheet
- For leases that were previously classified as finance leases under IAS 17, previously included within oil and gas facilities and plant and equipment which form part of the property, plant and equipment line item of the consolidated balance sheet, the carrying amount of the lease assets at the date of initial application was US$128m. This was the same carrying amount of the right-of-use assets measured applying IAS 17 immediately before that date
- For leases previously classified as operating leases under IAS 17, lease liabilities of US$85m were recognised within other financial liabilities line items of the consolidated balance sheet (non-current US$65m and current US$20m). The lease liability of US$85m at the date of initial application included a 70% gross up of US$17m on such liabilities, which was recognised within the other financial assets line items of the consolidated balance sheet (non-current US$10m and current US$7m), representing amounts due from joint operation partners. This adjustment was necessary as the Group is required to recognise 100% of the lease liability in the consolidated balance sheet to reflect the legal position of the Group as the contracting counterparty for such leases
- For leases that were previously classified as finance leases under IAS 17, the carrying amounts of the lease liability of US$451m at the date of initial application were the carrying amounts of the lease liability immediately before that date measured applying IAS 17. The lease liability of US$451m at the date of initial application included 70% gross up of US$313m on such liabilities, which was recognised within the other financial assets line items of the consolidated balance sheet (non-current US$237m and current US$76m), representing amounts due from joint operation partners, to reflect the legal position of the Group as the contracting counterparty for such leases
- For leases previously classified as operating leases under IAS 17, onerous operating lease provisions of US$12m, included within the provisions line item of the consolidated balance sheet (non-current US$9m and current US$3m), and rent-free period adjustment of US$9m, included within trade and other payables line item of the consolidated balance sheet, relating to such leases recognised in the consolidated balance sheet immediately before the date of initial application were adjusted against the right-of-use asset

For the year ended 31 December 2019:

- Depreciation expense in the consolidated income statement increased by US$13m for leases previously classified as operating leases compared with the year ended 31 December 2018
- Finance expense in the consolidated income statement increased by US$4m for leases previously classified as operating leases compared with the year ended 31 December 2018
- Lease expense recognised in the cost of sales and selling, general and administration expenses line items of the consolidated income statement reduced by US$16m
- Cash outflows from operating activities decreased by US$15m and cash outflows from financing activities increased by the same amount

The new accounting policies of the Group upon adoption of IFRS 16 are set out on pages 129 and 130.

IFRIC 23 ‘Uncertainty over Income Tax Treatments’

The interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 ‘Income Taxes’. It does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately
- The assumptions an entity makes about the examination of tax treatments by taxation authorities
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates
- How an entity considers changes in facts and circumstances

The Group determines whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments and uses the approach that better predicts the resolution of the uncertainty.

The Group applies significant judgement in identifying uncertainties over income tax treatments. Since the Group operates in a complex multinational environment, it assessed whether the interpretation had an impact on its consolidated financial statements.

Upon adoption of the interpretation, the Group considered whether it has any uncertain tax positions, particularly those relating to transfer pricing. The Company’s and the subsidiaries’ tax filings in different jurisdictions include deductions related to transfer pricing and the taxation authorities may challenge those tax treatments. The Group determined, based on its tax compliance and transfer pricing study, that it is probable that its tax treatments (including those for the subsidiaries) will be accepted by the taxation authorities. The interpretation did not have an impact on the consolidated financial statements.

2.4 Financial reporting standards, amendments and interpretations issued but not yet effective

Certain new accounting standards and interpretations have been published that are not mandatory for the 31 December 2019 reporting period and have not been early adopted by the Group. These standards, except amendments to IFRS 3 ‘Definition of a Business’ that apply prospectively to transactions or other events that occur on or after the date of first application, are not expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions and are therefore not presented.

Amendments to IFRS 3 ‘Business Combinations’: definition of a business

In October 2018, the International Accounting Standards Board issued amendments to the definition of a business in IFRS 3. The amendments are intended to assist entities to determine whether a transaction should be accounted for as a business combination or as an asset acquisition.

IFRS 3 continues to adopt a market participant’s perspective to determine whether an acquired set of activities and assets is a business. The amendments: clarify the minimum requirements for a business; remove the assessment of whether market participants are capable of replacing any missing elements; add guidance to help entities assess whether an acquired process is substantive; narrow the definitions of a business and of outputs; and introduce an optional fair value concentration test.

The amendments to IFRS 3 are effective for annual reporting periods beginning on or after 1 January 2020 and apply prospectively. Earlier application is permitted.

Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application and the Group does not intend to apply the amendment early, the Group will not be affected by these amendments on the date of transition.

2.5 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 2019. 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 voting rights majority 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 of the Group

The Group re-assesses whether 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 control of the subsidiary.

Net profit or loss and each component of other comprehensive income ("OCI") are attributed to Petrofac Limited shareholders and to 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 align their accounting policies 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 ceases to control 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 in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date.

Any contingent consideration to be transferred by the acquirer will be recognised at fair value at the acquisition date. Contingent consideration classified as equity is not remeasured and its subsequent settlement is accounted for within equity. Contingent consideration, classified as a liability that is a financial instrument and within the scope of IFRS 9 'Financial Instruments', is measured at fair value with the changes in fair value recognised in the consolidated income statement in accordance with IFRS 9.

Goodwill is initially measured at cost, being the excess of the aggregate consideration transferred and the fair value of the net assets acquired together with the amount recognised for non-controlling interests, and any previous interest held.

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 the 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 charge is recognised in the consolidated income statement.

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.

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

Associates and joint ventures

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 net profits of the associate or joint venture. Any change in other comprehensive income ("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 net profit or loss of associates and joint ventures is presented separately in the consolidated income statement outside operating profit/(loss) and represents profit or loss after tax and non-controlling interests.

Any unrealised gains and losses resulting from transactions between the Group and 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.

At the end of each reporting period, the Group determines whether there is objective evidence that its investment in its associates or joint ventures are 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 impairment loss as an exceptional item in the consolidated income statement.

2 Summary of significant accounting policies continued

Upon loss of significant influence over an associate or joint control over a joint venture, the Group measures and recognises any retained investment at 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 Group's share of revenue earned and expenses incurred are recognised in the consolidated income statement. Assets controlled and liabilities incurred by the Group are recognised in the consolidated balance sheet.

Foreign currency translation

The consolidated financial statements are presented in United States dollars ("US$m"), which is also the 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 net 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 the settlement or translation of monetary items are recognised in other operating income or other operating expenses line items, as appropriate, of the consolidated income statement.

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.

Group subsidiaries

On consolidation, the assets and liabilities of subsidiaries with non-United States dollars functional currencies are translated into United States dollars at the rate of exchange prevailing at the reporting date and their income statements are translated at monthly average rates. The exchange differences arising on translation for consolidation are recognised in the consolidated statement of other comprehensive income. On disposal of a subsidiary with non-United States dollars functional currency, the component of the consolidated statement of other comprehensive income relating to currency translation is recognised in the consolidated income statement.

2.6 Significant accounting judgements and estimates

The preparation of the consolidated financial statements requires management to make judgements and estimates that effect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures. Uncertainty about these judgements and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities effected in the next reporting period or in the longer-term.

Judgements

In the process of applying the Group's accounting policies, management has made the following judgements, apart from those involving estimations (see page 127), which have the most significant effect on the amounts recognised in the consolidated financial statements:

Significant judgements associated with revenue recognition

— Revenue recognition on fixed-price engineering, procurement and construction contracts: the Group measures progress and recognises revenue on fixed-price engineering, procurement and construction contracts using the input method, based on the actual cost of work performed at the end of the reporting period as a percentage of the estimated total contract costs at completion. The Group considers the input method to faithfully depict the Group's performance in transferring control of goods and services to the customer and provides meaningful information in respect of progress towards the satisfaction of performance obligations on its contracts
— In the early stages of contract completion, the outcome of a contract generally cannot be estimated reliably. The Group has established a threshold where contract revenues are recognised only to the extent of costs incurred to reflect this uncertainty. This threshold has been applied by the Group using a rebuttable presumption that contracts below 15% completion cannot yet be estimated reliably, however judgement may be applied to deviate from this threshold dependent upon an objective evaluation of operational and contractual risks, e.g. taking into account contract value, duration, geography, complexities involved in the execution of the contract, past experience with the customer and risk mitigations
— Management applies certain judgements associated with recognition and non-recognition of variable consideration, e.g. assessed variation orders and liquidated damages. The factors considered when determining whether to recognise variable consideration, together with the associated estimation uncertainty, are discussed below under section 'Estimation uncertainty'
— Revenue recognition on consortium contracts: the Group recognises its share of revenue and profit from contracts executed as part of a consortium in accordance with the agreed consortium contractual arrangement. In selecting the appropriate accounting treatment, the main consideration is the determination of whether the joint arrangement is a joint operation or joint venture (though not directly related to revenue recognition, this judgement has a material impact on presentation in the consolidated income statement) in accordance with IFRS 11 'Joint Arrangements'

Significant judgements associated with contingent liabilities and provisions
Management applies significant judgements in determining whether it has a possible obligation to disclose a contingent liability or a probable obligation to recognise a provision in the consolidated financial statements. Management, in certain instances, takes into consideration legal advice from its legal counsel and external legal advisors as well as independent, external specialist advice, to determine the probability of an outflow of resources embodying economic benefits that will be required to settle the obligation, if determined. Typically, the contingent liabilities include pending legal cases with regulatory authorities and/or third parties.

Significant judgements associated with classifying assets held for sale and presenting discontinued operations
Non-current assets or disposal groups are classified as held for sale when the management believes that 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. There is also judgement required to determine whether a disposal meets the criteria to be presented as a discontinued operation, in particular whether it represents a separate major line of business or geographic area of operation. On 19 September 2019, the Group signed a Sale and Purchase Agreement ("SPA") with Perenco (Oil and Gas) International Limited ("Perenco") to dispose of the remaining 51% ownership interest relating to the Group's operations in Mexico. Consequently, at the end of the reporting period all assets and liabilities relating to the disposal group were reclassified to assets held for sale and liabilities associated with assets held for sale line items of the consolidated balance sheet. The business performance net profit attributable to Petrofac Limited shareholders associated with the Group's operations in Mexico of US$3m represented 1% of the Group's business performance net profit attributable to Petrofac Limited shareholders. This was not considered material by management and accordingly the disposal was not presented as a discontinued operation.

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 reporting period are discussed below:

Fixed-price engineering, procurement and construction contracts
— Recognition of assessed variation orders pending customer approval ("AVOs"): an AVO is a management estimated right of payment due from the customer resulting for a customer instructed change in the contractual scope of work or for the reimbursement of costs not included in the contract price. The Group recognises revenues and profit from AVOs using the expected value approach to assess/re-assess AVOs at contract inception and at each reporting date where it is considered highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the AVO is subsequently resolved. In performing the assessment, management considers the likelihood of such settlement being made by reference to the contract, independent, external specialist advice, customer communications, past experience with the customer and other forms of documentary evidence. At 31 December 2019, contract assets line item in the consolidated balance sheet included AVOs of US$341m (2018: US$235m); see note 21
— Liquidated damages ("LDs"): LDs are contractual penalties applied by the customer, normally relating to failure of the contractor to meet agreed performance and progress outcomes. The Group estimates the application of LDs at contract inception using the expected value approach and recognises an associated amount as a reduction to contract revenue. The Group assesses/re-assesses its exposure to LD application at each reporting date, where the customer has the contractual right to apply LDs and where it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the LD is subsequently resolved. This requires a deterministic probability assessment of the monetary amount of LDs liable, which involves a number of management judgements and estimates (e.g. contractual position with the customer, negotiations with the customer specifically relating to extension of time ("EoT"), past experience with the customer, etc.), regarding the amounts to recognise in contract accounting. During 2019, liquidated damages amounting to US$16m were recognised as a reduction to estimate at completion revenue that resulted in a reduction of US$10m to the Group's revenue recognised during the year (2018: US$nil) through the application of contract progress. This estimate will impact revenues and contract assets or contract liabilities.
To the extent assessed variation orders pending customer approval are reflected in the transaction price (or excluded from estimate at completion contract revenue in the case of liquidated damages) are not resolved in the Group's favour, there could be reductions in, or reversals of, previously recognised revenue
— Estimate at completion contract costs: at the end of the reporting period the Group is required to estimate costs at completion on fixed-price contracts, based on the work to be performed beyond the reporting period. This involves an objective evaluation of project progress against the delivery schedule, evaluation of work to be performed and the associated risks and costs to fully deliver the contract to the customer. Estimating contract cost at completion also involves recognising an onerous contract provision in accordance with IAS 37 'Provisions, Contingent Liabilities and Contingent Assets' for future losses on contracts where it is considered probable that contract costs are likely to exceed revenues at contract completion. This estimate will impact revenues, cost of sales, contract assets and contract liabilities. The carrying amount of onerous contract provisions at 31 December 2019 was US$6m (2018: US$18m); see note 28

Income tax and deferred tax
— 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 uncertain tax treatments for jurisdictions where there is a probable future outflow, based on the applicable law and regulations, historic outcomes of similar audits and discussions, independent, external specialist advice and consideration of the progress on, and nature of, current discussions with the tax authority concerned. Where management determines that a greater than 50% probability exists that the tax authorities would accept the position taken in the tax return, amounts are recognised in the consolidated financial statements on that basis. Where the amount of tax payable or recoverable is uncertain, the Group recognises a liability or asset based on either: management's judgement of the most likely outcome; or, when there is a wide range of possible outcomes, a probability weighted average approach. The ultimate outcome following resolution of such audits and assessments may be materially higher or lower than the amounts recognised. Upon adoption of IFRIC 23 'Uncertainty over Income Tax Treatments', the Group considered whether it has any uncertain tax positions, particularly those relating to transfer pricing. The Group's subsidiaries' tax filings in different jurisdictions include deductions related to transfer pricing and the taxation authorities may challenge those tax treatments. The Group determined, based on its tax compliance and transfer pricing study, that it is probable that its tax treatments (including those for the subsidiaries) will be accepted by taxation authorities. IFRIC 23 did not have an impact on the consolidated financial statements of the Group. The carrying amount of uncertain tax treatments ("UTTs"), recognised within income tax payable line item of the consolidated balance sheet at 31 December 2019, was US$139m (2018: US$119m)
— 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 estimates concerning future taxable profits and the recoverability of recognised deferred tax asset balances. The carrying amount of deferred tax assets at 31 December 2019 was US$50m (2018: US$126m)

2 Summary of significant accounting policies continued

Contingent and deferred consideration measured at fair value through profit or loss

- Recoverable amount of net assets relating to the Group's operations in Mexico, including contingent consideration arising from the disposal (note 15): the carrying amount of the assets and liabilities held for sale in relation to Group's operations in Mexico was US$480m at 31 December 2019. Contingent consideration receivable associated with the 49% disposal of Group's operations in Mexico was US$42m (2018: US$42m). The Group has estimated the fair value less cost of disposal, including contingent consideration, for both the 49% disposal transaction in 2018 and the anticipated 51% disposal transaction announced in 2019. There remains considerable uncertainty concerning the timing and outcome of the contingent consideration receivable where the pay-out conditions are based on migrations of the Production Enhancement Contracts ("PECs") to other forms of contract, the terms achieved in those future migrations, and the outcome of future field developments. Management has therefore considered alternative scenarios to estimate the recoverability of the contingent consideration, including but not limited to the impact of delay in migration or renegotiation to another form of contract. This was a significant accounting estimate made by management to determine the fair value of the contingent consideration at 31 December 2019. A fair value loss and/or impairment of up to US$108m would be recognised in the consolidated income statement, in the next reporting period or in the longer-term, if the actual outcome of the migration or commercial negotiation is less favourable than management's current estimate (see note 15 for disclosures associated with the sale and purchase agreement signed during 2019 to dispose of the remaining 51% interest in the Group's Mexican operations)
- Block PM304 oil and gas asset in Malaysia had a carrying amount of US$150m (2018: US$234m). The recoverable amount, which was based on fair value less cost of disposal, was lower than the asset's carrying amount, resulting in a post-tax impairment charge of US$86m (2018: US$nil) in the period (note 6). The Group's fair value less cost of disposal estimate includes an assessment of future field performance, the likelihood of a license extension beyond 2026 and future oil price assumptions
- Recoverable amount of deferred consideration relating to disposal of JSD6000 installation vessel (the "vessel"): the deferred consideration relating to disposal of the vessel, representing a contractual right to the Group, was recognised as a non-current asset in the consolidated balance sheet. The deferred consideration was initially measured and recognised at fair value and will be subsequently measured at fair value through profit or loss with any fair value re-measurement being separately reported in the consolidated income statement. The fair value of the deferred consideration, with management's current involvement and recent discussions with the Group's partner in the construction of the vessel, is based on the assumption that the Group's partner has the continued intent and the required capabilities to complete the construction and commissioning of the vessel within the due timeframe. The recoverable amount is also subject to change based on changes in the market value of similar specification deep-water vessels. At the end of each reporting period, management reviews its estimate to assess the ability of the Group's partner to complete the construction and commissioning of the vessel and under such circumstances that may impair the Group's partner's ability to complete these activities, a fair value loss would be recognised in the consolidated income statement, in the next reporting period or in the longer-term; see note 11b

2.7 Significant accounting policies

Revenue from contracts with customers

The Group's principal activity is the provision of services to the oil and gas production and processing industry. Revenue from contracts with customers is recognised when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue arrangements, because it typically controls the goods or services before transferring them to the customer.

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'.

Engineering & Construction (E&C)

For fixed-price engineering, procurement and construction contracts, the Group measures progress and recognises revenue using the input method. This method is based on the actual cost of work performed, as a percentage of the estimate at completion cost at the end of the reporting period, once the outcome of a contract can be estimated reliably.

The services provided under the fixed-price engineering, procurement and construction contract are satisfied over time rather than at a point in time, since the customer simultaneously receives and consumes the benefits provided by the Group.

Fixed-price engineering, procurement and construction contracts contain distinct goods and services, but these are not distinct in the context of the contract and are therefore combined into a single performance obligation. At contract inception the management generally considers the following factors to determine whether the contract contains a single performance obligation or multiple performance obligations:

- It provides a significant service of integrating the goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output or outputs for which the customer has contracted
- One or more of the goods or services significantly modifies or customises, or are significantly modified or customised by, one or more of the other goods or services promised in the contract
- The goods or services are highly interdependent or highly interrelated

Contract modifications, e.g. variation orders (including those pending customer approval and customer claims), are generally not distinct from the existing contracts due to the significant integration service provided in the context of the contract and are accounted for as a modification of the existing contract and performance obligation, with a cumulative catch-up adjustment to revenue.

For material contract modifications, based on assessment of the following factors, management evaluates whether it is necessary to recognise such contract modification as a separate contract:

- The scope of the contract increases because of the addition of promised goods or services that are distinct; and
- The price of the contract increases by an amount of consideration that reflects the Group's stand-alone selling prices of the additional promised goods or services and any appropriate adjustments to that price to reflect the circumstances of the particular contract

Variable consideration, e.g. variation orders (including those pending customer approval and customer claims), liquidated damages and incentive payments are assessed/re-assessed using:

- the expected value approach (i.e. the sum of probability-weighted amounts in a range of possible consideration amounts); or
- most likely outcome method (i.e. the single most likely outcome of the contract, the most likely amount may be an appropriate estimate of the amount of variable consideration if the contract has only two possible outcomes for example the Group either achieves a performance bonus or does not)

as appropriate, at contract inception and at the end of each reporting period where it is considered highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

In performing the assessment, management considers the likelihood of such settlement being made by reference to the contract, anticipated performance on the contract, third-party expert opinions, customer communications, past experience with the customer and other forms of documentary evidence.

Revenues from cost-plus-fee contracts and reimbursable contracts are recognised using the input method for measuring progress towards complete satisfaction of the performance obligation.

An onerous contract provision is recognised where the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.

Advance payments received from customers for fixed-price engineering, procurement and construction contracts are structured primarily for reasons other than the provision of finance to the Group (e.g. mobilisation costs), and they do not provide customers with an alternative to pay in arrears. In addition, the length of time between when the customer settles the amount to which the Group has an unconditional right to payment 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 a customer are over several 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.

Engineering & Production Services (EPS)
The Group's contracts with customers for the provision of reimbursable engineering and production services include 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 services are satisfied over time given that the customer simultaneously receives and consumes the benefits provided by the Group, using the input method for measuring progress towards complete satisfaction of the performance obligation.

Variable consideration, e.g. incentive payments and performance bonuses, will be estimated at contract inception and at the end of each reporting period using the single most likely amount approach, where the outcome is expected to be binary and where it is considered highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Revenues from fixed-price contracts are recognised using the input 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.

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. In such cases the Group applies the practical expedient provided in IFRS 15 'Revenue from Contracts with Customers', and will not adjust the promised amount of the consideration for the effects of a significant financing component 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.

Integrated Energy Services (IES)
Production Enhancement Contracts (PECs)
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 sale of hydrocarbons from the Group's Equity Upstream Investments, when control has been passed to the buyer, i.e. the last outlet flange of the loading facility from where the goods are exported to the customer.

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, over the period as follows:

Oil and gas assets (see below)	on a field-by-field basis
Oil and gas facilities	8 to 10 years (or lease term if shorter)
Plant and equipment	3 to 25 years (or lease term if shorter)
Buildings and leasehold improvements	3 to 20 years (or lease term if shorter)
Office furniture and equipment	2 to 4 years (or lease term if shorter)
Vehicles	3 to 5 years (or lease term if shorter)

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.

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. 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.

In accordance with IFRS 16 'Leases', the Group has elected to present the right-of-use assets within property, plant and equipment line item of the consolidated balance sheet, at the commencement date of the lease (i.e. the date at which the underlying asset is available for use). The right-of-use assets is presented within the same asset category as that within which the corresponding underlying assets would be presented if they were owned. The disaggregated information for right-of-use asset presented within property, plant and equipment line item of the consolidated balance sheet is disclosed in note 12.

Set out below are the new accounting policies of the Group associated with right-of-use assets and lease liabilities upon adoption of IFRS 16.

Leases
The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

2 Summary of significant accounting policies continued

Right-of-use assets

The Group recognises right-of-use assets, within property, plant and equipment line item of the consolidated balance sheet, at the commencement date of the lease (i.e. the date at which the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received.

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets. If ownership of the right-of-use asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right-of-use assets are subject to the same impairment requirements as those applicable to property, plant and equipment, see accounting policies associated with Impairment of non-current assets on page 131.

Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate.

In calculating the present value of lease payments, if the interest rate implicit in the lease is not readily determinable, the Group uses the incremental borrowing rate, defined as the rate of interest that a lessee would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment, at the lease commencement date.

After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

The Group's lease liabilities are included in other financial liabilities line items of the consolidated balance sheet, see note 18.

Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of property, plant and equipment (i.e. those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of property, plant and equipment that are considered of low value (i.e. below US$5,000). Lease payments on short-term leases and leases of low-value assets are recognised as an expense on a straight-line basis over the lease term in cost of sales or selling, general and administration expenses line items of the consolidated income statement.

If the lease contract is cancellable by both lessee and lessor with no or insignificant penalty then the lease contract is considered to be cancellable, since the requirement under IFRS 16 for enforceability of the contract is not met, therefore, such lease is recognised as a short-term lease. The decision taken had no material impact on the consolidated financial statements; refer to note 30 for amounts recognised in the consolidated income statement associated with the short-term and low-value asset leases.

The Group makes certain judgements in determining the lease term for contracts that is or contains a lease:

- The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised
- The Group has the option to renew the lease term for some of its leases. The Group applies judgement in evaluating whether it is reasonably certain to exercise the option to renew. That is, it considers all relevant factors that create an economic incentive for it to exercise the renewal. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise (or not to exercise) the option to renew (e.g. a change in business strategy)
- 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

Oil and gas intangible assets

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 property, plant and equipment. 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.

Non-oil and gas intangible 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 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 of intangible assets is included in the cost of sales or selling, general and administration expenses line items 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.

Enterprise Resource Planning ("ERP") and digital system intangibles
Development cost associated with ERP and digital system intangibles is carried at cost less any accumulated amortisation and accumulated impairment. Amortisation of the asset begins when development is complete, and the asset is available for use. The useful life of the ERP system when it is available for use is estimated to be 4 to 7 years. Amortisation is included in the selling, general and administration expenses line item of the consolidated income statement.

Impairment of non-current 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. A post-tax discount rate is used in such calculations. The Group uses pre-tax discount rate to discount pre-tax cash flows and post-tax discount rate to discount post-tax cash flows.

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.

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.

Trade receivables
A trade receivable represents the Group's right to an amount of consideration that is unconditional (i.e. only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets on pages 132 and 133.

Contract assets and contract liabilities
Contract assets
A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration that is conditional.

Fixed-price engineering, procurement and construction contracts are presented in the consolidated balance sheet as follows:

— For each contract, the revenue recognised at the contract's measure of progress using input method, after deducting the progress payments received or receivable from the customers, is presented within the contract assets line item in the consolidated balance sheet as work in progress. The amounts recognised as work in progress are adjusted for any expected credit loss allowance using the probability of default of the counter party. The probability of default data for the counter party is sourced from a third-party provider

Contract liabilities
A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group performs under the contract.

Fixed-price engineering, procurement and construction contracts are presented in the consolidated balance sheet as follows:

— Where the payments received or receivable for any contract exceed revenue recognised, the excess is presented within the contract liabilities line item in the consolidated balance sheet as billings in excess of cost and estimated earnings

Fair value measurement
The Group measures financial instruments, such as derivatives, and contingent consideration receivable 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 consolidated 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.

2 Summary of significant accounting policies continued

Financial assets and financial liabilities

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

Initial recognition and measurement

Financial assets are classified at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), fair value through profit or loss, 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, transaction costs that are attributable to the acquisition of the financial asset.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component are measured at the transaction price determined under IFRS 15 'Revenue from Contracts with Customers'.

In order for a financial asset to be classified and measured at amortised cost, it needs to give rise to cash flows that are 'solely payments of principal and interest' ("SPPI") on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Subsequent measurement

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

— Amortised cost
— Financial assets at fair value through profit or loss

Amortised cost

This category is the most relevant to the Group and generally applies to trade and other receivables, receivable from joint operation partners for leases, deferred consideration receivable and advances relating to provision for decommissioning liability. The Group measures financial assets at amortised cost if both of the following conditions are met:

— The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows; and
— The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

Financial assets at amortised cost are subsequently measured using the effective interest rate ('EIR') method and are subject to impairment. Gains and losses are recognised in the consolidated income statement when the asset is derecognised, modified or impaired.

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, or financial assets mandatorily required to be measured at fair value. 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. Financial assets at fair value through profit or loss are carried in the consolidated balance sheet at fair value with net changes in fair value recognised in the consolidated income statement.

Pánuco contingent consideration, contingent consideration arising from disposal of the Group's operations in Mexico and contingent consideration receivable from Ithaca Energy UK Ltd, were recognised as financial assets at fair value through profit or loss within the other financial assets line items of the consolidated balance sheet.

The negative fair value change of US$37m (2018: US$43m) relating to Pánuco contingent consideration was recognised as an exceptional item in the consolidated income statement (note 6).

The fair value changes to undesignated forward currency contracts are reported within the other operating income/expenses line item in the consolidated income statement.

Impairment of financial assets

The Group recognises an allowance for expected credit losses ("ECLs") for all financial assets not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include, if any, cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

For other financial assets measured at amortised cost, ECLs are recognised in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12 months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL). There was no significant increase in the credit risk for such financial assets since the initial recognition.

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs (a lifetime ECL). Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. An impairment analysis by each operating segment is performed at each reporting date subject to the Group's established policies and procedures. Engineering & Construction and Integrated Energy Services operating segments that involve low population of high-value receivables apply the probability of default data relating to each individual counterparty to calculate expected credit loss allowance at each reporting date. The probability of default data for the counterparty is sourced from a third-party provider.

Engineering & Production Services operating segment involves high population of low-value receivables and applies a provision matrix to measure expected credit losses. The provision rates are based on days past due for groupings of various customer segments with similar loss patterns. The expected credit loss calculation reflects the probability-weighted outcome, the time value of money and reasonable and supportable information that is available at the reporting date about past events, current conditions and where possible, forecasts of future economic conditions. The amount of ECLs are sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of a customer's actual default in the future.

The Group considers a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full. A financial asset is written off only when there is no reasonable expectation of recovering the contractual cash flows, based on the contractual position agreed with the customer, contract close-out negotiations and objective evidence of the customer's inability to pay.

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, derivative financial instruments and lease liabilities.

Subsequent measurement

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

— Financial liabilities at fair value through profit or loss
— Financial liabilities at amortised cost (loans and borrowings)

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 by the Group that are not designated as hedging instruments in hedge relationships. 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, only if the criteria in IFRS 9 'Financial Instruments' are satisfied. The contingent consideration payable related to the acquisition of W&W Energy Services was designated as a financial liability measured at fair value through profit or loss (see note 11a).

Financial liabilities at amortised cost (loans and borrowings)

This category generally applies to interest-bearing loans and borrowings (note 27) and lease liabilities (note 18). After initial recognition, interest-bearing loans and borrowings and lease liabilities 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 considering 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 expense in the consolidated income statement.

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.

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 the 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

2 Summary of significant accounting policies continued

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.

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.

Share-based payments

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 cost of sales or selling, general and administration expenses line items in the consolidated income statement, together with a corresponding increase in other reserves line item in the consolidated balance sheet, 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 vested immediately on the date of cancellation, and any expense not recognised for the award at that date is immediately recognised in the consolidated income statement.

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 balance sheet date.

Deferred tax is recognised on all temporary differences at the balance sheet 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 balance sheet 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 balance sheet 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 balance sheet 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.

3 Revenue from contracts with customers

	2019 US$m	2018 US$m
Rendering of services	**5,389**	5,613
Sale of crude oil and gas	**141**	216
	5,530	5,829

Included in revenue from rendering of services are Engineering & Construction and Engineering & Production Services revenue of a "pass-through" nature with zero or low margins amounting to US$301m (2018: US$366m).

Set out below is the disaggregation of the Group's revenue from contracts with customers:

	Engineering & Construction US$m	Engineering & Production Services US$m	Integrated Energy Services US$m	2019 US$m	Engineering & Construction US$m*	Engineering & Production Services US$m*	Integrated Energy Services US$m	2018 US$m
Geographical markets								
Kuwait	**834**	**5**	**–**	**839**	1,648	3	–	1,651
Oman	**1,366**	**18**	**–**	**1,384**	922	17	–	939
Saudi Arabia	**379**	**–**	**–**	**379**	794	–	–	794
United Kingdom	**–**	**531**	**–**	**531**	2	515	58	575
United Arab Emirates	**511**	**22**	**–**	**533**	380	22	–	402
Turkey	**261**	**3**	**–**	**264**	237	1	–	238
Russia	**210**	**5**	**–**	**215**	232	4	–	236
Iraq	**145**	**180**	**–**	**325**	7	204	–	211
Germany	**60**	**–**	**–**	**60**	199	–	–	199
Algeria	**202**	**1**	**–**	**203**	156	–	–	156
Malaysia	**34**	**14**	**70**	**118**	54	17	42	113
Mexico	**–**	**–**	**103**	**103**	–	1	101	102
India	**278**	**–**	**–**	**278**	68	–	–	68
Singapore	**–**	**4**	**13**	**17**	–	–	48	48
Tunisia	**–**	**–**	**–**	**–**	–	3	28	31
Thailand	**159**	**14**	**9**	**182**	5	15	5	25
Netherlands	**28**	**1**	**–**	**29**	–	–	–	–
Bahrain	**–**	**24**	**–**	**24**	–	20	–	20
Others	**1**	**45**	**–**	**46**	–	21	–	21
Total revenue from contracts with customers	**4,468**	**867**	**195**	**5,530**	4,704	843	282	5,829
Type of goods or service								
Fixed price	**4,281**	**38**	**–**	**4,319**	4,315	41	–	4,356
Reimbursable	**187**	**829**	**54**	**1,070**	389	802	66	1,257
Sale of crude oil and gas	**–**	**–**	**141**	**141**	–	–	216	216
Total revenue from contracts with customers	**4,468**	**867**	**195**	**5,530**	4,704	843	282	5,829
Customer type								
Government	**3,210**	**160**	**112**	**3,482**	3,599	88	101	3,788
Non-government	**1,258**	**707**	**83**	**2,048**	1,105	755	181	2,041
Total revenue from contracts with customers	**4,468**	**867**	**195**	**5,530**	4,704	843	282	5,829
Timing of revenue recognition								
Services transferred over time	**4,468**	**867**	**54**	**5,389**	4,704	843	66	5,613
Goods transferred at a point in time	**–**	**–**	**141**	**141**	–	–	216	216
Total revenue from contracts with customers	**4,468**	**867**	**195**	**5,530**	4,704	843	282	5,829

* Restated, since on 1 January 2019, the Engineering, Procurement and Construction management (EPCm) line of business was reorganised and consequently revenue of US$626m was reclassified from the Engineering & Production Services (EPS) operating segment to the Engineering & Construction (E&C) operating segment to reflect reclassification of internally reported lines of business.

Revenue disclosed in the above tables is based on where the customer is located. Revenue representing greater than 10% of Group revenue arose from one customer amounting to US$796m in the Engineering & Construction operating segment (2018: two customers, US$2,199m in the Engineering & Construction operating segment).

3 Revenue from contracts with customers continued

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at the end of each reporting period is as follows:

	Engineering & Construction US$m	Engineering & Production Services US$m	2019 US$m	Engineering & Construction US$m Restated*	Engineering & Production Services US$m Restated*	2018 US$m Restated
Within one year	3,790	719	4,509	4,535	810	5,345
More than one year	1,876	1,017	2,893	3,462	763	4,225
	5,666	1,736	7,402	7,997	1,573	9,570

* Restated, since on 1 January 2019, the Engineering, Procurement and Construction management (EPCm) line of business was reorganised and consequently remaining performance obligations of US$740m were reclassified from the Engineering & Production Services (EPS) operating segment to the Engineering & Construction (E&C) operating segment to reflect reclassification of internally reported lines of business.

4 Segment information

The Group organisational structure comprises the following three operating segments:

— Engineering & Construction (E&C), which provides fixed-price engineering, procurement and construction project execution services and reimbursable engineering, procurement and construction management services to the onshore and offshore oil and gas industry
— Engineering & Production Services (EPS), which mainly includes 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

The Chief Operating Decision Maker (CODM) regularly reviews the performance of the operating segments to make decisions about resource allocations and to assess financial performance. Finance expense and income arising from borrowings and cash balances, which are not directly attributable to individual operating segments, are allocated to Corporate. In addition, certain shareholder services related costs, intra-group financing and consolidation adjustments are managed at Corporate and are not allocated to operating segments.

The Group's financial performance presented below also separately identifies the effect of exceptional items and certain remeasurements to provide users of the consolidated financial statements with a clear and consistent presentation of the underlying business performance of the Group; refer to note 6 and appendix A on page 174 for details.

On 1 January 2019, the Engineering, Procurement and Construction management (EPCm) line of business was reorganised and subsequently reclassified from the EPS operating segment to the E&C operating segment to reflect reclassification of internally reported lines of business. Consequently, revenue of US$626m, net profit attributable to Petrofac Limited shareholders of US$53m, EBITDA of US$70m and remaining performance obligations of US$740m were reclassified from the EPS operating segment to the E&C operating segment for the year ended 31 December 2018. The EBITDA for the year ended 31 December 2019 is also affected as a result of adoption of IFRS 16 'Leases' at 1 January 2019; see note 2 and 30 for details.

The following tables represent revenue and profit/(loss) information relating to the Group's operating segments for the year ended 31 December 2019 and the restated comparative information for the year ended 31 December 2018.

Year ended 31 December 2019

	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$m	Reported US$m
Revenue								
External sales	4,468	867	195	–	–	5,530	–	5,530
Inter-segment sales	7	22	–	–	(29)	–	–	–
Total revenue	4,475	889	195	–	(29)	5,530	–	5,530
Operating profit/(loss)	367	43	9	(10)	–	409	(189)	220
Finance income	–	2	6	5	–	13	–	13
Finance expense	(2)	(2)	(12)	(42)	–	(58)	–	(58)
Share of net profit of associates and joint ventures	–	1	16	–	–	17	–	17
Profit/(loss) before tax	365	44	19	(47)	–	381	(189)	192
Income tax (expense)/credit	(97)	(12)	(4)	1	–	(112)	(14)	(126)
Net profit/(loss) after tax	268	32	15	(46)	–	269	(203)	66
Non-controlling interests	10	–	(3)	–	–	7	–	7
Net profit/(loss) for the year attributable to Petrofac Limited shareholders	278	32	12	(46)	–	276	(203)	73
EBITDA	412	51	99	(3)	–	559		

	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 12)	**19**	**4**	**27**	**3**	**–**	**53**
Intangible assets (note 16)	**–**	**–**	**–**	**31**	**–**	**31**
Charges:						
Depreciation (note 12)	**45**	**7**	**72**	**6**	**–**	**130**
Amortisation and write-off (note 16)	**–**	**–**	**2**	**1**	**–**	**3**
Exceptional items and certain re-measurements, pre-tax (note 6)	**14**	**2**	**158**	**15**	**–**	**189**
Other long-term employment benefits (note 28)	**22**	**2**	**–**	**1**	**–**	**25**
Share-based payments (note 25)	**12**	**2**	**1**	**3**	**–**	**18**

Year ended 31 December 2018 – restated

	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$m	Reported US$m
Revenue								
External sales	4,704	843	282	–	–	5,829	–	5,829
Inter-segment sales	9	10	–	–	(19)	–	–	–
Total revenue	4,713	853	282	–	(19)	5,829	–	5,829
Operating profit/(loss)	419	62	51	(17)	–	515	(356)	159
Finance income	–	–	8	6	–	14	–	14
Finance expense	–	(4)	(16)	(61)	–	(81)	–	(81)
Share of net profit of associates and joint ventures	–	–	15	–	–	15	–	15
Profit/(loss) before tax	419	58	58	(72)	–	463	(356)	107
Income tax (expense)/credit	(85)	(13)	(20)	5	–	(113)	67	(46)
Net profit/(loss) after tax	334	45	38	(67)	–	350	(289)	61
Non-controlling interests	4	(2)	1	–	–	3	–	3
Net profit/(loss) for the year attributable to Petrofac Limited shareholders	338	43	39	(67)	–	353	(289)	64
EBITDA	458	68	160	(15)	–	671		

* Restated, since on 1 January 2019, the Engineering, Procurement and Construction management (EPCm) line of business was reorganised and consequently revenue of US$626m, net profit attributable to Petrofac Limited shareholders of US$53m and EBITDA of US$70m was reclassified from the Engineering & Production Services (EPS) operating segment to the Engineering & Construction (E&C) operating segment to reflect reclassification of internally reported lines of business.

	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 12)	14	3	43	4	–	64
Intangible assets (note 16)	–	–	–	7	–	7
Charges:						
Depreciation (note 12)	39	5	94	2	–	140
Amortisation and write-off (note 16)	–	1	–	–	–	1
Exceptional items and certain re-measurements, pre-tax (note 6)	8	24	302	22	–	356
Other long-term employment benefits (note 28)	19	1	–	1	–	21
Share-based payments (note 25)	13	1	1	2	–	17

Geographical segments

The following tables present selected non-current assets by geographical segments for the years ended 31 December 2019 and 2018.

As at 31 December 2019

	Malaysia US$m	United Arab Emirates US$m	United Kingdom US$m	India US$m	Kuwait US$m	Oman US$m	Other countries US$m	Total US$m
Non-current assets:								
Property, plant and equipment (note 12)	**237**	**63**	**49**	**19**	**15**	**5**	**10**	**398**
Goodwill (note 14)	**3**	**29**	**42**	**–**	**–**	**–**	**25**	**99**
Intangible oil and gas assets (note 16)	**17**	**–**	**–**	**–**	**–**	**–**	**–**	**17**
Other intangible assets (note 16)	**–**	**–**	**43**	**–**	**–**	**–**	**6**	**49**

4 Segment information continued

As at 31 December 2018

	Malaysia US$m	Mexico US$m	United Kingdom US$m	United Arab Emirates US$m	Kuwait US$m	Oman US$m	Other countries US$m	Total US$m
Non-current assets:								
Property, plant and equipment (note 12)	311	242	21	74	26	4	7	685
Goodwill (note 14)	3	–	41	29	–	–	–	73
Intangible oil and gas assets (note 16)	43	–	–	–	–	–	–	43
Other intangible assets (note 16)	–	5	8	–	–	–	–	13

5 Expenses and income

a. Cost of sales

Included in cost of sales are depreciation charged on property, plant and equipment of US$118m (2018: US$125m), expense associated with forward points and ineffective portions on derivatives designated as cash flow hedges of US$11m (2018: US$5m). These amounts are an economic hedge of foreign exchange risk but do not meet the recognition criteria within IFRS 9 'Financial Instruments' and are most appropriately recognised in cost of sales.

b. Selling, general and administration expenses

	2019 US$m	2018 US$m
Staff costs	127	134
Depreciation and amortisation (note 12 and note 16)	13	15
Expected credit loss allowance (note 20 and note 21)	16	1
Write-off property, plant and equipment (note 12)	2	1
Other operating expenses	70	65
	228	216

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

c. Staff costs

	2019 US$m	2018 US$m
Total staff costs:		
Wages and salaries	901	918
Social security costs	32	33
Defined contribution pension costs	21	17
Other long-term employee benefit costs (note 28)	24	21
Share-based payments costs (note 25)	18	17
	996	1,006

Of the US$996m (2018: US$1,006m) of staff costs shown above, US$869m (2018: US$872m) is included in cost of sales, with US$127m (2018: US$134m) in selling, general and administration expenses.

The average number of staff employed by the Group during the year was 11,519 (2018: 11,500).

d. 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:

	2019 US$m	2018 US$m
Group audit fee	2	2
Audit of subsidiaries' accounts	1	1
Others	1	1
	4	4

Others include audit related assurance services of US$473,000 (2018: US$437,000) and other non-audit services of US$123,000 (2018: US$241,000).

e. Other operating income

	2019 US$m	2018 US$m
Foreign exchange gains	6	4
Other income	21	18
	27	22

Other income mainly comprised US$5m (2018: US$8m) of forward points relating to undesignated forward currency contracts in the Corporate reporting segment; and US$9m (2018: US$3m) of scrap sales mainly relating to three contracts in the Engineering & Construction operating segment.

f. Other operating expenses

	2019 US$m	2018 US$m
Foreign exchange losses	6	4
Other expenses	5	6
	11	10

6 Exceptional items and certain re-measurements

	2019 US$m	2018 US$m
Impairment of assets	119	235
Fair value re-measurements	37	45
Losses on disposal (note 11b)	–	28
Restructuring and redundancy costs	10	8
Onerous leasehold property provisions (note 28)	–	18
Other exceptional items	23	22
	189	356
Foreign exchange translation (gains)/losses on deferred tax balances	(1)	2
Deferred tax impairment	16	–
Tax relief on exceptional items and certain re-measurements	(1)	(69)
	14	(67)
Consolidated income statement charge	203	289

See note 2 and appendix A on page 174 for further details on APMs

Impairment of assets

On 19 September 2019, the Group signed a Sale and Purchase Agreement ('SPA') with Perenco (Oil and Gas) International Limited ('Perenco') to dispose of the remaining 51% ownership interest relating to the Group's operations in Mexico. Consequently, a pre-tax impairment charge of US$49m (post-tax US$49m), associated with the oil and gas assets (note 12) was recognised as an exceptional item in the consolidated income statement attributable to the Integrated Energy Services operating segment, see note 15 for details (2018: US$156m, post-tax US$111m associated with the Group's operations in Mexico and US$79m, post-tax US$55m associated with Greater Stella Area).

During 2019, the Group reviewed the carrying amount of its Block PM304 oil and gas assets on a fair value less cost of disposal basis (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement'), which resulted in a pre-tax impairment charge of US$70m (post-tax US$86m) in the Integrated Energy Services reporting segment (2018: US$nil). The review involved assessing the field performance; licence extension beyond 2026; robustness of the future development plans; appropriateness of oil price assumptions and recoverability of deferred tax asset carrying amount. As a result of this review an impairment of US$16m was recognised against deferred tax asset carrying amount. The balance impairment of US$70m was allocated proportionately to property, plant and equipment (US$44m; see note 12) and intangible oil and gas assets (US$26m; see note 16). The oil price assumptions used by management were based on forward curve oil prices of US$60 per barrel for 2020, US$65 per barrel for 2021 and 2022 and a 3% oil price escalation was used for period 2023 and beyond. A 10% decrease in oil prices would result in an additional pre-tax impairment charge of US$19m (post-tax US$19m).

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 considering assumptions that market participants would typically use in estimating fair values. Post-tax cash flows are derived from projected production profiles for each asset considering 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.

6 Exceptional items and certain re-measurements continued

Fair value re-measurements

At 31 December 2019, management reviewed the carrying amount of the Pánuco contingent consideration and as a result of this review recognised a downward fair value movement of US$37m (post-tax US$37m) in the Integrated Energy Services operating segment. The downward fair value adjustment was a significant management judgement in response to considerably increased uncertainty concerning the timing and outcome of the Pánuco Production Enhancement Contract (PEC) migration to a Production Sharing Contract (PSC) and whether the contingent consideration pay out conditions will be achieved. Management considered alternative scenarios to assess the recoverability of the Pánuco contingent consideration, including but not limited to the impact of delay in migration or renegotiation of the contingent consideration in the event of migration to another form of contract. Based on this assessment, management estimated that the carrying amount of the contingent consideration of US$8m (note 18) reflected an expected outcome of a commercial negotiation in respect of migration or an alternative migration. A fair value loss would be recognised in the consolidated income statement if the actual outcome of the migration or commercial negotiation is different to management's current expectation (2018: negative fair value movement associated with Pánuco contingent consideration of US$43m, post-tax US$43m and negative fair value movement of US$2m, post-tax US$2m related to deferred consideration associated with the disposal of JSD6000 installation vessel).

Restructuring and redundancy costs

Group reorganisation and redundancy costs comprised: Group reorganisation related professional services fees in the Corporate reporting segment of US$4m (post-tax US$3m), US$3m (post tax US$3m) in the Engineering & Construction operating segment and US$2m (post-tax US$2m) in the Engineering & Production Services operating segment; and staff redundancy costs of US$1m (post-tax US$1m) associated with the Integrated Energy Services operating segment (2018: US$8m, post-tax US$8m mainly relating to the Engineering & Production Services operating segment and Integrated Energy Services operating segment).

Other exceptional items

Other exceptional items include: US$11m, post-tax US$11m (2018: US$15m, post-tax US$15m) of SFO related legal and professional fees associated with the Corporate reporting segment; US$6m, post-tax US$6m (2018: US$nil) of additional disposal costs associated with the disposal of JSD6000 installation vessel arising from a revision to disposal cost estimates during the year; US$5m, post-tax US$5m (2018: US$nil) of current legal provision relating to the Engineering & Construction operating segment; and Mexican PEC migration costs of US$1m, post-tax US$1m (2018: US$1m, post-tax US$1m) relating to the Integrated Energy Services operating segment.

7 Finance income/(expense)

	2019 US$m	2018 US$m
Finance income		
Bank interest	5	5
Unwinding of discount on receivables (note 18 and note 21)	8	9
Total finance income	13	14
Finance expense		
Group borrowings	(42)	(60)
Lease liabilities	(12)	(11)
Unwinding of discount on non-current contract assets	–	(4)
Unwinding of discount on provisions (note 28)	(4)	(6)
Total finance expense	(58)	(81)

8 Income tax

a. Tax on ordinary activities

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

	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2019 US$m	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2018 US$m
Current income tax						
Current income tax expense	131	(1)	130	112	–	112
Adjustments in respect of previous years	(5)	–	(5)	(3)	–	(3)
Deferred tax						
Relating to origination and reversal of temporary differences	(19)	–	(19)	8	(67)	(59)
Derecognition of deferred tax previously recognised	2	15	17	(3)	–	(3)
Adjustments in respect of previous years	3	–	3	(1)	–	(1)
Income tax expense/(credit) reported in the consolidated income statement	112	14	126	113	(67)	46
Income tax reported in equity						
Deferred tax related to items charged directly to equity	1	–	1	2	–	2
Foreign exchange movements on translation	–	–	–	1	–	1
Income tax expense reported in equity	1	–	1	3	–	3

1 This measurement is shown by the Group as a means of measuring underlying business performance; see note 2 and appendix A on page 174.

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

— the variance between tax provided on the percentage of completion of contracts compared to that paid on accrued income for fixed-price engineering, procurement and construction contracts; and

— the tax deductions available for expenditure on Production Sharing Contracts ("PSCs") and Production Enhancement Contracts ("PECs"), which are partially offset by the creation of losses.

See note 8c below for the impact on the movements in the year.

b. Reconciliation of total tax expense

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

	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2019 US$m	Business performance[1] US$m	Exceptional items and certain re-measurements US$m	Reported 2018 US$m
Profit before tax	**381**	**(189)**	**192**	463	(356)	107
At Jersey's domestic income tax rate of 0.0% (2018: 0.0%)	**–**	**–**	**–**	–	–	–
Expected tax charge in higher rate jurisdictions	**78**	**(51)**	**27**	82	(36)	46
Expenditure not allowable for income tax purposes	**30**	**49**	**79**	13	19	32
Income not subject to tax	**(6)**	**–**	**(6)**	(2)	(57)	(59)
Adjustments in respect of previous years	**(2)**	**–**	**(2)**	(3)	–	(3)
Adjustments in respect of deferred tax previously recognised/unrecognised	**2**	**13**	**15**	(3)	–	(3)
Unrecognised deferred tax	**9**	**4**	**13**	21	4	25
Other permanent differences	**1**	**(1)**	**–**	5	3	8
At the effective income tax rate of 43.0% on reported profit before tax (2018: 43.0%)	**112**	**14**	**126**	113	(67)	46

1 This measurement is shown by the Group as a means of measuring underlying business performance; see note 2 and appendix A on page 174.

The Group's reported effective tax rate on reported profit before tax for the year ended 31 December 2019 was 65.6% (2018: 43.0%).
The Group's business performance effective tax rate for the year ended 31 December 2019 was 29.4% (2018: 24.4%).

A number of factors have impacted the reported effective tax rate, with key drivers being: income not subject to tax and expenditure which is not allowable for tax purposes arising on impairment and fair value re-measurements of assets, as well as the impact of losses created during the year for which the realisation against future taxable profits is not probable.

In line with prior years, the reported 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 balance sheet		Consolidated income statement	
	2019 US$m	2018 US$m	**2019 US$m**	2018 US$m
Deferred tax liabilities				
Accelerated depreciation for tax purposes	**15**	50	**(4)**	(125)
Profit recognition	**30**	35	**(5)**	1
Overseas earnings	**4**	10	**(6)**	2
Other temporary differences	**1**	2	**(1)**	(4)
Gross deferred tax liabilities	**50**	97		
Deferred tax assets				
Losses available for offset	**44**	117	**9**	55
Decelerated depreciation for tax purposes	**6**	5	**(1)**	(2)
Share-based payment plans	**1**	2	**1**	–
Decommissioning	**6**	25	**2**	14
Other temporary differences	**6**	31	**6**	(4)
Gross deferred tax assets	**63**	180		
Net deferred tax asset and income tax expense/(credit)	**13**	83	**1**	(63)
Of which:				
Deferred tax assets	**50**	126		
Deferred tax liabilities	**37**	43		

Included within the deferred tax asset are tax losses of US$150m (2018: $384m). 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 reduction in the deferred tax asset is primarily driven by the reclassification of the Mexican operations to asset held for sale of US$69m (note 15) and does not form part of the tax charge/(credit) to the consolidated income statement for the year. In addition, US$7m of deferred tax assets have been derecognised in respect of PM304.

8 Income tax continued

d. Unrecognised tax losses and tax credits

Deferred 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$1,171m (2018: US$1,061m).

	2019 US$m	2018 US$m
Expiration dates for tax losses		
No later than 2025	–	3
No expiration date	1,161	1,046
	1,161	1,049
Tax credits (no expiration date)	10	12
	1,171	1,061

During 2019, no previously unrecognised losses were utilised by the Group (2018: US$1m).

9 Earnings per share

Basic earnings per share is calculated by dividing the net 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 net 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 the Employee Benefit Trust.

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

	2019 US$m	2018 US$m
Business performance net profit attributable to Petrofac Limited shareholders for basic and diluted earnings per share	276	353
Reported net profit attributable to Petrofac Limited shareholders for basic and diluted earnings per share	73	64

	2019 Shares million	2018 Shares million
Weighted average number of ordinary shares for basic earnings per share[1]	336	338
Effect of dilutive potential ordinary shares granted under share-based payment plans	7	7
Adjusted weighted average number of ordinary shares for diluted earnings per share	343	345

	2019 US cents	2018 US cents
Basic earnings per share		
Business performance	82.1	104.4
Reported	21.7	18.9
Diluted earnings per share		
Business performance	80.4	102.3
Reported	21.3	18.6

1 The weighted number of ordinary shares in issue during the year, excludes those held by the Employee Benefit Trust.

10 Dividends paid and proposed

	2019 US$m	2018 US$m
Declared and paid during the year		
Equity dividends on ordinary shares:		
Final dividend for 2017 (US$0.253 per share)	–	86
Interim dividend 2018 (US$0.127 per share)	–	42
Final dividend for 2018 (US$0.253 per share)	86	–
Interim dividend 2019 (US$0.127 per share)	43	–
	129	128

	2019 US$m	2018 US$m
Proposed for approval at the Annual General Meeting ("AGM")		
(not recognised as a liability as at 31 December)		
Equity dividends on ordinary shares:		
Final dividend for 2019: US$0.253 per share (2018: US$0.253 per share)	88	88

11 Business combination and disposals

a. Business combination

The following business combination took place during 2019:

Acquisition of W&W Energy Services Inc.

On 29 November 2019, the Group acquired a 100% ownership interest in W&W Energy Services Inc. ("W&W"). W&W is a maintenance, pipeline tie-in and project construction services business that will provide the Group an entry into the US Permian basin. The fair value of consideration was US$37m, which comprised cash consideration of US$22m and contingent consideration of US$15m, payable over a period of two years from the acquisition date, based on achievement of agreed financial performance targets for W&W. The fair value of net assets acquired was US$12m, which resulted in goodwill recognition of US$25m. The acquisition related to the Engineering & Production Services operating segment.

The goodwill recognised is deductible for tax purposes and related to the expected future synergies and business opportunities in the new geographies arising from the integration of W&W in to the Group.

The fair value of the identifiable assets and liabilities of W&W recognised at the date of acquisition was as follows:

	Carrying amount US$m	Fair value US$m
Property, plant and equipment[1] (note 12)	6	6
Intangible assets (note 16)	–	6
Deferred tax assets	–	–
Trade and other receivables (note 20)	10	10
Cash and short-term deposits	1	1
	17	23
Less:		
Interest-bearing loans and borrowings	(3)	(3)
Other financial liabilities[1]	(4)	(4)
Trade and other payables (note 29)	(4)	(4)
	(11)	(11)
Net assets acquired	6	12

1 At the date of acquisition, fair value of identifiable assets and liabilities represented US$2m of right-of-use asset (US$1m land, buildings and leasehold improvements and US$1m plant and equipment) included within property, plant and equipment (note 12) and associated lease liabilities of US$2m included within other financial liabilities (note 18).

The intangible asset recognised on acquisition related to customer contracts of W&W. The fair value of the intangible asset was derived using a ten-year cash flows associated with such customer contracts, discounted using a pre-tax rate of 11.6%. The intangible asset was estimated to have a useful life of ten years and will be amortised on a straight-line basis.

11 Business combination and disposals continued

The contingent consideration payable of US$15m (note 18), calculated using expected value pay-out approach using a discount rate of 11.6% (Level 3 of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement'), represented management's best estimate based on the expected financial performance targets that will be achieved by W&W, over the two-year evaluation period starting from the acquisition date. The contingent consideration payable at initial recognition is designated as a financial liability measured at fair value through profit and loss, with any subsequent fair value movements recognised as an exceptional item in the consolidated income statement (note 18). A 10% reduction in EBITDA targets would result in a negative fair value change of US$1m and a 100 basis points increase in discount rate would result in a negative fair value change of US$156,000.

The cash outflows in the consolidated cash flow statement of US$21m represent cash consideration of US$22m adjusted for cash acquired through the business combination of US$1m.

From the date of acquisition, W&W contributed US$7m of revenue and US$436,000 of net profit to the Group. If the above combination had taken place on 1 January 2019, the Group's revenue and profit for the year ended 31 December 2019 from W&W would have been US$47m and US$4m respectively.

b. Disposals

The following disposals took place during 2018:

Disposal of oil and gas assets in Tunisia
On 27 June 2018, the Group signed an Asset Purchase Agreement with Perenco Tunisia Oil and Gas Limited to dispose of its oil and gas assets in Tunisia. The disposal, which related to the Integrated Energy Services operating segment, was completed on 13 December 2018 and the Group received US$25m cash consideration as at that date. Consequently, a loss on disposal of US$4m was recognised as an exceptional item in the consolidated income statement (note 6).

Disposal of Petrofac GSA Holdings
On 26 August 2018, the Group signed a Sale and Purchase Agreement ("SPA") with Ithaca Energy UK Ltd for the disposal of its wholly owned subsidiary, Petrofac GSA Holdings Limited ("GSA"), which owned a 20% interest in the Great Stella Area joint operation and a 25% interest in Petrofac FPF1 Limited, previously classified as an investment in associate. The disposal, which related to the Integrated Energy Services operating segment, was completed on 11 December 2018, and a loss on disposal of US$16m was recognised as an exceptional item in the consolidated income statement (note 6). The fair value of consideration comprised cash consideration of US$106m, deferred consideration of US$59m and contingent consideration of US$19m with associated disposal cost of US$1m.

Disposal of 49% non-controlling interest of the Group's operations in Mexico
See note 15.

Disposal of JSD6000 installation vessel
On 24 April 2018, the Group signed an Asset Purchase Agreement with Shanghai Zhenhua Heavy Industries Co Ltd (the 'Purchaser'), for the disposal of the JSD6000 installation vessel (the 'vessel'). The disposal consideration comprised cash consideration of US$167m and deferred consideration of US$63m representing a 10% ownership interest in a Special Purpose Vehicle that will own the vessel upon construction and commissioning by the Purchaser. A loss on disposal of US$8m relating to the Engineering & Construction operating segment was recognised as an exceptional item in the consolidated income statement.

The deferred consideration of US$63m, being a contractual right to the Group, was recognised as a non-current asset in the consolidated balance sheet. The deferred consideration was initially measured and recognised at fair value and will subsequently be also measured at fair value with any fair value gain and loss recognised as an exceptional item in the consolidated income statement. The fair value of the deferred consideration took into consideration, amongst other factors, an independent broker's valuation of the vessel (a Level 3 measurement of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement'). A negative fair value movement of US$2m was recognised as an exceptional item in the consolidated income statement at the end of the reporting period (note 6) which reduced the deferred consideration to US$61m at 31 December 2018. A 10% decrease in the valuation of the vessel would result in a negative fair value change of US$6m.

The fair value of deferred consideration, with management's current involvement and recent discussions with the Purchaser, assumes that the Purchaser has the intent and the required capabilities to complete the construction and commissioning of the vessel within the due timeframe. At each reporting date, management will continue to review its judgement to assess the ability of the Purchaser to complete the construction and commissioning of the vessel and under such circumstances that may impair the Purchaser's ability to complete these activities, a fair value loss would be recognised as an exceptional item in the consolidated income statement.

12 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 2018	1,354	313	370	41	24	182	1	2,285
Additions	43	–	8	–	1	11	1	64
Change in decommissioning estimates (note 28)	(24)	–	–	–	–	–	–	(24)
Disposals	(336)	–	(6)	(3)	(2)	(8)	–	(355)
Transfer from intangible oil and gas assets (note 16)	12	–	–	–	–	–	–	12
Transfers	–	–	–	2	–	(2)	–	–
Write-off (note 5)	–	–	–	(1)	–	–	(1)	(2)
Translation difference	–	–	(1)	(1)	–	(5)	–	(7)
At 1 January 2019 – as previously reported	1,049	313	371	38	23	178	1	1,973
Right-of-use assets under IFRS 16	–	–	41	–	6	–	–	47
At 1 January 2019 – as restated	1,049	313	412	38	29	178	1	2,020
Additions	25	–	25	2	2	15	–	69
Addition on acquisition (note 11a)	–	–	1	2	3	–	–	6
Change in decommissioning estimates (note 28)	1	–	–	–	–	–	–	1
Disposals	–	–	–	(3)	–	(5)	–	(8)
Transfer to intangible assets (note 16)	–	–	–	–	–	(8)	–	(8)
Transfer to assets held for sale (note 15)	(559)	–	(3)	(2)	(1)	(5)	–	(570)
Write-off (note 5)	–	(133)	(3)	–	–	–	–	(136)
Translation difference	–	–	2	1	–	1	–	4
At 31 December 2019	516	180	434	38	33	176	1	1,378
Depreciation & impairment								
At 1 January 2018	(575)	(164)	(238)	(34)	(23)	(159)	–	(1,193)
Depreciation charge (note 5a and 5b)	(73)	(19)	(32)	(1)	(1)	(14)	–	(140)
Impairment charge (note 6)	(226)	–	–	–	–	–	–	(226)
Disposals	246	–	6	3	2	8	–	265
Transfers	–	–	–	(1)	–	1	–	–
Write-off (note 5)	–	–	–	1	–	–	–	1
Translation difference	–	–	–	–	–	5	–	5
At 1 January 2019	(628)	(183)	(264)	(32)	(22)	(159)	–	(1,288)
Depreciation charge (note 5a and 5b)	(49)	(19)	(42)	(1)	(4)	(15)	–	(130)
Impairment charge (note 6)	(76)	(17)	–	–	–	–	–	(93)
Disposals	–	–	–	3	–	5	–	8
Transfer to intangible assets (note 16)	–	–	–	–	–	4	–	4
Transfer to assets held for sale (note 15)	380	–	1	–	–	4	–	385
Write-off (note 5)	–	133	1	–	–	–	–	134
Translation difference	–	–	–	–	–	–	–	–
At 31 December 2019	(373)	(86)	(304)	(30)	(26)	(161)	–	(980)
Net carrying amount								
At 31 December 2019	143	94	130	8	7	15	1	398
At 31 December 2018	421	130	107	6	1	19	1	685

Additions
Additions to oil and gas assets in the Integrated Energy Services operating segment mainly comprised US$8m relating to Santuario Production Sharing Contract ("PSC") and Magallanes and Arenque Production Enhancement Contracts ("PECs") in Mexico; and US$17m related to Block PM304 in Malaysia (2018: US$13m related to GSA; US$19m related to Santuario PSC and Magallanes and Arenque PECs in Mexico; and US$11m related to Block PM304 in Malaysia). Additions to land, buildings and leasehold improvements of US$25m (2018: US$8m) mainly comprise project camps and temporary facilities associated with the Engineering & Construction operating segment of US$9m and right-of-use asset additions of US$16m.

Depreciation
The depreciation charge in the consolidated income statement is split between US$118m (2018: US$125m) in cost of sales and US$12m (2018: US$15m) in selling, general and administration expenses.

Write-off
The write-off in oil and gas facilities, having a net carrying amount of US$nil (US$133m – cost and US$133m – accumulated depreciation), related to an entity in the Integrated Energy Services operating segment that was liquidated during 2019.

12 Property, plant and equipment continued

Right-of-use assets

The table below provides details of right-of-use assets recognised within various categories of property, plant and equipment line item presented in the table on page 145:

	Oil and gas facilities US$m	Land, buildings and leasehold improvements US$m	Plant and equipment US$m	Vehicles US$m	Total US$m
Finance lease asset carrying amounts under IAS 17 'Leases' reclassified at the date of initial application (note 2)	127	–	1	–	128
Transition adjustment (note 2)	–	41	–	6	47
Additions	–	16	–	–	16
Addition on acquisition (note 11)	–	1	1	–	2
Depreciation charge	(20)	(9)	(1)	(2)	(32)
Impairment charge (note 6)	(17)	–	–	–	(17)
Translation difference	–	1	–	–	1
At 31 December 2019	90	50	1	4	145

Additions to right-of-use assets of US$16m related to office buildings, having a lease term of five years, in the Engineering & Construction operating segment.

13 Non-controlling interests

Petrofac Emirates LLC, Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited, three non-wholly owned subsidiaries, had material non-controlling interest at the end of each reporting period presented below. 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, Petrofac Netherland Holding BV and Petro Oil and Gas Limited	2019 US$m	2018 US$m
At 1 January	302	36
Loss for the year	(7)	(3)
Opening adjustment relating to adoption of IFRS 9 and IFRS 15	–	3
Disposal of 49% non-controlling interest of the Group's operations in Mexico (note 11b)	–	266
Net unrealised gains on derivatives	–	1
Dividend paid	(14)	(1)
At 31 December	281	302

Summarised financial information for Petrofac Emirates LLC, Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited, three non-wholly owned subsidiaries which have non-controlling interests that are considered material to the Group, is shown below:

	Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited		Petrofac Emirates LLC	
Summarised income statement	2019 US$m	2018 US$m	2019 US$m	2018 US$m
Revenue	160	34	550	338
Cost of sales	(139)	(32)	(573)	(329)
Gross profit	21	2	(23)	9
Selling, general and administration expenses	(11)	(1)	(12)	(14)
Other income	3	1	2	5
Net finance expense	(2)	(1)	(5)	(11)
Income tax expense	(6)	(1)	–	–
Net profit/(loss) for the year	5	–	(38)	(11)
Attributable to non-controlling interest	3	–	(10)	(3)
Net unrealised losses on derivatives				
Net unrealised losses on derivatives at 1 January	–	–	–	(5)
Other comprehensive income during the year	–	–	–	4
Net unrealised losses on derivatives at 31 December	–	–	–	(1)
Net unrealised losses on derivatives attributable to non-controlling interest (note 26)	–	–	–	–
Total comprehensive (loss)/income attributable to non-controlling interest	–	–	–	(2)
Summarised balance sheet				
Non-current assets	306	315	11	134
Current assets	378	351	613	585
Total assets	684	666	624	719
Non-current liabilities	72	62	7	8
Current liabilities	63	61	567	566
Total liabilities	135	123	574	574
Total equity	549	543	50	145
Attributable to non-controlling interest	268	266	13	36

Summarised cash flow statement	Petrofac Netherlands Holdings B.V. and Petro Oil and Gas Limited 2019 US$m	2018 US$m	Petrofac Emirates LLC 2019 US$m	2018 US$m
Operating	22	(18)	68	258
Investing	(8)	(6)	(9)	39
Financing	(3)	5	(106)	(243)
	11	(19)	(47)	54

Dividends of US$57m were declared by Petrofac Emirates LLC during 2019 (2018: US$3m), of which US$14m was attributable to the non-controlling interest (2018: US$1m). There was no cash outflow to the non-controlling interest since the dividends were adjusted against the receivable balance attributable to the non-controlling interest included within current assets in the individual financial statements of Petrofac Emirates LLC.

14 Goodwill

A summary of the movements in goodwill is presented below:

	2019 US$m	2018 US$m
At 1 January	73	76
Addition on acquisition (note 11a)	25	–
Exchange difference	1	(3)
At 31 December	99	73

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 cash flow projections that are based on a three-year business plan approved by the Board for the Engineering & Construction and Engineering & Production Services cash-generating units.

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

	2019 US$m	2018 US$m Restated*
Engineering & Construction	41	41
Engineering & Production Services	58	32
	99	73

* On 1 January 2019, the Engineering, Procurement and Construction Management (EPCm) line of business was reorganised and consequently goodwill of US$9m, based on relative fair values of EPCm line of business as a proportion to EPS operating segment fair value, was reclassified from the Engineering & Production Services (EPS) operating segment to the Engineering & Construction (E&C) operating segment.

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 used a pre-tax discount rate of 11.6% (2018: 11.6%) 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 not result in an impairment charge.

15 Assets and liabilities held for sale

Disposal of 49% interest in the Group's Mexican operations during 2018

On 30 July 2018, the Group signed a Sale and Purchase Agreement ("SPA") with Perenco (Oil and Gas) International Limited to dispose of a 49% non-controlling interest of the Group's operations in Mexico. A pre-tax impairment charge of US$156m (post-tax US$111m), which included disposal costs of US$6m, was recognised as an exceptional item in the consolidated income statement attributable to the Integrated Energy Services operating segment (note 6). The disposal was completed on 18 October 2018 and represented a transaction between equity holders under IFRS 10 'Consolidated Financial Statements'. The fair value of consideration received was recognised within equity as a non-controlling interest of US$266m (note 13).

The fair value of consideration comprised cash consideration of US$224m which was received by the Group on the date of completion and contingent consideration of US$42m, recoverable over a period of three years, which was recognised as a non-current financial asset in the consolidated balance sheet (note 18). The contingent consideration was initially measured and recognised at fair value and will subsequently be also measured at fair value with any fair value gain and loss recognised as an exceptional item in the consolidated income statement. No fair value movement was recognised from the date of disposal to the end of the reporting period. The fair value of the contingent consideration took into consideration management's expectation of future field development programme and migration terms relating to the Group's Magallanes and Arenque Production Enhancement Contracts by applying a risk factor (a Level 3 measurement of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') to the maximum contingent consideration receivable. A 10% increase in risk factor would result in a negative fair value change of US$7m.

SPA signed in 2019 to dispose of the remaining 51% interest in the Group's Mexican operations

On 19 September 2019 the Group signed an SPA with Perenco (Oil and Gas) International Limited ('Perenco') to dispose of the remaining 51% ownership interest in the Group's Mexican operations. Consequently, a pre-tax impairment charge of US$49m (post-tax US$49m) was recognised as an exceptional item in the consolidated income statement attributable to the Integrated Energy Services operating segment (note 6).

The fair value of consideration for the remaining 51% interest in the Group's Mexican operations comprises initial cash consideration of US$178m and contingent consideration of US$66m, which will be recognised on completion of the disposal. The contingent consideration is dependent upon certain future milestones, which includes future field development programme and migration terms relating to the Group's Magallanes and Arenque Production Enhancement Contracts. The total consideration is subject to an adjustment based on the achievement of future milestones and is capped at US$286m.

The transaction related to Integrated Energy Services operating segment and is subject to the approval of relevant Mexican authorities, which is expected to complete in the second quarter of 2020. At 31 December 2019, the Group's assets in Mexico were classified as asset held for sale, since the asset's carrying amount is expected to be recovered through a disposal transaction rather than through its continuing use.

The assets and liabilities shown below were classified as held for sale at 31 December 2019:

	2019 US$m	2018 US$m
Assets held for sale		
Property, plant and equipment (note 12)	185	–
Intangible assets (note 16)	4	–
Deferred tax assets	69	–
Inventories (note 19)	3	–
Trade and other receivables[1] (note 20)	180	–
Contract assets (note 21)	158	–
Income tax receivable	1	–
	600	–
Liabilities associated with assets held for sale		
Provisions (note 28)	60	–
Trade and other payables (note 29)	58	–
Other financial liabilities (note 18)	2	–
	120	–

1 Trade and other receivables of US$180m reclassified to assets held for sale includes trade receivables of US$114m, other receivables of US$31m, receivable from joint operation partners of US$33m and prepayments and deposits of US$2m (note 20).
2 Trade and other payables of US$58m reclassified to assets held for sale includes trade payables of US$10m, accrued expenses of US$12m, other taxes payable of US$7m and other payables of US$29m (note 29).

At 31 December 2019, the cash and short-term deposits associated with the Group's operations in Mexico amounted to US$30m. At completion the cash and short-term deposit balance will be offset against the cash consideration receivable by the Group and will be presented net of cash forgone associated with the disposal of subsidiary within investing activities in the Group's consolidated statement of cash flows. On the SPA signing date, the Group received an advance of US$37m from Perenco which was presented within trade and other payables line item of the consolidated balance sheet and presented within the investing activities in the consolidated statement of cash flows.

16 Intangible assets

	2019 US$m	2018 US$m
Intangible oil and gas assets		
Cost:		
At 1 January	**43**	67
Impairment charge (note 6)	**(26)**	–
Transfer to oil and gas assets (note 12)	**–**	(12)
Derecognised on disposal (note 11b)	**–**	(12)
Carrying amount of intangible oil and gas assets at 31 December	**17**	43
Other intangible assets		
Cost:		
At 1 January	**33**	26
Addition on acquisition	**6**	–
Additions	**31**	7
Transfer from property, plant and equipment (note 12)	**8**	–
Transferred to assets held for sale (note 15)	**(12)**	–
Write-off	**(1)**	–
At 31 December	**65**	33
Accumulated amortisation:		
At 1 January	**(20)**	(17)
Amortisation (note 5a and 5b)	**(1)**	(1)
Impairment (note 6)	**–**	(3)
Transfer from property, plant and equipment (note 12)	**(4)**	–
Write-off	**1**	–
Transferred to assets held for sale (note 15)	**8**	–
Translation difference	**–**	1
At 31 December	**(16)**	(20)
Carrying amount of other intangible assets at 31 December	**49**	13
Total intangible assets	**66**	56

Intangible oil and gas assets
Intangible oil and gas assets represent expenditure directly associated with evaluation or appraisal activities related to Block PM304 in Malaysia.

Other intangible assets
Other intangible assets mainly comprised customer contracts and Enterprise Resource Planning (“ERP”) and digital systems intangibles. Such intangible assets are 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 expense line items of the consolidated income statement (note 5a and 5b). The additions of US$31m (2018: US$7m) relates to investment in the development and implementation of Group-wide cloud-based ERP and digital systems.

17 Investments in associates and joint ventures

	Associates US$m	Joint ventures US$m	Total US$m
As at 1 January 2018	61	13	74
Loans repaid by associates and joint ventures	(13)	–	(13)
Disposal of investment in Petrofac FPF1 Limited (note 11b)	(35)	–	(35)
Share of net profit	15	–	15
Dividends received	(8)	(3)	(11)
As at 1 January 2019	20	10	30
Loans made to joint ventures	–	2	2
Share of net profit	16	1	17
Dividends received	(11)	–	(11)
As at 31 December 2019	**25**	**13**	**38**

Dividends received during the year include US$10m received from PetroFirst Infrastructure Limited and US$1m received from PetroFirst Infrastructure 2 Limited (2018: US$6m received from PetroFirst Infrastructure Limited, US$2m received from PetroFirst Infrastructure 2 Limited, US$2m received from Spiecapag – Petrofac International Limited and US$1m received from TTE Petrofac Limited).

Investment in associates

	2019 US$m	2018 US$m
PetroFirst Infrastructure Limited	**21**	16
PetroFirst Infrastructure 2 Limited	**4**	4
	25	20

17 Investments in associates and joint ventures continued

Interest in associates

Summarised financial information of associates, based on their IFRS financial statements, and a reconciliation with the carrying amount of the investment in associates in the consolidated balance sheet, are set out below:

	2019 US$m	2018 US$m
Revenue	128	105
Cost of sales	(33)	(37)
Gross profit	95	68
Net finance expense	(10)	(9)
Net profit	85	59
Group's share of net profit for the year	16	15
Non-current assets	215	192
Current assets	19	25
Total assets	234	217
Non-current liabilities	41	83
Current liabilities	51	47
Total liabilities	92	130
Net assets	142	87
Group's share of net assets	25	20
Carrying amount of the investment in associates	25	20

A list of all associates is disclosed in note 34.

No associates had contingent liabilities or capital commitments as at 31 December 2019 and 2018.

Investment in joint ventures

	2019 US$m	2018 US$m
Takatuf Petrofac Oman LLC	13	10

Interest in joint ventures

Summarised financial information of the joint ventures, based on their IFRS financial statements, and a reconciliation with the carrying amount of the investment in joint ventures in the consolidated balance sheet, are set out below:

	2019 US$m	2018 US$m
Revenue	10	2
Cost of sales	(6)	(2)
Gross profit	4	–
Selling, general and administration expenses	(1)	–
Profit before tax	3	–
Income tax expense	(1)	–
Net profit	2	–
Group's share of net profit	1	–
Non-current assets	28	26
Current assets	7	4
Total assets	35	30
Non-current liabilities	–	–
Current liabilities	4	4
Total liabilities	4	4
Net assets	31	26
Group's share of net assets	13	10
Carrying amount of the investment in joint ventures	13	10

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

The Group's share of capital commitments relating to a training centre in Oman was US$nil (2018: US$2m). The joint ventures had no contingent liabilities at 31 December 2019 and 2018. The joint ventures cannot distribute their distributable reserves until they obtain consent from the joint venture partners.

18 Other financial assets and other financial liabilities

Other financial assets	Classification	2019 US$m	2018 US$m
Non-current			
Receivable from joint operation partners for leases	Amortised cost	170	237
Deferred consideration receivable from Ithaca Energy UK Ltd (note 11b)	Amortised cost	45	59
Advances relating to decommissioning provision	Amortised cost	23	18
Bank guarantee receivable	Amortised cost	22	–
Receivable from Shanghai Zhenhua Heavy Industries Co Ltd (note 11b)	Amortised cost	5	4
Contingent consideration arising from the disposal of Group’s operations in Mexico (note 11b)	Fair value through profit and loss	42	42
Pánuco contingent consideration	Fair value through profit and loss	8	45
Forward currency contracts designated as cash flow hedges (note 33)	Designated as cash flow hedges	1	1
		316	406
Current			
Receivable from joint operation partners for leases	Amortised cost	89	76
Deferred consideration receivable from Ithaca Energy UK Ltd (note 11b)	Amortised cost	19	–
Restricted cash	Amortised cost	8	10
Contingent consideration receivable from Ithaca Energy UK Ltd (note 11b)	Fair value through profit and loss	9	19
Forward currency contracts undesignated as hedges (note 33)	Fair value through profit and loss	5	14
Forward currency contracts designated as cash flow hedges (note 33)	Designated as cash flow hedges	5	25
		135	144
Other financial liabilities			
Non-current			
Lease creditors (note 30)	Loans and borrowings	298	339
Contingent consideration payable arising from acquisition (note 11)	Fair value through profit and loss	15	–
Others (note 11)	Amortised cost	2	–
Forward currency contracts designated as cash flow hedges (note 33)	Designated as cash flow hedges	–	2
		315	341
Current			
Lease creditors (note 30)	Loans and borrowings	140	112
Interest payable	Loans and borrowings	5	7
Forward currency contracts undesignated as hedges (note 33)	Fair value through profit and loss	13	3
Forward currency contracts designated as cash flow hedges (note 33)	Designated as cash flow hedges	6	17
Interest rate swap	Designated as cash flow hedges	2	–
		166	139

Receivable from joint operation partners for leases

The current and non-current receivable from joint operation partners represented 70% of the lease liability in respect of oil and gas facilities in Malaysia that are recognised 100% in the consolidated balance sheet. This treatment is necessary to reflect the legal position of the Group as the contracting counterparty for this lease. The Group’s 30% share of this liability at 31 December 2019 was US$111m (2018: US$134m). At 31 December 2019, management concluded that no expected credit loss allowance against the receivable from joint operation partners for leases was necessary, since under the joint operating agreement any default by the joint arrangement partners is fully recoverable through a recourse available to the non-defaulting partner through a transfer or an assignment of the defaulting partner’s equity interest.

Deferred consideration receivable from Ithaca Energy UK Ltd

The deferred consideration, recoverable over a period of three years under the terms of the Sales and Purchase Agreement, of US$64m (2018: US$59m) from Ithaca Energy UK Ltd relating to the disposal of Petrofac GSA Holdings Limited, was initially recognised at fair value using a discount rate of 8.4% and is subsequently measured at amortised cost. During the year, unwinding of discount on the deferred consideration of US$5m (2018: US$nil) was recognised within the finance income line item of the consolidated income statement (note 7). There was no significant increase in the credit risk for such financial asset since the initial recognition.

Advances relating to decommissioning provision

Advances relating to decommissioning provisions represent advance payments to a regulator for future decommissioning liabilities, relating to the Group’s assets in Malaysia. The advance of US$5m (2018: US$6m) made during the year was presented in the consolidated statement of cash flows as a cash outflow within investing activity.

Bank guarantee receivable

Bank guarantee receivable of US$22m represents an amount receivable from a bank associated with the encashment of performance and advance bank guarantees relating to a subcontractor in the Engineering & Construction operating segment. The Group has determined the amount to be recoverable, taking into consideration the legal advice received relating to the enforceability of the guarantee.

Contingent consideration arising from the disposal of the Group’s operations in Mexico

A reconciliation of the fair value movement of contingent consideration arising from the disposal of the Group’s operations in Mexico is presented below:

	2019 US$m	2018 US$m
Opening balance	42	–
Initial recognition (note 15)	–	42
As at the end of the reporting period	42	42

For fair value sensitivity disclosures see note 15.

18 Other financial assets and other financial liabilities continued

Pánuco contingent consideration

A reconciliation of the fair value movement of the Pánuco contingent consideration is presented below:

	2019 US$m	2018 US$m
Opening balance	45	88
Fair value loss (note 6)	(37)	(43)
As at the end of the reporting period	8	45

Contingent consideration receivable from Ithaca Energy UK Ltd

A reconciliation of the fair value movement of contingent consideration arising from the disposal of Petrofac GSA Holdings Limited is presented below:

	2019 US$m	2018 US$m
Opening balance	19	–
Initial recognition (note 11b)	–	19
Receipts	(10)	–
As at the end of the reporting period	9	19

Restricted cash

The Group had outstanding letters of guarantee, including performance, advance payments and bid bonds against which the Group had pledged or restricted cash balances.

Changes in liabilities arising from financing activities

Year ended 31 December 2019

	1 January 2019 US$m	Cash inflows US$m	Cash outflows US$m	Additions[2] US$m	Cash outflows paid by joint operation partners US$m	Others US$m	31 December 2019 US$m
Interest-bearing loans and borrowings[1]	620	1,390	(1,113)	3	–	–	900
Lease liabilities	451	–	(44)	103	(72)	–	438
At 31 December 2019	**1,071**	**1,390**	**(1,157)**	**106**	**(72)**	**–**	**1,338**

1 Interest-bearing loans and borrowings excludes overdrafts since these are included within cash and equivalents.
2 Additions to interest-bearing loans and borrowings represent additions on acquisition and additions to lease liabilities include IFRS 16 transition adjustment of US$85m, additions during the year of US$16m and additions on acquisition of US$2m.

Year ended 31 December 2018

	1 January 2018 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 2018 US$m
Interest-bearing loans and borrowings[1]	1,565	1,858	(2,803)	–	–	–	620
Lease liabilities	547	–	(30)	–	–	(66)	451
At 31 December 2018	**2,112**	**1,858**	**(2,833)**	**–**	**–**	**(66)**	**1,071**

1 Interest-bearing loans and borrowings excludes overdrafts since these are included within cash and equivalents.

Fair value measurement

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: 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	
		2019 US$m	2018 US$m	2019 US$m	2018 US$m
Financial assets					
Measured at amortised cost					
Cash and short-term deposits	Level 2	1,025	726	1,025	726
Restricted cash	Level 2	8	10	8	10
Receivable from joint operation partners for leases	Level 2	259	313	259	313
Deferred consideration receivable from Ithaca Energy UK Ltd (note 11b)	Level 2	64	59	64	59
Bank guarantee receivable	Level 2	22	–	22	–
Receivable from Shanghai Zhenhua Heavy Industries Co Ltd (note 11b)	Level 2	5	4	5	4
Advances relating to provision for decommissioning liability	Level 2	23	18	23	18
Measured at fair value through profit and loss					
Pánuco contingent consideration	Level 3	8	45	8	45
Contingent consideration arising from the disposal of the Group's operations in Mexico (note 11b)	Level 3	42	42	42	42
Contingent consideration receivable from Ithaca Energy UK Ltd (note 11b)	Level 3	9	19	9	19
Sterling forward currency contracts – undesignated	Level 2	3	13	3	13
Euro forward currency contracts – undesignated	Level 2	2	1	2	1
Designated as cash flow hedges					
Euro forward currency contracts	Level 2	3	25	3	25
Russian ruble forward currency contracts	Level 2	2	1	2	1
Sterling forward currency contracts	Level 2	1	–	1	–
Financial liabilities					
Measured at amortised cost					
Interest-bearing loans and borrowings					
Term loans	Level 2	300	424	300	425
Revolving credit facility	Level 2	599	77	600	80
Export credit agency funding	Level 2	–	114	–	115
Bank overdrafts	Level 2	111	21	111	21
Lease liabilities	Level 2	438	451	438	451
Interest payable	Level 2	5	7	5	7
Others	Level 2	2	–	2	–
Measured at fair value through profit and loss					
Contingent consideration payable	Level 3	15	–	15	–
Sterling forward currency contracts – undesignated	Level 2	12	1	12	1
Euro forward currency contracts – undesignated	Level 2	1	2	1	2
Designated as cash flow hedges					
Euro forward currency contracts	Level 2	3	7	3	7
Kuwaiti dinar forward currency contracts	Level 2	1	8	1	8
Russian ruble forward currency contracts	Level 2	1	3	1	3
Sterling forward currency contracts	Level 2	1	1	1	1
Interest rate swap	Level 2	2	–	2	–

Management assessed the carrying amounts of trade and other receivables and trade and other payables to approximate their fair values largely due to the short-term maturities of these instruments.

When the fair values of financial assets and financial liabilities recognised in the consolidated balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including discounted cash flow ("DCF") model. The inputs to these models are taken from observable markets where possible, but where such information is not available, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the recognised fair value of financial instruments and are discussed further below.

18 Other financial assets and other financial liabilities continued

The following methods and assumptions were used to estimate the fair values for material financial instruments:

- The Group enters into derivative financial instruments with various counterparties, principally financial institutions with investment grade credit ratings. Foreign exchange forward contracts and commodity forward contracts are valued using valuation techniques, which employ the use of market observable inputs. The most frequently applied valuation techniques include forward pricing using present value calculations. The models incorporate various inputs including the credit quality of counterparties, foreign exchange spot and forward rates, yield curves of the respective currencies, currency basis spreads between the respective currencies, interest rate curves and forward rate curves of the underlying commodity. The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationships and other financial instruments recognised at fair value
- The fair value of deferred consideration receivable from Ithaca Energy UK Ltd is equivalent to its amortised cost determined as the present value of discounted future cash flows using the discount rate of 8.4% which included the counterparty's risk of default
- The Pánuco contingent consideration was fair valued at 31 December 2019, which resulted in a negative fair value change of US$37m (2018: US$43m) recognised as an exceptional item in the consolidated income statement. The downward fair value adjustment was a significant management estimate in response to considerable uncertainty concerning the timing and outcome of migration of the Pánuco PEC to a PSC and whether the contingent consideration pay out conditions will be achieved
- The contingent consideration receivable from Ithaca Energy UK Ltd of US$9m (2018: US$19m) is dependent upon certain performance conditions being satisfied and is recoverable over a period of one year. The fair value of the contingent consideration took into consideration Management's expectation of meeting certain performance conditions by applying a risk factor (a Level 3 measurement of the 'fair value hierarchy' contained within IFRS 13 'Fair Value Measurement') to the maximum contingent consideration receivable. A 10% increase in the risk factor would result in a negative fair value change of US$2m
- The fair value of contingent consideration arising from the disposal of 49% non-controlling interest of the Group's operations in Mexico and contingent consideration receivable arising from the disposal of Petrofac GSA Holdings Limited is calculated as explained in note 15
- The fair value of long-term interest-bearing loans and borrowings, lease liabilities and receivable from joint operation partners for leases are equivalent to their amortised costs determined as the present value of discounted future cash flows using the effective interest rate

19 Inventories

	2019 US$m	2018 US$m
Project materials	15	15
Crude oil	1	4
Stores and raw materials	1	2
	17	21

Inventories with a carrying amount of US$3m (note 15) relating to the Group's operation in Mexico were reclassified to assets held for sale at the end of the reporting period. Inventories expensed of US$77m (2018: US$71m) were included within cost of sales in the consolidated income statement.

20 Trade and other receivables

	2019 US$m	2018 US$m
Trade receivables	615	829
Advances to vendors and subcontractors	325	355
Prepayments and deposits	37	23
Receivables from joint operation partners	52	95
Other receivables	73	129
	1,102	1,431

The decrease in trade receivables is mainly due to a reclassification to assets held for sale associated with Group's operation in Mexico of US$114m relating to the Integrated Energy Services operating segment (note 15), and a receipt of US$91m relating to a customer in the Engineering & Construction operating segment. At 31 December 2019, the Group had an expected credit loss ("ECL") allowance of US$26m in accordance with IFRS 9 'Financial Instruments' (2018: US$21m) against an outstanding trade receivable balance of US$641m (2018: US$850m).

Trade receivables are non-interest bearing and credit terms are generally granted to customers on 30 to 60 days basis. At 31 December 2019 and 2018, the trade receivables were reported net of ECL allowance in accordance with IFRS 9.

The movement in ECL allowance during 2019 and 2018 against trade receivables was as follows:

	2019 US$m	2018 US$m
At 1 January	21	24
Reclassified to non-current contract assets (note 21)	–	(4)
Disposals	–	(2)
Transfer to assets held for sale (note 15)	(1)	–
Write-off	(2)	–
ECL charge (note 5b)	8	3
At 31 December	26	21

At 31 December 2019, the analysis of trade receivables is as follows:

	Number of days past due						
	< 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
ECL rate	0.5%	0.6%	2.6%	10.9%	34.2%	68.0%	
Gross trade receivables	476	98	21	7	14	25	641
Less: ECL allowance	(2)	(1)	(1)	(1)	(4)	(17)	(26)
Net trade receivables at 31 December 2019	474	97	20	6	10	8	615

The increase in ECL rate at 31 December 2019 is mainly due to an additional ECL allowance of US$8m recognised during the year and due to a reclassification of trade receivables of US$114m (note 15) to assets held for sale associated with the Group's operation in Mexico that are split across various aged categories, i.e. <30 days US$19m; 31-60 days US$8m; 61-90 days US$10m; 91-120 days US$5m; 121-360 days US$31m and >360 days US$41m.

At 31 December 2018, the analysis of trade receivables is as follows:

	Number of days past due						
	< 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
ECL rate	0.3%	0.1%	0.3%	1.9%	6.5%	36.6%	
Gross trade receivables	629	76	25	17	62	41	850
Less: ECL allowance	(2)	–	–	–	(4)	(15)	(21)
Net trade receivables at 31 December 2018	627	76	25	17	58	26	829

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

Receivables from joint operation partners are recoverable amounts from partners on Block PM304 and on consortium contracts in the Engineering & Construction operating segment. An ECL allowance of US$6m (2018: US$nil) was recognised against joint operation partner receivables in the Integrated Energy Services operating segment (note 5b). At 31 December 2019, joint operation partner receivables of US$33m associated with the Group's operations in Mexico were reclassified to assets held for sale (note 15).

Other receivables mainly consist of Value Added Tax recoverable of US$44m (2018: US$58m). At 31 December 2019, other receivables of US$31m associated with the Group's operations in Mexico were reclassified to assets held for sale (note 15).

All trade and other receivables except 'advances provided to vendors and subcontractors' 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.

21 Contract assets and contract liabilities

a. Contract assets

	2019 US$m	2018 US$m
Work in progress	1,754	1,505
Retention receivables	228	308
Accrued income	82	185
	2,064	1,998

At 31 December 2019, work in progress includes assessed variation orders pending customer approval of US$341m (2018: US$235m).

b. Contract liabilities

	2019 US$m	2018 US$m
Billings in excess of costs and estimated earnings	147	374
Advances received from customers	126	130
	273	504

Revenue of US$492m (2018: US$354m) was recognised during the year from amounts included in contract liabilities at the beginning of the year.

c. Expected credit loss (ECL) allowance on contract assets

The below table provides information on ECL allowance for each contract asset category at the end of reporting periods:

As at 31 December 2019

	Non-current contract assets US$m	Work in progress US$m	Retention receivables US$m	Accrued income US$m	Total current contract assets US$m
ECL rate		0.3%	12.6%	5.6%	
Estimated total gross carrying amount	–	1,760	261	87	2,108
Less: ECL allowance	–	(6)	(33)	(5)	(44)
Net contract assets at 31 December 2019	–	1,754	228	82	2,064

As at 31 December 2018

	Non-current contract assets US$m	Work in progress US$m	Retention receivables US$m	Accrued income US$m	Total current contract assets US$m
ECL rate	9.0%	0.3%	9.9%	1.1%	
Estimated total gross carrying amount	44	1,510	342	187	2,039
Less: ECL allowance	(4)	(5)	(34)	(2)	(41)
Net contract assets at 31 December 2018	40	1,505	308	185	1,998

The movement in ECL allowance during 2019 and 2018 against each contract asset category is as follows:

Year ended 31 December 2019

	Non-current contract assets US$m	Work in progress US$m	Retention receivables US$m	Accrued income US$m	Total current contract assets US$m
At 1 January 2018	–	8	34	1	43
ECL allowance relating to non-current receivables reclassified from trade and other receivables (note 20)	4	–	–	–	–
Charge/(reversal) for the year	–	(3)	–	1	(2)
At 1 January 2019	4	5	34	2	41
Transferred to current	(4)	–	–	4	4
Transferred to assets held for sale	–	–	–	(3)	(3)
Charge/(reversal) for the year (note 5b)	–	1	(1)	2	2
At 31 December 2019	–	6	33	5	44

d. Contract balances arising from contracts with customers

The Group's contract balances at the end of 31 December 2019 are as follows:

	2019 US$m	2018 US$m
Trade receivables (note 20)	615	829
Non-current contract assets	–	40
Current contract assets	2,064	1,998
Contract liabilities	273	504

Trade receivables are non-interest bearing and credit terms are generally on terms of 30 to 60 days. Trade receivables represent the Group's right to consideration that is unconditional (i.e. only the passage of time is required before payment of the consideration is due).

During 2019, unwinding of discount of US$2m (note 7) associated with non-current contract assets outstanding at 31 December 2018 was recognised within the finance income line item of the consolidated income statement. At the end of the reporting period, the carrying amount of US$42m was reclassified to current contract assets since the settlement is expected during 2020.

The Group recognised an ECL allowance on trade receivables and contract assets arising from contracts with customers, included within selling, general and administration expenses in the consolidated income statement, amounting to US$10m for the year ended 31 December 2019 (2018: US$1m).

Revenue recognised during the year from performance obligations satisfied in previous years, resulting from change in transaction price, amounted to US$358m (2018: US$254m).

22 Cash and short-term deposits

	2019 US$m	2018 US$m
Cash at bank and in hand	712	630
Short-term deposits	314	97
ECL allowance	(1)	(1)
Total cash and short-term deposits	**1,025**	726

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$1,025m (2018: US$726m).

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

	2019 US$m	2018 US$m
Total cash and short-term deposits	1,025	726
Bank overdrafts (note 27)	(111)	(21)
	914	705

Cash and cash equivalents included amounts totalling US$71m (2018: US$145m) held by Group undertakings in certain countries whose exchange controls significantly restrict or delay the remittance of these amounts to foreign jurisdictions.

Based on the probability of default data for the counterparties, sourced from a third-party provider, the ECL allowance at 31 December 2019 was US$1m (2018: US$1m). There was no movement in the expected credit loss allowance during the year.

23 Share capital

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

	2019 US$m	2018 US$m
Authorised		
750,000,000 ordinary shares of US$0.02 each (2018: 750,000,000 ordinary shares of US$0.02 each)	15	15
Issued and fully paid		
345,912,747 ordinary shares of US$0.02 each (2018: 345,912,747 ordinary shares of US$0.02 each)	7	7

All the allotted and issued shares, including those held by the Employee Benefit Trust, were fully paid. 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 Employee Benefit Trust (EBT) shares

The Petrofac Employee Benefit Trust (the Trust) has been established with the Group's discretionary share scheme awards made to the employees of the Group. The Trust issues Company's shares to the Group employees on their respective vesting dates subject to satisfying any service and performance conditions of each scheme. The Trust continues to be included in the Group's consolidated financial statements in accordance with IFRS 10 'Consolidated Financial Statements'.

For the purpose of making awards under the Group's share-based payment plans, shares in the Company are purchased and held by the Trust. These shares have been classified in the consolidated balance sheet as EBT shares within equity. Shares vested during the year are satisfied with these shares.

The movements in total EBT shares are shown below:

	2019		2018	
	Number	US$m	Number	US$m
At 1 January	9,064,919	107	6,226,375	102
Purchase of Company's shares by EBT	5,000,308	33	6,045,843	44
Issue of Company's shares by EBT	(4,009,760)	(30)	(3,207,299)	(39)
At 31 December	10,055,467	110	9,064,919	107

Shares vested during the year include dividend shares of 384,299 shares (2018: 353,528 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 and independent market and non-market-based performance conditions. The market performance-based element of PSP awards is 70% dependent on the total shareholder return (TSR) of the Group compared with an index composed of selected relevant companies. 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 2019 awards	Other participants 2019 awards	Executive Directors 2018 awards	Other participants 2018 awards	All participants 2017 awards	All participants 2016 awards
Expected share price volatility (based on median of comparator group's three-year volatilities)	36.2%	36.2%	37.7%	37.7%	39.1%	31.9%
Share price correlation with comparator group	15.8%	15.8%	22.3%	22.3%	26.6%	28.9%
Risk-free interest rate	0.86%	0.86%	0.94%	0.94%	0.2%	0.6%
Expected life of share award	3 years	3 years	3 years	3 years	3 years	3 years
Fair value of TSR portion	211p	264p	285p	356p	223p	747p

The non-market-based condition governing the vesting of the remaining 30% of the PSP awards is subject to achieving certain strategic targets, including Engineering & Construction operating segment net margin, new order intake, return on capital employed, cash conversion, etc. 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 over the three-year vesting period of the plan and the estimated vesting rate for the achievement of strategic targets.

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 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 share-based payments reserve. 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 £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	
	Executive Directors		Other participants		All participants					
	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
2019 awards	**364p**	**50.5%**	**455p**	**50.5%**	**–**	**–**	**455p**	**95.5%**	**394p**	**95.0%**
2018 awards	412p	39.4%	515p	39.4%	–	–	466p	90.3%	560p	90.3%
2017 awards	353p	42.7%	441p	42.7%	–	–	839p	85.7%	572p	85.7%
2016 awards	–	–	–	–	982p	0.0%	982p	81.5%	859p	81.5%

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	
	2019 Number	2018 Number	**2019 Number[1]**	2018 Number[1]	**2019 Number**	2018 Number	**2019 Number**	2018 Number
Outstanding at 1 January	**2,882,006**	2,267,918	**6,888,262**	5,160,988	**873,051**	276,272	**10,643,319**	7,705,178
Granted during the year	**1,725,782**	1,262,668	**4,280,064**	4,774,002	**1,250,845**	736,973	**7,256,691**	6,773,643
Vested during the year	**–**	–	**(3,303,791)**	(2,676,496)	**(365,516)**	(127,270)	**(3,669,307)**	(2,803,766)
Forfeited during the year	**(700,908)**	(648,580)	**(574,583)**	(370,232)	**(32,993)**	(12,924)	**(1,308,484)**	(1,031,736)
Outstanding at 31 December	**3,906,880**	2,882,006	**7,289,952**	6,888,262	**1,725,387**	873,051	**12,922,219**	10,643,319

1 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	
	2019 Number	2018 Number	**2019 Number[1]**	2018 Number[1]	**2019 Number**	2018 Number	**2019 Number**	2018 Number
2019 awards	**1,719,489**	–	**3,880,740**	–	**1,247,488**	–	**6,847,717**	–
2018 awards	**1,137,589**	1,250,504	**2,625,711**	4,502,154	**446,381**	730,145	**4,209,681**	6,482,803
2017 awards	**1,049,802**	1,145,404	**783,501**	1,753,306	**31,518**	48,746	**1,864,821**	2,947,456
2016 awards	**–**	486,098	**–**	632,802	**–**	94,160	**–**	1,213,060
Total awards	**3,906,880**	2,882,006	**7,289,952**	6,888,262	**1,725,387**	873,051	**12,922,219**	10,643,319

1 Includes Invested and Matching Shares.

The average share price of the Company's shares during 2019 was US$5.55, sterling equivalent of £4.34 (2018: US$7.44, sterling equivalent of £5.55).

The number of outstanding shares excludes the dividend shares shown below:

	PSP		DBSP		RSP		Total	
	2019 Number	2018 Number	**2019 Number[1]**	2018 Number[1]	**2019 Number**	2018 Number	**2019 Number**	2018 Number
Dividend shares outstanding at 31 December	**756,250**	238,785	**411,462**	572,407	**57,525**	30,182	**1,225,237**	841,374

1 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[1]		RSP		Total	
	2019 US$m	2018 US$m	**2019 US$m**	2018 US$m	**2019 US$m**	2018 US$m	**2019 US$m**	2018 US$m
Share-based payment charge	**3**	1	**12**	14	**3**	2	**18**	17

1 Represents the charge on Matching Shares only.

The Group recognised a share-based payment charge of US$18m (2018: US$17m) in the consolidated income statement relating to the above employee share-based payment plans (see note 5c) which was transferred to the share-based payments reserve together with US$12m of the accrued bonus liability for the year ended 31 December 2018 (2018: 2017 bonus of US$15m).

For further details on the above employee share-based payment plans, refer to pages 102, 103 to 105 and 107 of the Directors' remuneration report.

26 Other reserves

	Net unrealised gains/(losses) on derivatives US$m	Foreign currency translation US$m	Share-based payments reserve US$m	Total US$m
Balance at 1 January 2018	40	(18)	87	109
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	(24)	–	–	(24)
Foreign currency translation	–	17	–	17
Issue of Company's shares by Employee Benefit Trust	–	–	(34)	(34)
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	15	15
Credit to equity for share-based payments charge (note 25)	–	–	17	17
Income tax on share-based payments reserve	–	–	(2)	(2)
Balance at 31 December 2018	13	(1)	83	95
Attributable to:				
Petrofac Limited shareholders	13	(1)	83	95
Non-controlling interests	–	–	–	–
Balance at 31 December 2018	13	(1)	83	95
Balance at 1 January 2019	13	(1)	83	95
Net changes in fair value of derivatives and financial assets designated as cash flow hedges	(2)	–	–	(2)
Foreign currency translation	–	(13)	–	(13)
Issue of Company's shares by Employee Benefit Trust	–	–	(26)	(26)
Transfer to share-based payments reserve for Deferred Bonus Share Plan Invested Shares (note 25)	–	–	12	12
Credit to equity for share-based payments charge (note 25)	–	–	18	18
Income tax on share-based payments reserve	–	–	–	–
Balance at 31 December 2019	**11**	**(14)**	**87**	**84**
Attributable to:				
Petrofac Limited shareholders	11	(14)	87	84
Non-controlling interests	–	–	–	–
Balance at 31 December 2019	**11**	**(14)**	**87**	**84**

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. During 2019 fair value loss of US$2m (2018: US$24m fair value loss) was recognised within equity. 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. Net losses of US$128,000 (2018: US$3m net gains) relating to foreign currency forward contracts and financial instruments designated as cash flow hedges were recognised in cost of sales line item in the consolidated income statement.

The forward currency points element and ineffective portion of derivative financial instruments relating to forward currency contracts designated as cash flow hedges amounting to US$11m (2018: US$5m) were recognised in cost of sales line item in the consolidated income statement.

Foreign currency translation reserve

The assets and liabilities of entities 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 foreign currency differences arising on the translation are recognised in other reserves in equity.

Share-based payments reserve

The share-based payments reserve 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 of US$12m (2018: US$15m) into the share-based payments reserve reflected the transfer from accrued bonus liability within trade and other payables in the consolidated balance sheet which has been voluntarily elected or mandatorily obliged to be settled in shares as part of the Deferred Bonus Share Plan (note 25).

27 Interest-bearing loans and borrowings

	2019 US$m	2018 US$m
Non-current		
Revolving credit facility	600	80
Term loans	–	300
	600	380
Less: Debt acquisition costs net of accumulated amortisation and effective interest rate adjustments	(1)	(4)
	599	376
Current		
Export credit agency funding	–	115
Term loans	300	125
Bank overdrafts	111	21
	411	261
Less: Debt acquisition costs net of accumulated amortisation and effective interest rate adjustments	–	(1)
	411	260
Total interest-bearing loans and borrowings	1,010	636

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

Revolving credit facility

The Group has a US$1,200m committed Revolving credit facility with a syndicate of international banks, which is available for general corporate purposes. US$200m of the facility will mature in June 2020 and the remaining US$1,000m will mature in June 2021. As at 31 December 2019, US$600m was drawn under this facility (2018: US$80m).

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

Term loans

At 31 December 2019, the Group had in place three bilateral term loans with a combined total of US$300m. As at that date, US$300m was drawn under these facilities (2018: US$425m). Of the total, US$75m is scheduled to mature in February 2020 and US$225m is scheduled to mature in August 2020.

Export credit agency funding

In 2015, the Group entered into two term loan facilities guaranteed, respectively, by the Italian Export Credit Agency (SACE) and the UK Export Credit Agency (UKEF). As at 31 December 2019, no amounts were outstanding under the SACE facility (2018: US$43m) and the UKEF facility (2018: US$72m). These facilities were repaid in full during 2019.

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.

Compliance with covenants

The Revolving credit facility and the term loans (together, the "Senior loans") are subject to two financial covenants relating to leverage and interest cover. The Group was compliant with these covenants for the year ending 31 December 2019.

The Senior loans 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.

28 Provisions

Non-current provisions

	Other long-term employment benefits provision US$m	Provision for decommissioning US$m	Other provisions US$m	Total US$m
At 1 January 2018	112	138	19	269
Additions/(net reversals) during the year	21	(24)	27	24
Disposals (note 11b)	–	(25)	–	(25)
Paid during the year	(14)	–	(1)	(15)
Transfer to current provisions	–	–	(14)	(14)
Unwinding of discount	–	6	–	6
Exchange difference	–	–	(2)	(2)
At 1 January 2019 – as previously reported	119	95	29	243
Deducted from right-of-use assets	–	–	(9)	(9)
At 1 January 2019 – as restated	119	95	20	234
Additions/(net reversals) during the year	25	1	3	29
Reclassified to liabilities associated with assets held for sale	–	(60)	–	(60)
Paid during the year	(18)	–	(6)	(24)
Transfer from accrued contract expenses	5	–	4	9
Transfer to current provisions	–	–	(4)	(4)
Unwinding of discount	–	4	–	4
Exchange difference	–	–	1	1
At 31 December 2019	**131**	**40**	**18**	**189**

Other long-term employment benefits provision

Labour laws in the Middle East 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 annual % salary increases	2%	2%
Discount factor	2%	2%

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 at the end of the reporting period relates to the Group's obligation for the removal of facilities and restoration of Block PM304 in Malaysia. On 19 September 2019, the Group signed a Sale and Purchase Agreement ("SPA") to dispose of the remaining 51% interest in the Group's Mexican operations. Consequently, the provision for decommissioning of US$60m was reclassified to liabilities associated with assets held for sale line item of the consolidated balance sheet as at the end of the reporting period (note 15).

An additional provision of US$1m recognised for Block PM304 in Malaysia (2018: a reversal of US$32m was recognised for Block PM304 in Malaysia due to revised rig and support vessels rates provided by the regulator and an upward revision of US$8m was recognised in respect of the Group's operations in Mexico arising from changes to discount rate estimates).

The liability is discounted at the rate of 3.7% on Block PM304 (2018: 4.1%).

The unwinding of the discount is recognised in the finance expense (note 7) 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.

Other provisions

At 1 January 2019, on adoption of IFRS 16, the outstanding non-current onerous lease provision of US$9m was adjusted as an offset to the right-of-use asset recognised as at that date.

The other provisions carrying amount at 31 December 2019 mainly represent claim amounts of US$7m (2018: US$9m) against the Group, which will be settled through the captive insurance company, Jermyn Insurance Company Limited, and US$4m (2018: US$6m) represents disposal costs associated with the disposal of the JSD6000 installation vessel.

Current provisions

	Onerous contract provisions US$m	Other provisions US$m	Total US$m
At 1 January 2018	16	10	26
Amounts provided during the year	148	26	174
Transfer from non-current provisions	–	14	14
Utilised during the year	(146)	(28)	(174)
At 1 January 2019 – as previously reported	18	22	40
Deducted from right of use assets	–	(3)	(3)
At 1 January 2019 – as restated	18	19	37
Amounts provided during the year	73	19	92
Transfer from non-current provisions	–	4	4
Transfer from accrued contract expenses	–	10	10
Utilised during the year	(85)	(12)	(97)
Translation difference	–	1	1
At 31 December 2019	**6**	**41**	**47**

Onerous contract provisions

The Group provides for future losses on contracts where it is considered probable that the estimate at completion contract costs are likely to exceed estimate at completion contract revenue. The amount of US$73m provided during the year relates to projects in the Engineering & Construction operating segment (2018: US$148m).

Other provisions

At 1 January 2019, on adoption of IFRS 16, the outstanding current onerous lease provision of US$3m was adjusted as an offset to the right-of-use asset recognised as at that date.

The other provisions carrying amount at 31 December 2019 mainly represent amounts provided by the Group for potential claims from vendors, disputes with customers, current portion of provision for disposal costs associated with the disposal of JSD6000 installation vessel and other claims. Of the US$19m provided during the year, US$3m (2018: US$13m) related to projects in the Engineering & Production Services operating segment; US$6m (2018: US$13m) related to disposal costs associated with the disposal of JSD6000 installation vessel (note 6); and US$5m (2018: US$nil) related to a legal provision in the Engineering & Construction operating segment (note 6).

29 Trade and other payables

	2019 US$m	2018 US$m
Trade payables	**507**	336
Accrued expenses	**357**	431
Other taxes payable	**39**	71
Other payables	**172**	124
	1,075	962

The increase in trade payables of US$171m is mainly due to an increase of US$211m in the Engineering & Construction operating segment mainly arising from increase in the construction activity for late life contracts partly offset by a reclassification of trade payables to liabilities associated with assets held for sale related with the Group's operation in Mexico of US$10m in the Integrated Energy Services operating segment (note 15).

Accrued expenses primarily represent contract cost accruals relating to the Engineering & Construction operating segment and the Engineering & Production Services operating segment. The decrease in accrued expenses of US$74m is mainly due to reduced contract cost accruals of US$55m for two contracts in the Engineering & Construction operating segment that are nearing completion and a reclassification of accrued expenses to liabilities associated with assets held for sale related with the Group's operation in Mexico of US$12m in the Integrated Energy Services operating segment (note 15).

Other payables mainly consist of retentions held against vendors and subcontractors of US$109m (2018: US$110m). The increase in other payables is mainly due to a receipt of an advance of US$37m associated with the sale and purchase agreement signed on 19 September 2019 to dispose of the remaining 51% interest in Group's Mexican operations (note 15).

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 Leases

The Group has lease contracts for various items of property, plant and equipment. The Group's obligations under its leases are secured by the lessor's title to the leased assets. Generally, the Group is restricted from assigning and subleasing the leased assets.

The Group also has certain leases of office buildings with lease terms of 12 months or less and leases of office equipment with low value. The Group applies the 'short-term lease' and 'lease of low-value assets' recognition exemptions for these leases.

The Group applied the available practical expedients wherein it:

— Relied on its assessment of whether leases are onerous immediately before the date of initial application
— Applied the short-term leases exemptions to leases with lease term that ends within 12 months of the date of initial application
— Excluded the initial direct costs from the measurement of the right-of-use asset at the date of initial application
— Used hindsight in determining the lease term where the contract contained options to extend or terminate the lease

a. Right-of-use assets

The Group recognises right-of-use assets, within property, plant and equipment line item of the consolidated balance sheet, at the commencement date of the lease (i.e. the date at which the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received.

Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets. If ownership of the right-of-use asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The carrying amounts of right-of-use assets recognised and the movements during the period are disclosed in note 12.

b. Lease liabilities

The table below provides details of lease liabilities recognised within other financial liabilities line item of the consolidated balance sheet:

	US$m
Finance lease liabilities carrying amounts under IAS 17 reclassified at the date of initial application (note 2)	**451**
Transition adjustment (note 2)	**85**
Lease liabilities at 1 January 2019	**536**
Additions	**16**
Addition on acquisition	**2**
Interest	**12**
Transfer to liabilities associated with assets held for sale	**(2)**
Payments made by the Group	**(56)**
Principal payments made by joint operation partners	**(72)**
Translation difference	**2**
At 31 December 2019	**438**

The lease liabilities as at 1 January 2019 can be reconciled to the operating lease commitments as of 31 December 2018 as follows:

	US$m
Operating lease commitments as at 31 December 2018	**100**
Weighted average incremental borrowing rate as at 1 January 2019	**5.5%**
Discounted operating lease commitments at 1 January 2019	**85**
Commitments relating to leases previously classified as finance leases	**451**
Lease liabilities as at 1 January 2019	**536**

The above lease liabilities include a 70% gross up of US$259m (2018: US$313m) on leases in respect of right-of-use assets relating to Block PM304 in Malaysia, which is necessary to reflect the legal position of the Group as the contracting entity for these leases. The leases relating to Block PM304 in Malaysia associated with oil and gas facilities include a renewal option of up to two years and a purchase option at the end of the lease term.

c. Amounts recognised in the consolidated income statement in respect of leases

	US$m
Depreciation charge in respect of right-of-use assets	**32**
Finance expense recognised associated with lease liabilities	**12**
Lease expense recognised for short-term leases and leases for low-value assets	**6**

d. Future lease payments

Set out below are the future lease payments in respect of leases for property, plant and equipment. These have remaining non-cancellable lease terms of between one and eight years. The undiscounted future minimum rental commitments under these non-cancellable leases as at 31 December 2019 are as follows:

	Future minimum lease payments US$m	Finance expense US$m	Present value US$m
The commitments are as follows:			
Within one year	140	23	163
After one year but not more than five years	253	32	285
More than five years	45	4	49
	438	**59**	**497**

The Group applied IFRS 16 retrospectively, using the modified retrospective method; therefore, in accordance with the requirements of IFRS 16 'Leases', the comparative information for the above lease disclosures was not presented.

31 Commitments and contingent liabilities

Commitments

In the normal course of business, the Group obtains 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 and its subsidiaries in favour of the issuing banks.

At 31 December 2019, the Group had outstanding letters of credit, letters of guarantee, including performance, advance payments and bid bonds of US$4,581m (2018: US$4,721m) against which the Group had pledged or restricted cash balances of, in aggregate, US$8m (2018: US$10m).

At 31 December 2019, the Group had outstanding forward exchange contracts amounting to US$2,307m (2018: US$2,610m). 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).

31 December 2018

The financial commitments associated with leases for 31 December 2018, in accordance with IAS 17 'Leases', are as follows:

Operating lease commitments – 31 December 2018

	2018 US$m
Within one year	21
After one year but not more than five years	50
More than five years	29
	100

Included in the above are commitments relating to the lease of property in the United Kingdom of US$67m. Minimum lease payments recognised as an operating lease expense during 2018 amounted to US$27m, of which US$14m related to cancellable operating leases and US$13m related to non-cancellable operating leases.

Finance lease commitments – 31 December 2018

	Future minimum lease payments US$m	Finance expense US$m	Present value US$m
Oil and gas facilities and plant and equipment			
The commitments are as follows:			
Within one year	139	27	112
After one year but not more than five years	326	42	284
More than five years	60	5	55
	525	74	451

31 Commitments and contingent liabilities continued

Capital commitments

At 31 December 2019, the Group had capital commitments of US$53m (2018: US$21m) excluding the above lease commitments.

Included in the US$53m of commitments are:

	2019 US$m	2018 US$m
Production Enhancement Contracts (PECs) in Mexico	19	16
Block PM304 in Malaysia	22	3
Commitments in respect of development of the Group's cloud-based Enterprise Resource Planning ("ERP"), digital systems and other information technology equipment	12	–
Oman training centre commitments	–	2

Contingent liabilities

As described in pages 34, 74 and 86 of the 2019 Annual Report and Accounts, 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. In February 2019, a former employee of a Petrofac subsidiary admitted offences contrary to the UK Bribery Act 2010. No charges have been brought against any Group company or any other officers or employees to date. Although not charged, a number of Petrofac individuals and entities are alleged to have acted together with the individual concerned. The SFO investigation is ongoing. The existence of any possible future financial obligations (such as fines or penalties), or other consequences, is unable to be determined at this time.

The Group is aware of challenges to the historical application of National Insurance Contributions to workers in the UK Continental Shelf. At this point, the Group considers this to be a possible obligation whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group and, accordingly, no provision has been recognised. Management does not believe it is possible to make a reliable estimate of the potential financial effect in the event that the Group was determined to have any liability that may arise from this matter.

32 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 entered with related parties:

Related party receivables	2019 US$m	2018 US$m
Joint ventures	1	–
Associates	–	1
	1	1

All sales to and purchases from related parties are conducted on an arm's length basis and are approved by the operating segment's management. All related party balances will be settled in cash.

Other Directors' interests include market-rate services of US$262,000 (2018: US$324,000), incurred in the ordinary course of business by the Engineering & Production Services operating segment. The Group Chief Executive is a beneficiary of a trust which has invested in a fund that has an equity interest in the company which provided the services. In May 2017, the board of directors approved a donation of up to US$5m over the course of five years to the American University of Beirut (AUB) to establish the Petrofac Fund for Engineers endowment fund, which will provide scholarships and internships to engineering students in memory of Mr Maroun Semaan, Petrofac's co-founder. In 2019, a US$1m (2018: US$1m) donation from the approved amount was made to the AUB. The Group Chief Executive is a trustee of AUB.

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 108.

	2019 US$m	2018 US$m
Short-term employee benefits	11	13
Other long-term employment benefits	–	1
Share-based payments charge	4	2
Fees paid to Non-executive Directors	1	1
	16	17

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, other financial assets, cash and short-term deposits, interest-bearing loans and borrowings, trade and other payables and other financial liabilities.

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 the 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 83 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; 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.

The Group's interest-bearing loans and borrowings is primarily in United States dollars, linked to United States dollar LIBOR (London Interbank Offered Rate). The Group uses derivatives to swap between fixed and floating rates. At 31 December 2019, the proportion of floating rate debt was 85% of the total financial debt outstanding (2018: 100%), since a floating rate term loan of US$150m was converted to fixed rate using an interest rate swap that was designated as a cash flow hedge. At 31 December 2019 the fair value loss of US$2m was recognised through other comprehensive income and a financial liability of US$2m was recognised within other financial liability line item of the consolidated balance sheet.

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 2019	**(8)**	**8**	**–**	**–**
31 December 2018	(13)	13	–	–

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

Year ended 31 December 2019

	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)	**111**	**–**	**–**	**–**	**–**	**–**	**111**
Interest-bearing loans and borrowings[1] (note 27)	**150**	**600**	**–**	**–**	**–**	**–**	**750**
	261	**600**	**–**	**–**	**–**	**–**	**861**
Financial assets							
Floating rates							
Cash and short-term deposits (note 22)	**1,025**	**–**	**–**	**–**	**–**	**–**	**1,025**
Restricted cash balances (note 18)	**8**	**–**	**–**	**–**	**–**	**–**	**8**
	1,033	**–**	**–**	**–**	**–**	**–**	**1,033**

1 During 2019, a term loan of US$150m was converted using an interest rate swap.

33 Risk management and financial instruments continued

Year ended 31 December 2018

	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)	21	–	–	–	–	–	21
Interest-bearing loans and borrowings (note 27)	240	300	80	–	–	–	620
	261	300	80	–	–	–	641
Financial assets							
Floating rates							
Cash and short-term deposits (note 22)	726	–	–	–	–	–	726
Restricted cash balances (note 18)	10	–	–	–	–	–	10
	736	–	–	–	–	–	736

Financial liabilities in the above table are disclosed gross of debt acquisition costs and effective interest rate adjustments of US$1m (2018: US$5m).

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.

	2019 % of foreign currency denominated items	2018 % of foreign currency denominated items
Revenues	34.0%	44.8%
Costs	41.7%	53.5%
Non-current financial assets	15.5%	4.4%
Current financial assets	52.7%	13.3%
Non-current financial liabilities	6.3%	20.9%
Current financial liabilities	57.5%	15.4%

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 subsidiaries with non-USD functional currencies are translated into the Group's reporting currency using a weighted average exchange rate. 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:

	2019		2018	
	Average rate	Closing rate	Average rate	Closing rate
Sterling	1.28	1.32	1.34	1.28
Kuwaiti dinar	3.31	3.30	3.31	3.29
Euro	1.12	1.12	1.18	1.15

The following table summarises the impact on the Group's profit before tax and equity (due to a 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 2019	**15[1]**	**15[1]**	**(9)**	**9**
31 December 2018	(12)[1]	(12)[1]	14	(14)

1 Includes impact on pegged currencies.

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)[1]	
	2019 US$m	2018 US$m	**2019 US$m**	2018 US$m	**2019 US$m**	2018 US$m	**2019 US$m**	2018 US$m
Euro purchases	**179**	311	**1**	(1)	**–**	18	**15**	18
Sterling sales	**(555)**	(468)	**(9)**	12	**–**	(1)	**–**	(1)
Kuwaiti dinar sales	**(513)**	(942)	**–**	–	**(1)**	(8)	**(2)**	(1)
Russian ruble (sales)/purchases	**(4)**	29	**–**	–	**1**	(2)	**–**	(2)
Arab Emirates dirham purchases	**150**	150	**–**	–	**–**	–	**–**	–
			(8)	11	**–**	7	**13**	14

1 Attributable to Petrofac Limited shareholders.

The above foreign exchange contracts mature and will affect income between January 2020 and May 2022 (2018: between January 2019 and August 2021).

At 31 December 2019, the Group had cash and short-term deposits designated as cash flow hedges with net unrealised loss of US$nil (2018: US$1m loss) as follows:

	Fair value		Net unrealised gain/(loss)[1]	
	2019 US$m	2018 US$m	**2019 US$m**	2018 US$m
Euro cash and short-term deposits	**9**	16	**–**	(1)
Sterling cash and short-term deposits	**–**	3	**–**	–
			–	(1)

1 Attributable to Petrofac Limited shareholders.

During 2019, net changes in fair value resulting in a gain of US$254,000 (2018: loss of US$24m) relating to these derivative instruments and financial assets were taken to equity and losses of US$128,000 (2018: gains of US$3m) 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$11m (2018: US$5m loss) were recognised in the consolidated income statement.

Commodity price risk – oil prices

No crude oil swaps were entered by the Group during 2019 to hedge oil production.

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 2019, the Group's five largest customers accounted for 48.5% of outstanding trade receivables, contract assets and deferred consideration receivable (2018: 52.8%).

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 joint operation partners for leases 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.

33 Risk management and financial instruments continued

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 2019

	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	186	225	600	–	–	1,011	1,010
Lease liabilities	88	75	153	132	49	497	438
Trade and other payables (excluding other taxes payable and retention payable)	842	85	–	–	–	927	927
Derivative instruments	19	2	–	–	–	21	21
Interest payments	13	16	23	–	–	52	–
	1,148	403	776	132	49	2,508	2,396

Year ended 31 December 2018

	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	161	100	300	80	–	641	636
Lease liabilities	76	63	121	205	60	525	451
Trade and other payables (excluding advances from customers and other taxes payable)	780	111	–	–	–	891	891
Derivative instruments	15	5	2	–	–	22	22
Interest payments	11	8	11	2	–	32	–
	1,043	287	434	287	60	2,111	2,000

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:

	2019 US$m	2018 US$m
Cash and short-term deposits	1,025	726
Interest-bearing loans and borrowings (A)	(1,010)	(636)
Net cash (B)	15	90
Equity attributable to Petrofac Limited shareholders (C)	633	707
Reported net profit/(loss) for the year attributable to Petrofac Limited shareholders (D)	73	64
Gross gearing ratio (A/C)	159.6%	90.0%
Net gearing ratio (B/C)	Net cash	Net cash
Shareholders' return on investment (D/C)	11.5%	9.1%

34 Subsidiaries, associates and joint arrangements

At 31 December 2019, 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 2019	2018
Active subsidiaries			
Petrofac Algeria EURL	Algeria	100	100
Petrofac International (Bahrain) S.P.C.	Bahrain	100	100
Petrofac South East Asia (B) Sdn Bhd	Brunei	100	100
Petrofac (Cyprus) Limited	Cyprus	100	100
Caltec Limited	England	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	100[1]	100[1]
Petrofac Treasury UK Limited	England	100[1]	100[1]
Petrofac UK Holdings Limited	England	100[1]	100[1]
PetroHealth Limited	England	100	100
Petrofac Deutschland GmbH	Germany	100	100
Jermyn Insurance Company Limited	Guernsey	100[1]	100[1]
Petrofac Engineering India Private Limited	India	100	100
Petrofac Engineering Services India Private Limited	India	100	100
Petrofac Projects and Services Private Limited (formerly Petrofac Information Services Private Limited)	India	100	100
Petrofac (JSD 6000) Limited	Jersey	100	100
Petrofac Energy Developments (Ohanet) Jersey Limited	Jersey	–	100
Petrofac Energy Developments International Limited	Jersey	100[1]	100[1]
Petrofac Facilities Management International Limited	Jersey	100[1]	100[1]
Petrofac FPF004 Limited	Jersey	–	100
Petrofac Integrated Energy Services Limited	Jersey	100[1]	100[1]
Petrofac International Ltd	Jersey	100[1]	100[1]
Petrofac Offshore Management Limited	Jersey	100	100
Petrofac Platform Management Services Limited	Jersey	100	100
Petrofac Training International Limited	Jersey	100[1]	100[1]
Petrokyrgyzstan Limited	Jersey	–	100
Petro Oil & Gas Limited (note 13)	Jersey	51[2]	51[2]
Petroleum Facilities E & C Limited	Jersey	100[1]	100[1]
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

34 Subsidiaries, associates and joint arrangements continued

Name of entity	Country of incorporation	Proportion of nominal value of issued shares controlled by the Group 2019	2018
PFMAP Sdn Bhd	Malaysia	100	100
Petrofac EPS Sdn. Bhd	Malaysia	49[2]	49[2]
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
Petrofac Kazakhstan B.V.	Netherlands	100	100
Petrofac Netherlands Coöperatief U.A.	Netherlands	100	100
Petrofac Netherlands Holdings B.V. (note 13)	Netherlands	51[2]	51[2]
Petrofac Nigeria B.V.	Netherlands	100	100
Petrofac Norge B.V.	Netherlands	100	100
PTS B.V.	Netherlands	100	100
Petrofac Energy Services Nigeria Limited	Nigeria	100	100
Petrofac International (Nigeria) Limited	Nigeria	100	100
Petrofac Norge AS	Norway	100	100
Petrofac E&C Oman LLC	Oman	100	100
PKT Technical Services Ltd	Russia	50[2]	50[2]
PKT Training Services Ltd	Russia	–	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 Limited	Scotland	100	100
Petrofac Training Holdings 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
Petrofac South East Asia Pte Ltd	Singapore	100[1]	100[1]
Petrofac E&C International Limited	United Arab Emirates	100	100
Petrofac Emirates LLC (note 13)	United Arab Emirates	75	75
Petrofac FZE	United Arab Emirates	100	100
Petrofac International (UAE) LLC	United Arab Emirates	100	100
Petrofac Inc.	United States	100	100[1]
Petrofac Training Inc.	United States	100	100
Petrofac US Holdings Inc.	United States	100[6]	–
W&W Energy Services Inc.	United States	100[6]	–
SPD Group Limited	British Virgin Islands	100	100

Associates			Proportion of nominal value of issued shares controlled by the Group	
Name of associate	Principal activities	Country of incorporation	2019	2018
PetroFirst Infrastructure Limited	Leasing of floating platforms to oil and gas industry	Jersey	**20**	20
PetroFirst Infrastructure 2 Limited	Leasing of floating platforms to oil and gas industry	Jersey	**10**	10
Joint arrangements				
Joint ventures				
Socar – Petrofac LLC	Training services	Azerbaijan	**49**	49
Petrofac – ISKER LLP	Engineering and construction services	Kazakhstan	**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	**50**[3]	50[3]
PSS Netherlands B.V.	Engineering, procurement, supply of equipment and materials and related services to execute the Company's scope of work for a project in Thailand	Netherlands	**36**[4]	36[4]
Bechtel Petrofac JV	Engineering, procurement and construction management of a project in UAE	Unincorporated	**35**[5]	35[5]
NGL 4 JV	EPC for a project in UAE	Unincorporated	**45**[5]	45[5]
Petrofac/Bonatti JV	EPC for a project in Algeria	Unincorporated	**70**[5]	70[5]
Petrofac/Daelim JV	EPC for a project in Oman	Unincorporated	**50**[5]	50[5]
PM304 JV	Oil and gas exploration and production in Malaysia	Unincorporated	**30**[5]	30[5]
Petrofac/Samsung/CB&I CFP	EPC for a project in Kuwait	Unincorporated	**47**[5]	47[5]
Santuario Production Sharing Contract	Oil and gas exploration and production in Mexico	Unincorporated	**36**[5]	36[5]

Please note that only active entities are shown in th-e 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 The joint arrangement is classified as a joint operation as, contractually, the joint operation partners have rights to the joint operation's assets and obligation for the joint operation's liabilities.
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.
6 Following the acquisition of W&W Energy Services Inc at the end of 2019, the formal registration of the transfer of shares will be undertaken in early 2020.

The Group's ownership interest in associates and joint ventures is disclosed on page 149 and page 150.

Appendix A

The Group references Alternative Performance Measures ("APMs") when evaluating the Group's reported financial performance, financial position and cash flows that are not defined or specified under International Financial Reporting Standards ("IFRS"). The Group considers that these APMs, which are not a substitute for or superior to IFRS measures, provide stakeholders with additional useful information by adjusting for certain reported items which impact upon IFRS measures or, by defining new measures, to aid the understanding of the Group's financial performance, financial position and cash flows.

APM	Description	Closest equivalent IFRS measure	Adjustments to reconcile to primary statements	Rationale for adjustments
Group's business performance net profit attributable to Petrofac Limited shareholders (note A1)	Measures net profitability	Group's net profit/(loss)	Petrofac presents business performance APM in the consolidated income statement as a means of measuring underlying business performance. The business performance net profit measure excludes the contribution of impairments of assets, fair value re-measurements, losses on disposal, restructuring and redundancy costs, onerous leasehold property provision, certain Corporate reporting segment professional services and amortisation of debt acquisition cost, contract migration costs and material deferred tax movements arising due to foreign exchange differences in jurisdictions where tax is computed based on the functional currency of the country	The intention of this measure is to provide users of the consolidated financial statements with a clear and consistent presentation of underlying business performance and it excludes the impact of certain items to aid comparability
Business performance basic and diluted earnings per share attributable to Petrofac Limited shareholders (note A2)	Measures net profitability	Basic and diluted earnings per share		
Business performance earnings before interest, tax, depreciation and amortisation ("EBITDA") (note A3)	Measures operating profitability	Operating profit/(loss)	Excludes exceptional items and certain re-measurements, depreciation and amortisation and includes share of net profits from associates and joint ventures	The intention of this measure is to provide users of the consolidated financial statements with a clear and consistent presentation of underlying operating performance
Business performance effective tax rate ("ETR") (note A4)	Measures tax charge	Income tax expense	Excludes income tax credit related to exceptional items and certain re-measurements	The intention of this measure is to provide users of the consolidated financial statements with a clear and consistent presentation of underlying business performance ETR
Capital expenditure (note A5)	Measures net cash cost of capital investment	Net cash flows generated from/(used in) investing activities	Excludes dividends received from associates and joint ventures, net loans repaid by/(paid to) associates and joint ventures, proceeds from disposal of property, plant and equipment, proceeds from disposal of subsidiaries and interest received	Excludes items not considered relevant to capital investment
Free cash flow (note A6)	Measures net cash generated after operating and investing activities to finance returns to shareholders	Net cash flows generated from/(used in) operating activities plus net cash flows (used in)/generated from investing activities minus interest paid plus amounts received from non-controlling interest	n/a	n/a
Working capital, balance sheet measure (note A7)	Measures the investment in working capital	No direct equivalent. Calculated as inventories plus trade and other receivables plus contract assets minus trade and other payables minus contract liabilities minus accrued contract expenses	n/a	n/a
Return on capital employed ("ROCE") (note A8)	Measures the efficiency of generating operating profits from capital employed	No direct equivalent. Calculated as business performance earnings before interest, tax and amortisation (EBITA) divided by capital employed (average total assets minus average current liabilities after adjusting for certain leases)	n/a	n/a
Cash conversion (note A9)	Measures the conversion of EBITDA into cash	No direct equivalent. Calculated as cash generated from operations divided by business performance EBITDA	n/a	n/a
Net lease liabilities (note A10)	Measures net lease liabilities	No direct equivalent. Calculated as gross lease liabilities minus 70% of leases in respect of right-of-use assets relating to Block PM304 in Malaysia	n/a	n/a
Net debt/net cash (note A11)	Measures indebtedness	No direct equivalent. Calculated as interest-bearing loans and borrowings minus cash and short-term deposits	n/a	n/a
Net debt/EBITDA (note A12)	Measures leverage	No direct equivalent. Calculated as net debt divided by EBITDA	n/a	n/a
New order intake (note A13)	Provides visibility of future revenue	No direct equivalent. Calculated as net awards and net variation orders	n/a	n/a

A1. Business performance net profit attributable to Petrofac Limited shareholders

	2019 US$m	2018 US$m
Reported net profit (A)	66	61
Adjustments – exceptional items and certain re-measurements (note 6):		
Impairment of assets	119	235
Fair value re-measurements	37	45
Loss on disposal	–	28
Group reorganisation and redundancy costs	10	8
Onerous leasehold property provisions	–	18
Other exceptional items	23	22
Pre-tax exceptional items and certain re-measurements (B)	189	356
Foreign exchange translation (gains)/losses on deferred tax balances	(1)	2
Deferred tax impairment	16	–
Tax relief on exceptional items and certain re-measurements	(1)	(69)
Tax credit on exceptional items and certain re-measurements (C)	14	(67)
Post-tax exceptional items and certain re-measurements (D = B + C)	203	289
Group's business performance net profit (A + D)	269	350
Loss attributable to non-controlling interest	7	3
Business performance net profit attributable to Petrofac Limited shareholders	276	353

A2. Business performance basic earnings per share attributable to Petrofac Limited shareholders

	2019 US$m	2018 US$m
Reported net profit attributable to Petrofac Limited shareholders (E)	73	64
Add: post-tax exceptional items and certain re-measurements (appendix A, note A1)	203	289
Business performance net profit attributable to Petrofac Limited shareholders (E1)	276	353

	2019 Shares million	2018 Shares million
Weighted average number of ordinary shares for basic earnings per share1 (F) (note 9)	336	338
Weighted average number of ordinary shares for diluted earnings per share1 (F1) (note 9)	343	345

	2019 US cents	2018 US cents
Basic earnings per share		
Business performance (E^1/F x 100)	82.1	104.4
Reported (E/F x 100)	21.7	18.9
Diluted earnings per share		
Business performance (E^1/F^1 x 100)	80.4	102.3
Reported (E/F^1 x 100)	21.3	18.6

1 The weighted number of ordinary shares in issue during the year, excludes those held by the Employee Benefit trust.

A3. Business performance EBITDA

	2019 US$m	2018 US$m
Reported operating profit	220	159
Adjustments:		
Pre-tax exceptional items and certain re-measurements (appendix A, note A1)	189	356
Share of net profits from associates and joint ventures (note 17)	17	15
Depreciation (note 12)	130	140
Amortisation and write off (note 5a and note 5b)	3	1
Business performance EBITDA	559	671

A4. Business performance ETR

	2019 US$m	2018 US$m
Reported income tax expense	126	46
Add: Tax credit on exceptional items and certain re-measurements (appendix A, note A1)	(14)	67
Business performance income tax expense (G)	112	113
Group's business performance net profit (appendix A, note A1)	269	350
Group's business performance net profit before tax (H)	381	463
Business performance ETR (G/H x 100)	29.4%	24.4%

Appendix A continued

A5. Capital expenditure

	2019 US$m	2018 US$m
Net cash flows used in/(from) investing activities	59	(213)
Adjustments:		
Acquisition of subsidiary	(21)	–
Dividends received from associates and joint ventures	11	11
Net loans (paid to)/repaid by associates and joint ventures	(2)	13
Disposal costs paid/proceeds from disposal of property, plant and equipment	(9)	152
Proceeds from disposal of subsidiaries including receipt against contingent consideration	12	130
Advance received	37	–
Interest received	5	5
Capital expenditure	92	98

A6. Free cash flow

	2019 US$m	2018 US$m
Net cash flows generated from operating activities	238	553
Net cash flows (used in)/generated from investing activities	(59)	213
Interest paid	(51)	(69)
Amounts received from non-controlling interest	10	224
Free cash flow	138	921

A7. Working capital

	2019 US$m	2018 US$m
Inventories (note 19)	17	21
Trade and other receivables (note 20)	1,102	1,431
Contract assets (note 21)	2,064	1,998
Current Assets (I)	3,183	3,450
Trade and other payables (note 29)	1,075	962
Contract liabilities (note 21)	273	504
Accrued contract expenses	1,599	1,645
Current Liabilities (J)	2,947	3,111
Working capital (I – J)	236	339

A8. Return on capital employed

	2019 US$m	2018 US$m
Reported operating profit	220	159
Adjustments:		
Pre-tax exceptional items and certain re-measurements (appendix A, note A1)	189	356
Share of profits from associates and joint ventures (note 17)	17	15
Amortisation (note 5a and 5b)	1	–
Business performance EBITA (K)	427	530
Total assets opening balance	5,806	7,563
Less: 70% on leases in respect of right-of-use assets relating to Block PM304 in Malaysia	(313)	(381)
Adjusted total assets opening balance (L)	5,493	7,182
Total assets closing balance	5,976	5,806
Less: 70% on leases in respect of right-of-use assets relating to Block PM304 in Malaysia (note A10)	(259)	(313)
Adjusted total assets closing balance (M)	5,717	5,493
Average total assets (N = (L + M)/2)	5,605	6,338
Current liabilities opening balance	3,794	4,982
Less: 70% on leases in respect of right-of-use assets relating to Block PM304 in Malaysia (note A10)	(76)	(76)
Adjusted current liabilities opening balance (O)	3,718	4,906
Current liabilities closing balance	3,922	3,794
Less: 70% on leases in respect of right-of-use assets relating to Block PM304 in Malaysia (note A10)	(89)	(76)
Adjusted current liabilities closing balance (P)	3,833	3,718
Average current liabilities (Q = (O + P)/2)	3,776	4,312
Capital employed (R = N – Q)	1,829	2,026
Return on capital employed (K/R x 100)	23.3%	26.2%

A9. Cash conversion

	2019 US$m	2018 US$m
Cash generated from operations (S)	399	681
Business performance EBITDA (T)	559	671
Cash conversion (S/T x 100)	**71.4%**	101.5%

A10. Net lease liabilities

	2019 US$m	2018 US$m
Non-current liability for lease liabilities (note 18)	298	339
Current liability for lease liabilities (note 18)	140	112
Total gross liability for lease liabilities	438	451
70% gross up on non-current liability for leases in respect of right-of-use assets relating to Block PM304 in Malaysia (note 18)	170	237
70% gross up on current liability for leases in respect of right-of-use assets relating to Block PM304 in Malaysia (note 18)	89	76
Total 70% on leases in respect of right-of-use assets relating to Block PM304 in Malaysia	259	313
Net non-current liability for leases	128	102
Net current liability for leases	51	36
Net liability for leases	**179**	138

A11. Net (cash)/debt

	2019 US$m	2018 US$m
Interest-bearing loans and borrowings (U) (note 27)	1,010	636
Less: Cash and short-term deposits (V) (note 22)	(1,025)	(726)
Net (cash)/debt (U – V)	**(15)**	(90)

A12. Net debt/EBITDA

	2019 US$m	2018 US$m
Net Debt (W) (appendix A, note A11)	n/a	n/a
Business performance EBITDA (X) (note A3)	n/a	n/a
Net Debt/EBITDA (W/X)	**n/a**	n/a

A13. New order intake

	2019 US$m	2018 US$m
Engineering & Construction operating segment		
Net awards	1,252	3,688
Net variation orders	882	668
	2,134	4,356
Engineering & Production Services operating segment		
Net awards	912	751
Net variation orders	115	(67)
	1,027	684
New order intake	**3,161**	5,040