HELLENIC PETROLEUM S.A.

Consolidated Financial Statements
in accordance with IFRS as endorsed by the
European Union for the
year ended 31 December 2019

GENERAL COMMERCIAL REGISTRY: 000296601000
COMPANY REGISTRATION NUMBER: 2443/06/B/86/23

Index to the consolidated financial statements

Company Information **4**

Consolidated Statement of financial position **5**

Consolidated statement of comprehensive income **6**

Consolidated statement of changes in equity **7**

Consolidated statement of cash flows **8**

Notes to the consolidated financial statements **9**

1 General information **9**

2 Summary of significant accounting policies **9**

2.1 Basis of preparation 9
2.2 Basis of Consolidation 15
2.3 Business combinations 17
2.4 Segment reporting 17
2.5 Foreign currency translation 17
2.6 Assets held for sale 18
2.7 Property, plant and equipment 19
2.8 Borrowing costs 20
2.9 Intangible assets 20
2.10 Exploration for and evaluation of mineral resources 20
2.11 Impairment of non-financial assets 21
2.12 Financial assets 22
2.13 Derivative financial instruments and hedging activities 24
2.14 Government grants 25
2.15 Inventories 25
2.16 Trade receivables 25
2.17 Cash and cash equivalents 25
2.18 Share capital 25
2.19 Borrowings 25
2.20 Current and deferred income tax 26
2.21 Employee benefits 27
2.22 Trade and other payables 28
2.23 Provisions 28
2.24 Environmental liabilities 29
2.25 Revenue recognition 29
2.26 Leases – IAS 17 applicable up to 31 December 2018 30
2.27 Dividend distribution 31
2.28 Financial guarantee contracts 31
2.29 Changes in accounting policies 31
2.30 Comparative figures 31

3 Financial risk management **31**

3.1 Financial risk factors 31
3.2 Capital risk management 36
3.3 Fair value estimation 36

4 Critical accounting estimates and judgements **38**

5 Segment information ... 40
6 Property, plant and equipment ... 44
7 Right-of-use assets ... 46
8 Intangible assets ... 47
9 Investments in associates and joint ventures ... 48
10 Loans, advances & long term assets ... 52
11 Inventories ... 53
12 Trade and other receivables ... 54
13 Cash and cash equivalents ... 55
14 Share capital ... 56
15 Reserves ... 56
16 Trade and other payables ... 57
17 Interest bearing loans and borrowings ... 58
18 Lease liabilities ... 61
19 Deferred income tax ... 61
20 Retirement benefit obligations ... 63
21 Provisions ... 65
22 Other non-current liabilities ... 65
23 Derivative financial instruments ... 66
24 Expenses by nature ... 67
25 Exploration and development expenses ... 67
26 Other operating income / (expenses) and other gains / (losses) ... 68
27 Finance income / (expense) ... 68
28 Currency exchange gains / (losses) ... 69
29 Income tax expense ... 69
30 Earnings per share ... 70
31 Dividends per share ... 71
32 Cash generated from operations ... 71
33 Contingencies and litigation ... 72
34 Commitments ... 75
35 Related-party transactions ... 75
36 Principal subsidiaries, associates and joint ventures included in the consolidated financial statements ... 78
37 Events after the end of the reporting period ... 78

Company Information

Directors	Ioannis Papathanasiou - Chairman of the Board (From 7/8/2019) Andreas Shiamishis - Chief Executive Officer (From 7/8/2019) Georgios Alexopoulos - Member Theodoros-Achilleas Vardas - Member Michail Kefalogiannis - Member (From 7/8/2019) Alexandros Metaxas - Member (From 7/8/2019) Iordanis Aivazis - Member (From 7/8/2019) Loukas Papazoglou - Member (From 7/8/2019) Alkiviadis-Konstantinos Psarras - Member (From 7/8/2019) Theodoros Pantalakis - Member Spiridon Pantelias - Member Georgios Papakonstantinou - Member Konstantinos Papagiannopoulos - Member
Other Board Members during the year	Efstathios Tsotsoros - Chairman of the Board & Chief Executive Officer (Until 7/8/2019) Georgios Grigoriou - Member (Until 7/8/2019) Dimitrios Kontofakas - Member (Until 7/8/2019) Vasileios Kounelis - Member (Until 7/8/2019) Loudovikos Kotsonopoulos - Member (Until 7/8/2019) Christos Tsitsikas - Member (Until 7/8/2019)
Registered Office	8A Chimarras Str GR 151 25 - Marousi
General Commercial Registry	000296601000

These consolidated financial statements constitute an integral part of the Annual Financial Report which can be found at https://www.helpe.gr/en/investor-relations/quarterly-results/annual-and-interim-financial-reports/ and which incorporates the Independent Auditor’s Report.

Consolidated Statement of financial position

	Note	As at 31 December 2019	31 December 2018
ASSETS			
Non-current assets			
Property, plant and equipment	**6**	3.297.668	3.268.928
Right-of-use assets	**2,7**	242.934	-
Intangible assets	**8**	104.426	105.617
Investments in associates and joint ventures	**9**	384.747	390.091
Deferred income tax assets	**19**	59.358	64.109
Investment in equity instruments	**3**	1.356	634
Loans, advances and long term assets	**10**	55.438	73.922
		4.145.927	**3.903.301**
Current assets			
Inventories	**11**	1.012.802	993.031
Trade and other receivables	**12**	748.153	776.487
Income tax receivable	**29**	91.391	37.466
Assets held for sale		2.520	3.133
Derivative financial instruments	**23**	3.474	-
Cash and cash equivalents	**13**	1.088.198	1.275.159
		2.946.538	**3.085.276**
Total assets		**7.092.465**	**6.988.577**
EQUITY			
Share capital and share premium	**14**	1.020.081	1.020.081
Reserves	**15**	276.972	258.527
Retained Earnings		964.972	1.052.164
Equity attributable to equity holders of the parent		**2.262.025**	**2.330.772**
Non-controlling interests		64.548	63.959
Total equity		**2.326.573**	**2.394.731**
LIABILITIES			
Non- current liabilities			
Interest bearing loans and borrowings	**17**	1.610.094	1.627.171
Lease liabilities	**2,18**	169.357	-
Deferred income tax liabilities	**19**	213.495	185.744
Retirement benefit obligations	**20**	180.398	163.514
Provisions	**21**	25.625	38.238
Other non-current liabilities	**22**	28.376	28.852
		2.227.345	**2.043.519**
Current liabilities			
Trade and other payables	**16**	1.401.732	1.349.153
Derivative financial instruments	**23**	-	16.387
Income tax payable	**29**	7.147	75.119
Interest bearing loans and borrowings	**17**	1.022.270	1.108.785
Lease liabilities	**2,18**	30.537	-
Dividends payable		76.861	883
		2.538.547	**2.550.327**
Total liabilities		**4.765.892**	**4.593.846**
Total equity and liabilities		**7.092.465**	**6.988.577**

The notes on pages 9 to 79 are an integral part of these consolidated financial statements.

These consolidated financial statements were approved by the board of directors on 27 February 2020.

A. Shiamishis	C. Thomas	S. Papadimitriou
Chief Executive Officer	Chief Financial Officer	Accounting Director

Consolidated statement of comprehensive income

	Note	For the year ended 31 December 2019	31 December 2018
Revenue from contracts with customers	**5**	**8.856.965**	**9.769.155**
Cost of sales	**24**	(8.051.806)	(8.769.769)
Gross profit		**805.159**	**999.386**
Selling and distribution expenses	**24**	(329.711)	(324.430)
Administrative expenses	**24**	(140.012)	(150.518)
Exploration and development expenses	**25**	(4.843)	(1.403)
Other operating income / (expenses) and other gains / (losses)	**26**	10.351	(8.823)
Operating profit		**340.944**	**514.212**
Finance income	**27**	5.843	3.827
Finance expense	**27**	(146.303)	(149.532)
Lease finance cost	**18,27**	(10.081)	-
Currency exchange gains / (losses)	**28**	(1.255)	2.194
Share of profit / (loss) of investments in associates and joint ventures	**9**	17.862	(1.771)
Profit before income tax		**207.010**	**368.930**
Income tax expense	**29**	(43.434)	(154.218)
Profit for the year		**163.576**	**214.712**
Profit attributable to:			
Owners of the parent		160.798	211.614
Non-controlling interests		2.778	3.098
		163.576	**214.712**
Other comprehensive income / (loss):			
Other comprehensive income that will not be reclassified to profit or loss (net of tax):			
Actuarial gains / (losses) on defined benefit pension plans	**20**	(12.369)	(11.012)
Changes in the fair value of equity instruments	**15**	544	(695)
Share of other comprehensive income / (loss) of associates	**15**	(188)	(288)
		(12.013)	(11.995)
Other comprehensive income that may be reclassified subsequently to profit or loss (net of tax):			
Fair value gains / (losses) on cash flow hedges	**15**	12.890	(5.006)
Recycling of (gains) / losses on hedges through comprehensive income	**15**	1.501	(14.920)
Currency translation differences and other movements		272	(745)
		14.663	(20.671)
Other comprehensive income / (loss) for the year, net of tax		**2.650**	**(32.666)**
Total comprehensive income for the year		**166.226**	**182.046**
Total comprehensive income / (loss) attributable to:			
Owners of the parent		163.425	178.958
Non-controlling interests		2.801	3.088
		166.226	**182.046**
Earnings per share (expressed in Euro per share)	**30**	**0,53**	**0,69**

The notes on pages 9 to 79 are an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

		Attributable to owners of the Parent					
	Note	**Share Capital**	**Reserves**	**Retained Earnings**	**Total**	**Non-controlling Interest**	**Total Equity**
Balance at 31 December 2017 as originally presented		**1.020.081**	**358.056**	**930.522**	**2.308.659**	**62.915**	**2.371.574**
Effect of changes in accounting policy		-	166	(3.469)	(3.303)	-	(3.303)
Balance at 1 January 2018		**1.020.081**	**358.222**	**927.053**	**2.305.356**	**62.915**	**2.368.271**
Changes in the fair value of equity instruments	**15**	-	(700)	-	(700)	5	(695)
Currency translation gains / (losses) and other movements	**15**	-	(740)	-	(740)	(5)	(745)
Actuarial losses on defined benefit pension plans	**15**	-	(11.002)	-	(11.002)	(10)	(11.012)
Recycling of (gains) / losses on hedges through comprehensive income	**15**	-	(14.920)	-	(14.920)	-	(14.920)
Fair value losses on cash flow hedges	**15**	-	(5.006)	-	(5.006)	-	(5.006)
Share of other comprehensive income / (loss) of associates	**15**	-	(288)	-	(288)	-	(288)
Other comprehensive loss	**15**	**-**	**(32.656)**	**-**	**(32.656)**	**(10)**	**(32.666)**
Profit for the period		-	-	211.614	211.614	3.098	214.712
Total comprehensive income / (loss) for the year		**-**	**(32.656)**	**211.614**	**178.958**	**3.088**	**182.046**
Share based payments	**14**	-	(93)	(1.121)	(1.214)	-	(1.214)
Acquisition of treasury shares	**15**	-	(683)	-	(683)	-	(683)
Issue of treasury shares to employees	**15**	-	1.214	-	1.214	-	1.214
Participation of minority shareholders in share capital increase of subsidiary		-	-	-	-	17	17
Transfers from Reserves to Retained Earnings	**15**	-	(17.319)	17.319	-	-	-
Tax on intra-group dividends		-	-	(123)	(123)	-	(123)
Dividends to non-controlling interests		-	-	-	-	(2.061)	(2.061)
Dividends		-	(76.408)	(76.408)	(152.816)	-	(152.816)
Transfer to Statutory Reserve		-	26.170	(26.170)	-	-	-
Transfer of grant received to tax free reserves	**15**	-	80	-	80	-	80
Balance at 31 December 2018		**1.020.081**	**258.527**	**1.052.164**	**2.330.772**	**63.959**	**2.394.731**
Changes of the fair value of equity investments	**15**	-	525	-	525	19	544
Recycling of (gains) / losses on hedges through comprehensive income	**15**	-	1.501	-	1.501		1.501
Fair value gains / (losses) on cash flow hedges	**15**	-	12.890	-	12.890	-	12.890
Share of other comprehensive income of associates	**15**	-	(188)	-	(188)		(188)
Currency translation differences and other movements	**15**	-	271	-	271	1	272
Actuarial gains / (losses) on defined benefit pension plans	**15**	-	(12.372)	-	(12.372)	3	(12.369)
Other comprehensive income / (loss)	**15**	**-**	**2.627**	**-**	**2.627**	**23**	**2.650**
Profit for the period		-	-	160.798	160.798	2.778	163.576
Total comprehensive income for the period		**-**	**2.627**	**160.798**	**163.425**	**2.801**	**166.226**
Share of acquisition of non-controlling interest in associate		-	-	(2.482)	(2.482)	-	(2.482)
Share capital issue expenses		-	-	(342)	(342)	-	(342)
Transfers to statutory and tax reserves	**15**	-	15.818	(15.818)	-	-	-
Participation of minority shareholders in share capital increase of subsidiary		-	-	-	-	34	34
Tax on intra-group dividends		-	-	(122)	(122)	-	(122)
Dividends to non-controlling interests		-	-	-	-	(2.246)	(2.246)
Dividends		-	-	(229.226)	(229.226)	-	(229.226)
Balance at 31 December 2019		**1.020.081**	**276.972**	**964.972**	**2.262.025**	**64.548**	**2.326.573**

The notes on pages 9 to 79 are an integral part of these consolidated financial statements.

Consolidated statement of cash flows

	Note	For the year ended 31 December 2019	31 December 2018
Cash flows from operating activities			
Cash generated from / (used in) operations	**32**	634.718	652.291
Income tax received / (paid)		(148.655)	(4.918)
Net cash generated from / (used in) operating activities		**486.063**	**647.373**
Cash flows from investing activities			
Purchase of property, plant and equipment & intangible assets	**6,8**	(241.045)	(156.713)
Proceeds from disposal of property, plant and equipment & intangible assets		1.616	277
Participation in share capital increase of associates and joint ventures		(10.295)	-
Purchase of subsidiary, net of cash acquired	**36**	(5.341)	(1.298)
Settlement of consideration of acquisition of further equity interest in subsidiary		-	(16.000)
Grants received		439	299
Interest received	**27**	5.843	3.827
Prepayments for right-of-use assets		(717)	-
Dividends received	**9**	30.490	307.735
Proceeds from disposal of assets held for sale		1.334	-
Proceeds from disposal of investments in equity instruments		19	265
Net cash generated from / (used in) investing activities		**(217.657)**	**138.392**
Cash flows from financing activities			
Interest paid		(150.411)	(140.755)
Dividends paid to shareholders of the Company		(153.248)	(148.767)
Dividends paid to non-controlling interests		(2.246)	(2.061)
Acquisition of treasury shares		-	(683)
Participation of minority shareholders in share capital increase of subsidiary		34	17
Proceeds from borrowings		514.700	409.694
Repayments of borrowings		(625.581)	(506.358)
Payment of lease liabilities - principal	**18**	(30.712)	-
Payment of lease liabilities - interest	**18**	(10.081)	-
Net cash generated from / (used in) financing activities		**(457.545)**	**(388.913)**
Net increase/ (decrease) in cash and cash equivalents		**(189.139)**	**396.852**
Cash and cash equivalents at the beginning of the year	**13**	**1.275.159**	**873.261**
Exchange gains / (losses) on cash and cash equivalents		2.179	5.046
Net increase / (decrease) in cash and cash equivalents		(189.139)	396.852
Cash and cash equivalents at end of the year	**13**	**1.088.198**	**1.275.159**

The notes on pages 9 to 79 are an integral part of these consolidated financial statements.

Notes to the consolidated financial statements

1 General information

Hellenic Petroleum S.A. ("the Company or "Hellenic Petroleum") is the parent company of Hellenic Petroleum Group (the "Group"). The Group operates in the energy sector predominantly in Greece, South Eastern Europe and the East Mediterranean. The Group's activities include refining and marketing of oil products, production and marketing of petrochemical products and exploration for hydrocarbons. The Group also provides engineering services. Through its investments in DEPA and Elpedison, the Group also operates in the natural gas sector and in the production and trading of electricity power.

The parent company is incorporated in Greece and the address of its registered office is 8A Chimarras Str., Marousi, 151 25. The shares of the Company are listed on the Athens Stock Exchange and the London Stock Exchange through GDRs.

The financial statements and the consolidated financial statements of Hellenic Petroleum S.A. for the year ended 31 December 2019 were authorised for issue by the Board of Directors on 27 February 2020. The shareholders of the Company have the power to amend the financial statements after their issuance.

2 Summary of significant accounting policies

The principal accounting policies adopted in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented unless otherwise stated.

2.1 Basis of preparation

These consolidated financial statements for the year ended 31 December 2019 have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board ("IASB"), as endorsed by the European Union ("EU"), and present the financial position, results of operations and cash flows of the Group on a going concern basis. Management has concluded that the going concern basis of preparation of the accounts is appropriate.

The consolidated financial statements have been prepared in accordance with the historical cost basis, except for the following:

- financial instruments – some of which are measured at fair value
- defined benefit pension plans – plan assets measured at fair value
- assets held for sale – measured at the lower of carrying value and fair value less cost to sell

The preparation of financial statements, in accordance with IFRS, requires the use of certain critical accounting estimates and assumptions. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 4 "Critical accounting estimates and judgements". Estimates and judgements are continuously evaluated and are based on historical experience and other factors, including expectations of future events as assessed to be reasonable under the present circumstances.

2.1.1 New standards, amendments to standards and interpretations

New and amended standards adopted by the Group.

The accounting principles and calculations used in the preparation of the consolidated financial statements are consistent with those applied in the preparation of the consolidated financial statements for the year ended 31 December 2018 and have been consistently applied in all periods presented in this report except for the following IFRSs, which have been adopted by the Group as of 1 January 2019. The Group applied for the first time, IFRS 16 (Leases) and disclosed below, as required by IFRSs, the nature and effect of these changes. Several other amendments and interpretations were also applied for the first time in 2019 but, other than the classification effect of IFRIC 23, they do not have a significant impact on the consolidated financial statements of the Group for the year ended 31 December 2019.

- *IFRS 16 Leases:* IFRS 16 supersedes 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. The standard sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model.

  The Group adopted IFRS 16 using the modified retrospective method of adoption with the date of initial application of 1 January 2019. Under this method, the standard is applied retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application. The comparative figures have not been restated. The Group applied the practical expedient to grandfather the definition of a lease on transition. This means that it applied IFRS 16 to all contracts entered into before 1 January 2019 that were identified as leases in accordance with IAS 17 and IFRIC 4. Furthermore, the Group elected to use the recognition exemptions proposed by the standard for lease contracts that, at the commencement date have a lease term of 12 months or less and do not contain a purchase option ('short-term leases'), and lease contracts for which, the underlying asset is of low value ("low-value assets"). Finally, the Group decided to apply a single discount rate to a portfolio of leases with reasonably similar characteristics (such as leases with similar remaining lease term for similar class of underlying assets in a similar economic environment).

  The effect of adoption IFRS 16 as at 1 January 2019 (increase/(decrease)) is as follows:

Assets	
Right-of-use assets	230.848
Property, plant and equipment	(6.259)
Trade and other receivables - prepayments	(37.509)
Service stations usage rights	(9.940)
Total assets	**177.140**
Liabilities	
Lease liabilities	180.198
Borrowings	(3.058)
Total liabilities	**177.140**

a) <u>Nature of the effect of adoption of IFRS 16</u>

The Group has lease contracts for various items of petrol station properties, commercial properties, plant & machinery and motor vehicles. Before the adoption of IFRS 16, the Group classified each of its leases (as lessee) 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 of 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 capitalized at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments were apportioned between interest (recognized as finance costs) and reduction of the lease liability. In an operating lease, the leased property was not capitalized and the lease payments were recognized as rent expense in profit or loss on a straight-line basis over the lease

term. Any prepaid rent and accrued rent were recognized under Trade and other receivables and Trade and other payables, respectively.

Upon adoption of IFRS 16, the Group applied a single recognition and measurement approach for all leases, except for leases of low-value assets. The standard provides specific transition requirements and practical expedients, which have been applied by the Group.

- Leases previously classified as finance leases

  The Group did not change the initial carrying amounts of recognized 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 recognized under IAS 17 under property plant and equipment and borrowings respectively). The requirements of IFRS 16 were applied to these leases from 1 January 2019.

- Leases previously accounted for as operating leases

  The Group recognized right-of-use assets and lease liabilities for those leases previously classified as operating leases, except for leases of low-value assets. The right-of-use assets were recognized as equal to the lease liability, adjusted by the amount of any prepaid lease payments relating to that lease recognized in the statement of financial position immediately before the date of initial application. Lease liabilities were recognized based on the present value of the remaining lease payments, discounted using the incremental borrowing rate at the date of initial application.

The Group also applied the available practical expedients whereby it:

- Used a single discount rate to a portfolio of leases with reasonably similar characteristics
- Relied on its assessment of whether leases are onerous immediately before 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 contains options to extend or terminate the lease

For the year ended 31 December 2019 the effect of the application of IFRS 16 in the statement of comprehensive income is:

	Note	2019
Decrease in operating expenses & cost of sales		**41.554**
Depreciation expense for right-of-use assets	**7**	(39.103)
Interest expense on lease liabilities	**27**	(10.081)
Total cost of leases in scope of IFRS 16		**(49.184)**
Net decrease in net income before tax		**(7.630)**

b) Summary of new accounting policies

Set out below are the new accounting policies of the Group upon adoption of IFRS 16, which have been applied from the date of initial application:

- Right-of-use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date 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 re-measurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to

obtain ownership of the leased asset at the end of the lease term, the recognized right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment on their own or together with the Cash Generating Unit to which they belong.

- Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance 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. The variable lease payments that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. 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 re-measured 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 result of this re-measurement is disclosed in a line of the right-of-use assets note as modifications.

- Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases (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 low-value assets recognition exemption to leases that are considered of low value (i.e., below five thousand Euros). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

- Significant judgement in determining the lease term of contracts with renewal options

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, under some of its leases to lease the assets for additional terms. 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 (as a change in business strategy).

During 2019, the IFRS Interpretations Committee (the "Committee") issued, among others, a summary of decisions reached in its public meetings to clarify interpretations in respect to IFRS 16 on the following topics:

- Subsurface rights

The Committee concluded that the arrangement presented in its decision, where a pipeline operator obtains the right to place a pipeline in an underground space constitutes a lease and therefore this arrangement as presented in this decision should be in scope of IFRS 16. As disclosed in note 7, the Group operates a number of subsurface pipelines within the boundaries of various municipalities, in accordance with relevant laws, without the requirement to pay any compensation for them. As described in note 33 of these financial statements, certain municipalities have proceeded with the imposition of duties and fines relating to the rights of way. The group has appealed against such amounts imposed as described in the note and believes the

outcome will be favourable. The Group considers these do not fall within the scope of IFRS 16 as there is no requirement to pay compensation.

- Lease term

The Committee issued a decision that in assessing the notion of no more than an insignificant penalty, when establishing the lease term, the analysis should not only capture the termination penalty payment specified in the contract but use a broader economic consideration of penalty and thus include all kinds of possible economic outflows related to termination of the contract. The Group applies this decision and uses judgment in estimating the lease term, especially in cases, where the agreements do not provide for a predetermined term, such as rights of use of coastal zones as described in note 7. The Group considers all relevant factors that create an economic incentive for it to exercise either the renewal or termination.

- Lessor accounting

The Group enters into certain sublease agreements with third parties and therefore, acts as an intermediate lessor. In classifying a sublease, the Group acting as the intermediate lessor shall classify the sublease as a finance lease or an operating lease as follows:

(a) if the head lease is a short-term lease that the Group, as a lessee, has accounted for applying paragraph 6 of the standard, the sublease shall be classified as an operating lease.

(b) otherwise, the sublease shall be classified by reference to the right-of- use asset arising from the head lease, rather than by reference to the underlying asset.

The Group has assessed all subleases it enters into based on the above criteria and classifies these as either operating or finance. As at 31 December 2019, all leases where the Group acts as an intermediate lessor assessed and evaluated as operating.

- *IFRS 9 (Amendment) Prepayment features with negative compensation:* The Amendment allows financial assets with prepayment features that permit or require a party to a contract either to pay or receive reasonable compensation for the early termination of the contract (so that, from the perspective of the holder of the asset there may be 'negative compensation'), to be measured at amortized cost or at fair value through other comprehensive income.
- *IAS 28 (Amendments) Long-term Interests in Associates and Joint Ventures:* The Amendments relate to whether the measurement, in particular impairment requirements, of long term interests in associates and joint ventures that, in substance, form part of the 'net investment' in the associate or joint venture should be governed by IFRS 9, IAS 28 or a combination of both. The Amendments clarify that an entity applies IFRS 9 Financial Instruments, before it applies IAS 28, to such long-term interests for which the equity method is not applied. In applying IFRS 9, the entity does not take account of any adjustments to the carrying amount of long- term interests that arise from applying IAS 28.
- *IFRIC Interpretation 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. The Interpretation provides guidance on considering uncertain tax treatments separately or together, examination by tax authorities, the appropriate method to reflect uncertainty and accounting for changes in facts and circumstances. Upon adoption of the Interpretation, the Group considered whether it has any uncertain tax positions. The Company's and the subsidiaries' tax filings in different jurisdictions include income tax deductions and the respective tax authorities may challenge the deductibility thereof. The Group determined, that the tax treatment adopted will be accepted by the tax authorities. The Interpretation did not have an impact on the consolidated financial statements of the Group. As a result of IFRIC 23 and related IFRIC decisions the Group proceeded to reclassify its income tax receivables from trade and other receivable line to a separate line in the statement of financial position.
- *IAS 19 (Amendments) Plan Amendment, Curtailment or Settlement*: The amendments require entities to use updated actuarial assumptions to determine current service cost and net interest for the remainder of the annual reporting period after a plan amendment, curtailment or settlement has occurred. The amendments also clarify

how the accounting for a plan amendment, curtailment or settlement affects applying the asset ceiling requirements.

- *Annual Improvements to IFRSs 2015 – 2017 Cycle*, which is a collection of amendments to IFRSs.

  - *IFRS 3 Business Combinations and IFRS 11 Joint Arrangements:* The amendments to IFRS 3 clarify that when an entity obtains control of a business that is a joint operation, it remeasures previously held interests in that business. The amendments to IFRS 11 clarify that when an entity obtains joint control of a business that is a joint operation, the entity does not remeasure previously held interests in that business.

  - *IAS 12 Income Taxes:* The amendments clarify that the income tax consequences of payments on financial instruments classified as equity should be recognized according to where the past transactions or events that generated distributable profits has been recognized.

  - *IAS 23 Borrowing Costs*: The amendments clarify paragraph 14 of the standard that, when a qualifying asset is ready for its intended use or sale, and some of the specific borrowing related to that qualifying asset remains outstanding at that point, that borrowing is to be included in the funds that an entity borrows generally.

Standards issued but not yet effective and not early adopted

The Group has not early adopted any other of the following standard, interpretation or amendment that has been issued but is not yet effective. In addition, the Group assessed all standards, interpretations and amendments issued but not yet effective, and concluded that, they will not have any significant impact on the consolidated financial statements.

- *IFRS 10 (Amendment) Consolidated Financial Statements and IAS 28 Investments in Associates and Joint Ventures: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture:* The amendments address an acknowledged inconsistency between the requirements in IFRS 10 and those in IAS 28, in dealing with the sale or contribution of assets between an investor and its associate or joint venture. The main consequence of the amendments is that a full gain or loss is recognized when a transaction involves a business (whether it is housed in a subsidiary or not). A partial gain or loss is recognized when a transaction involves assets that do not constitute a business, even if these assets are housed in a subsidiary. In December 2015 the IASB postponed the effective date of this amendment indefinitely pending the outcome of its research project on the equity method of accounting. The amendments have not yet been endorsed by the EU.

- *Conceptual Framework in IFRS standards:* The IASB issued the revised Conceptual Framework for Financial Reporting on 29 March 2018. The Conceptual Framework sets out a comprehensive set of concepts for financial reporting, standard setting, guidance for preparers in developing consistent accounting policies and assistance to others in their efforts to understand and interpret the standards. IASB also issued a separate accompanying document, Amendments to References to the Conceptual Framework in IFRS Standards, which sets out the amendments to affected standards in order to update references to the revised Conceptual Framework. Its objective is to support transition to the revised Conceptual Framework for companies that develop accounting policies using the Conceptual Framework when no IFRS Standard applies to a particular transaction. For preparers who develop accounting policies based on the Conceptual Framework, it is effective for annual periods beginning on or after 1 January 2020.

- *IFRS 3 Business Combinations (Amendments):* The IASB issued amendments in Definition of a Business (Amendments to IFRS 3) aimed at resolving the difficulties that arise when an entity determines whether it has acquired a business or a group of assets. The amendments are effective for business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after 1 January 2020 and to asset acquisitions that occur on or after the beginning of that period, with earlier application permitted. These Amendments have not yet been endorsed by the EU.

- *IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors: Definition of 'material' (Amendments)* The Amendments are effective for annual periods beginning on or after 1 January 2020 with earlier application permitted. The Amendments clarify the definition of material and how it should be applied. The new definition states that, 'Information is material if omitting,

misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity'. In addition, the explanations accompanying the definition have been improved. The Amendments also ensure that the definition of material is consistent across all IFRS Standards.

- *IFRS 9, IAS 39 and IFRS 7 (Amendments) "Interest rate benchmark reform".* The Amendments are effective for annual periods beginning on or after 1 January 2020 with earlier application permitted. The amendments modify some specific hedge accounting requirements to provide relief from potential effects of the uncertainty caused by the IBOR reform. In addition, the amendments require companies to provide additional information to investors about their hedging relationships which are directly affected by these uncertainties.
- *IAS 1 Presentation of Financial Statements "Classification of Liabilities as Current or Non-current (Amendments)".* The amendments are effective for annual reporting periods beginning on or after January 1, 2022 with earlier application permitted. The amendments aim to promote consistency in applying the requirements by helping companies determine whether, in the statement of financial position, debt and other liabilities with an uncertain settlement date should be classified as current or non-current. The amendments affect the presentation of liabilities in the statement of financial position and do not change existing requirements around measurement or timing of recognition of any asset, liability, income or expenses, nor the information that entities disclose about those items. Also, the amendments clarify the classification requirements for debt which may be settled by the company issuing own equity instruments. These Amendments have not yet been endorsed by the EU.

2.2 Basis of Consolidation

(a) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to or has rights to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

At each reporting period, the Group reassesses whether it exercises control over the investees, in case there are facts and circumstances indicating a change in one of the control elements above. Subsidiaries are consolidated from the date on which effective control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group.

Inter-company transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated, unless there is objective evidence that the asset is impaired. Accounting policies of subsidiaries are changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of comprehensive income, statement of other comprehensive income, statement of changes in equity and statement of financial position respectively.

(b) Changes in ownership interests in subsidiaries without change of control

Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions – that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

(c) Disposal of subsidiaries

When the Group ceases to have control over an entity, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or

liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss.

(d) Associates and Equity method

Associates are all entities over which the Group has significant influence but not control, generally accompanying a shareholding of between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting. Under the equity method, investments are initially recognised at cost and their carrying amount is increased or decreased to recognise the investor's share of the profit or loss or share of other comprehensive income of the investee after the date of acquisition. The Group's investment in associates includes goodwill identified on acquisition. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income is reclassified to profit or loss where appropriate.

The Group's share of its associates' post-acquisition profit or loss is recognised in the statement of comprehensive income, and its share of post-acquisition movements in other comprehensive income is recognised in other comprehensive income with a corresponding adjustment to the carrying amount of the investment. When the Group's share of losses in an associate equals or exceeds its interest in the associate, the Group does not recognise further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the associate.

The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case, the Group calculates the amount of impairment as the difference between the recoverable amount of the investment in the associate and its carrying value.

Profits and losses resulting from upstream and downstream transactions between the Group and its associates are recognised in the Group's financial statements only to the extent of unrelated investor's interests in the associates. Unrealised losses are eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates are changed where necessary to ensure consistency with the policies adopted by the Group.

(e) Joint arrangements

Investments in joint arrangements (IFRS 11) are classified as either joint operations or joint ventures depending on the contractual rights and obligations of each investor.

Joint ventures are accounted for using the equity method. Under the equity method of accounting, interests in joint ventures are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the Group's share of losses in a joint venture equals or exceeds its interest in the joint ventures, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the joint venture. Unrealised gains on transactions between the Group and its joint ventures are eliminated to the extent of the Group's interest in the joint venture. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of joint ventures are changed where necessary to ensure consistency with the policies adopted by the Group.

A joint operation arises where the Group has rights to the assets and obligations of the operation. The Group recognizes its share of the assets, obligations, revenue and expenses of the jointly controlled operation, including its share of those held or incurred jointly, in each respective line of its' financial statements.

After application of the equity method, the Group determines whether it is necessary to recognise an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognises the loss within 'Share of profit of investments in associates and a joint ventures' in the statement of profit or loss.

2.3 Business combinations

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest (previously minority interests) in the acquiree. For each business combination, the Group measures the non-controlling interest in the acquiree at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed.

The consideration transferred for the acquisition of a subsidiary is the total of the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date.

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of acquisition. The discount rate used is the entity's incremental borrowing rate, being the rate at which similar borrowing could be obtained from an independent financier under comparable terms and conditions.

Any contingent consideration to be transferred by the Group is recognised at fair value at the acquisition date and is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognized in profit or loss, in accordance with the appropriate IFRS. Amounts classified as equity are not remeasured.

Goodwill (as disclosed in Note 2.9) is initially measured as the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interest and any previous interest held over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the Group reassesses whether it has correctly identified all of the assets acquired and liabilities assumed and reviews their measurement, before any remaining difference is recognised in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

2.4 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The executive committee which is comprised of the Chairman of the Board of Directors and Chief Executive Officer, the Deputy Chief Executive Officer and six General Managers of the Group, is the chief operating decision-maker, who makes strategic decisions and is responsible for allocating resources and assessing performance of the operating segments. The Group's key operating segments are disclosed in note 5.

2.5 Foreign currency translation

(a) *Functional and presentation currency*

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Euro, which is the parent entity's functional currency and the presentation currency of the Group. Given that the Group's primary activities are in oil refining and trading, in line with industry practices, most crude oil and oil product trading transactions are based on the international reference prices of crude oil and oil products in US Dollars. Depending on the country of operation, the Group translates this value to the local currency (Euro in most cases) at the time of any transaction.

(b) *Transactions and balances*

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are recognised in the statement of comprehensive income. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges.

For transactions that include the receipt or payment of advance consideration in a foreign currency the date of the transaction, for the purpose of determining the exchange rate, is the date of initial recognition of the non-monetary prepayment asset or deferred income liability.

Foreign exchange gains and losses are presented in the same line as the transaction they relate to in the statement of comprehensive income, except those that relate to borrowings and cash, which are presented in a separate line ("Currency exchange gains/(losses)").

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss.

(c) *Group companies*

The results and financial position of all the Group entities that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

(i) assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;
(ii) income and expenses for each statement of comprehensive income are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions); and
(iii) all resulting exchange differences are recognized in other comprehensive income.

On consolidation, exchange differences arising from the translation of the net investment in foreign operations are recognised in other comprehensive income. When a foreign operation is sold, exchange differences that were recorded in other comprehensive income are recycled to the profit or loss of the statement of comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Exchange differences arising are recognised in other comprehensive income.

2.6 Assets held for sale

The Group classifies assets as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset.

The criteria for held for sale classification is regarded as met only when the sale is highly probable and the asset is available for immediate sale in its present condition. Actions required to complete the sale should indicate that it is unlikely that significant changes to the sale will be made or that the decision to sell will be withdrawn. Management must be committed to the plan to sell the asset and the sale expected to be completed within one year from the date of the classification.

Property, plant and equipment and intangible assets are not depreciated or amortised once classified as held for sale.

Assets held for sale and their related liabilities are presented separately as current items in the statement of financial position.

2.7 Property, plant and equipment

Property, plant and equipment is comprised mainly of land, buildings, plant & machinery, transportation means and furniture and fixtures. Property, plant and equipment are shown at historical cost less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. Repairs and maintenance are charged to the profit or loss of the statement of comprehensive income as incurred. Refinery turnaround costs that take place periodically are capitalised and charged to profit or loss on a straight line basis until the next scheduled turnaround to the extent that such costs improve either the useful economic life of the equipment or its production capacity.

Assets under construction are assets (mainly related to the refinery units) that are in the process of construction or development, and are carried at cost. Cost includes cost of construction, professional fees and other direct costs. Assets under construction are not depreciated, as the corresponding assets are not yet available for use.

Land is also not depreciated. Depreciation on assets is calculated using the straight-line method to allocate the cost of each asset to its residual value over its estimated useful economic life, as shown on the table below for the main classes of assets:

– Buildings (including petrol stations)	13 – 40 years
– Plant & Machinery	
▪ Specialised industrial installations and Machinery	10 – 35 years
▪ Pipelines	30 – 40 years
▪ Other equipment	5 – 10 years
– Transportation means	
▪ LPG and white products carrier tank trucks	5 – 10 years
▪ Other Motor Vehicles	4 – 10 years
▪ Shipping Vessels	25 – 35 years
– Furniture and fixtures	
▪ Computer hardware	3 – 5 years
▪ Other furniture and fixtures	4 – 10 years

Specialised industrial installations include refinery units, petrochemical plants, tank facilities and petrol stations.

The assets' residual values and estimated useful economic lives are reviewed at the end of each reporting period and adjusted prospectively if appropriate.

If the asset's carrying amount is greater than its estimated recoverable amount then it is written down immediately to its recoverable amount (Note 2.11).

The cost and related accumulated depreciation of assets retired or sold are removed from the accounts at the time of sale or retirement and any gain or loss, which is determined by comparing the proceeds with the carrying amount, is included in the consolidated statement of comprehensive income within "Other operating income / (expenses) and other gains / (losses)".

2.8 Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are added to the cost of the asset during the period of time that is required to complete and prepare the asset for its intended use.

Borrowing costs are capitalised to the extent that funds are borrowed specifically for the purpose of obtaining a qualifying asset. To the extent that funds are borrowed generally and used for the purpose of obtaining a qualifying asset, the amount of borrowing costs eligible for capitalisation is determined by applying a capitalisation rate to the expenditures on that asset. All other borrowing costs are expensed as incurred.

2.9 Intangible assets

(a) Goodwill

Goodwill represents the excess of the consideration transferred over the Company's interest in net fair value of the net identifiable assets and liabilities of the acquiree at the date of acquisition. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold. In the event that the fair value of the Company's share of the net identifiable assets of the acquired subsidiary at the date of acquisition is higher than the cost, the excess remaining is recognised immediately in the statement of comprehensive income.

Goodwill is allocated to cash-generating units (CGU) for the purpose of impairment testing. The allocation is made to those CGUs or Groups of CGUs that are expected to benefit from the business combination in which the goodwill arose, identified according to operating segment. Goodwill impairment reviews are undertaken annually or more frequently, if events or changes in circumstances indicate a potential impairment. Impairment is determined for goodwill by assessing the recoverable amount of each CGU (or group of CGUs) to which the goodwill relates. When the recoverable amount (higher of value in use and fair value less costs to sell) of the CGU is less than its carrying amount including goodwill, an impairment loss is recognised. Impairment losses relating to goodwill cannot be reversed in future periods.

(b) Retail Service Stations Usage rights

Retail Service Stations Usage rights represent upfront lump-sum amounts to purchase licenses to operate and control service stations from previous owner of the license. These licenses are not directly linked with a lease agreement and have an indefinite useful economic life. Such payments made to secure branding and future revenues for the Group that were not available in the past and are therefore capitalised in accordance with IAS 38, Intangible Assets.

(c) Licences and rights

Licenses and rights have a definite useful life and are carried at cost less accumulated amortisation. Amortisation is being calculated using the straight-line method to allocate their cost over their estimated useful lives, which usually range from 3 to 25 years.

(d) Computer software

These include primarily the costs of implementing the (ERP) computer software program. Acquired computer software licences are capitalised on the basis of the costs incurred to acquire and bring to use the specific software. These costs are amortised using the straight line method over their estimated useful lives (1 to 5 years).

2.10 Exploration for and evaluation of mineral resources

(a) Exploration and evaluation assets

During the exploration period and before a commercially viable discovery, oil and natural gas exploration and evaluation expenditures are expensed. Geological and geophysical costs as well as costs directly associated with

an exploration are expensed as incurred. Exploration property leasehold acquisition costs are capitalized within intangible assets and amortised over the period of the licence or in relation to the progress of the activities if there is a substantial difference. Upstream exploration rights are included in licenses and rights in intangible assets.

(b) Development of tangible and intangible assets

Expenditure on the construction, installation or completion of infrastructure facilities such as platforms, pipelines and the drilling of commercially proven development wells is capitalized within tangible and intangible assets according to their nature. When development is completed on a specific field, it is transferred to production assets. No depreciation and/or amortisation is charged during development.

(c) Oil and gas production assets

Oil and gas production assets are aggregated exploration and evaluation tangible assets and development expenditures associated with the production of proved reserves. The Group has not recognised any such assets, as it is currently in the first stages of exploration and evaluation.

(d) Depreciation/amortisation

Oil and gas properties/intangible assets are depreciated/amortized using the unit-of-production method. Unit-of-production rates are based on proved developed reserves, which are oil, gas and other mineral reserves estimated to be recovered from existing facilities using current operating methods. Oil and gas volumes are considered produced once they have been measured through meters at custody transfer or sales transaction points at the outlet valve on the field storage tank.

(e) Impairment – exploration and evaluation assets

The exploration property leasehold acquisition costs are tested for impairment whenever facts and circumstances indicate impairment. For the purposes of assessing impairment, the exploration property leasehold acquisition costs subject to testing are grouped with existing cash-generating units (CGUs) of production fields that are located in the same geographical region corresponding to each licence.

(f) Impairment – proved oil and gas properties and intangible assets

Proven oil and gas properties and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows.

2.11 Impairment of non-financial assets

The Group assesses, at each reporting date, whether an indication of impairment exists. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. Assets that have an indefinite useful life are not subject to amortisation and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Assets that are subject to amortisation or depreciation are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use (discounted cash flows an asset is expected to generate based upon management's expectations of future economic and operating conditions). For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognised impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years.

2.12 Financial assets

2.12.1 Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

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 or for which the Group has applied the practical expedient, 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 or for which the Group has applied the practical expedient are measured at the transaction price determined under IFRS 15. Refer to the accounting policies in section 2.25 Revenue from contracts with customers.

In order for a financial asset to be classified and measured at amortised cost or fair value through OCI, 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.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognised on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement

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

• Financial assets at amortised cost (debt instruments)

• Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)

• Financial assets at fair value through profit or loss

(a) Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading, 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 are also categorised as 'held for trading' unless they are designated as hedges. Assets in this category are classified as current assets if they are either held for trading or are expected to be realised within 12 months of the end of the reporting period, otherwise they are classified as non-current. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model.

(b) Financial assets at amortised cost

The Group measures financial assets at amortised cost if both of the following conditions are met: a) the financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows and b) 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 (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

(c) Financial assets at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments).

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under IAS 32 Financial Instruments: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis. Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the profit or loss of the statement of comprehensive income, when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

The Group elected to classify irrevocably its listed equity investments under this category.

2.12.2 Derecognition and impairment

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognised (i.e., removed from the Group's consolidated statement of financial position) when:

The rights to receive cash flows from the asset have expired Or

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

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognise the transferred asset to the extent of its continuing involvement. In that case, the Group also recognises an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Impairment

Further disclosures relating to impairment of financial assets are also provided in the following notes:

• Disclosures for significant estimates and assumptions Note 4

• Trade receivables Note 12

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

2.12.3 Offsetting of financial instruments

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

2.13 Derivative financial instruments and hedging activities

As part of its risk management policy, the Group utilizes currency and commodity derivatives to mitigate the impact of volatility in commodity prices and foreign exchange rates. Derivative financial instruments are initially recognized at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative. Changes in fair values of the derivative financial instruments are recognised at each reporting date either in the statement of comprehensive income or in other comprehensive income, depending on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Group designates certain derivatives as either:

(a) Hedges of the fair value of recognised assets or liabilities or a firm commitment (fair value hedge);

(b) Hedges of a particular risk associated with a recognised asset or liability or a highly probable forecast transaction (cash flow hedge).

The Group documents, at the inception of the transaction, the relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking various hedging transactions.

The documentation also includes both at hedge inception and on an ongoing basis how it will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

The instruments used for this risk management include commodity exchange traded contracts (ICE futures), full refinery margin forwards, product price forward contracts or options.

Cash flow hedges

The effective portion of changes in the fair value of these derivatives is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in the statement of comprehensive income within "Other operating income / (expenses) and other gains / (losses)". Amounts accumulated in equity are recycled in the statement of comprehensive income in the periods when the hedged item affects profit or loss (i.e. when the forecast transaction being hedged takes place) within cost of sales.

When a hedging instrument expires or is sold, or a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in the statement of comprehensive income. When a forecast transaction is no longer expected to occur, the derivative is de-designated and the cumulative gain or loss that was reported in equity is immediately transferred to the statement of comprehensive income within "Other operating income / (expenses) and other gains / (losses)".

Derivatives held for trading

Derivatives that do not qualify for hedge accounting are classified as held for trading and accounted for at fair value through profit or loss. Changes in the fair value of the derivative instruments that do not qualify for hedge accounting are recognized immediately in the statement of comprehensive income.

2.14 Government grants

Government grants are recognised at their fair value where there is reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants related to Property, Plant and Equipment received by the Group are initially recorded as deferred government grants and included in "Other non-current liabilities". Subsequently, they are credited to the statement of comprehensive income over the useful lives of the related assets in direct relationship to the depreciation charged on such assets.

2.15 Inventories

Inventories comprise crude oil and other raw materials, refined and semi-finished products, petrochemicals, merchandise, consumables and other spare parts.

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the monthly weighted average cost method. The cost of finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production overheads. It does not include borrowing costs. Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale, where applicable. Spare parts consumed within a year are carried as inventory and recognized in profit or loss when consumed.

2.16 Trade receivables

Trade receivables, which generally have 20-90 day terms, are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

Trade receivables include bills of exchange and promissory notes from customers.

For trade receivables, which are not in default the Group applies the simplified approach, in accordance with IFRS 9 and calculates ECLs based on lifetime expected credit losses. The Group has established a provision matrix that is based on the Group's historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment. On the other hand, trade receivables in default are assessed on a case by case basis. The amount of the provision is recognised in the statement of comprehensive income and is included in "Selling and distribution expenses".

2.17 Cash and cash equivalents

Cash and cash equivalents includes cash in hand, deposits held at call with banks, other short-term highly liquid investments such as marketable securities and time deposits with original maturities of three months or less.

2.18 Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction from the proceeds, net of tax.

Own equity instruments that are reacquired (treasury shares) are recognised at cost and deducted from equity. No gain or loss is recognised to profit or loss of the statement of comprehensive income on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognised in equity.

2.19 Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption

value is recognised in the statement of comprehensive income over the period of the borrowings using the effective interest rate method.

Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a pre-payment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any noncash assets transferred or liabilities assumed, is recognised in profit or loss as other income or finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

In cases where an existing borrowing of the Group is renegotiated, this might result in modification or an exchange of borrowings with the lenders that could be carried out in a number of ways. Whether a modification or exchange of borrowings represents a settlement of the original debt, or merely a renegotiation of that debt, determines the accounting treatment that should be applied by the borrower. When the terms of the existing borrowings are substantially different from the terms of the modified or exchanged borrowings, such a modification or exchange is treated as an extinguishment of the original borrowing and the recognition of a new liability any difference in the respective carrying amount, is recognized in profit and loss of the statement of comprehensive income.

The Group considers the terms to be substantially different if either the discounted present value of the future cash flows under the new terms, including any costs or fees incurred, using the original effective interest rate, is at least 10% different from the discounted present value of the remaining cash flows of the original borrowing or there is a substantial change in the terms from a qualitative perspective. Qualitative factors may include:

- the currency in which the borrowing is denominated
- the interest rate (that is fixed versus floating rate)
- changes in covenants

2.20 Current and deferred income tax

The tax expense or credit for the period comprises current and deferred tax. The income tax expense or credit for the period, is the tax estimated on the current period's taxable income based on the applicable income tax rate for each jurisdiction, adjusted by changes in deferred tax assets and liabilities attributable to temporary differences and to unused tax losses, as well as additional taxes for prior years. Tax is recognised in the statement of comprehensive income, except to the extent that it relates to items recognized directly in equity. In this case, the tax is also recognized in equity.

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period in the countries where the Group's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities. Any interest and penalties arising on uncertain tax positions are considered as part of income tax.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. Deferred

income tax is not recognized if it arises from initial recognition of an asset or liability in a transaction, other than a business combination, that at the time of the transaction does not affect either accounting or taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred income tax assets are reviewed at each financial position date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the taxable entity or different taxable entities, where there is an intention to settle the balances on a net basis.

2.21 Employee benefits

(a) *Pension obligations*

The Group participates in various pension schemes. The payments are determined by the local legislation and the funds' regulations. The Group has both defined benefit and defined contribution plans.

A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate State pension fund. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods.

Defined benefit pension plan

Where applicable, under local labor laws, employees and workers are entitled to termination payments in the event of retirement with the amount of payment varying in relation to the employee's or worker's compensation and length of service. This program is considered as a defined benefit plan.

The liability recognized in the consolidated statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that have terms to maturity approximating to the terms of the related pension obligation.

The current service cost of the defined benefit plan, recognized in the consolidated statement of profit or loss in employee benefit expense (except where included in the cost of an asset) reflects the increase in the defined benefit obligation resulting from employee service in the current year, benefit changes curtailments and settlements.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Past-service costs are recognized immediately in profit or loss of the statement of comprehensive income.

Defined contribution plans

The Group's employees are covered by one of several Greek State sponsored pension funds which relates to the private sector and provides pension and pharmaceutical benefits. Each employee is required to contribute a portion of their monthly salary to the funds, with the Group also contributing a portion. Upon retirement, the pension fund is responsible for paying the employees retirement benefits. As such, the Group has no legal or constructive obligation to pay future benefits under this plan.

(b) Termination benefits

Termination benefits are payable when employment is terminated by the Group before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The Group recognises termination benefits at the earlier of the following dates: (a) when the Group can no longer withdraw the offer of those benefits; and (b) when the entity recognises costs for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

(c) Share-based compensation

Employees of the Group may receive remuneration in the form of share based payments as part of a share option plan. The total amount to be expensed over the vesting period is determined by reference to the fair value of the options granted, at the date of granting. Non-market vesting conditions are included in assumptions about the number of options that are expected to vest.

At each reporting period end, the entity revises its estimates of the number of options that are expected to vest. It recognises the impact of the revision of original estimates, if any, in the statement of comprehensive income, with a corresponding adjustment to equity.

When the options are exercised, the Company may issue new shares. In that case, the proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium when the options are exercised.

(d) Short-term paid absences

The Group recognises the expected cost of short-term employee benefits in the form of paid absences in the case of accumulating paid absences, when the employees render service that increases their entitlement to future paid absences.

2.22 Trade and other payables

Trade and other payables are recognised initially at fair value and are subsequently measured at amortised cost using the effective interest method. Accounts payable are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities.

2.23 Provisions

Provisions for restructuring costs and legal claims are recognised when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value reflects current market assessments of the time value of money and the increases specific to the liability.

2.24 Environmental liabilities

The Group has an environmental policy which complies with existing legislation and any obligations resulting from its environmental and operational licences. In order to comply with all rules and regulations, the Group has set up a monitoring mechanism in accordance with the requirements of the relevant authorities. Furthermore, investment plans are adjusted to reflect any known future environmental requirements. The above mentioned expenses are estimated based on the relevant environmental studies.

Liabilities for environmental remediation costs are recognised when environmental assessments or clean-ups are probable and the associated costs can be reasonably estimated. Generally, the timing of these provisions coincides with the commitment to a formal plan of action or, if earlier, on divestment or on closure of inactive sites. The amount recognised is the best estimate of the expenditure required. If the effect of the time value of money is material, the amount recognised is the present value of the estimated future expenditure.

The obligation of the Group to meet its CO2 emission targets is treated as follows: European ETS register allocates emission rights to refineries annually. Allowances received or purchased are recognised at cost. A provision is recognized for the net obligation payable for the emission quantities that exceed the pre-allocated allowances, after taking into account any purchases of emission certifications. The provision recognised is measured at the amount that it is expected to cost the entity to settle the obligation net of any certificates purchased. This will be the market price at the balance sheet date of the allowances required to cover any emissions deficit made to date.

2.25 Revenue recognition

Revenue from contracts with customers

Revenue comprises the fair value of the sale of goods and services, net of value-added tax and any excise duties, rebates and discounts. 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. Control over goods sold and services rendered is transferred to the customer upon delivery of the respective products or service respectively. Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured. Payment terms vary in line with the type of sales transactions and depend mainly on the products sold or services rendered, the distribution channels as well as each customer's specifics.

The Group assesses whether it acts as a principal or agent in each of its revenue arrangements. The Group has concluded that in all sales transactions it acts as a principal.

Revenue is recognised as follows:

Sales of goods – wholesale & retail

Revenue is recognized when a contractual promise to a customer (performance obligation) is fulfilled by transferring the promised goods (which is when the customer obtains control over the promised goods). If a contract contains more than one performance obligation, the total transaction price of the contract is allocated among the individual, separate performance obligations based on their relative standalone selling prices. The amount of revenue recognized is the amount allocated to the satisfied performance obligation based on the consideration that the Group expects to receive in accordance with the terms of the contracts with the customers.

Provision of services

For sales of services, revenue is recognised in the accounting period in which the services are rendered, as the customer obtains control over the promised services, by reference to stage of completion of each specific performance obligation and assessed on the basis of the actual service provided as a proportion of the total services to be provided.

Variable consideration

If the consideration in a contract includes a variable amount, the Group recognizes this amount as revenue only to the extent that it is highly probable that a significant reversal will not occur in the future.

Volume discounts

The Group provides volume discounts to customers based on thresholds specified in the respective contracts. Options for volume related discounts are assessed by the Group to determine whether they constitute a material right that the customer would not receive without entering into that contract. For all such options that are considered as material rights, the Group assesses the likelihood of its exercise and then the portion of the transaction price allocated to the option is deferred and recognized when it is either exercised or lapsed.

Under the new requirements, the Group concluded that volume discounts constitute a material right which should be recognized over time up to the point it is either exercised or lapsed. All such discounts are accrued within the financial year.

Interest income

Interest income is recognised using the effective interest method. When a receivable is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flow discounted at original effective interest rate of the instrument, and continues unwinding the discount as interest income.

Dividend income

Dividend income is recognised when the right to receive payment is established.

2.26 Leases – IAS 17 applicable up to 31 December 2018

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset (or assets) and the arrangement conveys a right to use the asset (or assets), even if that asset is (or those assets are) not explicitly specified in an arrangement.

Group as lessee
Leases of property plant and equipment, where the Group has substantially all the risks and rewards of ownership, are classified as finance leases. Finance leases are capitalised at the lease's inception at the lower of the fair value of the leased property and the present value of the minimum lease payments. Each lease payment is allocated between the liability and finance charges so as to achieve a constant periodic rate of interest on the finance balance outstanding. The corresponding rental obligations, net of finance charges, are included in "Borrowings". The interest element of the finance cost is charged to the statement of comprehensive income over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases are depreciated over the shorter of the asset's useful life and the lease term. Leases where the lessor retains substantially a significant portion of the risks and rewards of ownership are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to the statement of comprehensive income on a straight-line basis over the period of the lease.

Group as lessor
Lease income from operating leases where the group is a lessor is recognised in income on a straight-line basis over the lease term. The respective leased assets are included in the balance sheet based on their nature.

As from 1 January 2019 this accounting policy has been updated based on the new IFRS 16 standard as described in 2.1.1.

2.27 Dividend distribution

Dividend distribution to the company's shareholders is recognised as a liability in the Group's financial statements in the period in which the dividends are declared and appropriately authorised or approved by the Company's Shareholders' General Meeting. Interim dividends proposed by the Board of Directors are recognized as liabilities upon proposal.

2.28 Financial guarantee contracts

Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognised initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the liability is measured at the higher of the amount of the loss allowance determined in accordance with IFRS 9 requirements and the amount initially recognized, less when appropriate, the cumulative amount of income.

2.29 Changes in accounting policies

The Group adopted the amendments described in paragraph 2.1.1 for the first time for the annual reporting period commencing 1 January 2019.

2.30 Comparative figures

Where necessary, comparative figures have been reclassified to conform to changes in presentation in the current year.

3 Financial risk management

3.1 Financial risk factors

The Group's activities are primarily centred on Downstream Refining (incl. Petrochemicals) & Marketing of petroleum products; with secondary activities relating to exploration of hydrocarbons and power generation and trading. As such, the Group is exposed to a variety of financial and commodity markets' risks including foreign exchange and commodity price risk, credit risk, liquidity risk, cash flow risk and interest-rate risk. In line with international best practices and within the context of local markets and legislative framework, the Group's overall risk management policies aim at reducing possible exposure to market volatility and / or mitigating its adverse effects on the financial position of the Group to the extent possible. In general, the key factors that impact the Group's operations are summarised as follows:

Greek Macros: The Greek economy boosted its growth momentum in the period January-September 2019, despite the slowdown on a global level. Positive developments in the financial sector have taken place, including increased deposits and improved lending conditions for banks. Confidence in the banking sector has grown significantly and restrictions on capital movements have been fully abolished since 1 September.

GDP grew by 2,3% in the third quarter of 2019 compared to the corresponding period of 2018 (GDP increase in the first 9 months of 2019 was 2,1%), mainly driven by higher exports of goods and services, private sector investments, as well as increased private consumption and decreased imports of goods. On the other hand, an increase in imports of services, limited a further upward performance.

Total domestic fuels consumption for the year increased by 2,8% compared to 2018, mainly supported by significantly higher demand for heating gasoil, which is attributed to lower temperatures during the first quarter

of the year. Net demand for Motor fuels marginally increased by 0,4%, driven by higher auto diesel consumption (+1,6%) and lower gasoline demand (-0,7%).

The Greek economy still faces a number of significant challenges, such as the relatively low growth rates comparing to the other countries in the Eurozone and the lower than the investment class Greek government's credit rating. At the same time, there are significant risks and uncertainties coming from the external environment, such as the slowdown in global economic activity due to growing trade protectionism and geopolitical tensions. Management continually assesses the situation and its possible future impact to ensure that all necessary actions and measures are taken in order to minimize the impact on the Group's Greek operations.

United Kingdom's exit from the European Union: The Group is sourcing funds from international debt capital markets, through Eurobonds, issued by its London based subsidiary, Hellenic Petroleum Finance plc, listed in the Luxembourg stock exchange, for the optimal management of its debt liabilities. It is uncertain, how the exit of the UK from the EU will affect existing HPF Eurobonds, as well as the Group's funding from international debt capital markets. The Group is closely following relevant developments and assessing alternatives in order to maintain its ability to source funding through the international debt capital markets.

Currency: The Group's business is naturally hedged against a functional currency risk. All petroleum industry transactions are referenced to international benchmark quotes for crude oil and oil products in USD. All international purchases and sales of crude oil and products are conducted in USD and all sales into local markets are either in USD prices or converted to local currency for accounting and settlement reasons using the USD reference on the date of the transaction.

Prices: Commodity price risk management is supervised by a Risk Management Committee, which includes Finance and Trading departments' Senior Management. Non-commodity price risk management is carried out by the Finance Department under policies approved by the Board of Directors. The Finance Department identifies and evaluates financial risks in close co-operation with the Group's operating units.

Securing continuous crude oil supplies: During the last 2,5 years crude oil reference prices have partially recovered, following a 3-year period of contraction (June 2014 – June 2017), averaging $64/bbl in 2019. Nonetheless, the cost of crude, for both sweet and especially sour grades, which represent the key source of feedstock for complex refiners like Hellenic Petroleum, remains at reasonable levels, maintaining the competitive position of Med refiners vs. their global peers. Concerning the USA's decision for the re-imposition of the nuclear-related sanctions against Iran, Hellenic Petroleum has successfully managed to replace the Iranian oil supply with other alternatives in the region, without any significant effect in the continuity and cost of its operations (Note 16).

Financing of operations: The key priorities of the Group are the management of the 'Assets and Liabilities' maturity profile, ensuring adequate financing capacity in accordance with its strategic investment plans and liquidity risk management for its operational needs. As a result and in line with its medium term strategic plans and commercial requirements, the Group maintains a mix of long term, medium term and short term credit facilities by taking into consideration banks' and debt capital markets' credit capacity. Approximately 70% of total debt comprises medium to long term committed credit lines while the remaining debt consists predominantly of short term credit facilities.

In June 2018, the Group prepaid two loan facilities, which had a total outstanding balance of €380 million. The facilities were refinanced with a 5 year syndicated revolving bond loan facility issued by Hellenic Petroleum S.A. and subscribed to by Greek and international banks for an amount of €400 million.

In November 2018, Hellenic Petroleum S.A. refinanced a €400 million syndicated bond loan with a new facility of the same principal amount maturing in 2 years, with a one-year extension option.

In January 2015, Hellenic Petroleum S.A. issued a €200 million revolving bond loan facility with a tenor of 3 years. The facility was refinanced in February 2018 for an increased amount of €300 million and a new tenor of 3 years.

In June 2018 Hellenic Petroleum S.A. issued a $250 million revolving bond loan facility with a tenor of 3 years.

In July 2014 Hellenic Petroleum Finance S.A. issued a €325 million 5 year eurobond with a 5.25% annual coupon maturing in July 2019. The Notes, which are guaranteed by Hellenic Petroleum S.A., are listed on the Luxembourg Stock Exchange. In July 2019, Hellenic Petroleum Finance S.A. fully repaid the outstanding balance of €319.8 million.

In October 2016 Hellenic Petroleum Finance S.A. issued a €375 million 5 year 4.875% Eurobond guaranteed by Hellenic Petroleum S.A. with the issue price being 99.453 per cent. of the principal amount. The proceeds of the issue were used to repay existing financial indebtedness including a partial prepayment of a €500 million eurobond maturing in May 2017. The latter was effected via a tender offer process where notes of nominal value of €225 million were accepted. In July 2017 HPF issued a notional amount of €74.53 million of notes guaranteed by Hellenic Petroleum S.A. maturing in October 2021 which were consolidated and form a single series with the €375 million 4.875% guaranteed notes as per above. The notes were partially prepaid in October 2019 with the proceeds of a new eurobond issue of €500 million 5 year Eurobond as detailed below. The balance of the notes as at 31 December 2019 was €201 million.

In October 2019 Hellenic Petroleum Finance S.A. issued a €500 million five-year 2% Eurobond guaranteed by Hellenic Petroleum S.A. with the issue price being 99.41 per cent. of the principal amount. The notes mature in October 2024. Part of the proceeds of the issue were used for the partial prepayment of the €450 million Eurobond maturing in October 2021 through a tender offer process which was completed in October 2019 during which notes of nominal value of €248.4 million were accepted.

Additional information is disclosed in paragraph (c) Liquidity risk below and Note 17.

Capital management: Another key priority of the Group has been the management of its Assets. Overall the Group has around €4,1 billion of capital employed which is driven from working capital, investment in fixed assets and its investment in the DEPA Group. Current assets are mainly funded with current liabilities (incl. short term bank debt) which are used to finance working capital (inventories and receivables). As a result of the implementation of the Group's investment plan during the period 2007-2012, net debt level has increased to 43% of total capital employed while the remaining 57% is financed through shareholders equity. The Group has started reducing its net debt levels through utilization of the incremental operating cashflows, post completion and operation of the new Elefsina refinery. This is expected to lead to lower Debt to Equity ratio, better matched Asset and Liability maturity profiles as well as lower financing costs.

(a) Market risk

(i) Foreign exchange risk

As explained in note 2.5 "Foreign currency translation", the parent company's functional currency and presentation currency of the Group is the Euro. However, in line with industry practice in all international crude oil and oil trading transactions, underlying commodity prices are based on international reference prices quoted in US dollars.

Foreign currency exchange risk arises on three types of exposure:

- **Financial position translation risk:** Most of the inventory held by the Group is reported in Euro while its underlying value is determined in USD. Thus, a possible devaluation of the USD against the Euro leads to a reduction in the realisable value of inventory included in the statement of financial position. In order to manage this risk, a significant part of the Group's payables (sourcing of crude oil and petroleum products) is denominated in USD resulting to an offsetting impact to the one described above. It should be noted however, that while in the case of USD devaluation the impact on the statement of financial position is mitigated, in cases of USD appreciation the mark-to-market valuation of USD-denominated debt liabilities leads to a reported foreign exchange loss, with no compensating benefit as stocks continue to be included in the statement of financial position at cost. It is estimated that at 31 December 2019 if the Euro had weakened against the US dollar by 5% with all other variables held constant, pre-tax results would have been approximately €9 million lower, as a result of foreign exchange gains on translation of US dollar-denominated receivables, payables, cash and borrowings.

- **Gross Margin transactions and translation risk:** The fact that most of the transactions in crude oil and oil products are based on international Platt's USD prices leads to exposure in terms of the Gross Margin translated in Euro. Market volatility had an adverse impact on the cost of mitigating this exposure; as a result, the Group did not actively hedge material amounts of the Gross margin exposure. This exposure is linearly related to the Gross margin of the Group in that the appreciation/ depreciation of Euro vs. USD leads to a respective translation loss/ (gain) on the period results.

- **Local subsidiaries exposure:** Where the Group operates in non-Euro markets there is an additional exposure in terms of cross currency translation between USD (price base), Euro reporting currency and local currency. Where possible the Group seeks to manage this exposure by transferring the exposure for pooling at Group levels. Although material for local subsidiaries' operations, the overall exposure is not considered material for the Group.

(ii) Commodity price risk

The Group's primary activity as a refiner involves exposure to commodity prices. Changes in current or forward absolute price levels vs acquisition costs affect the value of inventory while exposure to refining margins (combination of crude oil and product prices) affect the future cash flows of the business.

In the case of price risk, the level of exposure is determined by the amount of priced inventory carried at the end of the reporting period. In periods of sharp price decline, as Group policy is to report its inventory at the lower of historical cost and net realisable value, results are affected by the reduction in the carrying value of the inventory. The extent of the exposure relates directly to the level of stocks and rate of price decrease. This exposure is partly hedged with paper derivatives to the extent that the cost of such instruments is considered attractive from a risk-return point of view and subject to the structure of the market (contango vs. backwardation) as well as credit capacity for long dated transactions.

Refining margin exposure relates to the absolute level of margin generated by the operation of the refineries. This is determined by Platt's prices and varies on a daily basis; as an indication of the impact to the Group financial results, a change in the refinery margins has a proportionate impact on the Group's profitability. Where possible, the Group aims to hedge the part of its production which will be sold in the future and hence will be exposed to forward pricing, thus generating higher price risk upon completion of the sale. This, however, is not possible to do in all market conditions, such as a backwardated market structure, where future prices are below their spot levels, or when there is no credit capacity for derivatives transactions.

(iii) Cash flow and fair value interest rate risk

The Group's operating income and cash flows are not materially affected by changes in market interest rates, given the low level of prevailing reference rates. Borrowings issued at variable rates expose the Group to cash flow interest rate risk, while borrowings issued at fixed rates expose the Group to fair value interest rate risk. Approximately 26% of the Group's borrowings are at fixed rates of interest. Depending on the levels of net debt at any given period of time, any change in the base interest rates (EURIBOR or LIBOR), has a proportionate impact on the Groups results. At 31 December 2019, if interest rates on Euro denominated borrowings had been 0,5% higher with all other variables held constant, pre-tax profit for the year would have been Euro €9 million lower.

(b) Credit risk

(i) Risk Management

Credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale customers, including outstanding receivables and committed transactions. If wholesale customers are independently rated, these ratings are used. Otherwise, if there is no independent rating, risk control assesses the credit quality of the customer, taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilisation of credit limits is regularly monitored. Sales to retail customers are settled in cash or using major credit cards.

(ii) Credit quality

The credit quality of cash, cash equivalents and restricted cash is assessed by reference to external credit ratings obtained from S&P and Fitch in the table below.

Due to market conditions, the approval of credit risk is subject to a more strict process involving all levels of senior management. A Group credit committee monitors material credit exposures on a Group wide basis. See Note 12 for further disclosure on credit risk.

	As at	
Bank Rating (in €million)	**31 December 2019**	**31 December 2018**
A	62	-
A-	-	17
BBB+	-	5
BBB	279	518
BBB-	5	1
BB+	1	4
CCC+	505	3
CCC	176	669
CCC-	20	39
No rating	40	20
Total	**1.088**	**1.276**

(c) Liquidity risk

Prudent liquidity risk management entails maintaining sufficient cash reserves and financial headroom, through committed credit facilities. Due to the dynamic nature of the underlying businesses, the Group aims to maintain flexibility in its funding operations through the use of cash and committed credit facilities.

Where deemed beneficial to the Group, and in order to achieve better commercial terms (e.g. better pricing, higher credit limits, longer payment terms), the Group provides for the issuance of short term letters of credit or guarantee for the payment of liabilities arising from trade creditors. These instruments are issued using the Group's existing credit lines with local and international banks, and are subject to the approved terms and conditions of each bank, regarding the amount, currency, maximum tenor, collateral etc.

The Group's plans with respect to facilities expiring within the next 12 months are presented below in million Euros.

Contractual Term Facilities	**1H20**	**2H20**	**2020**	**Schedule for repayment**	**Schedule for refinancing**
Bond loan €400 million	-	225	225	-	225
European Investment Bank ("EIB") Term loan	22	22	44	44	-
Other credit lines (callable on demand)					
Bilateral/ Factoring with recourse	-	-	754	-	-
Total	**22**	**247**	**1.023**	**44**	**225**

The table below analyses the Group's financial liabilities and net-settled derivative financial liabilities into relevant maturity groupings based on the remaining period from balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual cash flows.

	Less than 1 year	**Between 1 and 5 years**	**Over 5 years**
31 December 2019			
Borrowings	1.105.978	1.714.343	-
Lease liabilities (Note 18)	36.124	86.135	89.327
Trade and other payables	1.352.034	-	-
31 December 2018			
Borrowings	1.225.186	1.759.400	-
Finance lease liabilities	906	2.177	607
Trade and other payables	1.307.483	-	-

The amounts included as loans in the table above do not correspond to the balance sheet amounts, as they are contractual (undiscounted) cash flows, which include capital and interest.

Trade and other payables do not correspond to the balance sheet amounts as they include only financial liabilities.

3.2 Capital risk management

The Group's objective with respect to capital structure, which includes both equity and debt funding, is to safeguard its ability to continue as a going concern, to have in place an optimal capital structure from a cost perspective and at the same time to ensure that the requirements of loan financial covenants are met.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Consistent with the industry convention, the Group monitors capital structure and indebtedness levels on the basis of the gearing ratio. The ratio is calculated as net debt divided by total capital employed. Net debt is calculated as total borrowings (including "current and non-current borrowings" as shown in the statement of financial position) less "Cash & cash equivalents" and, "Investment in equity instruments". Total capital employed is calculated as "Total Equity" as shown in the statement of financial position plus net debt.

The gearing ratios as at 31 December 2019 and 2018 were as follows:

	As at	
	31 December 2019	**31 December 2018**
Total Borrowings (Note 17)	2.632.364	2.735.956
Less: Cash & Cash Equivalents (Note 13)	(1.088.198)	(1.275.159)
Less: Investment in equity instruments (Note 3.3)	(1.356)	(634)
Net debt (excl. Lease liabilities)	**1.542.810**	**1.460.163**
Total Equity	2.326.573	2.394.731
Total Capital Employed (excl. Lease liabilities)	**3.869.383**	**3.854.894**
Gearing ratio (excl. Lease liabilities)	**40%**	**38%**
Lease liabilities (Note 18)	199.894	-
Net debt (incl. Lease liabilities)	**1.742.704**	**1.460.163**
Total Capital Employed (incl. Lease liabilities)	**4.069.277**	**3.854.894**
Gearing ratio (incl. Lease liabilities)	**43%**	**38%**

3.3 Fair value estimation

The table below analyses financial instruments carried at fair value, categorised within the fair value hierarchy based on the lowest level input that is significant to the fair value measurement as a whole. The different levels are defined as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1).
- Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (level 2).

- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (level 3).

The following table presents the Group's assets and liabilities that are measured at fair value at 31 December 2019:

	Level 1	Level 2	Level 3	Total balance
Assets				
Derivatives used for hedging	-	3.474	-	3.474
Investment in equity instruments	1.356	-	-	1.356
Assets held for sale	2.520	-	-	2.520
	3.876	**3.474**	**-**	**7.350**
Liabilities				
Derivatives used for hedging	-	-	-	-
	-	**-**	**-**	**-**

The following table presents the Group's assets and liabilities that are measured at fair value at 31 December 2018:

	Level 1	Level 2	Level 3	Total balance
Assets				
Derivatives used for hedging	-	-	-	-
Investment in equity instruments	634	-	-	634
Assets held for sale	3.133	-	-	3.133
	3.767	**-**	**-**	**3.767**
Liabilities				
Derivatives used for hedging	-	16.387	-	16.387
	-	**16.387**	**-**	**16.387**

The fair value of financial instruments traded in active markets is based on quoted market prices at the balance sheet date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency. These instruments are included in level 1.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.

- The fair value of commodity swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.

There were no changes in valuation techniques during the year. For the years ended 31 December 2019 and 31 December 2018, there were no transfers between levels.

The fair value of Euro denominated Eurobonds as at 31 December 2019 was €718 million (31 December 2018: €797 million), compared to its book value of €692 million (31 December 2018: €765 million). The fair value of the remaining borrowings approximates their carrying value. The fair values of borrowings are within level 2 of the fair value hierarchy.

The fair value of the following financial assets and liabilities approximate their carrying amount, due to their short term nature:

- Trade receivables
- Cash and cash equivalents
- Trade and other payables

4 Critical accounting estimates and judgements

Estimates and judgements are continuously evaluated and are based on historical experience as adjusted for current market conditions and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(i) Critical accounting estimates and assumptions

(a) Income taxes

The Group is subject to periodic audits by local tax authorities in various jurisdictions and the assessment process for determining the Group's current and deferred tax balances is complex and involves high degree of estimation and judgement. There are some transactions and calculations for which the ultimate tax determination is uncertain. Where tax positions are not settled with the tax authorities, the Group management takes into account past experience with similar cases as well as the advice of tax and legal experts in order to analyze the specific facts and circumstances, interpret the relevant tax legislation, assess other similar positions taken by the tax authorities to form a view about whether its tax treatments will be accepted by the tax authorities, or whether a provision is needed. Where the Group is required to make payments in order to appeal against positions of tax authorities and the Group assesses that it is more probable than not to win its appeal, the respective payments are recorded as assets as these advance payments will be returned to the Group, if the Group's position is upheld. In case the Group determines a provision is needed for the outcome of the uncertain tax position, any amounts already paid are deducted from the said provision.

Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made.

(b) Recoverability of deferred tax assets

Deferred tax assets include certain amounts which relate to carried forward tax losses. In most cases, depending on the jurisdiction in which such tax losses have arisen, such tax losses are available for set off for a limited period of time since they are incurred. The Group makes assumptions on whether these deferred tax assets will be recoverable using the estimated future taxable income based on the approved business plans and budgets for each relevant entity.

(c) Provision for environmental restoration

The Group operates in the oil industry with its principal activities being that of exploration and production of hydrocarbons, refining of crude oil and sale of oil products, and the production and trading of petrochemical products. Environmental damage caused by such substances may require the Group to incur restoration costs to

comply with the regulations in the various jurisdictions in which the Group operates, and to settle any legal or constructive obligation. Analysis and estimates are performed by the Group together with its technical and legal advisers, in order to determine the probability, timing and amount involved with probable required outflow of resources. Estimated restoration costs, for which disbursements are determined to be probable, are recognised as a provision in the Group's financial statements. When the final determination of such obligation amounts differs from the recognised provisions, the Group's statement of comprehensive income is impacted.

(d) Estimates in value-in-use calculations

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. The recoverable amount of a cash-generating unit (CGU) is determined for impairment tests purposes based on value-in-use calculations which require the use of assumptions. In assessing value in use, the estimated future cash flows 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. The calculations use cash flow projections based on financial budgets approved by management. These budgets and forecast calculations generally cover a period of five years. Cash flows beyond the period over which projections are available are extrapolated using estimated growth rates. These growth rates are consistent with forecasts included in country or industry reports specific to the country and industry in which each CGU operates. The key assumptions used to determine the recoverable amount for the different CGUs, or assets, including a sensitivity analysis, are disclosed and further explained in Notes: 6. for Property, Plant and Equipment, 8. for Goodwill, 9. for Investments in Associates and Joint Ventures.

(e) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives and certain investments in equity instruments) is determined by using valuation techniques. The Group uses its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period.

(f) Provision for expected credit losses of receivables

The Group uses a provision matrix to calculate ECLs for trade receivables. The provision matrix is based on the Group's historical credit loss experience calibrated to adjust the historical credit loss experience with forward-looking information specific to the debtors and the economic environment. At each year end, the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

The assessment of the correlation between historical observed credit losses, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is 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 customer's actual default in the future.

(g) Retirement Benefit Obligations

The present value of the pension obligations for the Group's defined benefit plans depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost / (income) for pensions include the discount rate and salary rate increases. Any changes in these assumptions will impact the carrying amount of pension obligations. The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Group considers the interest rates of high-quality corporate bonds that are denominated in the currency and jurisdiction in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension liability.

Other key assumptions for pension obligations are based in part on current market conditions. Additional information is disclosed in Note 20.

(h) Depreciation of property, plant and equipment

The Group periodically assesses the useful lives of its property, plant and equipment to determine whether the original estimated lives continue to be appropriate. To this respect, the Group may obtain technical studies and use external sources to determine the lives of its assets, which can vary depending on a variety of factors such as technological innovation and maintenance programs.

(ii) Critical judgements in applying the Group's accounting policies

(a) Impairment of non-current assets and investments in associates and joint ventures

The Group assesses at each reporting date, whether indicators for impairment exist for its non-financial assets (note 2.11) and its investments in associates and joint ventures. The assessment includes both external and internal factors which include inter-alia, significant changes with an adverse effect in the regulatory or technological environment or evidence is available from internal reporting that indicates that the economic performance of the asset is, or will be worse than expected. If any indication exists, the Group estimates the asset's or cash generating unit's recoverable amount. Judgment is involved to some extent in determining whether indicators exist and also the determination of the cash generating units at which the respective assets are tested.

(b) Provisions for legal claims

The Group has a number of legal claims pending against it (Note 33). Management uses its judgement as well as the available information from the Group legal department, in order to assess the likely outcome of these claims and if it is more likely than not that the Group will lose a claim, then a provision is recognized. Provisions for legal claims, if required, are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period (Note 33).

(c) Determination of lease term

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). The following factors are normally the most relevant: If there are significant penalties to terminate (or not extend), the Group is typically reasonably certain to extend (or not terminate). If any leasehold improvements are expected to have a significant remaining value, the Group is typically reasonably certain to extend (or not terminate). Otherwise, the Group considers other factors including historical lease durations and the costs and business disruption required to replace the leased asset. Most extension options in offices and vehicles leases have not been included in the lease liability, because the Group could replace the assets without significant cost or business disruption. The lease term is reassessed if an option is actually exercised (or not exercised) or the Group becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

5 Segment information

All critical operating decisions are made by the Group's Executive Committee, which reviews the Group's internal reporting in order to assess performance and allocate resources. Management has determined the operating segments based on these reports. The committee considers the business from a number of measures which may vary depending on the nature and evolution of a business segment by taking into account the risk profile, cash flow, product and market considerations. Information provided to the committee is measured in a manner consistent with that of the financial statements.

The Group's key operating segments are:

a) Refining, Supply and Wholesale Trading (Refining)

- Activities in Greece revolve around the operation of the Group's three refineries located in Aspropyrgos, Elefsina and Thessaloniki, which account for approximately 65% of the country's total refining capacity. The three refineries combine a storage capacity of 6,65 million m³ of crude oil and petroleum products.
- International activities refer to the OKTA facility, which is located in Skopje and is connected to Thessaloniki refinery through a pipeline for the transportation of high value-added products (e.g. diesel). The pipeline has not been operational since 2013 and is expecting to commence operation during 2021.

b) Marketing

- Activities in Greece: The Group, through its subsidiary HFL S.A., possesses an extensive fuel supply network in the country via the EKO and BP brand names, which includes a total of 1.722 petrol stations, 244 of which are company-operated.
- International activities: The Group operates through subsidiary companies in Cyprus, Bulgaria, Serbia, Montenegro and North Macedonia, with a total network of 311 petrol stations.

c) Exploration and Production of Hydrocarbons

The Group is engaged in the exploration and production of hydrocarbons in several areas in Greece , (either through full control or in partnership with other oil & gas companies), including the sea of Thrace in the North Aegean, the offshore block of Patraikos Gulf (West), the two onshore areas of "Arta-Preveza" and ''NW Peloponnese'', the offshore Block 2 west of Corfu Island, the offshore West Crete & Southwest Crete areas, the offshore area Western Greece in the Ionian Block and the Kyparissiakos gulf (Block 10). An offer has also been submitted for North Corfu (Block 1).

d) Petro-chemicals

Petrochemical activities mainly focus on the production and marketing of polypropylene, BOPP films and solvents, as well as the trading of imported plastics and chemicals. The polypropylene production plant in Thessaloniki mainly receives propylene produced in the Aspropyrgos refinery. Part of the production of the produced polypropylene is the raw material used in the BOPP film production unit in Komotini.

e) Gas and Power

- Natural Gas: The Group is active in the natural gas sector through its 35% participation in DEPA S.A., (the remaining 65% is held by the Hellenic Republic Asset Development Fund - HRADF). The DEPA Group is active in the wholesale trading, supply and distribution of natural gas in Greece. DEPA also participates in international gas transportation projects.
- Power: The Group is active in the production, trading and supply of power in Greece through its participation (50%) in the JV Elpedison B.V. (the remaining 50% is held by EDISON International). Elpedison B.V. owns 100% of the share capital of Elpedison S.A..

f) Other

"Other Segments" include Group entities which provide treasury, consulting and engineering services.

More information about the activities of the Group's key operating segments, as described above, can be found in the Group's Annual Report.

Financial information regarding the Group's operating segments for the years ended 31 December 2019 and 31 December 2018 is presented below:

	For the year ended 31 December 2019						
	Refining	Marketing	Exploration & Production	Petro-chemicals	Gas & Power	Other	Total
Gross Sales	7.754.000	3.258.007	(0)	299.268	3.722	13.933	11.328.930
Inter-segmental Sales	(2.452.144)	(6.610)	(0)	(0)	(22)	(13.189)	(2.471.964)
Revenue from contracts with customers	**5.301.856**	**3.251.397**	**(0)**	**299.268**	**3.700**	**744**	**8.856.965**
EBITDA	**360.463**	**133.268**	**(9.497)**	**92.444**	**2.391**	**(5.303)**	**573.767**
Depreciation & Amortisation (PPE & Intangibles)	(149.651)	(35.468)	(761)	(6.189)	(1.101)	(549)	(193.719)
Depreciation of Right-of-Use assets (*)	(6.528)	(33.032)	(36)	(409)	(10)	912	(39.103)
Operating profit / (loss)	**204.284**	**64.768**	**(10.294)**	**85.845**	**1.280**	**(4.940)**	**340.944**
Currency exchange gains/ (losses)	(955)	(283)	(17)	-	-	-	(1.255)
Share of profit/(loss) of investments in associates & joint ventures	2.445	425	-	-	14.988	4	17.862
Finance (expense)/income - net	(50.075)	(14.357)	-	25	(317)	(75.735)	(140.460)
Lease finance cost (*)	(957)	(9.186)	(4)	(23)	(3)	92	(10.081)
Profit / (loss) before income tax	**154.741**	**41.367**	**(10.315)**	**85.847**	**15.948**	**(80.579)**	**207.010**
Income tax expense							(43.434)
Profit for the period							**163.576**
(Profit) attributable to non-controlling interests							(2.778)
Profit for the period attributable to the owners of the parent							**160.798**

(*) Comparability to figures as of 31 December 2018 is affected due to the adoption of IFRS 16 as of 1 January 2019 (Note 2).

	For the year ended 31 December 2018						
	Refining	Marketing	Exploration & Production	Petro-chemicals	Gas & Power	Other	Total
Gross Sales	8.681.579	3.329.400	-	314.716	2.793	15.039	12.343.527
Inter-segmental Sales	(2.555.150)	(7.386)	(0)	(0)	(11)	(11.825)	(2.574.372)
Revenue from contracts with customers	**6.126.429**	**3.322.014**	**(0)**	**314.716**	**2.782**	**3.214**	**9.769.155**
EBITDA	**555.703**	**81.081**	**(8.155)**	**84.949**	**1.982**	**(4.164)**	**711.395**
Depreciation & Amortisation	(144.560)	(45.305)	(1.240)	(4.482)	(817)	(779)	(197.183)
Operating profit / (loss)	**411.143**	**35.776**	**(9.397)**	**80.467**	**1.165**	**(4.943)**	**514.212**
Currency exchange gains/ (losses)	2.149	49	(4)	-	-	-	2.194
Share of profit/(loss) of investments in associates & joint ventures	3.731	(240)	-	-	(6.684)	1.422	(1.771)
Finance (expense)/income - net	(92.694)	(17.765)	-	35	(173)	(35.108)	(145.705)
Profit / (loss) before income tax	**324.329**	**17.821**	**(9.401)**	**80.502**	**(5.692)**	**(38.629)**	**368.930**
Income tax expense							(154.218)
Profit for the period							**214.712**
(Profit) attributable to non-controlling interests							(3.098)
Profit for the period attributable to the owners of the parent							**211.614**

Inter-segment sales primarily relate to sales from the refining segment to the other operating segments.

There were no changes in the basis of segmentation or in the basis of measurement of segmental profit or loss, as compared to the consolidated annual financial statements for the year ended 31 December 2018.

An analysis of the Group's revenue from contracts with customers by type of market (domestic, aviation & bunkering, exports and international activities) and business unit is presented below:

	For the year ended 31 December 2019					
Revenue from contracts with customers	**Refining**	**Marketing**	**Petro-chemicals**	**Gas & Power**	**Other**	**Total**
Domestic	1.115.470	1.651.195	105.829	3.700	543	2.876.736
Aviation & Bunkering	628.479	732.823	-	-	-	1.361.302
Exports	3.109.072	30.531	193.439	-	201	3.333.243
International activities	448.836	836.847	-	-	-	1.285.683
Total	**5.301.857**	**3.251.397**	**299.269**	**3.700**	**744**	**8.856.965**

	For the year ended 31 December 2018					
Revenue from contracts with customers	**Refining**	**Marketing**	**Petro-chemicals**	**Gas & Power**	**Other**	**Total**
Domestic	1.161.580	1.639.422	118.391	2.782	2.690	2.924.865
Aviation & Bunkering	569.724	819.117	-	-	-	1.388.841
Exports	3.949.874	27.098	196.325	-	524	4.173.821
International activities	445.251	836.377	-	-	-	1.281.628
Total	**6.126.429**	**3.322.014**	**314.716**	**2.782**	**3.214**	**9.769.155**

The segment assets and liabilities at 31 December 2019 and 2018 are as follows:

	As at	
	31 December 2019	**31 December 2018**
Total Assets		
Refining	4.981.990	5.072.907
Marketing	1.354.643	1.174.367
Exploration & Production	23.812	16.455
Petro-chemicals	416.401	359.703
Gas & Power	402.240	413.642
Other Segments	1.894.438	1.861.751
Inter-Segment	(1.960.462)	(1.901.397)
Total	**7.113.062**	**6.997.429**
Total Liabilities		
Refining	2.884.618	3.090.505
Marketing	752.931	593.052
Exploration & Production	22.099	19.530
Petro-chemicals	2.275	(310)
Gas & Power	8.350	10.788
Other Segments	1.976.611	1.820.412
Inter-Segment	(855.710)	(931.279)
Total	**4.791.175**	**4.602.698**

"Other Segments" include Group entities which provide treasury, consulting and engineering services.

There has been no material change in the definition of segments or the segmental analysis of total assets or total liabilities from the amounts disclosed in the consolidated annual financial statements for the year ended 31 December 2018.

6 Property, plant and equipment

	Land	Buildings	Plant & Machinery	Transportation means	Furniture and fixtures	Assets Under Con-struction	Total
Cost							
As at 1 January 2018	**312.868**	**909.409**	**4.708.733**	**96.556**	**181.388**	**102.131**	**6.311.085**
Additions	1.049	3.129	20.679	2.117	11.100	111.061	149.135
Capitalised projects	2.151	15.584	98.513	159	1.178	(117.585)	-
Disposals	(71)	(3.069)	(9.792)	(6.560)	(1.025)	(10)	(20.527)
Impairment/Write off	(1.096)	(2.487)	(1.320)	(76)	(116)	(1.594)	(6.689)
Currency translation differences	59	98	(8)	-	-	1	150
Transfers and other movements	-	(4.366)	3.538	123	1.225	(1.861)	(1.341)
As at 31 December 2018	**314.960**	**918.298**	**4.820.343**	**92.319**	**193.750**	**92.143**	**6.431.813**
Accumulated Depreciation and impairment							
As at 1 January 2018	**-**	**467.548**	**2.319.571**	**61.948**	**150.125**	**-**	**2.999.192**
Charge for the year	-	29.207	141.306	7.783	8.821	-	187.117
Disposals	-	(3.050)	(9.746)	(6.558)	(1.018)	-	(20.372)
Impairment/Write off	-	(1.888)	(1.092)	(74)	(196)	-	(3.250)
Currency translation differences	-	9	31	-	1	-	41
Transfers and other movements	-	(2.275)	2.494	123	(185)	-	157
As at 31 December 2018	**-**	**489.551**	**2.452.564**	**63.222**	**157.548**	**-**	**3.162.885**
Net Book Value at 31 December 2018	**314.960**	**428.747**	**2.367.779**	**29.097**	**36.202**	**92.143**	**3.268.928**
Cost							
As at 1 January 2019	**314.960**	**918.298**	**4.820.343**	**92.319**	**193.750**	**92.143**	**6.431.813**
Additions	1.739	4.421	20.820	878	10.148	192.840	230.846
Capitalised projects	-	9.298	115.612	436	1.300	(126.646)	-
Disposals	(96)	(1.433)	(9.726)	(9.144)	(1.467)	-	(21.866)
Impairment/ Write off	(2.949)	(3.436)	(1.951)	(42)	(197)	(1.308)	(9.883)
Currency translation differences	115	55	34	-	1	(2)	203
Transfers and other movements	(4.943)	(2.688)	2.395	3.025	(853)	(8.451)	(11.515)
As at 31 December 2019	**308.826**	**924.515**	**4.947.527**	**87.472**	**202.682**	**148.576**	**6.619.598**
Accumulated Depreciation and impairment							
As at 1 January 2019	**-**	**489.551**	**2.452.564**	**63.222**	**157.548**	**-**	**3.162.885**
Charge for the year	-	26.020	147.949	3.635	9.540	-	187.144
Disposals	-	(1.216)	(9.311)	(8.278)	(1.413)	-	(20.218)
Impairment/Write off	-	(3.375)	(1.933)	(42)	(197)	-	(5.547)
Currency translation differences	-	15	17	-	-	-	32
Transfers and other movements	-	(1.809)	(734)	886	(709)	-	(2.366)
As at 31 December 2019	**-**	**509.186**	**2.588.552**	**59.423**	**164.769**	**-**	**3.321.930**
Net Book Value at 31 December 2019	**308.826**	**415.329**	**2.358.975**	**28.049**	**37.913**	**148.576**	**3.297.668**

(1) The Group has not pledged any property, plant and equipment as security for borrowings.

(2) Additions are mainly comprised of capital expenditure in the refining segment that relate to projects of long-term maintenance and upgrades of the refining units. These amounts are mainly included in assets under construction and are reclassified into the relevant asset class when the projects are completed.

(3) During 2019 an amount of €2,8 million (2018: €2,5 million) in respect of interest has been capitalised within Assets Under Construction relating to the refining segment, at an average borrowing rate of 4,16% (2018: 5,11%).

(4) Gains or losses from disposals are included within "Other income / (expenses) and other gains / (losses) (Note 26).

(5) 'Transfers and other movements' primarily comprise the transfer of finance leases balances (Cost of € 10,4 million and Accumulated Depreciation of € 4,1 million) to right-of-use assets upon the implementation of the IFRS 16 as from 1 January 2019. Furthermore, 'Transfers and other movements' also include the transfer of computer software development costs to intangible assets and the transfer of spare parts for the refinery units between inventories and fixed assets.

(6) "Impairment/write offs" for the year ended 31 December 2019, include write offs of assets both from cost and accumulated depreciation, as well as an impairment charge of €3,1 million related to the write down of land and buildings to their recoverable amount, based on their fair value. These assets are included in the

marketing segment and relate to HFL SA (€1,5 million) and EKO Bulgaria (€1,6 million). The impairment charge is included in "Other operating expenses/income - net" in the income statement.

(7) Plant and machinery include inter alia the carrying value (€66 million) of the pipeline connecting Thessaloniki and Skopje, which is an asset of the Group's subsidiary Vardax S.A.. The asset has not been operational since 2013 and this was considered an indication of possible impairment. Management carried out an impairment test according to the requirements of IAS 36. The analysis was carried out by identifying the recoverable amount ("value in use") of the asset through the application of the discounted cash flow valuation method. The impairment test was carried out using the following main assumptions as of 31 December 2019: WACC of 5,27%, Growth 2%, Year of expected commencement of operation Q2 of 2021. In its analysis the Group has assumed an extension of the useful life of the pipeline following its operation which is equivalent to the number of years that it was not operational. Based on this impairment test, the Group concluded that the carrying amount of the asset is recoverable and consequently no impairment charge was recorded.

The value in use measurement is most sensitive to the timing of reoperation of the pipeline; however, Group management believes that it is feasible for the useful life to be extended for the years of non-operation which will be confirmed following reoperation of the pipeline.

The Group estimated the impact on the recoverable amount if certain key assumptions used in the application of the discounted cash flow valuation method varied with all other variables held constant as follows:

Key assumption tested	**Change in assmuption**	**Impact in value in use**
WACC	+0,5%	(6,4%)
Growth	(0,5%)	(4,6%)
Year of operation	+ 2 years delay	(11,2%)
Tarif	(5,9%)	(8,7%)

In all sensitivity analysis' scenarios, based on the above assumptions and the extension of the useful life, the carrying amount of the asset is recoverable.

(8) Depreciation expense of Property, plant and equipment of €187,1 million (2018: €187,1 million), depreciation expense of right-of-use assets of €39,1 million (2018: €0 million) and amortisation expense of €6,6 million (2018: €10,1 million) are allocated in the following lines of the Consolidated Statement of Comprehensive Income:

- Cost of Sales €146 million (2018: €137,7 million),
- Selling and distribution expenses €72,7 million (2018: €50,3 million),
- Administration expenses €14,1 million (2018: €9,2 million).

7 Right-of-use assets

	Petrol station properties	Commercial Properties	Plant & Machinery	Motor Vehicles	Total
Cost					
As at 1 January 2019	**199.890**	**22.419**	**6.325**	**6.275**	**234.909**
Additions	14.007	1.177	2.927	12.997	31.108
Derecognition	(514)	-	-	(18)	(531)
Impairment/ Write off	(1.252)	-	-	-	(1.252)
Modification	7.811	7.724	(343)	6.457	21.649
Currency translation effects	28	-	-	3	31
As at 31 December 2019	**219.969**	**31.321**	**8.909**	**25.714**	**285.913**
Accumulated Depreciation					
As at 1 January 2019	**4.061**	**-**	**-**	**-**	**4.061**
Charge for the period	27.678	5.907	1.150	4.368	39.103
Impairment/ Write off	(80)	-	-	-	(80)
Modification	(82)	(21)	-	(2)	(104)
As at 31 December 2019	**31.576**	**5.887**	**1.150**	**4.366**	**42.979**
Net Book Value at 31 December 2019	**188.393**	**25.434**	**7.759**	**21.348**	**242.934**

The Group leases a variety of assets in the course of its activities. Through the marketing segment the Group enters into lease agreements whereby it leases land on which it constructs petrol stations. Furthermore, the Group leases operational petrol stations, large complexes which may include other commercial properties such as highway service stations.

The opening balance includes petrol stations properties usage rights, which were transferred from intangible assets category where they were presented up to 31 December 2018, before the application of IFRS 16. Retail Service Stations Usage rights represent upfront lump-sum amounts paid upon the signing of agreements to owners of such retail sites for the use and control of the service stations. They are amortised over the life of the acquired right which usually ranges from 5 to 25 years. The net book value of the opening balance transferred is €9,9 million. The opening balance also includes an amount of €6,4 million which relates to finance leases for petrol stations of EKO Bulgaria and were transferred from property, plant and equipment category to right-of-use assets from 1 January 2019, upon application of IFRS 16.

Part of the Group's operations require the use of coastal zones. The Group has entered into an Agreement with the State for the use of coastal zones in certain areas. There are however other areas, where the Group uses coastal zones, and for which no agreement exists. The State may periodically issue a notice for compensation for the use of the coastal zones for these areas. Upon adoption of IFRS 16, the Group concluded that the use of coastal zones could meet the criteria of an identified asset under IFRS 16, where an Agreement exists. Where the terms of use by the Greek state are determinable from the Agreement, the Group recognizes a right of use asset within commercial properties and a lease liability representing its obligation to make payments. For instances where the Group uses coastal zones without an Agreement, the Group considers that the arrangement does not constitute a lease and provides for compensation for the use of the coast based on the most recently received notice. For the twelve-month period to 31 December 2019, this is estimated at € 720 thousand and is included in current liabilities.

Furthermore, the Group operates a number of underground pipelines within the boundaries of various municipalities, in accordance with relevant laws. As described in note 33 of these financial statements, certain municipalities have proceeded with the imposition of duties and fines relating to the rights of way. The group has appealed against such amounts imposed as described in the note and does not consider that any of these fall within the scope of IFRS 16.

8 Intangible assets

	Goodwill	Retail Service Stations Usage Rights	Computer software	Licences & Rights	Other	Total
Cost						
As at 1 January 2018	**133.914**	**51.241**	**111.527**	**38.075**	**74.603**	**409.360**
Additions	-	2.723	2.309	3.691	123	8.846
Disposals	-	-	(3)	(241)	-	(244)
Impairment	-	(106)	-	(1.654)	-	(1.760)
Currency translation effects	-	-	3	-	10	13
Other movements	-	-	1.156	(1.064)	70	162
As at 31 December 2018	**133.914**	**53.858**	**114.992**	**38.807**	**74.806**	**416.377**
Accumulated Amortisation						
As at 1 January 2018	**71.829**	**34.834**	**101.407**	**31.224**	**64.382**	**303.676**
Charge for the year	-	2.973	5.815	1.252	26	10.066
Disposals	-	-	(3)	(241)	-	(244)
Impairment	-	(106)	-	(1.359)	-	(1.465)
Currency translation effects	-	-	-	-	-	-
Other movements	-	-	(39)	(1.187)	(47)	(1.273)
As at 31 December 2018	**71.829**	**37.701**	**107.180**	**29.689**	**64.361**	**310.760**
Net Book Value at 31 December 2018	**62.085**	**16.157**	**7.812**	**9.118**	**10.445**	**105.617**
Cost						
As at 1 January 2019	**133.914**	**53.858**	**114.992**	**38.807**	**74.806**	**416.377**
Additions	4.674	1.070	2.918	1.437	100	10.199
Disposals	-	-	(62)	-	-	(62)
Impairment	-	-	(7)	(27)	(439)	(473)
Currency translation effects	-	-	-	-	22	22
Other movements	-	(47.935)	5.563	5	107	(42.260)
As at 31 December 2019	**138.588**	**6.993**	**123.404**	**40.222**	**74.596**	**383.803**
Accumulated Amortisation						
As at 1 January 2019	**71.829**	**37.701**	**107.180**	**29.689**	**64.361**	**310.760**
Charge for the year	-	-	5.239	883	453	6.575
Disposals	-	-	(62)	-	-	(62)
Impairment	-	-	(7)	(8)	(189)	(204)
Currency translation effects	-	-	(1)	-	-	(1)
Other movements	-	(37.701)	-	10	-	(37.691)
As at 31 December 2019	**71.829**	**-**	**112.349**	**30.574**	**64.625**	**279.377**
Net Book Value at 31 December 2019	**66.759**	**6.993**	**11.055**	**9.648**	**9.971**	**104.426**

(1) The majority of the remaining balance of goodwill as at 31 December 2019 relates to the unamortised goodwill arising on the acquisition of Hellenic Petroleum Cyprus Ltd in 2003 which is treated in line with the accounting policy in Note 2.9. Goodwill was tested for impairment as at 31 December 2019 using the value-in-use model. This calculation used cash flow projections based on financial budgets approved by management covering a five year period. Cash flows beyond the five-year period were extrapolated using an estimated growth rate of 1% that reflects the forecasts in line with management beliefs, based on GDP growth projections. Management determined annual volume growth rate and gross margins based on past performance and expectations for the market development. The discount rate used was 4,39% which reflects the specific risks relating to operations. The results of the model show that the valuation covers the carrying amount of the goodwill, which amounts to €67 million as of 31 December 2019.

A sensitivity analysis was performed to the key assumptions used in the model (discount rates and perpetuity growth rates), in order to stress test the adequacy of the valuation headroom. It is estimated that at 31 December 2019 if the free cash flow growth rate of Hellenic Petroleum Cyprus Ltd used in the impairment test was lower by 0,5% with all other variables held constant, the Equity Value of the company would have been lower by 11,27%. In addition, if the future WACC was higher by 0,5% with all other variables held

constant, the Equity Value of the company would have been lower by 12,86%. The sensitivity analysis resulted in recoverable values well in excess of the carrying value.

Goodwill addition of € 4,7 million relates to acquisition of a subsidiary (Note 36).

(2) Other intangible assets include the right of indefinite use of land in Serbia and Montenegro, where under certain circumstances the local legal framework did not allow outright ownership of land. The balance represent upfront lump-sum payments in the case of Serbia and in the case of Montenegro the purchase price allocation of land upon acquisition of the Group's subsidiary in Montenegro. The legal title of the land was subsequently contested by the local authorities in both countries without however recalling the right of the entities to make use of the land and buildings located on it.

(3) 'Licenses and Rights' include net exploration license costs relating to the exploration & production hydrocarbons' concessions in Greece

(4) 'Other movements' include completed IT software projects capitalised during 2019 and thus transferred from assets under construction. These projects are monitored within assets-under-construction as implementation of the relevant software takes place over a period of time. They are transferred to Intangible Assets when the implementation of the software has been completed and tested as being ready for use.

9 Investments in associates and joint ventures

	As at	
	31 December 2019	**31 December 2018**
Beginning of the Year	**390.091**	**701.635**
Change in accounting policy (IFRS 9)	-	(1.750)
Dividend income	(30.490)	(307.735)
Share of profit/ (loss) of investments in associates & joint ventures	17.862	(1.771)
Share of other comprehensive income/ (loss) of investments in associates	(188)	(288)
Acquisition of the non controlling interest in Elpedison SA (net of impairment - Note 9)	7.519	
Share capital increase / (decrease)	(50)	-
Other movements	3	-
End of the year	**384.747**	**390.091**

a) Joint Ventures

The Group is active in power generation, trading and supply in Greece through its 50% shareholding in Elpedison B.V., a joint venture entity with EDISON International. The Group accounts for Elpedison B.V. using the equity method and as such, the Group's 50% share of the consolidated results of Elpedison B.V. appear under "Share of profit of investments in associates and joint ventures" and its 50% share of net assets under "Investment in associates and joint ventures".

Acquisition of non-controlling interest in ELPEDISON SA

On 26 July 2019, ELPEDISON BV acquired all the shares held by minority shareholders in Elpedison SA and which represent 24,22% of Elpedison SA's share capital and currently owns 100% of the shares in ELPEDISON SA. Total consideration for the acquisition of the shares amounted to €20 million (Note 36). The acquisition was financed through a share capital increase in ELPEDISON BV (Helpe Group's share was 10 million).

As at 26 July 2019, the non-controlling interests in the financial statements of Elpedison B.V. stood at €15,038 million. Therefore, the acquisition of the non-controlling interests by Elpedison B.V. resulted in a decrease in total equity attributable to the owners of €4,962 million. As at 31 December 2019, the Group's share of the decrease amounting to €2,481 million is included in Retained Earnings.

Given the materiality of this activity for the Group, the table below summarises the key financials of the Elpedison B.V. Group, which consolidates its 100% holding in Elpedison S.A.

	As at	
Elpedison B.V. Group	**31 December 2019**	**31 December 2018**
Statement of Financial Position		
Non-Current Assets	252.917	255.354
Cash and Cash Equivalents	13.377	17.044
Other Current Assets	145.151	115.321
Total Assets	**411.445**	**387.719**
Equity	**57.957**	**71.707**
Long Term Borrowings	183.474	198.950
Other Non-Current Liabilities	29.317	27.303
Short Term Borrowings	15.416	7.416
Other Current Liabilities	125.281	82.343
Total Liabilities	**353.488**	**316.012**
Total Liabilities and Equity	**411.445**	**387.719**
Investment in Elpedison BV as accounted in Helpe Group	**37.862**	**36.021**

	As at	
	31 December 2019	**31 December 2018**
Statement of Comprehensive Income		
Revenue	626.475	442.855
EBITDA	**20.873**	**22.542**
Depreciation & Amortisation	(28.321)	(27.968)
EBIT	**(7.448)**	**(5.426)**
Interest Income	401	389
Interest Expense	(8.675)	(12.065)
Loss beforeTax	**(15.722)**	**(17.102)**
Income Tax	1.515	3.480
Loss after Tax	**(14.207)**	**(13.622)**
Share of loss accounted in Helpe Group	**(5.831)**	**(5.177)**

In September 2018, Elpedison SA agreed with its Bondholders to refinance its loans amounting to €213,9 million for three years, up to September 2021. The loans are fully guaranteed by the ultimate shareholders of Elpedison S.A., according to their shareholdings in the Company, while they provide for quarterly capital repayments of €3 million on average and mandatory capital prepayments from any proceeds from ADMIE's historical deficit. Additionally, the loans provide for a cash sweep mechanism that will mandatorily repay 50% of the company's excess cash flow on a semiannual basis. The loans outstanding as at 31 December 2019 amounted to €198,89 million.

The Group has provided letters of comfort and guarantees in favour of banks as security for loans granted by them to Elpedison SA. As at 31 December 2019, the Group's share of the above was €105 million (31 December 2018: €83 million).

Impairment of investment in Elpedison B.V.

As at 31 December 2019, Elpedison B.V. Management carried out an impairment test according to the requirements of IAS 36, based on the post-tax cash flows produced by the company. The anticipated future developments in the market and regulatory environment (change in remuneration mechanisms and/or delay of their enforcement, intensification of competition) in which the company operates, were considered as indicators of impairment, as they could impact the future cash flows of its assets.

The valuation analysis considered Elpedison S.A.'s two gas fired power plants and the supply business unit as a single cash generation unit (CGU). The analysis was carried out by identifying the recoverable value ("value in use") of the CGU. The estimation of the value in use was performed through the application of the Discounted

Cash Flow Valuation Method. The discount rate applied was 6,8% and was estimated as the post-tax Weighted Average Cost of Capital (WACC) of the company. Based on this impairment test, the Group concluded that the carrying amount of its investment is recoverable and consequently no impairment charge was recorded.

It should be noted that the assumptions and scenarios used could further change in the future, particularly in an environment characterized by high volatility. Relevant changes in assumptions used e.g. in the future Annual Flexibility Remuneration and in discount rates, could have an impact on the value in use of the assets.

It is estimated that at 31 December 2019 if the WACC used in the impairment test was higher by 0,5% with all other variables held constant, the Equity Value of Elpedison BV would have been lower by 10%. In addition, if the future Annual Flexibility Remuneration was lower by 10% with all other variables held constant, the Equity Value of Elpedison BV would have been lower by 14%. In both sensitivity analysis' scenarios, the carrying amount of the Group's investment in Elpedison BV is recoverable.

b) Associates

The Group exercises significant influence over a number of entities, which are also accounted for using the equity method.

DEPA Group

The DEPA Group operates in the wholesale, trading, transmission, distribution and supply of natural gas. Its shareholders are the Hellenic Republic Assets Development Fund (65%) and HELPE S.A. (35%).

The DEPA Group fully consolidates its 100% shareholding in:

- EDA Attica S.A. (gas Distribution Company for the Attica region),
- EPA Attica S.A. (gas Supply Company for the Attica region), and
- DEDA SA (Administrator of the Natural Gas Medium & Low Pressure Distribution System for areas other than the areas in which EDA Attica S.A. & EDA THESS S.A. are active).

Furthermore, DEPA S.A. has a 51% shareholding in EDA THESS S.A. (gas Distribution Company for the Thessaloniki and Thessalia regions), which it is accounted for using the equity method of accounting. Finally, DEPA S.A. has a 50% shareholding in IGI Poseidon S.A. (Joint Venture between DEPA S.A. and Edison S.p.A.), which is engaged in the development of gas infrastructure projects in South East Europe.

On 20 July 2018, DEPA S.A. sold its 51% shareholding in EPA Thessaloniki-Thessalia S.A. or "Zeniθ" (gas Supply Company for the Thessaloniki and Thessalia regions) to Eni gas e luce S.p.A. (EGL). The results of EPA Thessaloniki-Thessalia S.A. up until the date of sale, were consolidated using the equity method of accounting. Additionally, on 27 November 2018, DEPA S.A. acquired the remaining 49% of EPA Attica S.A. & EDA Attica S.A. (now holds the 100% of both) from Attiki Gas. The results of both companies up until the date of acquisition, were consolidated using the equity method of accounting. Furthermore, the sale of the 100% shareholding of DESFA (Administrator of the Natural Gas High Pressure Transmission System) was finalized during December 2018. The results of DESFA S.A. up until the date of sale, were fully consolidated.

The table below summarizes the key financials of DEPA Group:

Public Natural Gas Corporation of Greece (DEPA)	**As at 31 December 2019**	**31 December 2018**
Statement of Financial Position		
Non-Current Assets	955.813	943.137
Cash and Cash Equivalents	295.849	302.363
Other Current Assets	293.331	393.687
Total Assets	**1.544.993**	**1.639.187**
Equity	**973.777**	**995.824**
Non-Current Liabilities	376.635	377.001
Short Term Borrowings	16.300	14.170
Other Current Liabilities	178.280	252.191
Total Liabilities	**571.216**	**643.362**
Total Liabilities and Equity	**1.544.993**	**1.639.187**
Investment in DEPA Group as accounted in Helpe Group	**340.822**	**348.498**

	As at 31 December 2019	**As at 31 December 2018**
Statement of Comprehensive Income		
Continuing operations		
Revenue	953.671	927.386
EBITDA	**86.460**	**104.560**
Depreciation & Amortisation	(31.281)	(77.123)
Operating Profit	**55.179**	**27.437**
Interest Income	14.049	36.464
Interest Expense	(1.898)	(20.509)
Profit before Tax	**76.216**	**130.496**
Income Tax	(16.847)	(20.250)
Profit from continuing operations	**59.368**	**110.246**
Discontinued operations		
Loss from discontinued operations	**-**	**(114.445)**
Total Profit/ (Loss) After Tax	**59.368**	**(4.199)**
Other comprehensive loss	**(537)**	**(825)**
Total Comprehensive Income/ (Loss)	**58.831**	**(5.024)**
Share of profit/ (loss) accounted in Helpe Group	**20.819**	**(1.507)**
Share of other comprehensive loss accounted in Helpe Group	**(188)**	**(289)**

In 2019, the Group received cash dividends of €28 million from the DEPA Group (2018: €307 million – From this, €23 million related to the results of 2017 and €284 million related to the proceeds from the sale of DESFA).

The Group consolidates the DEPA Group using the equity method of accounting and the carrying value of the investment in the consolidated financial statements reflects HELPE's 35% share of the net asset value of the DEPA group which as at 31 December 2019 amounts to €341 million (31 December 2018: €348 million). The cost of investment of the DEPA group in the financial statements of HELPE S.A is €237 million.

Other associates

The Group's subsidiary company, Hellenic Petroleum International AG, participates in the shareholding of DMEP Holdco Ltd (48% shareholding). DMEP HoldCo Ltd is incorporated in the UK and ultimately owns 100% of "OTSM S.A. of Maintenance Compulsory Stocks and Trading of Crude Oil and Petroleum Products" (OTSM). OTSM is established under Greek law and is fully permitted to provide crude oil and petroleum products stock keeping and management services. The Group has delegated part of its compulsory stock keeping obligations to OTSM, reducing its stock holding by approximately 142 kMT (31 December 2018: 114 kMT), at a fee calculated in line with the legal framework.

An analysis of the financial position and results of the Group's major associates is set out below:

	% interest held			As at 31 December 2019		
		Investment	**Assets**	**Liabilities**	**Revenues**	**Profit after tax**
Spata Aviation Fuel Company S.A.	33%	1.029	5.506	4.231	8.262	3.794
ELPE THRAKI	25%	2	9	1	-	17
Athens Airport Fuel Pipeline Company S.A.	50%	4.509	12.234	3.175	4.358	1.504
DMEP Holdco	48%	523	74.021	120.507	40.279	1.137

	% interest held			As at 31 December 2018		
		Investment	**Assets**	**Liabilities**	**Revenues**	**Profit after tax**
Spata Aviation Fuel Company S.A.	33%	1.640	5.106	3.806	7.718	3.544
ELPE THRAKI	25%	(2)	7	16	-	(13)
Athens Airport Fuel Pipeline Company S.A.	50%	5.125	13.812	3.605	4.409	1.482
DMEP Holdco	48%	(1.191)	85.759	85.808	52.964	1.108
		390.091				-

There are no contingent liabilities or commitments in relation to the group's interest in its associates.

c) Joint operations

The Group participates in the following joint operations with other third parties relating to exploration and production of hydrocarbons in Greece and abroad:

- Edison International SpA (50%), HELPE Patraikos SA (50%) - Greece, Patraikos Gulf
- Calfrac Well Services Ltd (75%), HELPE Sea of Thrace SA (25%) - Greece, Sea of Thrace concession
- Total E&P Greece B.V. (50%), Edison International S.p.A (25%), HELPE West Kerkyra SA (25%) - Greece, Block 2, West of Corfu Island.
- Total E&P Greece B.V. (40%), Exxon Mobil Exploration and Production Greece (Crete) B.V. (40%), HELPE SA (20%) - Greece, Block West Crete.
- Total E&P Greece B.V. (40%), Exxon Mobil Exploration and Production Greece (Crete) B.V. (40%), HELPE SA (20%) - Greece, Block South West Crete.
- Repsol Exploracion (50%), HELPE SA (50%) - Greece, Block Ionian.

The jointly controlled operations are still on a research phase and do not contribute to the Group's revenue.

10 Loans, advances & long term assets

	As at 31 December 2019	31 December 2018
Loans and advances	19.884	38.668
Other long term assets	35.554	35.254
Total	**55.438**	**73.922**

Loans and advances are primarily comprised of payments advanced to secure the long term retail network which are amortised over the remaining life of the respective contracts of the petrol station locations.

Other long term assets include merchandise credit extended to third parties as part of the operation of the marketing segment and are non-interest bearing. They also include trade receivables due in more than one year as a result of settlement arrangements.

The balances included in the above categories as at 31 December 2019, relating to merchandise credit and non-interest bearing settlement arrangements, are discounted at a weighted average rate of 6% (2018: 6%) over their respective lives.

11 Inventories

	As at	
	31 December 2019	**31 December 2018**
Crude oil	331.819	328.482
Refined products and semi-finished products	587.398	572.461
Petrochemicals	25.554	24.400
Consumable materials and other spare parts	98.571	97.518
- Less: Provision for consumables and spare parts	(30.540)	(29.830)
Total	**1.012.802**	**993.031**

Under IEA and EU regulations, Greece is obliged to hold crude oil and refined product stocks in order to fulfil the EU requirement for compulsory Stock obligations (90 days stock directive), as legislated by Greek Law 3054/2002. This responsibility is passed on to all companies, including Hellenic Petroleum S.A., which import and sell in the domestic market who have the responsibility to maintain and finance the appropriate stock levels. Such stocks are part of the operating stocks and are valued on the same basis.

The cost of inventories recognised as an expense and included in “Cost of sales” amounted to €7,5 billion (2018: €8,2 billion). The Group has reported a loss of €2,1 million as at 31 December 2019 arising from inventory valuation which is reflected in a write-down of the year end values (2018 – €32,4 million). This was recognised as an expense in the year ended 31 December 2019 and included in ‘Cost of Sales’ in the statement of comprehensive income. Overall for 2019, management has estimated that the impact on the results of the Group from the fluctuations of crude oil and product prices during the year was positive and equal to approx. €24 million (2018: positive impact of €48 million).

In addition, as at 31 December 2019, an amount of €1,2 million relating to spare parts for the refinery units, has been transferred from fixed assets to inventories (December 2018: €5,2 million transfer from inventories to fixed assets -see Note 6).

12 Trade and other receivables

	As at	
	31 December 2019	**31 December 2018**
Trade receivables	748.181	756.135
- Less: Provision for impairment of receivables	(255.023)	(262.133)
Trade receivables net	**493.158**	**494.002**
Other receivables	275.695	296.339
- Less: Provision for impairment of receivables	(44.120)	(42.304)
Other receivables net	**231.575**	**254.035**
Derivatives used for hedging (Note 23)	3.474	-
Deferred charges and prepayments	23.420	28.450
Total	**748.153**	**776.487**

Restatement: The other receivables balance as at 31 December 2018 has been restated by €1,2 million reclassified from cash and cash equivalents (Note 13), €3,8 million reclassified from long-term provisions in provisions for impairment of trade receivables and for €37,9 million reclassified from other receivables to income tax receivable.

As part of its working capital management, the Group utilises factoring facilities to accelerate the collection of cash from its customers in Greece. Non-recourse factoring is excluded from balances shown above since all risks and rewards of the relevant invoices have been transferred to the factoring institution.

Other receivables include balances in respect of advances to suppliers, advances to personnel, VAT, withholding taxes and taxes paid other than taxes related to income tax, as a result of tax audit assessments during previous years from the tax authorities where the Group has commenced legal proceedings and disputed the relevant amounts. The timing of the finalization of these disputes cannot be estimated and the Group has classified the amounts as current assets. This balance as at 31 December 2019 also includes an amount of €54m (31 December 2018: €54m) of VAT approved refunds which has been withheld by the customs authorities due to a dispute relating to stock shortages. The Group has filed a specific legal objection and claim against this action and expects to fully recover this amount following the conclusion of the relevant legal proceedings (Note 33).

The fair values of trade receivables approximate their carrying amount.

The table below analyses total trade receivables:

	As at	
	31 December 2019	**31 December 2018**
Not past due	343.356	345.026
Past due	404.825	411.109
Total trade receivables	**748.181**	**756.135**

The overdue days of trade receivables that were past due are as follows:

	As at	
	31 December 2019	**31 December 2018**
Up to 30 days	103.608	83.859
30 - 90 days	20.767	18.526
Over 90 days	280.450	308.724
Total	**404.825**	**411.109**

Regarding trade receivables, an impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses (ECLs). The maximum exposure to credit risk at the reporting date is the carrying

value of each class of receivable. Collaterals include primarily first or second class pre-notices over properties of the debtor, personal and bank guarantees.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix:

	< 30 days	31 - 90 days	> 91 days	Total
Expected credit loss rate	0,02%	0,10%	90,89%	34,09%
Total gross carrying amount	446.964	20.767	280.450	748.181
Expected credit loss	100	20	254.903	255.023

The movement in the provision for impairment of trade receivables is set out below.

	As at	
	31 December 2019	**31 December 2018**
Balance at 1 January	262.133	248.008
Effect of change in accounting policy	-	2.084
Charged / (credited) to the statement of comprehensive income		
- Exchange differences	299	136
- Additional provisions	13.209	19.241
- Unused amounts reversed	(5.189)	(2.936)
Receivables written off during the year as uncollectible	(15.226)	(4.640)
- Unwinding of discount	(182)	-
Transfers and other movements	(21)	240
Balance at 31 December	**255.023**	**262.133**

The movement in the provision for impairment has been included in Selling & Distribution costs in the statement of comprehensive income.

The movement in the provision for impairment of other receivables is set out below.

	As at	
	31 December 2019	**31 December 2018**
Balance at 1 January	42.304	47.566
Charged / (credited) to the statement of comprehensive income		
- Additional provisions	2.351	4.662
- Unused amounts reversed	(155)	(3.795)
- Receivables written off during the year as uncollectible	(318)	-
- Unwinding of discount	-	(12)
Transfer to litigation provision	-	(6.000)
Other movements	(62)	(117)
Balance at 31 December	**44.120**	**42.304**

13 Cash and cash equivalents

	As at	
	31 December 2019	**31 December 2018**
Cash at bank and in hand	1.083.747	1.275.159
Short term bank deposits	4.451	-
Cash and Cash Equivalents	**1.088.198**	**1.275.159**

Restatement: During the year, the Group reconsidered the presentation of restricted cash balances and now includes such balances in the caption "Trade and other receivables". Previously, such balances were included in the caption "Cash, cash equivalents and restricted cash". Following the reconsideration, an adjustment was applied retrospectively to the 2018 comparative balance by reclassifying an amount of € 1,2 million from "Cash, cash equivalents and restricted cash" to "Trade and other receivables"

The balance of US Dollars included in Cash at bank as at 31 December 2019 was $824 million (euro equivalent €734 million). The respective amount for the period ended 31 December 2018 was $891 million (euro equivalent €779 million).

The weighted average effective interest rate as at the reporting date on cash and cash equivalents was:

	As at	
	31 December 2019	**31 December 2018**
Euro	0,05%	0,03%
USD	0,14%	0,09%

14 Share capital

	Number of Shares (authorised and issued)	Share Capital	Share premium	Total
As at 1 January & 31 December 2018	305.635.185	666.285	353.796	1.020.081
As at 31 December 2019	305.635.185	666.285	353.796	1.020.081

All ordinary shares were authorised, issued and fully paid. The nominal value of each ordinary share is €2,18 (31 December 2018: €2,18).

15 Reserves

		Statutory reserve	Special reserves	Hedging reserve	Share-based payment reserve	Tax free & Incentive Law Reserves	Other reserves	Treasury shares	Total
Balance at 31 December 2017 as originally presented		**118.668**	**86.495**	**8.175**	**94**	**164.982**	**(19.827)**	**(531)**	**358.056**
Change in accounting policy		-	-	-	-	-	166	-	166
Restated total equity as at 1 January 2018		**118.668**	**86.495**	**8.175**	**94**	**164.982**	**(19.661)**	**(531)**	**358.222**
Changes in the fair value of equity investments		-	-	-	-	-	(700)	-	(700)
Currency translation differences and other movements		-	-	-	-	-	(740)	-	(740)
Recycling of gains / (losses) on hedges through comprehensive income		-	-	(14.920)	-	-	-	-	(14.920)
Fair value gains / (losses) on cash flow hedges		-	-	(5.006)	-	-	-	-	(5.006)
Actuarial gains / (losses) on defined benefit pension plans		-	-	-	-	-	(11.002)	-	(11.002)
Share-based payments	**13**	-	-	-	(93)	-	-	-	(93)
Share of other comprehensive income of associates		-	-	-	-	-	(288)	-	(288)
Acquisition of treasury shares	**13**	-	-	-	-	-	-	(683)	(683)
Issue of treasury shares to employees	**13**	-	-	-	-	-	-	1.214	1.214
Transfers of tax on reserves distributed to retained earnings		-	-	-	-	(17.319)	-	-	(17.319)
Dividends		-	-	-	-	(76.408)	-	-	(76.408)
Transfer to Statutory Reserve		26.170	-	-	-	-	-	-	26.170
Transfer of grant received to tax free reserves		-	-	-	-	80	-	-	80
Balance at 31 December 2018		**144.838**	**86.495**	**(11.751)**	**1**	**71.335**	**(32.391)**	**-**	**258.527**
Changes in the fair value of equity instruments		-	-	-	-	-	525	-	525
Recycling of gains / (losses) on hedges through comprehensive income		-	-	1.501	-	-	-	-	1.501
Transfers to statutory and tax reserves		15.818	-	-	-	-	-	-	15.818
Actuarial gains / (losses) on defined benefit pension plans		-	-	-	-	-	(12.372)	-	(12.372)
Fair value gains / (losses) on cash flow hedges		-	-	12.890	-	-	-	-	12.890
Currency translation differences and other movements	**13**	-	-	-	-	-	271	-	271
Share of other comprehensive loss of associates		-	-	-	-	-	(188)	-	(188)
Balance at 31 December 2019		**160.656**	**86.495**	**2.640**	**1**	**71.335**	**(44.155)**	**-**	**276.972**

Statutory reserves

Under Greek law, corporations are required to transfer a minimum of 5% of their annual net profit as reflected in their statutory books to a statutory reserve until this reserve is equal to one third of the outstanding share capital. This reserve cannot be distributed during the existence of the corporation, but can be used to offset accumulated losses.

Special reserves

Special reserves primarily relate to reserves arising from tax revaluations which have been included in the parent company accounts in accordance with the relevant legislation in prior years.

Tax free and Incentive Law reserves

These reserves relate to retained earnings that have not been taxed with the prevailing corporate income tax rate as allowed by Greek law under various statutes and include reserves relating to investments under incentive laws. These reserves will become liable to tax at the rate prevailing at the time of distribution to shareholders or conversion to share capital under certain conditions.

Hedging reserve

The hedging reserve is used to record gains or losses on derivatives that are designated and qualify as cash flow hedges and that are recognised in other comprehensive income. Amounts are reclassified to profit or loss when the associated hedged transaction affects profit or loss.

Other reserves

Other reserves are almost entirely comprised of actuarial losses.

Other reserves include:

(i) Actuarial gains / (losses) on defined benefit plans resulting from a) experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred) and b) the effects of changes in actuarial assumptions.

(ii) Changes in the fair value of investments that are classified as investments in equity instruments.

(iii) Exchange differences arising on translation of foreign controlled entities, which are recognised in other comprehensive income. The cumulative amount is reclassified to the profit or loss when the net investment is disposed of.

16 Trade and other payables

	As at	
	31 December 2019	**31 December 2018**
Trade payables	1.238.776	1.137.603
Accrued expenses	77.477	138.022
Other payables	85.479	73.528
Total	**1.401.732**	**1.349.153**

Trade payables are comprised of amounts payable or accrued in respect of supplies of crude oil, products, and services.

Trade payables, as at 31 December 2019 and 31 December 2018, include amounts in respect of crude oil imports from Iran, which were received between December 2011 and March 2012 as part of a long-term contract with NIOC. Despite repeated attempts to settle the payment for these cargoes through the international banking system between January and June 2012, it has not been possible to do so. In the period from 16 January 2016 up to 8 May 2018, when sanctions were suspended, the Group successfully made several payments against a significant part of these amounts. Following the re-imposition of relevant sanctions by the United States, no deliveries of Iranian crude oil or payments have taken place since 8 May 2018.

Accrued expenses mainly relate to accrued interest, payroll related accruals and accruals for operating expenses not yet invoiced. Accrued expenses include the estimated cost of the CO2 emission rights required under the corresponding environmental legislation amounting to €12 million as at 31 December 2019 (2018: €54 million).

Other payables include amounts in respect of payroll related liabilities, social security obligations and sundry taxes.

17 Interest bearing loans and borrowings

	As at	
	31 December 2019	**31 December 2018**
Non-current interest bearing loans and borrowings		
Bank borrowings	917.938	1.178.075
Eurobonds	692.156	446.715
Finance leases	-	2.381
Total non-current interest bearing loans and borrowings	**1.610.094**	**1.627.171**
Current interest bearing loans and borrowings		
Short term bank borrowings	977.826	745.278
Eurobonds	-	318.386
Current portion of long-term bank borrowings	44.444	44.444
Finance leases - current portion	-	677
Total current interest bearing loans and borrowings	**1.022.270**	**1.108.785**
Total interest bearing loans and borrowings	**2.632.364**	**2.735.956**

Non-current interest bearing loans and borrowings mature as follows:

	As at	
	31 December 2019	**31 December 2018**
Between 1 and 2 years	702.348	267.038
Between 2 and 5 years	907.746	1.360.133
	1.610.094	**1.627.171**

The weighted average effective interest margins are as follows:

		As at	
Borrowings	**Currency**	**31 December 2019**	**31 December 2018**
Short-term			
- Floating Euribor + margin	Euro	3,30%	5,18%
- Floating Libor + margin	US Dollar	4,84%	6,88%
- Floating Belibor + margin	Serbian Dinar	2,84%	4,20%
- Floating Reference Rate + margin	Bulgarian Lev	1,89%	1,98%
- Fixed coupon	Euro	-	5,25%
Long-term			
- Floating Euribor + margin	Euro	2,81%	2,77%
- Floating Libor + margin	US Dollar	4,60%	5,42%
- Fixed coupon	Euro	2,82%	4,88%

The carrying amounts of the Group’s borrowings are denominated in the following currencies:

	As at	
	31 December 2019	**31 December 2018**
Euro	2.429.503	2.529.086
US Dollar	158.941	155.060
Serbian Dinar	15.053	15.098
Bulgarian Lev	28.867	36.712
Total interest bearing loans and borrowings	**2.632.364**	**2.735.956**

The Group has centralised treasury operations which coordinate and control the funding and cash management activities of all group companies. Within this framework, Hellenic Petroleum Finance plc (HPF) was established in November 2005 in the U.K. as a wholly-owned subsidiary of Hellenic Petroleum S.A. to act as the central treasury vehicle of the Hellenic Petroleum Group.

Group borrowings by maturity date as at 31 December 2019 and 31 December 2018 are summarised in the table below (amounts in € million):

			Balance as at	
	Company	**Maturity**	**31 December 2019**	**31 December 2018**
1 Bond loan €400 million	HP SA	Jun 2023	394	392
2. Bond loan €400 million	HP SA	Nov 2020	224	223
3. Bond loan €300 million	HP SA	Feb 2021	299	297
4. Bond loan $ 250 million	HP SA	June 2021	159	155
5. European Investment Bank ("EIB")Term loan	HP SA	Jun 2022	111	156
6. Eurobond €325 million	HPF plc	Jul 2019	-	318
7. Eurobond €450 million	HPF plc	Oct 2021	200	447
8. Eurobond €500 million	HPF plc	Oct 2024	491	-
9. Bilateral lines	Various	Various	754	745
10. Finance leases	Various	Various	-	3
Total			**2.632**	**2.736**

Refer to ‘Liquidity Risk Management’ (Note 3.1c) for an analysis of the Group’s plans regarding the facilities falling due in 2020.

No loans were in default as at 31 December 2019 (none as at 31 December 2018).

1. Bond loan €400 million maturing in June 2023

In June 2018, the Group prepaid two loan facilities which had a total outstanding balance of €380 million. The facilities were refinanced with a 5 year syndicated revolving bond loan facility issued by Hellenic Petroleum S.A. and subscribed to by Greek and international banks for an amount of €400 million. The outstanding amount of the loan as at 31 December 2019 was €400 million.

2. Bond Loan €400 million maturing in November 2020 (plus one year extension option)

In November 2018 Hellenic Petroleum SA refinanced a €400 million syndicated bond loan with a new facility of the same principal amount maturing in 2 years which has a 1 year extension option. The outstanding amount of the loan as at 31 December 2019 was €225 million.

3. Bond loan €300 million maturing in February 2021

In January 2015 Hellenic Petroleum S.A. issued a €200 million revolving bond loan facility with a tenor of 3 years. The facility was refinanced in February 2018 for an increased amount of €300 million and a new tenor of 3 years. The outstanding amount of the loan as at 31 December 2019 was €300 million.

4. Bond Loan $250 million maturing in June 2021

In June 2018 Hellenic Petroleum S.A. issued a $250 million revolving bond loan facility with a tenor of 3 years. The outstanding amount of the loan as at 31 December 2019 was $180 million.

5. EIB Term loans maturing in June 2022

In May 2010, Hellenic Petroleum S.A. signed two loan agreements (Facilities A and B) with the European Investment Bank for a total amount of €400 million (€200 million each). The purpose of the loans was to finance part of the investment programme related to the upgrade of the Elefsina Refinery. Both loans had a maturity of twelve years and a 3 year grace period as well as similar terms and conditions. Facility B was credit enhanced by a commercial bank guarantee until February 2018 (this is normal lending practice for EIB particularly during the construction phase of large projects). Total repayments on both loans up to 31 December 2019 amounted to €289

million (€44 million paid during 2019). Facility B includes financial covenant ratios (leverage, interest cover and gearing ratios) which were amended in February 2018 in order to become aligned with those included in the Group's loans with commercial banks and Eurobonds.

6. Eurobond €325m maturing in July 2019

In July 2014 Hellenic Petroleum Finance PLC issued a €325 million 5 year eurobond with a 5.25% annual coupon maturing in July 2019. The Notes, which are guaranteed by Hellenic Petroleum S.A., are listed on the Luxembourg Stock Exchange. In July 2019 Hellenic Petroleum Finance fully repaid the outstanding balance of €319.8 million.

7. Eurobond €450m maturing in October 2021

In October 2016 Hellenic Petroleum Finance PLC issued a €375 million 5 year 4.875% Eurobond guaranteed by Hellenic Petroleum S.A. with the issue price being 99.453 per cent. of the principal amount. The proceeds of the issue were used to repay existing financial indebtedness including a partial prepayment of a €500 million eurobond maturing in May 2017. The latter was effected via a tender offer process where notes of nominal value of €225 million were accepted. In July 2017 Hellenic Petroleum Finance PLC issued a notional amount of €74.53 million of notes guaranteed by Hellenic Petroleum S.A. maturing in October 2021 which were consolidated and form a single series with the €375 million 4.875% guaranteed notes as per above. The notes were partially prepaid in October 2019 with the proceeds of a new 5-year Eurobond issue of €500 million as detailed below. The balance of the notes as at 31 December 2019 was €201 million. Finance costs incurred related to the tender offer amounted to €24,6 million and are recorded in finance expenses in profit or loss of the statement of comprehensive income. Total cash outflow for the partial prepayment of the bonds amounted to €273 million.

8. Eurobond €500m maturing in October 2024

In October 2019, Hellenic Petroleum Finance PLC issued a €500 million five-year 2% Eurobond guaranteed by Hellenic Petroleum S.A. with the issue price being 99.41 per cent. of the principal amount. The notes mature in October 2024. Part of the proceeds of the issue were used for the partial prepayment of the €450 million Eurobond maturing in October 2021 through a tender offer process which was completed in October 2019 during which notes of nominal value of €248,4 million were accepted. Net cash inflow from this issue amounted to €251,6 million (excluding fees capitalized).

9. Bilateral lines

The Group companies have uncommitted credit facilities with various banks to finance general corporate needs which are renewed in accordance with the Group's finance needs. The facilities are mainly comprised of short-term loans of the parent company. During 2019, the Group achieved further improvements in the cost base of the facilities.

10. Finance leases

From 1 January 2019, following the adoption of IFRS 16, liabilities relating to finance leases, previously included within borrowings, are now presented within lease liabilities. (Note 18).

No other significant movements occurred in borrowings during the year ended 31 December 2019.

Certain medium term credit agreements, include financial covenants mainly for the maintenance of certain ratios such as: "Consolidated Net Debt/ Consolidated Adjusted EBITDA", "Consolidated Adjusted EBITDA/ Consolidated Net Interest" and "Consolidated Net Debt/ Consolidated Net Worth". Management monitors the Group's performance to ensure compliance with the above covenants.

18 Lease liabilities

Set out below are the carrying amounts of lease liabilities and the movements during the period:

	Note	
As at 1 January 2019		**180.198**
Additions		36.378
Derecognition		(471)
Modification		14.467
Interest Cost	**27**	10.081
Repayment		(40.793)
Foreign exchange difference		33
As at 31 December 2019		**199.894**
Current		**30.537**
Non-current		**169.357**

The following are the amounts recognized in the consolidated statement of comprehensive income:

	Note	2019
Depreciation expense for right-of-use assets	**7**	39.103
Interest expense on lease liabilities	**27**	10.081
Expense relating to short-term leases		4.552
Expense relating to leases of low-value assets		195
Variable lease payments		1.112
Total amount recognised in statement of comprehensive income		**55.043**

The maturity table of the undiscounted cash flows of the lease liabilities is presented below.

	Less than 1 year	Between 1 and 5 years	Over 5 years	Total
As at 31 December 2019				
Lease liabilities	36.124	86.135	89.327	211.586

19 Deferred income tax

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

The offset amounts are as follows:

	As at	
	31 December 2019	**31 December 2018**
Deferred tax assets	59.358	64.109
Deferred tax liabilities	(213.495)	(185.744)
	(154.137)	**(121.635)**

The gross movement on the deferred income tax asset / (liability) is as follows:

	As at	
	31 December 2019	**31 December 2018**
Beginning of the year	(121.635)	(60.256)
Income statement charge	(29.807)	(72.957)
Charged / (released) to equity	(2.921)	10.911
Restatement of equity	0	531
Other movements	226	136
End of year	**(154.137)**	**(121.635)**

Deferred tax relates to the following types of temporary differences:

	As at	
	31 December 2019	**31 December 2018**
Intangible and tangible fixed assets	(219.535)	(213.073)
Inventory valuation	11.654	11.385
Unrealised exchange gains	139	(3.387)
Employee benefits provision	42.008	42.359
Provision for bad debts	33.914	39.318
Derivative financial instruments at fair value	(834)	4.002
Interest cost carried forward (thin capitalisation)	3.128	3.997
Tax free reserves (Law 4172/2013)	512	-
Tax losses carried forward	1.268	5.479
Environmental provisions	6.396	18.311
Impairment of investments	11.179	7.737
Unearned profit in stock	1.178	2.129
Other temporary differences relating to provisions and accruals	2.034	8.604
Deferred Tax on distribution of DESFA shares by DEPA	(46.556)	(48.496)
Leases (IFRS 16)	(623)	-
End of year	**(154.137)**	**(121.635)**

Deferred tax assets relating to tax loss carry-forwards are recognised if it is probable that they can be offset against future taxable profits. As at 31 December 2019, the Group recognised deferred tax assets on tax loss carry-forwards totalling €1 million (2018: €5 million) since, on the basis of the approved business plan, the Group considers it probable that these can be offset against future taxable profits.

In 2014, thin capitalization rules as per art. 49 of law 4172/2013 were applied for the first time, whereby the net interest expense is deductible up to a certain percentage of tax EBITDA (60% for 2014, 50% for 2015, 40% for 2016 and 30% thereafter). This resulted in a deferred tax asset of €3 million as at 31 December 2019 (31 December 2018: €4 million), which can be offset against future taxable profits without any time constraints.

20 Retirement benefit obligations

The table below outlines where the Group's retirement benefit amounts and activity are included in the financial statements.

	As at	
	31 December 2019	31 December 2018
Statement of Financial Position obligations for:		
Pension benefits	180.398	163.514
Liability in the Statement of Financial Position	**180.398**	**163.514**
Statement of Comprehensive Income charge for:		
Pension benefits	20.858	22.201
Total as per Statement of Comprehensive Income	**20.858**	**22.201**
Remeasurements for:		
Pension benefits	15.049	13.750
Tax	(2.680)	(2.738)
Total as per Statement of Other Comprehensive Income	**12.369**	**11.012**

The amounts recognised in the Statement of Financial Position are as follows:

	As at	
	31 December 2019	31 December 2018
Present value of funded obligations	27.971	21.663
Fair value of plan assets	(11.479)	(10.108)
Deficit of funded plans	**16.492**	**11.555**
Present value of unfunded obligations	163.906	151.959
Liability in the Statement of Financial Position	**180.398**	**163.514**

The Group operates defined benefit pension plans in Greece, Bulgaria, Serbia, North Macedonia, Montenegro and Cyprus. All of the plans are final salary pension plans. The level of benefits provided depend on members' length of service and remuneration. The majority of the plans are unfunded, however there are certain plans in Greece and Cyprus that have plan assets.

The movement in the defined benefit obligation is as follows:

	Present Value of Obligation	Fair Value of Plan Assets	Total
As at 1 January 2018	**142.786**	**(9.530)**	**133.256**
Current service cost	7.243	-	7.243
Interest expense/(income)	2.950	(158)	2.792
Past service costs and (gains)/losses on settlements	12.166	-	12.166
Statement of comprehensive income charge (P&L)	**22.359**	**(158)**	**22.201**
Remeasurements:			
- Return on plan assets, excluding amounts included in Interest expense/(income)	-	322	322
- (Gain)/loss from change in demographic assumptions	(6)	-	(6)
- (Gain)/loss from change in financial assumptions	10.852	-	10.852
- Experience (gains)/losses	2.582	-	2.582
Statement of comprehensive income charge (OCI)	**13.428**	**322**	**13.750**
Benefits paid directly by the group/Contributions paid by the group	(3.881)	(1.322)	(5.203)
Benefit payments from the plan	(1.074)	595	(479)
Contributions paid by employees	17	(17)	
Settlement payments from the plan	(12)	-	(12)
As at 31 December 2018	**173.623**	**(10.108)**	**163.514**

	Present Value of Obligation	Fair Value of Plan Assets	Total
As at 1 January 2019	**173.623**	**(10.108)**	**163.514**
Current service cost	8.661	-	8.661
Interest expense/(income)	2.979	(166)	2.813
Past service costs and (gains)/losses on settlements	9.384	-	9.384
Statement of comprehensive income charge (P&L)	**21.024**	**(166)**	**20.858**
Remeasurements:			
- Return on plan assets, excluding amounts included in Interest expense/(income)	-	(480)	(480)
- (Gain)/loss from change in demographic assumptions	(909)	-	(909)
- (Gain)/loss from change in financial assumptions	20.012	-	20.012
- Experience (gains)/losses	(3.574)	-	(3.574)
Statement of comprehensive income charge (OCI)	**15.529**	**(480)**	**15.049**
Benefits paid directly by the group/Contributions paid by the group	(15.467)	(1.350)	(16.817)
Benefit payments from the plan	(2.844)	638	(2.206)
Contributions paid by employees	13	(13)	-
As at 31 December 2019	**191.878**	**(11.479)**	**180.398**

Past service costs include the Voluntary Retirement Scheme costs for 2019 of €9,1 million (Note 24).

The expected maturity analysis of undiscounted pension benefits is as follows:

Balance at 31 December 2019	**Less than a year**	**Between 1-2 years**	**Between 2-5 years**	**Over 5 years**	**Total**
Pension Benefits	6.312	17.024	39.286	153.657	**216.279**

Plan assets are comprised as follows:

	2019				**2018**			
	Quoted	**Unquoted**	**Total**	**%**	**Quoted**	**Unquoted**	**Total**	**%**
Equity Instruments	1.668	-	1.668	15%	1.973	-	1.973	20%
Debt Instruments								
- Government bonds	1.735	-	1.735	15%	1.228	-	1.228	12%
- Corporate bonds	3.159	-	3.159	28%	2.961	-	2.961	29%
Investment funds	2.074	-	2.074	18%	2.139	-	2.139	21%
Real Estate / Property	1.421	-	1.420	12%	1.421	-	1.420	14%
Cash and cash equivalents	138	1.285	1.423	12%	196	191	387	4%
Total	**10.195**	**1.285**	**11.479**	**100%**	**9.918**	**191**	**10.108**	**100%**

The principal actuarial assumptions used were as follows:

	As at 31 December 2019	**31 December 2018**
Discount Rate	1,05%	2,05%
Future Salary Increases	1,10% - 2,50%	1,10% - 1,50%
Inflation	1,10%	1,10%
Average future working life in years	10,84	16,18

The sensitivity of the defined benefit obligation (DBO) to changes in the weighted principal assumptions is:

	Impact on Defined Benefit Obligation		
	Change in assumption	**Increase in DBO**	**Decrease in DBO**
Discount Rate	-1,0%	-4,94%	5,36%
Future Salary Increases	0,5%	5,15%	Not appicable

The above sensitivity analysis is based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognized within the statement of financial position.

Expected contributions to defined benefit plans for the following year amount to €1,2 million. The weighted average duration of the defined benefit obligation is 11 years.

21 Provisions

The movement for provisions for 2019 and 2018 is as follows:

	Provisions for other liabilities and charges
At 1 January 2018	**6.371**
Charged / (credited) to the statement of comprehensive income:	
- Additional provisions	30.895
- Unused amounts reversed	(2.511)
- Utilized during year	(3.705)
Transfer from Note 12	6.000
Other movements / reclassifications	1.188
At 31 December 2018	**38.238**
Charged / (credited) to the statement of comprehensive income:	
- Additional provisions	1.365
- Unused amounts reversed	(78)
- Utilized during year	(518)
Other movements / reclassifications	(13.382)
At 31 December 2019	**25.625**

Restatement: 'Other movements / reclassifications for the year ended 31 December 2018 includes an amount of €3,8 million that has been reclassified to provisions for impairment of trade receivables (Note 12).

Long-term provisions as at 31 December 2019 mainly comprise of environmental restoration costs of €15 million (2018: €15 million).

Other movements / reclassifications for 2019 include an amount of €12 million that relates to a tax provision reclassified to current income tax balance.

22 Other non-current liabilities

	As at	
	31 December 2019	**31 December 2018**
Government grants	10.329	10.939
Trade and other payables	18.047	17.913
Total	**28.376**	**28.852**

Government grants

Advances by the Government to the Group's entities relate to grants for the purchase of property plant and equipment. Amortisation for 2019 amounted to €1,0 million (2018: €1,0 million).

Trade and other payables

Trade and other payables, non-current are comprised of cash guarantees received from petrol station dealers/ managers of the Group's retail companies in order to ensure that contract terms and conditions are met.

23 Derivative financial instruments

	31 December 2019			31 December 2018		
Commodity derivative type		**Assets**	**Liabilities**		**Assets**	**Liabilities**
	Bbls'000	**€**	**€**	**Bbls'000**	**€**	**€**
Commodity Swaps	1.028	3.474		846	-	16.387
	1.028	**3.474**	**-**	**846**	**-**	**16.387**
Total	**1.028**	**3.474**	**-**	**846**	**-**	**16.387**

	31 December 2019		31 December 2018	
	Assets	**Liabilities**	**Assets**	**Liabilities**
Non-current portion				
Commodity swaps	-	-	-	-
	-	**-**	**-**	**-**
Current portion				
Commodity swaps	3.474	-	-	16.387
	3.474	**-**	**-**	**16.387**
Total	**3.474**	**-**	**-**	**16.387**

Derivatives are only used for economic hedging purposes and not as speculative investments. However, where derivatives do not meet the accounting hedging criteria, they are classified as 'held for trading' for accounting purposes.

The full fair value of a hedging derivative is classified as a non-current asset or liability if the remaining maturity of the hedged item is more than 12 months and, as a current asset or liability, if the maturity of the hedged item is less than 12 months.

Derivatives designated as cash flow hedges

During the year ended 31 December 2019 amounts transferred to the statement of comprehensive income, relating to contracts that were settled during the year, amounted to €1,501 million loss, net of tax (2018: €14,920 million gain, net of tax).

The remaining cash flow hedges are highly effective and the movement in their fair value, amounting to a gain of €12,890 million net of tax as at 31 December 2019, (2018: €5,006 million loss, net of tax), is included in the hedging reserve (see Note 15).

The maximum exposure to credit risk at the reporting date is the fair value of the derivative assets in the statement of financial position.

24 Expenses by nature

	For the year ended	
	31 December 2019	**31 December 2018**
Raw materials and consumables used	7.507.711	8.219.544
Employee costs	284.279	279.943
Depreciation	226.247	187.117
Amortisation	6.575	10.066
Transportation and warehouse costs	126.510	124.150
Production overheads	105.235	104.565
SWAPS gains / (losses)	12.751	(41.611)
Stock devaluations	2.001	32.705
Other expenses	250.220	328.238
Total cost of sales, distribution cost and administrative expenses	**8.521.529**	**9.244.717**

Restatement: Comparative balances of 31 December 2018 are restated to conform to the changes in presentation of the current year.

Other expenses mainly comprise items relating to maintenance & site expenses, insurance costs, provision for impairment of receivables, corporate social responsibility costs, third party services (consultancy & legal) expenses, IT costs and advertising and promotion costs. The current year's balance does not include rental cost, due to the application of IFRS 16 as from 1 January 2019.

The fees of Ernst & Young concerning the permissible non audit services which have been preapproved from the Audit Committee of the Company during 2019, amounts to €0,25m, out of which €0,13m related to fees of Ernst & Young Hellas.

Employee costs

Employee costs are set out in the table below:

	For the year ended	
	31 December 2019	**31 December 2018**
Wages and salaries	191.047	186.943
Social security costs	47.871	45.412
Pension costs	11.447	22.201
Other employment benefits	33.914	25.387
Total	**284.279**	**279.943**

Other employment benefits include medical insurance, catering and transportation expenses as well as voluntary retirement scheme costs of €9,1 million (Note 20).

25 Exploration and development expenses

Geological and geophysical costs are expensed as incurred (2019: €4,8 million and 2018: €1,4 million) and relate mainly to exploration operations including environmental and geological studies in the Patraikos Gulf, Arta – Preveza onshore Block, NW Peloponnese onshore Block and Block 2.

Exploration license costs relating to Patraikos, Arta Preveza, NW Peloponnese, Block 2, SW Crete, West Crete and Block 10 have been capitalized within intangible assets and are amortised over the term of the exploration period for each block.

26 Other operating income / (expenses) and other gains / (losses)

Other operating income / (expenses) and other gains / (losses) are analysed as follows:

	Note	For the year ended	
		31 December 2019	**31 December 2018**
Other operating income and other gains			
Income from Grants	**33**	1.049	965
Services to 3rd parties		3.014	2.874
Rental income		8.712	9.315
Insurance compensation		611	2.297
Profit from the sale of PPE		686	293
Discounting effect of long-term liabilities		1.464	2.363
Other		18.609	9.692
Total		**34.146**	**27.799**
Other operating expenses and other losses			
Loss from the sale of PPE		718	47
Impairment of fixed assets	**6**	4.606	3.734
Discounting effect of long-term receivables		2.423	2.817
Voluntary retirement scheme cost		9.119	596
Provision for environmental restoration		-	15.000
Other		6.929	14.428
Total		**23.795**	**36.622**
Other operating income / (expenses) and other gains / (losses) - Net		**10.351**	**(8.823)**

Restatement: Comparative balances of 31 December 2018 are restated to conform to changes in presentation of the current year.

Other operating income / (expenses) and other gains / (losses) include amounts which do not relate to the trading activities of the Group.

Rental income relates to long term rental of petrol stations, let to dealers.

Other category in other operating income includes various items of a non-trading nature, the most significant of which relates to reversal of provisions for impairment of receivables of €7,3 million.

27 Finance income / (expense)

	For the year ended	
	31 December 2019	**31 December 2018**
Interest income	5.843	3.827
Interest expense	(99.963)	(125.907)
Other finance costs	(46.340)	(23.625)
Lease finance cost	(10.081)	-
Finance costs -net	**(150.541)**	**(145.705)**

Finance costs amounting to €2,9 million (2018: €2,5 million) have been capitalised (Note 6).

Other finance costs for 2019 include a one-off expense of €24,6 million which relates to the finance cost of the tender offer for the new €500 million bond issued in October 2019 (Note 17).

28 Currency exchange gains / (losses)

Foreign currency exchange losses of €1 million for the year ended 31 December 2019 mainly relate to unrealized losses arising from the valuation of bank accounts denominated in foreign currency (mostly USD) as well as unrealized exchange losses arising from the valuation of borrowings denominated in foreign currency. The corresponding amount for the year ended 31 December 2018 was a gain of €2 million.

29 Income tax expense

The tax (charge) / credit relating to profit or loss components of comprehensive income, is as follows:

	For the year ended	
	31 December 2019	**31 December 2018**
Current tax	(18.555)	(72.025)
Tax on distribution of dividends	0	(13.490)
Prior year tax	4.928	4.254
Deferred tax (Note 19)	(29.807)	(72.957)
Income Tax (expense) / credit	**(43.434)**	**(154.218)**

The tax (charge) / credit relating to components of other comprehensive income, is as follows:

	For the year ended					
	31 December 2019			31 December 2018		
	Before tax	Tax (charge)/ credit	After tax	Before tax	Tax (charge)/ credit	After tax
Share of other comprehensive income of associates	(188)	-	(188)	(288)	-	(288)
Investment in equity instruments	741	(197)	544	(959)	264	(695)
Cash flow hedges	19.794	(5.403)	14.391	(27.835)	7.909	(19.926)
Currency translation differences	272	-	272	(745)	-	(745)
Actuarial gains/ (losses) on defined benefit pension plans	(15.049)	2.680	(12.369)	(13.750)	2.738	(11.012)
Other comprehensive income	**5.570**	**(2.920)**	**2.650**	**(43.577)**	**10.911**	**(32.666)**

The corporate income tax rate of legal entities in Greece for 2019 is 24% (2018: 29%).

In accordance with the applicable tax provisions, tax audits in Group companies are conducted as follows:

a. Audits by Certified Auditors - Tax Compliance Report

Effective from fiscal years ending 31 December 2011 onwards, Greek companies meeting certain criteria can obtain an "Annual Tax Compliance Report" as provided for by par. 5, article 82 of L.2238/1994 and article 65A of L. 4174/2013, as of 2014, from their statutory auditor in respect of compliance with tax law. The issuance of a Tax Compliance Report under certain conditions, substitutes the full tax audit by the tax authorities, however the tax authorities reserve the right of future tax audit.

All Group companies based in Greece have received unqualified Tax Compliance Reports by their respective statutory auditor for fiscal years up to 2018 inclusive.

b. Audits by Tax Authorities

Income tax years of the parent company and its most significant subsidiaries audited by the tax authorities are set out below:

Company name	**Financial years ended (up to and including)**
HELLENIC PETROLEUM SA	2011
EKO SA	2010
HELLENIC FUELS & Lubricants SA (former HELLENIC FUELS SA)	2011

Notwithstanding the possibility of future tax audits, Group management believes that no additional material liability will arise as a result of unaudited tax years over and above the tax liabilities and provisions recognised in the consolidated financial statements as of 31 December 2019 (Note 33).

With the adoption of IFRIC 23 as of 1 January 2019, the Group reclassified from trade and other receivables line of the statement of financial position, to a separate line item (income tax receivable) assets relating to advance payments against uncertain tax positions (notes 2.20, 4(i) and note 33). The comparatives have been reclassified accordingly.

As of 31 December 2019, the income tax receivable amount of €91.4 million includes amounts advanced by the Group relating to uncertain tax positions (as explained in notes 2.20, 4(i) and note 33) relating to income taxes (31 December 2019 and 2018: €14,2 million and €17,4 million respectively) and related interest and penalties (31 December 2019 and 2018: €17,9 million and € 17,9 million respectively). The income tax receivable amount also includes an amount of €59,3 million relating to the excess of income tax advances made against the income tax payable for 2019.

Numerical reconciliation of Group Income tax expense to prima facie tax payable:

	For the year ended	
	31 December 2019	**31 December 2018**
Profit before tax	**207.010**	**368.930**
Tax (expense) at Greek corporation tax rate of 24% (2018 - 29%)	(49.682)	(106.990)
Difference in overseas tax rates	3.777	5.688
Tax exempt results of shipping companies	1.629	556
Deferred Tax on distribution of DESFA shares by DEPA	-	(48.494)
Tax on expenses not deductible for tax purposes	(8.294)	(9.457)
Adjustments to Deferred tax due to changes in tax rate (excl DESFA)	1.477	17.164
Utilization of previously unrecognized tax losses	3.001	449
Tax losses for which no deferred income tax was recognised	(6.666)	(50)
Adjustments for deferred tax of prior periods	870	(536)
Tax on Distribution of Dividend	-	(13.490)
Tax on income from associates not subject to corporate tax	4.287	513
Derecognition of provisions for which no deferred tax had been recognised	617	-
Derecognition of deferred tax asset tax losses due to statute of limitations	(491)	-
Adjustment for prior year taxes	4.908	-
Under / (Over) provision of prior year deferred taxes	969	-
Other	164	430
Tax (Charge) / Credit	**(43.434)**	**(154.218)**
Effective tax rate	***21,0%***	***41,8%***

30 Earnings per share

Basic earnings per share are calculated by dividing the net profit attributable to equity holders of the company by the weighted average number of ordinary shares in issue during the period, excluding the weighted average number of treasury shares (Note 14). As of 31 December 2019 and 31 December 2018, all share options had either been exercised or lapsed and there were no treasury shares. Diluted earnings per share equal basic earnings per share.

	For the year ended	
	31 December 2019	**31 December 2018**
Earnings per share attributable to the Company Shareholders (expressed in Euro per share):	**0,53**	**0,69**
Net income attributable to ordinary shares (Euro in thousands)	160.798	211.614
Weighted average number of ordinary shares	305.635.185	305.628.663

31 Dividends per share

On 28 February 2019, the BoD proposed to the AGM the distribution of a final dividend of €0,50 per share for the year ended 2018, which was approved by the AGM on 7 June 2019. The above dividend includes a special dividend of €0,25 per share relating to distribution of part of the proceeds from the sale of the Group's share in DESFA. The total final dividend for 2018, amounts to €152,8 million and is included in the Consolidated Financial Statements for the year ended 31 December 2019. The whole amount was paid in July 2019.

At its meeting held on 5 November 2019, the Board of Directors decided to distribute an interim dividend of €0,25 per share for the financial year 2019. The dividend amounts to a total of €76,4 million and is also included in the Consolidated Financial Statements for the year ended 31 December 2019.

A proposal to the AGM for a final dividend €0,25 per share for the year ended 2019, was approved by the Board of Directors on 27 February 2019. The total final dividend amounts to €76,4 million and is not included in the Consolidated Financial Statements for the year ended 31 December 2019, as it has not yet been approved by the shareholders' AGM.

The Board did not approve a change in dividend policy overall and will re-evaluate the payment of an additional dividend or an additional special dividend during 2020.

32 Cash generated from operations

	Note	For the twleve month period ended	
		31 December 2019	**31 December 2018**
Profit before tax		**207.010**	**368.930**
Adjustments for:			
Depreciation and impairment of property, plant and equipment and right-of-use assets	**6,7**	230.585	190.851
Amortisation and impairment of intangible assets	**8**	6.844	10.066
Amortisation of grants	**26**	(1.049)	(965)
Finance costs - net	**27**	150.541	145.704
Share of operating profit of associates	**9**	(17.862)	1.771
Provisions for expenses and valuation charges		33.003	89.103
Foreign exchange gains	**28**	1.255	(2.194)
Amortisation of long-term contracts costs	**26**	(959)	454
Gains / (losses) on assets held for sale		(721)	-
(Gains) / losses on sales of property, plant and equipment	**26**	32	(246)
		608.679	**803.474**
Changes in working capital			
(Increase) / decrease in inventories		(20.065)	61.582
(Increase) / decrease in trade and other receivables		7.352	126.751
Increase / (decrease) in trade and other payables		38.751	(339.516)
		26.039	**(151.183)**
Net cash generated from / (used in) operating activities		**634.718**	**652.291**

33 Contingencies and litigation

The Group has contingent liabilities in respect of bank and other guarantees and other matters arising in the ordinary course of business, the most significant of which are disclosed below:

(a) Business issues

(i) Unresolved legal claims

The Group is involved in a number of legal proceedings and has various unresolved claims pending arising in the ordinary course of business. Based on currently available information and the opinion of legal counsel, management believes that the final outcome will not have a significant effect on the Group's operating results or financial position and that no additional provisions over and above provisions already reflected in the consolidated financial statements are required.

As at 31 December 2019 there are pending litigation claims that have been filed against the Group by the State, concerning customs violations that have been carried out by petrol stations dealers for which the Group is considered to be jointly liable. Furthermore, a number of decisions have been issued by the Supreme Administrative Court in similar cases, which either reject the Group's appeals, or accept the State's appeals and redirect them to the Administrative Appeals Court. The total amounts imposed amount to € 13,9 million of which € 11,7 million has been paid and recognized in Other Receivables in the Financial Statements.

The Group intends to file an appeal regarding these cases, to the European Court of Human Rights and at the same time to submit a question to the European Union Court as it assesses that the above Court decisions contradict the provisions of the European Convention on Human Rights as well as the legal framework of the European Union.

In this context, Group Management assesses that the probability of a favourable outcome from the European Courts is significant, which may as a result change the Supreme Administrative Court's position, which will subsequently result in a favourable outcome for the Group. For the reasons mentioned above, the Group has not raised a provision with regards to these cases.

Municipalities

During the current and preceding year, a number of Municipalities proceeded with the imposition of duties and fines relating to the rights of way occupied by underground pipelines operated by the Group within the boundaries of each respective municipality. As at 31 December 2019, the total amounts imposed amount to € 26,5 million (31 December 2018: €26,5 million). In order to appeal against these, and in accordance with legislation, the Group has paid an amount of €14 million which is included in Other Receivables in the Financial Statements.

The Group has exercised all available legal recourse relating to these cases and Group Management have assessed that it is most probable that the outcome of all appeals will be favourable. Therefore, the Group has not raised a provision with regards to these cases.

Competition commission

In 2008, the Competition Commission (CC) imposed a penalty to BP Hellas S.A. (BP) amounting to € 30,066,585. On 24.12.2008, BP appealed against the CC Decision before the Athens Appellate Administrative Court and obtained suspension of enforcement for the amount of €28 million. Said Court, by virtue of Decision No. 1494/2011 sustained the appeal and cancelled the penalty. On 26.10.2011 the CC appealed against the above Decision before the Supreme Administrative Court (Conseil d' Etat), which recently rendered its Decision No. 1770/2019, by virtue of which it has sustained the appeal of the CC and annulled the Decision of the Appellate Court, before which the case will be tried anew. The Supreme Court Decision is not yet available, as it is not yet transcribed into an official transcript.

In view of the above, a definitive opinion on the outcome of the new trial before the Appellate Court cannot be formed. The Group's legal advisors firm view since the beginning of the Court proceedings in 2008 is that the Company did not violate Law 703/1977 and it is believed that their view still remains unchanged.

Therefore, Group management believes that there is sufficient defense against the above penalty of the CC, which will be ultimately cancelled and no probable loss is expected to arise for the Company. Therefore, no provision has been made in the financial statements in relation to this claim.

(ii) Guarantees

The parent Company has provided letters of comfort and guarantees in favour of banks as security for loans granted by them to subsidiaries and associates of the Group. The outstanding amount of these as at 31 December 2019 was the equivalent of €912 million (31 December 2018: €969 million). Out of these, €807 million (31 December 2018: €886 million) are included in consolidated borrowings of the Group and are presented as such in the consolidated financial statements.

(iii) International operations

The Group's international operations face a number of legal issues related mainly to changes in local permits and fines imposed by Independent Regulatory Agencies, however it is considered that they do not present any material impact on the consolidated financial statements. Such cases include a dispute in connection with the local tank depots of Jugopetrol AD in Montenegro, as well as the re-opening of the Commission for the Protection of Competition in Cyprus' investigation against the Petroleum companies operating there (wholesale), for the period from 1 October 2004 to 22 December 2006. On 15 November 2017 the Commission for the Protection of Competition in Cyprus imposed a fine amounting to €5 million against Hellenic Petroleum Cyprus Ltd. Pertinent legal actions, have commenced on 30 December 2017 and are in progress. The likelihood for an outflow of resources is assessed as remote. Management believes that no additional material liabilities will arise as a result of these cases over and above those recognised in the consolidated financial statements.

(b) Taxation and customs

The tax framework and practices in Greece, which determine the tax base for the transactions of the Group's main entities, may result in inherent uncertainties, due to its complexity and it being subject to changes and alternative interpretation by relevant authorities at different points in time and across different entities. As a result, there may be types of expenses or treatments for which a company may be assessed on a different basis than the one adopted during preparation of its tax return and the financial statements. Based on past experience tax audits were carried out by tax authorities on average 5-7 years after the filing of the tax return. In addition, where a tax audit results in a different view to the that adopted by a Group entity, the process for resolving the issue is usually through a court of law proceeding, which has many stages and can take a considerable number of years to reach its final and irrevocable ruling. For an entity to engage in this process, a minimum down payment of 50% of the total tax and surcharges assessed is required.

All of the above result in inherent difficulties in the determination and accounting of tax liabilities. As a result, management aims to determine its policy based on specific legislation available at the time of accounting for a transaction, obtain specialist legal and tax advice on individual cases and utilise prior tax audits experience and rulings, including relevant court decisions. This process ensures that the financial statements reflect any material tax and customs liabilities as accurately and completely as possible.

(i) Open tax years – Litigation tax cases

As disclosed in Note 29, tax audits for the Group's most important Greek legal entities have been completed by the Tax Authorities as follows:

- Hellenic Petroleum S.A. has been audited up to and including the financial year ended 31 December 2011. The Tax audit reports for years ended 31 December 2010 and 31 December 2011 were received in December 2017 and they are subject to legal dispute by the Company. In summary, the reports assess additional taxes of € 22,5 million and penalties of €23,5 million, for items relating to stamp duty, various non-deductible expenses and other income tax adjustments. Following a detailed review of the Tax Audit Report, the Company has disputed the additional taxes imposed (which are over and above the amounts already included in the Companies' normal tax returns) and proceeded with all possible legal means and actions to appeal against these additional taxes and surcharges imposed.

  Even though the Company disputed the additional taxes and surcharges imposed, it was obliged to pay 50% of the assessed amounts (taxes and surcharges) to the Tax Authorities in order to appeal the results of the tax audits.

This was paid within the applicable deadline, while the remaining amounts have been fully offset by the Authorities, with tax and other State receivables of the Company, within 2018. These amounts are included in the Income Tax Receivable balance if they relate to income tax, or in Trade and Other Receivables balance if they relate to other taxes, as the Company assesses that it will succeed in its appeals. As far as surcharges are concerned, the report has assessed amounts at 120% of the original tax instead of the applicable 50%; this is also being legally challenged by the Company.

At present, notification for audit has been received for the year ended 31 December 2012, which according to the general provisions is time-barred.

The two main retail subsidiaries in Greece, which merged during 2016, have been audited as follows:

- Former Hellenic Fuels S.A. has been audited up to and including the financial year ended 31 December 2011, while notifications for audit have been received for subsequent years up to and including 31 December 2013, which according to the general provisions are time–barred. The most recent Tax audit reports for 2010 and 2011 were delivered in December 2017, and assess additional taxes of € 1,6 million and surcharges of € 1,9 million for similar reasons as Hellenic Petroleum. The process followed is identical to the one described above for Hellenic Petroleum and the subsidiary has already proceeded with the relevant legal actions.

  Following the court hearing, the relevant Decisions were issued in Q3 2019. With regards to the Stamp duty cases amounting to € 3,4 million, the decisions were in favor of the company and the relevant amounts are to be refunded to the company, whereas for the Real Estate tax dispute of 2010 amounting to € 100 thousand, which was not in favor, the company continues the legal procedure.

- EKO S.A. has been audited up to and including 31 December 2010, while notification for audit has been received for the fiscal year 2012, which according to the general provisions is time-barred. The most recent Tax audit reports for 2008, 2009 and 2010 were delivered in February 2018 and assess additional stamp duty of € 4,1 million and surcharges of € 3,5 million. The process followed is identical to the one described above for Hellenic Petroleum and the subsidiary has already proceeded with the relevant legal actions.

  Even though the Companies dispute the additional taxes and surcharges imposed, they were obliged to pay 50% of the assessed amounts (taxes and surcharges) to the Tax Authorities in order to appeal the results of the tax audits. These were paid within the applicable deadlines, while the remaining amounts have been fully offset by the Authorities, with tax and other State receivables of the Companies, within 2018. The amounts paid and/or offset are included in the Income Tax Receivable balance if they relate to income tax or in the Trade and Other Receivable balance if they relate to other taxes, as the Group assesses that it will succeed in its appeals.

  Management believes that no additional material liability will arise either as a result of open tax years or from the outcome of current litigation cases over and above the tax liabilities and provisions already recognized in the consolidated financial statements as at 31 December 2019. The Company has recorded down payments made for taxes and penalties assessed in previous disputes with the tax authorities in income tax receivable (Note 29), to the extent that the Company has assessed that the amounts will be ultimately recoverable.

It is noted that for financial years ending 31 December 2011 up to and including 31 December 2018, the Group's Greek legal entities obtained unqualified "Annual Tax Compliance Reports" from their Statutory Auditors, as provided for by par. 5, article 82 of L.2238/1994 and article 65A of L. 4174/2013.

(ii) Assessments of customs and fines

Customs and stock shortages

In 2008, Customs authorities assessed additional customs duties and penalties amounting to approximately €40 million for alleged "stock shortages" during the years 2001-2005. The Company has duly filed contestations before the Administrative Court of First Instance, and Management believes that this case will have a positive outcome when the legal procedure will be concluded.

Notwithstanding the filing of the above contestations, the Customs office withheld an amount of €54 million (full payment plus surcharges) of established VAT refunds (Note 12), an action against which the Company filed two

Contestations before the Administrative Courts of Athens and Piraeus. The Administrative Court of Athens ruled that the withholding effected by the Tax Office was unlawful.

The Company considers that the above amounts will be recovered.

Customs – other

As at 31 December 2019 there are pending litigation claims that have been filed against the Group by the State, concerning customs violations that have been carried out by petrol stations dealers and whereby the Group is considered to be jointly liable. Furthermore, a number of decisions have been issued by the Supreme Administrative Court in similar cases, which either reject the Group's appeals, or accept the State's appeals and redirect them to the Administrative Appeals Court. The total amounts imposed amount to € 13,9 million of which € 13,1 million have been paid and recognized in Other Receivables in the Financial Statements (31 December 2018: € 11,7 million).

With regards to EKO S.A.'s cases, the Group has filed an appeal to the European Court of Human Rights as it assesses that the above Court decisions contradict the provisions of the European Convention on Human Rights.

In this context, Group Management assesses that the probability of a favorable outcome from the European Courts is more likely than not, which may as a result change the Supreme Administrative Court's position, which will subsequently result in a favorable outcome for the Group. For the reasons mentioned above, the Group has not raised a provision with regards to these cases.

In 2019, the customs authorities in Skopje, conducted an audit in OKTA, with regards to excise duties of eurodiesel imports, for the fiscal years 2014 - 2018.

They are of the opinion that, excise duties related to these imports, were not correctly calculated and they issued relevant decisions for the fiscal year 2014, imposing additional amounts of € 380 K.

The Company filed lawsuits, initiating administrative disputes, seeking full annulment, on grounds of substantial violations of procedural rules from the customs authorities' side, their failure to completely and correctly establish the facts of the case and to correctly apply substantive laws. The Company expects that the case will have a positive outcome, when the legal procedure will be concluded.

34 Commitments

(a) Capital commitments

Significant contractual commitments of the Group amount to €39,1 million as at 31 December 2019 (31 December 2018: €21,7 million), which mainly relate to improvements in refining assets.

(b) Exploration costs

Contractual commitments of the Group for exploration costs amount to €23,8 million as at 31 December 2019 (31 December 2018: €26,4 million).

(c) Letters of Credit

The Group may be requested to provide bank letters of credit to suppliers in order to obtain better commercial and credit terms. To the extent that such items are already recorded as liabilities in the financial statements there is no additional commitment to be disclosed. In cases where the underlying transaction occurs after the year end, the Group is not liable to settle the letter of credit and hence no such liability exists as at the year end.

35 Related-party transactions

Included in the statement of comprehensive income are proceeds, costs and expenses, which arise from transactions between the Group and related parties. Such transactions are mainly comprised of sales and purchases of goods and services in the ordinary course of business.

Transactions have been carried out with the following related parties:

a) Associates and joint ventures of the Group which are consolidated under the equity method:
- Athens Airport Fuel Pipeline Company S.A. (EAKAA)
- Public Gas Corporation of Greece S.A. (DEPA)
- Elpedison B.V.
- Spata Aviation Fuel Company S.A. (SAFCO)
- HELPE Thraki S.A.
- D.M.E.P. HOLDCO

	For the year ended	
	31 December 2019	**31 December 2018**
Sales of goods and services to related parties		
Associates	397.674	597.853
Joint ventures	1.107	754
Total	**398.781**	**598.606**
Purchases of goods and services from related parties		
Associates	460.363	769.052
Joint ventures	38.357	18.813
Total	**498.720**	**787.865**

	As at	
	31 December 2019	**31 December 2018**
Balances due to related parties		
Associates	9.176	11.912
Joint ventures	226	1.387
Total	**9.401**	**13.299**
Balances due from related parties		
Associates	18.738	36.041
Joint ventures	438	150
Total	**19.176**	**36.191**

Hellenic Petroleum S.A. has provided letters of comfort and guarantees in favour of banks as security for loans granted by them to Elpedison B.V., the outstanding amount of which as at 31 December 2019 was €105 million (31 December 2018: €83 million).

b) Government related entities which are under common control with the Group due to the shareholding and control rights of the Hellenic State and with which the Group has material transactions or balances:
- Public Power Corporation Hellas S.A.
- Hellenic Armed Forces
- Road Transport S.A.
- Lignitiki Megalopolis S.A.
- Lignitiki Melitis S.A

During the year ended 31 December 2019, transactions and balances with the above government related entities are as follows:

- Sales of goods and services amounted to €328 million (31 December 2018: €353 million);
- Purchases of goods and services amounted to €68 million (31 December 2018: €51 million);
- Receivable balances of €60 million (31 December 2018: €44 million);

- Payable balances of €16 million (31 December 2018: €11 million).

c) Key management includes directors (Executive and Non-Executive Members of the board of Hellenic Petroleum S.A.) and General Managers. The compensation paid or payable to the aforementioned key management is as follows:

	For the year ended	
	31 December 2019	**31 December 2018**
Short-term employee benefits	4.839	4.522
Post-employment benefits	136	67
Termination benefits	1.676	1.661
Total	**6.651**	**6.250**

d) The Group participates in the following jointly controlled operations with other third parties relating to exploration and production of hydrocarbons in Greece:

- Edison International SpA (Greece, Patraikos Gulf).
- Calfrac Well Services Ltd (Greece, Sea of Thrace concession)
- Total E&P Greece B.V and Edison International SpA (Greece, Block 2).
- Total E&P Greece B.V., Exxon Mobil Exploration and Production Greece (Crete) B.V. (Greece, Block West Crete).
- Total E&P Greece B.V., Exxon Mobil Exploration and Production Greece (Crete) B.V. (Greece, Block South West Crete).
- Repsol Exploracion (Greece, Block Ionian).

36 Principal subsidiaries, associates and joint ventures included in the consolidated financial statements

COMPANY NAME	ACTIVITY	COUNTRY OF REGISTRATION	EFFECTIVE PARTICIPATION PERCENTAGE	METHOD OF CONSOLIDATION
HELLENIC FUELS AND LUBRICANTS INDUSTRIAL AND COMMERCIAL S.A	Marketing	GREECE	100,00%	FULL
EKOTA KO S.A.	Marketing	GREECE	49,00%	FULL
EKO KALYPSO M.E.P.E.	Marketing	GREECE	100,00%	FULL
EKO ATHINA MARITIME COMPANY	Vessel owning / Marketing	GREECE	100,00%	FULL
EKO ARTEMIS MARITIME COMPANY	Vessel owning / Marketing	GREECE	100,00%	FULL
EKO DIMITRA MARITIME COMPANY	Vessel owning / Marketing	GREECE	100,00%	FULL
EKO IRA MARITIME COMPANY	Vessel owning / Marketing	GREECE	100,00%	FULL
EKO AFRODITI MARITIME COMPANY	Vessel owning / Marketing	GREECE	100,00%	FULL
EKO BULGARIA EAD	Marketing	BULGARIA	100,00%	FULL
EKO SERBIA AD	Marketing	SERBIA	100,00%	FULL
HELLENIC PETROLEUM INTERNATIONAL S.A.	Holding	AUSTRIA	100,00%	FULL
HELLENIC PETROLEUM CYPRUS LTD	Marketing	U.K	100,00%	FULL
R.A.M.OIL Cyprus LTD	Marketing	CYPRUS	100,00%	FULL
YUGEN LTD	Marketing	CYPRUS	100,00%	FULL
HELLENIC PETROLEUM CYPRUS HOLDING LTD	Marketing	CYPRUS	100,00%	FULL
HELLENIC PETROLEUM BULGARIA (HOLDINGS) LTD	Holding	CYPRUS	100,00%	FULL
HELLENIC PETROLEUM SERBIA (HOLDINGS) LTD	Holding	CYPRUS	100,00%	FULL
JUGOPETROL AD	Marketing	MONTENEGRO	54,35%	FULL
GLOBAL ALBANIA S.A	Marketing	ALBANIA	99,96%	FULL
ELPET BALKANIKI S.A.	Holding	GREECE	100,00%	FULL
VARDAX S.A	Pipeline	GREECE	80,00%	FULL
OKTA CRUDE OIL REFINERY A.D	Refining	NORTH MACEDONIA	81,51%	FULL
ASPROFOS S.A	Engineering	GREECE	100,00%	FULL
DIAXON S.A.	Petrochemicals	GREECE	100,00%	FULL
POSEIDON MARITIME COMPANY	Vessel owning / Petrochemicals	GREECE	100,00%	FULL
APOLLON MARITIME COMPANY	Vessel owning / Refining	GREECE	100,00%	FULL
HELLENIC PETROLEUM FINANCE PLC	Treasury services	U.K	100,00%	FULL
HELLENIC PETROLEUM CONSULTING	Consulting services	GREECE	100,00%	FULL
HELLENIC PETROLEUM R.E.S S.A.	Energy	GREECE	100,00%	FULL
HELPE-LARCO ENERGIAKI SERVION S.A.	Energy	GREECE	51,00%	FULL
HELPE-LARCO ENERGIAKI KOKKINOU S.A.	Energy	GREECE	51,00%	FULL
ENERGIAKI PYLOY METHONIS S.A.	Energy	GREECE	100,00%	FULL
ATEN ENERGY S.A.	Energy	GREECE	100,00%	FULL
HELPE E&P HOLDINGS S.A	E&P of hydrocarbons	GREECE	100,00%	FULL
HELPE ARTA PREVEZA SA	E&P of hydrocarbons	GREECE	100,00%	FULL
HELPE NW PELOPONISSOS SA	E&P of hydrocarbons	GREECE	100,00%	FULL
HELPE WEST KERKYRA SA	E&P of hydrocarbons	GREECE	100,00%	FULL
HELPE SEA OF THRACE SA	E&P of hydrocarbons	GREECE	100,00%	FULL
HELPE PATRAIKOS S.A.	E&P of hydrocarbons	GREECE	100,00%	FULL
HELPE UPSTREAM S.A	E&P of hydrocarbons	GREECE	100,00%	FULL
SUPERLUBE LTD	Lubricants	CYPRUS	100,00%	FULL
BLUE CIRCLE ENGINEERING LIMITED	Marketing	CYPRUS	100,00%	FULL
ELPEDISON B.V.	Power Generation	NETHERLANDS	50,00%	EQUITY
SAFCO S.A.	Airplane Fuelling	GREECE	33,33%	EQUITY
DEPA S.A.	Natural Gas	GREECE	35,00%	EQUITY
E.A.K.A.A S.A.	Pipeline	GREECE	50,00%	EQUITY
HELPE THRAKI S.A	Pipeline	GREECE	25,00%	EQUITY
DMEP HOLDCO LTD	Trade of crude/products	U.K	48,00%	EQUITY

- On 15 January 2019, HELLENIC PETROLEUM CYPRUS HOLDING (HPCH) LTD signed a share purchase agreement for the acquisition of 100% of the total issued share capital of BLUE CIRCLE ENGINEERING LIMITED, a company that specializes in the use of LPG as a source of energy, as well as distributing of LPG throughout Cyprus. The transaction was completed on 31 May 2019 and the total aggregate consideration for the ordinary share capital acquired was €6,9 million, comprising an immediate cash consideration of €5,7 million (€5,3 million net of cash acquired), an amount of €0,55 million which was settled within the third quarter of 2019 and a contingent consideration of €0,65 million subject to the satisfaction of specific terms of the agreement in relation to working capital balances. Provisional goodwill of €4,7 million was recognised (Note 8).

- On 26 July 2019, ELPEDISON BV acquired all the shares held by the non-controlling interests in ELPEDISON SA of 24,22% and currently owns 100% of the shares in ELPEDISON SA. The total aggregate consideration for the ordinary share capital acquired amounted to €20 million (Note 9).

37 Events after the end of the reporting period

On 17 February 2020, HELLENIC PETROLEUM announced the acquisition (the “Transaction”) of a portfolio of photovoltaic (“PV”) projects (the “Project”) at final permitting stage, in the area of Kozani, N. Greece, from German RES developer and contractor JUWI. The Transaction, is expected to be completed during 2Q20, with the construction estimated at 16 months and the Project becoming operational in 4Q21, the total investment is estimated at €130 million.

On 20 February 2020, the Extraordinary General Meeting of the Shareholders of Hellenic Petroleum S.A. granted permission, in accordance with the provisions of article 100 of Law 4548/2018, for the conclusion of a Memorandum of Understanding between the "Hellenic Republic Asset Development Fund S.A." and "Hellenic Petroleum S.A." regarding:

• The joint sale of DEPA Infrastructure S.A. (a company to formed following the spin-off of DEPA's infrastructure business within the framework of its privatization process) and

• The participation in the sales process of DEPA Commercial S.A. (DEPA SA will be renamed to DEPA Commercial SA following the spin-off of its infrastructure business within the framework of its privatization process)