LOTOS

THE LOTOS GROUP
CONSOLIDATED FINANCIAL HIGHLIGHTS

	PLN'000		EUR'000	
	Year ended Dec 31 2015	**Year ended Dec 31 2014**	**Year ended Dec 31 2015**	**Year ended Dec 31 2014**
Revenue	22,709,442	28,501,887	5,426,649	6,803,496
Operating profit/(loss)	423,398	(1,393,008)	101,175	(332,516)
Pre-tax loss	(195,274)	(2,123,715)	(46,663)	(506,938)
Net loss	(263,300)	(1,466,372)	(62,918)	(350,028)
Net loss attributable to owners of the Parent	(263,263)	(1,466,326)	(62,909)	(350,017)
Net loss attributable to non-controlling interests	(37)	(46)	(9)	(11)
Total comprehensive income/(loss)	(544,925)	(1,902,137)	(130,215)	(454,047)
Total comprehensive income/(loss) attributable to owners of the Parent	(544,888)	(1,902,096)	(130,206)	(454,037)
Total comprehensive income/(loss) attributable to non-controlling interests	(37)	(41)	(9)	(10)
Net cash from operating activities	1,488,069	1,380,488	355,589	329,527
Net cash from investing activities	(1,161,975)	(958,338)	(277,666)	(228,759)
Net cash from financing activities	114,719	(597,271)	27,413	(142,571)
Total net cash flow	440,813	(175,121)	105,336	(41,803)
Basic loss per share (PLN/EUR)	(1.42)	(10.11)	(0.34)	(2.41)
Diluted loss per share (PLN/EUR)	(1.42)	(10.11)	(0.34)	(2.41)

	PLN'000		EUR'000	
	As at Dec 31 2015	**As at Dec 31 2014**	**As at Dec 31 2015**	**As at Dec 31 2014**
Total assets	19,169,332	18,947,157	4,498,259	4,445,290
Equity attributable to owners of the Parent	7,712,060	8,258,288	1,809,706	1,937,519
Non-controlling interests	138	175	32	41
Total equity	7,712,198	8,258,463	1,809,738	1,937,560

Items in the Financial Highlights table have been translated at the following EUR exchange rates:

Items of the statement of financial position have been translated at the mid-exchange rates quoted by the National Bank of Poland for the last day of the reporting period:

As at Dec 31 2015	**As at Dec 31 2014**
1 EUR = 4.2615 PLN	**1 EUR = 4.2623 PLN**

Items of the statement of comprehensive income and the statement of cash flows have been translated using the arithmetic mean of the mid-exchange rates quoted by the National Bank of Poland for the last day of each month in the reporting period:

Year ended Dec 31 2015	**Year ended Dec 31 2014**
1 EUR = 4.1848 PLN	**1 EUR = 4.1893 PLN**

THE LOTOS GROUP

CONSOLIDATED FINANCIAL STATEMENTS FOR 2015
PREPARED IN ACCORDANCE WITH THE INTERNATIONAL FINANCIAL REPORTING STANDARDS AS ENDORSED BY THE EUROPEAN UNION
WITH THE AUDITOR’S OPINION

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Revenue	8	22,709,442	28,501,887
Cost of sales	9.1	(20,249,028)	(27,466,614)
Gross profit		**2,460,414**	**1,035,273**
Distribution costs	9.1	(1,284,846)	(1,162,071)
Administrative expenses	9.1	(459,120)	(447,055)
Other income	9.3	48,291	26,707
Other expenses	9.4	(341,341)	(845,862)
Operating profit/(loss)		**423,398**	**(1,393,008)**
Finance income	9.5	100,637	21,740
Finance costs	9.6	(688,243)	(727,982)
Share in net profit/loss of equity-accounted joint ventures	16	(31,066)	(24,465)
Pre-tax loss		**(195,274)**	**(2,123,715)**
Corporate income tax	10.1	(68,026)	657,343
Net loss		**(263,300)**	**(1,466,372)**
Other comprehensive income/(loss)			
Items that may be reclassified to profit/loss:		**(282,407)**	**(428,448)**
Exchange differences on translating foreign operations		5,946	45,106
Cash flow hedges	23	(355,973)	(584,653)
Corporate income tax relating to cash flow hedges	10.1	67,620	111,099
Items that will not be reclassified to profit/loss:		**782**	**(7,317)**
Actuarial gain/(loss) under post-employment benefits		2,211	(8,974)
Corporate income tax relating to actuarial gain/(loss) under post-employment benefits	10.1	(1,429)	1,657
Other comprehensive income/(loss), net		**(281,625)**	**(435,765)**
Total comprehensive income/(loss)		**(544,925)**	**(1,902,137)**
Net loss attributable to			
Owners of the Parent	11	(263,263)	(1,466,326)
Non-controlling interests	26	(37)	(46)
		(263,300)	**(1,466,372)**
Total comprehensive income/(loss) attributable to:			
Owners of the Parent		(544,888)	(1,902,096)
Non-controlling interests	26	(37)	(41)
		(544,925)	**(1,902,137)**
Net loss attributable to owners of the Parent per share (PLN)			
Weighted average number of shares ('000)	11	184,873	145,027
- basic	11	(1.42)	(10.11)
- diluted	11	(1.42)	(10.11)

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

PLN '000	Note	Dec 31 2015	Dec 31 2014 (restated)
ASSETS			
Non-current assets			
Property, plant and equipment	13	10,568,422	9,481,883
Goodwill	14	46,688	46,688
Other intangible assets	15	617,731	557,458
Equity-accounted joint ventures	16	70,745	99,599
Deferred tax assets	10.3	924,478	1,488,901
Derivative financial instruments	28	8,697	-
Other non-current assets	18	201,008	107,288
Total non-current assets		**12,437,769**	**11,781,817**
Current assets			
Inventories	19	3,235,816	3,917,129
- including mandatory stocks	*19.2*	*1,881,494*	*2,243,655*
Trade receivables	18	1,550,900	1,406,501
Current tax assets		11,953	59,094
Derivative financial instruments	28	208,482	4,430
Other current assets	18	856,336	1,419,536
Cash and cash equivalents	20	859,699	348,215
Total current assets		**6,723,186**	**7,154,905**
Non-current assets held for sale (or disposal groups)	17	8,377	10,435
Total assets		**19,169,332**	**18,947,157**
EQUITY AND LIABILITIES			
Equity			
Share capital	21	184,873	184,873
Share premium	22	2,228,310	2,229,626
Cash flow hedging reserve	23	(700,888)	(412,535)
Retained earnings	24	5,928,484	6,190,989
Translation differences	25	71,281	65,335
Equity attributable to owners of the Parent		**7,712,060**	**8,258,288**
Non-controlling interests	26	138	175
Total equity		**7,712,198**	**8,258,463**
Non-current liabilities			
Borrowings, other debt instruments and finance lease liabilities	27	4,454,460	4,495,562
Derivative financial instruments	28	54,306	62,626
Deferred tax liabilities	10.3	47,626	55,527
Employee benefit obligations	29	182,252	185,451
Other liabilities and provisions	30	1,292,571	657,563
Total non-current liabilities		**6,031,215**	**5,456,729**
Current liabilities			
Borrowings, other debt instruments and finance lease liabilities	27	2,544,848	2,168,106
Derivative financial instruments	28	110,845	135,917
Trade payables	30	1,232,510	1,692,839
Current tax payables		11,770	4,667
Employee benefit obligations	29	122,201	84,038
Other liabilities and provisions	30	1,403,745	1,137,310
Total current liabilities		**5,425,919**	**5,222,877**
Liabilities directly associated with non-current assets (or disposal groups) held for sale	17; 29.1	-	9,088
Total liabilities		**11,457,134**	**10,688,694**
Total equity and liabilities		**19,169,332**	**18,947,157**

CONSOLIDATED STATEMENT OF CASH FLOWS

(prepared using the indirect method)

	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Cash flows from operating activities			
Net loss		**(263,300)**	**(1,466,372)**
Adjustments:		**1,810,253**	**2,904,163**
Income tax expense	10.1	*68,026*	*(657,343)*
Share in net profit/(loss) of equity-accounted joint ventures	16	*31,066*	*24,465*
Depreciation/amortisation	9.1	*714,568*	*808,941*
Foreign exchange (gains)/losses		*348,234*	*366,720*
Interest and dividends		*177,702*	*168,177*
(Gain)/loss from investing activities		*69,902*	*16,356*
Impairment losses on property, plant and equipment and other intangible assets	9.4	*85,817*	*806,141*
Settlement and valuation of financial instruments	9.5; 9.6	*(78,809)*	*197,849*
(Increase)/decrease in trade receivables		*(144,399)*	*185,148*
(Increase)/decrease in other assets		*54,473*	*(6,376)*
Decrease in inventories		*719,073*	*1,811,755*
(Decrease) in trade payables		*(460,329)*	*(702,398)*
Increase/(decrease) in other provisions and liabilities		*187,754*	*(120,389)*
Increase in employee benefit obligations		*37,175*	*5,117*
Income tax paid		(58,884)	(57,303)
Net cash from operating activities		**1,488,069**	**1,380,488**
Cash flows from investing activities			
Dividends received – equity-accounted joint ventures	16.1	837	7,280
Dividends received from other entities		907	894
Interest received		16,053	6,033
Sale of property, plant and equipment and other intangible assets		23,615	14,015
Sale of organised part of business		2,600	4,880
Effect of final accounting for the acquisition of Heimdal assets		-	12,443
Purchase of property, plant and equipment and other intangible assets		(758,582)	(1,002,131)
Cash contributions – equity-accounted joint ventures	16.1	(3,898)	(339)
Acquisition of shares in related entities		-	(23)
Cash earmarked for the EFRA project		(433,357)	-
Security deposit		(4,293)	10,035
Funds contributed to the oil and gas extraction facilities decommissioning fund		(414)	(407)
Deposit securing the performance of an engineering, procurement and management services contract for the purposes of the offshore production unit on B-8 field		(10,488)	-
Option premium expense		(4,907)	-
Settlement of derivative financial instruments		10,554	(11,018)
Other investment cash outflows		(602)	-
Net cash from investing activities		**(1,161,975)**	**(958,338)**
Cash flows from financing activities			
Proceeds from bank borrowings	27.1	798,209	562,963
Proceeds from non-bank borrowings	27.2	-	106,900
Proceeds from issue of Series D shares in Grupa LOTOS S.A.	18	981,268	-
Cash flows attributable to changes in interest in subsidiaries not resulting in loss of control		(31)	(1,681)
Grants received		-	1,239
Return of a deposit provided as security for repayment of credit facility at Energobaltic Sp. z o.o.		-	2,111
Repayment of bank borrowings	27.1	(1,161,456)	(1,030,408)
Repayment of non-bank borrowings	27.2	(10,781)	(12,983)
Redemption of notes	27.3	(19,350)	(17,397)
Arrangement fees paid under borrowings		(57,202)	-
Interest paid		(172,969)	(181,297)
Decrease in finance lease liabilities		(19,957)	(18,830)
Settlement of derivative financial instruments		(222,192)	4,439
Expenses related to the issue of Series D shares in Grupa LOTOS S.A.		-	(7,867)
Other cash used in financing activities		(820)	(4,460)
Net cash from financing activities		**114,719**	**(597,271)**
Total net cash flow		**440,813**	**(175,121)**
Effect of exchange rate fluctuations on cash held		3,944	11,509
Change in net cash		**444,757**	**(163,612)**
Cash at beginning of period		**(166,687)**	**(3,075)**
Cash at end of period	20	**278,070**	**(166,687)**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

PLN '000	Note	Share capital	Share premium	Cash flow hedging reserve	Retained earnings	Exchange differences on translating foreign operations	Equity attributable to owners of the Parent	Non-controlling interests	Total equity
Jan 1 2015		**184,873**	**2,229,626**	**(412,535)**	**6,190,989**	**65,335**	**8,258,288**	**175**	**8,258,463**
Net loss		-	-	-	*(263,263)*	-	*(263,263)*	*(37)*	*(263,300)*
Other comprehensive income/(loss), net		-	-	*(288,353)*	*782*	*5,946*	*(281,625)*	-	*(281,625)*
Total comprehensive income/(loss)		-	-	(288,353)	(262,481)	5,946	(544,888)	(37)	(544,925)
Issue cost	22	-	(1,316)	-	-	-	(1,316)	-	(1,316)
Other		-	-	-	(24)	-	(24)	-	(24)
Dec 31 2015		**184,873**	**2,228,310**	**(700,888)**	**5,928,484**	**71,281**	**7,712,060**	**138**	**7,712,198**
Jan 1 2014		**129,873**	**1,311,348**	**61,019**	**7,666,833**	**20,234**	**9,189,307**	**289**	**9,189,596**
Net loss		-	-	-	*(1,466,326)*	-	*(1,466,326)*	*(46)*	*(1,466,372)*
Other comprehensive income/(loss), net		-	-	*(473,554)*	*(7,317)*	*45,101*	*(435,770)*	*5*	*(435,765)*
Total comprehensive income/(loss)		-	-	(473,554)	(1,473,643)	45,101	(1,902,096)	(41)	(1,902,137)
Issue of shares	21	55,000	-	-	-	-	55,000	-	55,000
Share premium	22	-	940,500	-	-	-	940,500	-	940,500
Issue cost	22	-	(22,222)	-	-	-	(22,222)	-	(22,222)
Purchase of non-controlling interests		-	-	-	(2,179)	-	(2,179)	(83)	(2,262)
Other changes in interest in subsidiaries not resulting in loss of control	26	-	-	-	(10)	-	(10)	10	-
Other		-	-	-	(12)	-	(12)	-	(12)
Dec 31 2014		**184,873**	**2,229,626**	**(412,535)**	**6,190,989**	**65,335**	**8,258,288**	**175**	**8,258,463**

NOTES TO THE FINANCIAL STATEMENTS

1. General information

Grupa LOTOS Spółka Akcyjna ("Grupa LOTOS S.A.", the "Company", the "Parent"), was established on September 18th 1991. The Company's registered address is ul. Elbląska 135, 80-718 Gdańsk, Poland.

The principal business activity of the LOTOS Group (the "LOTOS Group" or the "Group") consists in the production and processing of refined petroleum products and their wholesale and retail sale. The Group's business also includes acquisition of crude oil and natural gas deposits and oil and gas production. Based on the classification applied by the Warsaw Stock Exchange, Grupa LOTOS S.A. is included in the fuel sector.

2. Composition of the Group and its changes

The LOTOS Group comprises Grupa LOTOS S.A. (the Parent) and a number of production, service and trading companies which are direct or indirect subsidiaries of Grupa LOTOS S.A.

The Group also holds shares in equity-accounted joint ventures.

Contact data and brief description of the principal business activity of these entities, as well as the Group's ownership interests and the applied consolidation method are presented below.

Name	Registered office	Principal business activity	The Group's ownership interest	
			Dec 31 2015	Dec 31 2014
Parent				
Downstream segment				
● Grupa LOTOS S.A.	Gdańsk	Production and processing of refined petroleum products (mainly fuels) and their wholesale	Not applicable	Not applicable
Direct fully-consolidated subsidiaries				
Upstream segment				
● LOTOS Petrobaltic S.A. (parent of another group: LOTOS Petrobaltic Group)	Gdańsk	Acquisition of crude oil and natural gas deposits, extraction of hydrocarbons	99.99%	99.99%
Downstream segment				
● LOTOS Paliwa Sp. z o.o.	Gdańsk	Wholesale and retail sale of fuels and light fuel oil, management of the LOTOS service station chain	100.00%	100.00%
● LOTOS Oil Sp. z. o.o.	Gdańsk	Production and sale of lubricating oils and lubricants, and sale of base oils	100.00%	100.00%
● LOTOS Asfalt Sp. z o.o.	Gdańsk	Production and sale of bitumens	100.00%	100.00%
● LOTOS Kolej Sp. z o.o.	Gdańsk	Railway transport	100.00%	100.00%
● LOTOS Serwis Sp. z o.o.	Gdańsk	Maintenance of mechanical and electric operations and controlling devices, overhaul and repair services	100.00%	100.00%
● LOTOS Lab Sp. z o.o.	Gdańsk	Laboratory analyses	100.00%	100.00%
● LOTOS Straż Sp. z o.o.	Gdańsk	Fire service activities	100.00%	100.00%
● LOTOS Ochrona Sp. z o.o.	Gdańsk	Security services	100.00%	100.00%
● LOTOS Terminale S.A. (parent of another group: LOTOS Terminale Group)	Czechowice-Dziedzice	Storage and distribution of fuels	100.00%	100.00%
● LOTOS Infrastruktura S.A. (parent of another group: LOTOS Infrastruktura Group)	Jasło	Storage and distribution of fuels Renting and operating of own or leased real estate	100.00%	100.00%
Other				
● LOTOS Gaz S.A. w likwidacji (in liquidation)	Kraków	Dormant	100.00%	100.00%
● LOTOS Park Technologiczny Sp. z o.o. w likwidacji (in liquidation) (1)	Jasło	Dormant	-	100.00%
Non-consolidated direct subsidiaries(2)				
● Infrastruktura Kolejowa Sp. z o.o.	Gdańsk	Dormant	100.00%	100.00%
● LOTOS Foundation (3)	Gdańsk	Socially beneficial activity within the scope of public tasks defined in the Act on Public Benefit and Volunteer Work.	100.00%	-

		The Foundation does not conduct any business activity.		

Name	Registered office	Principal business activity	The Group's ownership interest	
			Dec 31 2015	Dec 31 2014
Indirect fully-consolidated subsidiaries				
Downstream segment				
LOTOS Infrastruktura Group				
• RCEkoenergia Sp. z o.o.	Czechowice-Dziedzice	Production and distribution of electricity, heat and gas	100.00%	100.00%
LOTOS Terminale Group				
• LOTOS Biopaliwa Sp. z o.o.	Czechowice-Dziedzice	Production of fatty acid methyl esters (FAME)	100.00%	100.00%
Upstream segment				
LOTOS Petrobaltic Group				
• LOTOS Exploration and Production Norge AS	Norway, Stavanger	Oil exploration and production on the Norwegian Continental Shelf, provision of services incidental to oil and gas exploration and production	99.99%	99.99%
• Aphrodite Offshore Services N.V.	Curaçao	Sea transport services (dormant)	99.99%	99.99%
• B8 Sp. z o.o.	Gdańsk	Support activities for extraction and quarrying operations	99.99%	99.99%
• B8 Spółka z ograniczoną odpowiedzialnością BALTIC S.K.A.	Gdańsk	Exploration for and production of crude oil and natural gas	99.99%	99.99%
• Miliana Shipholding Company Ltd. (parent of another group: Miliana Shipholding Group)	Nicosia, Cyprus	Storage and transport of crude oil, other sea transport services	99.99%	99.99%
• Technical Ship Management Sp. z o.o. (parent of another group: Technical Ship Management Group)	Gdańsk	Sea transport support activities, ship operation advisory services	99.99%	99.99%
• SPV Baltic Sp. z o.o.	Gdańsk	Provision of sea transport and related services	99.99%	99.99%
• Miliana Shipmanagement Ltd.	Nicosia, Cyprus	Provision of sea transport and related services	99.99%	99.99%
• Miliana Shipping Group Ltd. (parent of another group: Miliana Shipping Group Group)	Nicosia, Cyprus	Management of own assets	99.99%	99.99%
• Bazalt Navigation Co. Ltd.	Nicosia, Cyprus	Ship chartering	99.99%	99.99%
• Granit Navigation Company Ltd.	Nicosia, Cyprus	Ship chartering	99.99%	99.99%
• Kambr Navigation Company Ltd.	Nicosia, Cyprus	Ship chartering	99.99%	99.99%
• St. Barbara Navigation Company Ltd.	Nicosia, Cyprus	Ship chartering	99.99%	99.99%
• Petro Icarus Company Ltd.	Nicosia, Cyprus	Ship chartering	99.99%	99.99%
• Petro Aphrodite Company Ltd.	Nicosia, Cyprus	Ship chartering	99.99%	99.99%
• AB LOTOS Geonafta (parent of another group: AB LOTOS Geonafta Group)	Lithuania, Gargždai	Crude oil exploration and production, drilling services, and purchase and sale of crude oil	99.99%	99.99%
• UAB Genciu Nafta	Lithuania, Gargždai	Crude oil exploration and production	99.99%	99.99%
• UAB Manifoldas	Lithuania, Gargždai	Crude oil exploration and production	99.99%	99.99%
Other				
LOTOS Petrobaltic Group				
• Energobaltic Sp. z o.o.	Władysławowo	Production of electricity, heat, LPG and natural gas condensate	99.99%	99.99%

Name	Registered office	Principal business activity	The Group's ownership interest	
			Dec 31 2015	Dec 31 2014
Equity-accounted joint ventures				
● LOTOS - Air BP Polska Sp. z o.o. (4)	Gdańsk	Sale of aviation fuel and logistics services	50.00%	50.00%
LOTOS Petrobaltic Group				
● Baltic Gas Sp. z o.o. (5)	Gdańsk	Oil and gas production (support activities for oil and gas production)	49.99%	49.99%
● Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. (5)	Gdańsk	Crude oil and gas production	43.96%	62.40%
AB LOTOS Geonafta Group				
● UAB Minijos Nafta (6)	Lithuania, Gargždai	Crude oil exploration and production	49.99%	49.99%

(1) On March 12th 2015, LOTOS Park Technologiczny Sp. z o.o. w likwidacji (in liquidation) was deleted from the National Court Register. The liquidation proceedings were opened to achieve one of the objectives of the 2013−2015 Efficiency and Growth Programme, which is to streamline the structure of the LOTOS Group.

(2) The companies were excluded from consolidation because the figures reported in their financial statements as at December 31st 2015 were immaterial to fulfilling the obligation provided for in IFRS 10 Consolidated Financial Statements.

(3) On June 1st 2015, Grupa LOTOS S.A. established the LOTOS Foundation. The Foundation's mission is the wide-ranging social activity to make a positive contribution to its social and natural environment. The LOTOS Foundation's activities focus mainly on projects in the area of environmental protection, science, education, and social development.

(4) Joint venture agreement between Grupa LOTOS S.A. and BP Europe SE on joint operations related to supply of aviation fuel through LOTOS - Air BP Polska Sp. z o.o.

(5) Agreement on cooperation between LOTOS Petrobaltic S.A. and CalEnergy Resources Poland Sp. z o.o. with respect to development and production of gas and condensate reserves from the B-4 and B-6 fields in the Baltic Sea, performed through special purpose vehicles Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. and Baltic Gas Sp. z o.o. (general partner).
For IFRS purposes, Baltic Gas Sp. z o.o. i wspólnicy sp.k. and Baltic Gas Sp. z o.o. are the Group's equity-accounted joint ventures (IFRS 11).
In 2015, Cal Energy Resources Poland Sp. z o.o. and LOTOS Petrobaltic S.A. made cash contributions to Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp. k. of PLN 40,176 thousand and PLN 3,877 thousand, respectively, which changed the Group's ownership interest in the company. Furthermore, in Q2 2015, those shareholders acquired new shares in the increased (by PLN 40 thousand) share capital of Baltic Gas Sp. z o.o. The expenditure of PLN 3,898 thousand, representing the cash contributions made by LOTOS Petrobaltic S.A. to the abovementioned companies, was disclosed in the consolidated statement of cash flows under *Cash contributions − equity-accounted joint ventures*. See Note 16.1.

(6) Joint venture set up for the purpose of oil exploration and production operations in Lithuania, operated in the form of UAB Minijos Nafta.

3. Basis of preparation

These consolidated financial statements ("consolidated financial statements", "financial statements") were prepared in accordance with the International Financial Reporting Standards ("IFRS") endorsed by the European Union which were in effect as at December 31st 2015. Given the ongoing process of implementation of the IFRSs in the European Union and the scope of the Group's business, as far as the accounting policies applied by the Group are concerned, there is no difference between the IFRSs which have come into force and the IFRSs endorsed by the European Union for 2015, save for the principles which have been modified or introduced as a result of applying new IFRS regulations for annual periods beginning on or after January 1st 2015 (see Note 4).

The following new standards, amendments to the existing standards and interpretations which have been endorsed by the European Union (the "EU") are effective in periods beginning on or after January 1st 2015 and have been applied by the Company:

- Amendments introduced as part of the Improvements to IFRSs 2011-2013 cycle, published on December 12th 2013 (effective for annual periods beginning on or after July 1st 2014) − in the EU effective for annual periods beginning on or after January 1st 2015,
- IFRIC 21 Levies, published on May 20th 2013 (applicable to annual periods beginning on or after January 1st 2014 – in the EU effective for annual periods beginning on or after June 17th 2014).

These amendments and interpretations of IFRSs have no material effect on the Group's financial statements.

These consolidated financial statements have been prepared on the assumption that the Group companies will continue as a going concern in the foreseeable future. As at the date of approval of these financial statements, no circumstances were identified which would indicate any threat to the Group companies' continuing as a going concern.

The Parent's functional currency and the presentation currency of these consolidated financial statements is the Polish złoty ("złoty", "zł", "PLN"). These consolidated financial statements were prepared in thousands of złoty and, unless indicated otherwise, all amounts are stated in thousands of złoty.

4. New standards and interpretations which have been published but are not yet effective

The following new standards, amendments to the existing standards and interpretations have been endorsed by the European Union (the "EU"):

- Amendments introduced as part of the Improvements to IFRSs 2010-2012 cycle, published on December 12th 2013 (effective for annual periods beginning on or after July 1st 2014) − in the EU effective for annual periods beginning on or after February 1st 2015,
- Amendments introduced as part of the Improvements to IFRSs 2011-2013 cycle, published on December 12th 2013 (effective for annual periods beginning on or after July 1st 2014) − in the EU effective for annual periods beginning on or after January 1st 2015,
- Amendments to IAS 19 Employee Benefits: Defined Benefit Plans − Employee Contributions (effective for annual periods beginning on or after July 1st 2014) − in the EU effective for annual periods beginning on or after February 1st 2015,
- IFRIC 21 Levies, published on May 20th 2013 (applicable to annual periods beginning on or after January 1st 2014 – in the EU effective for annual periods beginning on or after June 17th 2014),
- Amendments to IAS 16 Property, Plant and Equipment and IAS 38 Intangible Assets: Clarification of Acceptable Methods of Depreciation and Amortisation, published on May 12th 2014 (effective for annual periods beginning on or after January 1st 2016),
- Amendments to IAS 16 Property, Plant and Equipment and IAS 41 Agriculture: Bearer Plants, published on June 30th 2014 (effective for annual periods beginning on or after January 1st 2016),
- Amendments to IAS 27 Separate Financial Statements: Equity method in separate financial statements, published on August 12th 2014 (effective for annual periods beginning on or after January 1st 2016),
- Amendments introduced as part of the Improvements to IFRSs 2012-2014 cycle, published on September 25th 2014 (effective for annual periods beginning on or after January 1st 2016),
- Amendments to IAS 1 Presentation of financial statements − Disclosures, published on December 18th 2014 (effective for annual periods beginning on or after January 1st 2016).

New standards, amendments to the existing standards and interpretations which have not been endorsed by the European Union:

- IFRS 9 Financial Instruments, published on July 24th 2014 (effective for annual periods beginning on or after January 1st 2018);
- IFRS 14 Regulatory Deferral Accounts, published on January 30th 2014 (effective for annual periods beginning on or after January 1st 2016);
- IFRS 15 Revenue from Contracts with Customers, published on May 28th 2014 (effective for annual periods beginning on or after January 1st 2017);
- Amendments to IFRS 11 Joint Arrangements: Accounting for Acquisitions of Interests in Joint Operations, published on May 6th 2014 (effective for annual periods beginning on or after January 1st 2016);
- Amendments to IFRS 10 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; published on September 11th 2014 (effective for annual periods beginning on or after January 1st 2016; it is important to note that the effective date of these amendments has been tentatively postponed, and as at the issue date of these financial statements no decision has been made as to the timing of the individual stages of the endorsement process),
- Amendments to IFRS 10 Consolidated Financial Statements, IFRS 12 Disclosure of Interests in Other Entities, and IAS 28 Investments in Associates and Joint Ventures − Investment Entities: Applying the Consolidation Exception, published on December 18th 2014 (effective for annual periods beginning on or after January 1st 2016),
- IFRS 16 Leases, published on January 13th 2016 (effective for annual periods beginning on or after January 1st 2019).
- Amendments to IAS 7 under the Disclosure Initiative (effective for annual periods beginning on or after January 1st 2017).

The Group has not elected to early adopt any of the standards, interpretations, or amendments endorsed by the EU which were not effective as at December 31st 2015. From among the new and amended regulations described above, IFRS 9 and IFRS 15, in particular, may have a material impact on the Group's reporting. The Company's Management Board is analysing and assessing the effect of the new standards and interpretations on the accounting policies applied by the Group and on the Group's future financial statements.

5. Use of accounting assumptions, estimates and judgements

The preparation of financial statements in accordance with the International Financial Reporting Standards requires a number of assumptions, judgements and estimates which affect the value of items disclosed in these financial statements.

Although the assumptions and estimates are based on the management's best knowledge of the current and future events and developments, the actual results might differ from the estimates.

The estimates and underlying assumptions are reviewed on a continuous basis. Any change in an accounting estimate is recognised in the period in which it was made if it refers exclusively to that period, or in the current period and future periods if it refers to both the current period and future periods. Material assumptions used in making the estimates are described in the relevant notes to these financial statements.

While making assumptions, estimates and judgements, the Company's Management Board (Management Board) relies on its experience and knowledge and may take into consideration opinions, analyses and recommendations issued by independent experts.

Critical assumptions and estimates

Employee benefit obligations

Employee benefit obligations are estimated using actuarial methods. For information on actuarial assumptions and valuation of employee benefit obligations see Note 29.4.

Depreciation/amortisation

Depreciation/amortisation of the assets of onshore and offshore oil and natural gas extraction facilities is calculated (using the units-of-production method) based on 2P hydrocarbon reserve estimates (proved and probable reserves), evaluated, revised and updated by the Group, as well as forecast production volumes from the individual oil and gas fields based on geological data, test production, subsequent production data and the schedule of work adopted in the long-term strategy. The increase in the Group's estimated oil and gas resources in the last quarter of 2015 is attributable to the acquisition of an interest in producing fields – a portfolio of assets in the Sleipner gas field on the Norwegian Continental Shelf, and will have an effect on the depreciation/amortisation expense on the Group's production assets (calculated using the units-of-production method) as of January 1st 2016.

Depreciation/amortisation charges on refining and other fixed assets are determined based on the expected useful lives of property, plant and equipment and intangible assets. The Group reviews the useful lives of its assets annually, based on current estimates. The relevant estimate update which had an effect on the Group's financial statements for 2015 chiefly involved a PLN 5,043 thousand decrease in depreciation/amortisation at the Parent.

Fair value of financial instruments

Fair value of financial instruments for which no active market exists is measured with the use of appropriate valuation methods. In selecting the methods and assumptions appropriate for these objectives, the Group relies on professional judgement.

For more information on the assumptions adopted for the measurement of fair value of financial instruments, see Note 7.22.

Deferred tax assets

The Group recognises deferred tax assets if it is assumed that taxable income will be generated in the future against which the asset can be utilised. If taxable income deteriorates in the future, this assumption may prove invalid. The Parent's Management Board reviews its estimates regarding the likelihood of recovering deferred tax assets taking into account changes in the factors on which such estimates were based, new information and past experience.

For information on deferred tax assets, see Note 10.3.

Impairment of cash-generating units, individual items of property, plant and equipment, and intangible assets

In accordance with IAS 36 Impairment of Assets, as at the end of each reporting period it is assessed whether there are any indicators of impairment of cash-generating units and individual assets. Impairment indicators may be external and may relate to market variables (including fluctuations in prices, FX rates, stock prices, interest rates and other variables related to current economic trends), and may also follow from plans, actions and developments at the Group, such as decisions concerning change, discontinuation, limitation or development of its business, technology changes, or efficiency and investment initiatives.

If there is any indication of impairment, the Company is required to estimate the recoverable amounts of assets and cash-generating units. While determining the recoverable amount, the Company takes into account such key variables as discount rates, growth rates and price ratios.

As at December 31st 2015, following an analysis of cash flows for individual cash-generating units and the required impairment tests for assets, the Group made necessary adjustments to assets and disclosed detailed information on the assumptions and test results in Notes 13, 14 and 15. For information on impairment of the Group's investments in joint ventures, see Note 16.

Recognition of revenue from sales of crude oil and natural gas in Norway

In line with the Group's accounting policy, revenue from sales of hydrocarbons produced from the fields on the Norwegian Continental Shelf in which the Group holds interests is recognised using the entitlements method (see Note 7.2), in proportion to the Group's entitlement to production from a given field. Revenue from oil and gas sales disclosed in the statement of comprehensive income for a given reporting period is estimated based on up-to-date data on production from the individual fields in the reporting period. Any differences between the amount of actual revenue from sales of crude oil produced from the Heimdal producing fields: Skirne, Vale and Atla, and the Sleipner producing fields: Sleipner Ost, Sleipner Vest, Gungne and Loke, and the Group's revenue estimated based on the contractual share of production from the fields are recognised in the statement of financial position under trade receivables and trade payables, which in 2015 amounted to PLN 13,742 thousand and PLN 9,974 thousand, respectively.

Provision for decommissioning of the upstream segment's facilities and land reclamation

As at the end of the reporting period, the Group analyses the costs necessary to decommission oil and natural gas extraction facilities and the expenditure to be incurred on future land reclamation. As a result of those analyses, the Group adjusts the value of the land reclamation provision recognised in previous years to reflect the amount of estimated necessary future costs. Any changes in the estimated time value of money are also reflected in the amount of the provision. For information on the rules for recognition of these provisions and information on provisions disclosed in these financial statements for 2015, see Note 7.26.1 and Note 30.1, respectively.

Professional judgement in accounting

Control of an investee

According to IFRS 10 Consolidated Financial Statements, the Group controls an investee when it is exposed or has rights to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. When assessing whether it controls an investee the Group considers all relevant facts and circumstances, including the entity's purpose and design, its relevant activities and decision-making process, and the significant rights of the investor (excluding protective rights) giving it the current ability to direct the relevant activities, as well as the nature of its relationship with other parties in respect of such entity. The Group reassesses whether it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control: power over the investee, exposure (or rights) to variable returns, and the ability to use its power over the investee. As at the end of the reporting period, the Group controls all of the entities presented in these financial statements as subsidiaries (see Note 2).

Collective control of an investee or operation

The Group and two or more investors collectively control an investee when they must act together to direct the relevant activities. In such cases, because no investor can direct the activities without the cooperation of other investors, no investor individually controls the investee. The Group assesses whether it shares control of an arrangement, which – according to IFRS 11 Joint Arrangements – may be defined either as a joint venture or a joint operation, taking into consideration whether all parties to the relevant arrangement have control of it, whether they share exposure, or rights, to variable returns from their involvement with the investee, and whether they have the ability to jointly use their power over the investee to affect the amount of their returns.

As at the end of the reporting period, the Group was involved in joint operations under projects carried out on the Heimdal field in Norway, and was involved in joint ventures (see Note 2 and Note 16), as defined in IFRS 11, and in that respect, considering all facts and circumstances, it had joint control.

As at December 31st 2015, the Group also held interests in the Sleipner gas fields in Norway. Upon their acquisition in December 2015 (see Note 13.1.3), the Group entered into an agreement with the other licence holders: Sleipner, Gungne, Loke, Alfa Sentral and PL046D. Considering the IFRS 11 criteria, the Group's operations on the above fields do not represent joint arrangements as defined in the standard and the Group does not have joint control of the operations as there is more than one combination of parties that can agree to make significant decisions. Therefore, for the purpose of correct recognition and measurement of transactions related to the operations on the Sleipner field, the Group applies other relevant IFRSs taking into account its interest in the fields, which ensures that there are no material differences in the accounting recognition and measurement of transactions related to these operations and the manner of recognising operations which are carried out jointly with the Heimdal licence interest holders and meet the definition of joint operations within the meaning of IFRS 11.

Classification of lease agreements

The Group classifies its lease agreements as finance leases or operating leases based on the assessment of the extent to which the risks and rewards incidental to asset ownership have been transferred from the lessor to the lessee. Such assessment is in each case based on the economic substance of a given transaction. At the inception of a lease, the Group assesses all facts, circumstances and conditions, and specifies the objectives and intentions concerning the agreement, in order to determine if substantially all the risks and rewards of ownership have been transferred to the lessee. In the event of material amendments to a lease, the Group performs a reassessment of the lease classification, applying the same rules as in the original classification of the lease agreement.

Classification of natural gas and crude oil assets in financial statements

The Group classifies its natural gas and crude oil assets as exploration and evaluation assets, development assets or production assets, relying on its professional judgement.

Once the size of a deposit is confirmed and its production plan is approved, the expenditure on natural gas and crude oil assets is transferred from exploration and evaluation assets to appropriate items of property, plant and equipment or intangible assets related to development and production.

The decision to present natural gas and crude oil assets in the financial statements under development assets or production assets is made taking into account all conditions and circumstances related to the upstream project and the subsequent production from the field.

For information on accounting policies concerning natural gas and crude oil assets, see Notes 7.7, 7.9 and 7.10. For presentation and details of these assets in the financial statements, see Notes 13 and 15.

6. Change of information presented in previous reporting periods and change of accounting policies

Following reclassification of a portion of property, plant and equipment under construction in the reporting period ended December 31st 2015, the Group restated the comparative data in the statement of financial position as at December 31st 2014 by transferring PLN 3,771 thousand from *Property, plant and equipment* to *Other intangible assets* (see Notes 13.2 and 15.2).

7. Accounting policies

These consolidated financial statements have been prepared in accordance with the historical cost principle, except with respect to derivative financial instruments, which are measured at fair value, and financial liabilities measured at amortised cost.

The key accounting policies applied by the Group are presented below.

7.1 Basis of consolidation

These consolidated financial statements have been prepared on the basis of the financial statements of the Parent and financial statements of its subsidiaries and jointly-controlled entities, prepared as at December 31st 2015.

All significant balances and transactions between the related entities, including material unrealised profits on transactions, have been eliminated in their entirety. Unrealised losses are eliminated unless they are indicative of impairment.

Subsidiaries are fully consolidated starting from the date when the Group assumes control over them and cease to be consolidated when the control is lost. According to IFRS 10 Consolidated Financial Statements, the Group controls an investee when it is exposed or has rights to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The Group and two or more investors collectively control an investee when they must act together to direct the relevant activities. In such cases, because no investor can direct the activities without the cooperation of other investors, no investor individually controls the investee. Interests in joint ventures held by the Group (see Note 2 and Note 16) are accounted for with the equity method (see Note 7.11).

7.2 Revenue

Revenue is disclosed at the fair value of consideration received or due for the sale of products, merchandise and services, executed in the ordinary course of business, less discounts, value added tax (VAT) and other sales-related taxes (excise duty, fuel charge). Revenue from sale of products and merchandise is recognised at the moment of delivery, when material risks and rewards resulting from the ownership of the products and merchandise have been transferred to the purchaser, with the proviso that revenue from sale of crude oil and natural gas in Norway is recognised and disclosed using the entitlements (rights) method.

The entitlements method is one of two methods for recognition of revenue commonly applied by oil and gas producers (with the sales method as the alternative) and allowed under IFRS. The Management Board believes that the entitlements method provides for a fair and accurate presentation of the assets, financial performance and profitability of the Group’s joint operations carried out at oil and gas producing fields.

For logistical reasons, when hydrocarbons are produced from a field by many participants there are naturally occurring differences between the volumes actually received by individual participants and their respective contractual share of production (to which participants are entitled under relevant agreements). Thus, it is necessary to apply a special mechanism to account for such discrepancies. In accordance with the entitlements method applied by the Group, revenue is always recognised in the Group’s accounting books in proportion to its entitlement to production from the field. The correct amount of revenue in the financial statements is arrived at in such manner that an overlift party, i.e. a participant which in a given period receives hydrocarbons in excess of its contractual share of production from a field, recognises the excess in its accounting books not as revenue but as a liability. Conversely, if in a given period the underlift party, i.e. a participant that receives less than its entitlement, recognises the underlift as a receivable (revenue). In the consolidated statement of financial position, assets and liabilities under the entitlements method are presented as *trade receivables* and *trade payables*. For more information on estimates related to the application of the entitlements method, see Note 5.

7.3 Dividend income

Dividend is recognised as finance income as at the date on which the appropriate governing body of the dividend payer adopts a resolution concerning distribution of profit, unless the resolution specifies another dividend record date. Although it does not follow directly from IAS 18, the Group decided to disclose dividend income under finance income as such classification is a common practice among entities, other than financial institutions, applying IFRSs. The Group applies this classification policy in a consistent manner.

7.4 Interest income

Interest income is recognised as the interest accrues (using the effective interest rate), unless its receipt is doubtful. The Group recognises interest income under finance income, which does not follow directly from IAS 18 but from a common and accepted practice of entities, other than financial institutions, applying IFRSs. The Group applies this classification policy in a consistent manner.

7.5 Taxes

7.5.1 Income tax

Mandatory decrease in profit/(increase in loss) comprises current income tax (CIT) and deferred income tax. The current portion of income tax is calculated based on net profit/(loss) (taxable income) for a given financial year. Net profit (loss) for tax purposes differs from net profit (loss) for accounting purposes due to temporary differences between revenue amounts calculated for these two purposes, including income which is taxable and costs which are tax-deductible in a period other than the current accounting period, as well as permanent differences attributable to income and cost which will never be accounted for in tax settlements. The tax charges are calculated based on the tax rates effective for a given financial year.

For the purposes of financial reporting, the Company determines deferred tax liabilities taking into account all temporary differences existing as at the end of the reporting period between the tax base of assets and liabilities and their carrying amounts as disclosed in the financial statements.

Deferred tax liability is recognised for all taxable temporary differences:

- except to the extent that the deferred tax liability arises from the initial recognition of goodwill or the initial recognition of an asset or liability in a transaction which is not a business combination, and, at the time of the transaction, affects neither accounting pre-tax profit nor taxable income (tax loss), and
- in the case of taxable temporary differences associated with investments in subsidiaries, jointly-controlled entities or associates and interests in joint ventures, unless the investor is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are disclosed in relation to all deductible temporary differences, unused tax assets, and unused tax losses brought forward in the amount of the probable taxable income which would enable these differences, assets and losses to be used:

- except to the extent that the deferred tax assets related to deductible temporary differences arise from the initial recognition of an asset or liability in a transaction which is not a business combination, and, at the time of the transaction, affects neither accounting pre-tax profit nor taxable income (tax loss), and
- in the case of deductible temporary differences associated with investments in subsidiaries, jointly-controlled entities or associates and interests in joint ventures, the related deferred tax assets are recognised in the statement of financial position to the extent it is probable that in the foreseeable future the temporary differences will be reversed and taxable income will be generated which will enable the deductible temporary differences to be offset.

The carrying amount of deferred tax assets is revised as at the end of each reporting period and is subject to appropriate reduction to the extent it is no longer probable that taxable income sufficient for its partial or full realisation would be generated.

Deferred tax assets and deferred tax liabilities are calculated using tax rates expected to be effective at the time of realisation of particular asset or liability, based on tax rates (and tax legislation) effective as at the end of the reporting period or tax rates (and tax legislation) which as at the end of the reporting period are certain to be effective in the future. The effect of deferred tax on items posted directly to equity is recognised in equity through other comprehensive income.

Deferred tax assets and deferred tax liabilities are presented in the statement of financial position in an amount obtained after they are offset for particular consolidated entities.

7.5.2 Value-added tax (VAT), excise duty and fuel charge

Revenue, expenses, assets and liabilities are recognised net of the VAT, excise duty and fuel charge:

- except where the value-added tax (VAT) paid on the purchase of assets or services is not recoverable from the tax authorities (in such a case it is recognised in the cost of a given asset or as part of the cost item), and
- except in the case of receivables and payables which are recognised inclusive of the value-added tax, excise duty and fuel charge.

The net amount of value-added tax, excise duty and fuel charge recoverable from or payable to tax authorities is carried in the statement of financial position under receivables or liabilities, as appropriate.

7.6 Foreign currency transactions

Business transactions denominated in foreign currencies are reported in the consolidated financial statements after translation into the Group's presentation currency (Polish złoty) at the following exchange rates:

- the exchange rate actually applied on that date due to the nature of the transaction – in the case of sale or purchase of foreign currencies;
- the mid rate quoted for a given currency by the National Bank of Poland (the "NBP") for the day immediately preceding the transaction date – in the case of payment of receivables or liabilities where there is no rationale for using the exchange rate referred to above, and for other transactions.

The exchange rate applicable to purchase invoices is the mid-exchange rate quoted by the National Bank of Poland for the last business day immediately preceding the invoice date, and the exchange rate applicable to sales invoices is the mid-exchange rate quoted by the National Bank of Poland for the last business day immediately preceding the sale date.

Any foreign exchange gains or losses resulting from currency translation are posted to the statement of comprehensive income (including intra-Group foreign currency transactions), except for foreign exchange gains and losses which are treated as a part of borrowing costs and are capitalised in property, plant and equipment (foreign exchange gains and losses on interest and fees and commissions). Non-monetary items measured at their historical cost in a foreign currency are translated at the exchange rate effective as at the date of the initial transaction. Non-monetary items measured at fair value in a foreign currency are translated at the exchange rate effective as at the date of determining the fair value.

The Company calculates realised and unrealised foreign exchange gains (losses) separately and recognises the resulting total balance in the statement of comprehensive income under:

- operating profit or loss: in the case of foreign exchange gains and losses related to settlement of trade receivables and payables,
- finance gain or loss: in the case of borrowings, investment commitments, and cash and cash equivalents.

Exchange differences on valuation as at the end of the reporting period of short-term investments (e.g. shares and other securities, loans advanced, cash and cash equivalents) and receivables and liabilities denominated in foreign currencies are charged to finance income or costs and operating income or expenses.

The financial statements of foreign entities are translated into the presentation currency of the consolidated financial statements at the following exchange rates:

- items of the statement of financial position – at the mid-exchange rate quoted by the National Bank of Poland for the end of the reporting period (NBP's mid-exchange rate for the end of the reporting period),
- items of the statement of comprehensive income – at the exchange rate computed as the arithmetic mean of mid-exchange rates quoted by the National Bank of Poland for the end of each month in the reporting period (NBP's average mid-exchange rate in the reporting period).

The resulting exchange differences are recognised as a separate component in equity and other comprehensive income.

Exchange differences arising on a monetary item that forms a part of a reporting entity's net investment in a foreign operation are recognised in equity and other comprehensive income, and on disposal of the investment they are reclassified to consolidated profit or loss in the statement of comprehensive income.

At the time of disposal of a foreign entity, the accumulated exchange differences recognised in equity and relating to this foreign entity are disclosed in profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets or liabilities of the foreign operation and are translated into the presentation currency of the financial statements at the exchange rate effective for the end of the reporting period.

The following exchange rates were used in the valuation of items of the statement of financial position:

NBP's mid rate quoted for:	Dec 31 2015 (1)	Dec 31 2014 (2)
USD	3.9011	3.5072
EUR	4.2615	4.2623
NOK	0.4431	0.4735
LTL	- (3)	1.2344

(1) NBP's mid rates table, effective for December 31st 2015.
(2) NBP's mid rates table, effective for December 31st 2014.
(3) Starting from January 1st 2015, the Lithuanian litas was replaced by the euro as the Republic of Lithuania joined the eurozone.

The following exchange rates were used in the valuation of items of the statement of comprehensive income:

NBP's average exchange rate for the reporting period	year ended Dec 31 2015	year ended Dec 31 2014
USD	3.7928	3.1784
EUR	4.1848	4.1893
NOK	0.4664	0.5001
LTL	- (3)	1.2133

(1) Based on the arithmetic mean of the mid rates quoted by the NBP for the last day of each full month in the period January 1st–December 31st 2015.
(2) Based on the arithmetic mean of the mid-exchange rates quoted by the NBP for the last day of each full month in the period January 1st–December 31st 2014.
(3) Starting from January 1st 2015, the Lithuanian litas was replaced by the euro as the Republic of Lithuania joined the eurozone.

7.7 Property, plant and equipment

Items of property, plant and equipment other than land are measured at cost less accumulated depreciation and impairment losses.

Land is measured at cost less impairment losses. In the case of perpetual usufruct rights to land, cost is understood to mean the amount paid for the right to a third party.

Perpetual usufruct rights to land obtained free of charge are capitalised at fair value in the accounting books.

Initial value of an item of property, plant and equipment comprises its cost, which includes all costs directly related to its acquisition and bringing it to working condition for its intended use. The cost also includes the cost of replacing component parts of plant and equipment, which is recognised when incurred, if relevant recognition criteria are fulfilled. Costs incurred on an asset which is already in service, such as costs of repairs or overhauls or operating fees, are expensed in the reporting period in which they were incurred.

Items of property, plant and equipment (including their components), other than land and property, plant and equipment comprising production infrastructure, are depreciated using the straight-line method over their estimated useful lives, which are as follows:

Buildings, structures	over 1 year – 80 years
Plant and equipment	over 1 year – 25 years
Vehicles, other	over 1 year – 15 years

Items of property, plant and equipment comprising production infrastructure used in crude oil and natural gas extraction are depreciated using the units-of-production depreciation method, i.e. depreciation per unit of produced crude oil or natural gas is charged to expenses. The depreciation rate is estimated by reference to forecasts of crude oil and gas production from a given geological area. If the estimated hydrocarbon reserves (2P – proved and probable reserves) change materially as at the end of the reporting period, depreciation per unit of produced crude oil or natural gas is remeasured. Then, starting from the new financial year, the revised depreciation rate is applied (see also Note 5).

An item of property, plant and equipment may be removed from the statement of financial position if it is sold or if the entity does not expect to realise any economic benefits from its further use. Any gains or losses on derecognition of an asset from the statement of financial position (calculated as the difference between net proceeds from its sale, if any, and the carrying amount of the asset) are disclosed in the statement of comprehensive income in the period of derecognition.

The residual values, useful economic lives and depreciation methods are reviewed on an annual basis and adjusted – if required – with effect from the beginning of the next financial year.

As part of its property, plant and equipment comprising production infrastructure, the Group discloses assets corresponding to the provision for decommissioning of oil and gas extraction facilities (see also Note 7.26.1). These assets are recognised in accordance with IAS 16 Property, Plant and Equipment, which reads: "The cost of an item of property, land and equipment comprises […] the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period". The Group's obligation to incur costs of decommissioning of the oil and gas extraction facilities results directly from the reasons specified in IAS 16. Under section 63 of the standard, entities are obliged to test the value of the asset periodically, at least as at the end of the reporting period.

Revaluation of assets so recognised may be caused by:

- change in the estimated cash outflow necessary to ensure performance of the decommissioning obligation,
- change in the current market discount rate,
- change in the inflation rate.

Items of property, plant and equipment under construction are measured at the amount of aggregate costs directly attributable to their acquisition or production (including finance costs) less impairment losses, if any. Items of property, plant and equipment under construction are not depreciated until they are ready for their intended use.

Property, plant and equipment under construction (including assembly) are recognised at cost.

Finance costs capitalised in property, plant and equipment under construction include costs recognised in line with the policies described in Note 7.22.

Expenditure on property, plant and equipment classified as exploration and evaluation assets is capitalised until the size of the deposit and the economic viability of production are determined; such expenditure is presented in a separate item of property, plant and equipment in accordance with IFRS 6 Exploration for and Evaluation of Mineral Resources. Upon confirmation of existence of reserves in the case of which extraction is technically feasible and economically viable, such expenditure is transferred to relevant items of property, plant and equipment classified as development and production assets, and is subsequently amortised using the units-of-production method (see above) based on the volume of reserves and actual production.

If expenditure on property, plant and equipment under construction does not result in discovery of any reserves in the case of which extraction is technically feasible and economically viable, impairment losses on property, plant and equipment under construction are recognised and charged to profit or loss of the period in which it is found that commercial production from the deposits is not viable.

7.8 Goodwill

The acquirer recognises the aquiree's goodwill on acquisition, equal to the excess of the difference between (A) the amount of consideration transferred, measured at its acquisition-date fair value, including the value of any non-controlling interests in the acquiree, (B) the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree (in the case of a business combination achieved in stages), and (C) the net of the acquisition-date amount, including all identifiable assets acquired and the liabilities assumed, measured at fair values as at the transaction date.

Goodwill = (C) - (A) - (B)

In the case of a business combination achieved in stages, the acquirer remeasures its previously held equity interest in the acquiree at its acquisition-date fair value and recognises the resulting gain or loss in the statement of comprehensive income.

Following the initial recognition, goodwill is carried at cost less cumulative impairment losses. Goodwill is tested for impairment once a year. It is not amortised.

As at the date of assuming control, the acquired goodwill is allocated to every identifiable cash-generating unit. The Group calculates impairment of value by estimating the recoverable amount of the cash-generating unit relevant to a given part of goodwill. If the recoverable amount of a cash-generating unit is lower than its carrying amount, the Group recognises an impairment loss. If goodwill comprises a part of a cash-generating unit and the Group sells a part of the cash-generating unit's business, the goodwill pertaining to the sold business is included in the carrying amount of the sold business for the purpose of calculating gains or losses on disposal of the part of business. In such a case, goodwill pertaining to the sold business should be measured using the relative value of the sold business, pro-rata to the interest in the retained part of the cash-generating unit.

7.9 Other intangible assets

Intangible assets other than goodwill comprise oil exploration and production licences in Lithuania acquired as part of a business combination, expenditure incurred on oil and gas exploration licences on the Norwegian Continental Shelf, other production and exploration licences in Poland, software licences, patents, trademarks, acquired CO2 emission allowances and intangible assets under development.

Intangible assets are initially recognised at cost if they are acquired in separate transactions. Intangible assets acquired as part of a business combination are recognised at fair value as at the transaction date. Subsequent to initial recognition, measurement of intangible assets accounts for accumulated amortisation and impairment losses.

Licences obtained in Lithuania during the step acquisition of the AB LOTOS Geonafta Group companies are disclosed in intangible assets classified as development and production assets and amortised using the unit-of-production method, i.e. amortisation per unit of produced crude oil is charged to expenses. The amortisation rate is estimated by reference to forecasts of hydrocarbon production from a given field. If the estimated hydrocarbon reserves (2P – proved and probable reserves) change materially as at the end of the reporting period, amortisation per unit of produced crude oil or natural gas is remeasured. Then, starting from the new financial year, the revised amortisation rate is applied.

Expenditure on oil and gas exploration licences on the Norwegian Continental Shelf is presented in a separate item of intangible assets, as required under IFRS 6 Exploration for and Evaluation of Mineral Resources, and is not amortised until the technical feasibility and commercial viability of extraction is demonstrated. For more information on the accounting policies concerning expenditure on exploration for and evaluation of mineral resources, see Note 7.10.

Other intangible assets are amortised using the straight-line method over their estimated useful lives. The expected useful lives of the Group's intangible assets range from 2 to 40 years.

The amortisation period and the amortisation method for an intangible asset are reviewed at the end of each financial year. Changes in the expected useful life or pattern of generation of the future economic benefits embodied in an intangible asset are reflected by changing the amortisation period or amortisation method, as appropriate, and are treated as changes in accounting estimates (see Note 5).

Except capitalised development expenditure, expenditure on intangible assets produced by the Company is not capitalised but is charged to expenses in the period in which it was incurred.

7.10 Exploration and evaluation expenditures

Exploration for and evaluation (appraisal) of mineral resources means the search for crude oil and natural gas resources, and determination of the technical feasibility and commercial viability of their extraction.

From the moment of obtaining the exploration right to a given area to the moment of determination of the technical feasibility and commercial viability of extracting mineral resources, expenditure directly connected with exploration for and evaluation of oil and gas resources is recognised in accordance with IFRS 6 Exploration for and Evaluation of Mineral Resources in a separate item of non-current assets. The expenditure includes the costs of acquisition of exploration rights, costs of exploration rigs, salaries and wages, consumables and fuel, insurance, costs of geological and geophysical surveys, as well as costs of other services.

The Group classifies its hydrocarbon exploration and evaluation assets as property, plant and equipment or intangible assets, depending on the type of the acquired assets, and applies this classification policy in a consistent manner.

Once the size of a deposit is confirmed and its production plan is approved, the expenditure is transferred to appropriate items of property, plant and equipment or intangible assets classified as development and production assets (see also Note 7.7 and Note 7.9).

The Group examines the need to recognise impairment losses on exploration and evaluation assets by considering whether in relation to a specific area:

- whether the period for which the Group has the right to explore in the specific area has expired during the current financial year or will expire in the near future, and is not expected to be renewed,
- no substantial expenditure on further exploration for and appraisal of mineral resources is anticipated,
- exploration for and appraisal of mineral resources have not led to discovery of commercially viable quantities of mineral resources and the Group has decided to discontinue such activities,
- sufficient data exist to indicate that, although development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

7.11 Equity-accounted joint ventures

Investments in joint ventures measured in accordance with IFRS 11 Joint Arrangements are accounted for with the equity method and recognised in the statement of financial position at cost, adjusted for subsequent changes in the Group's share of the net assets of such entities, less impairment losses, if any. The statement of comprehensive income reflects the share in the results of operations of such entities, and if a change is recognised directly in their equity, the Group recognises its share in each change and, if applicable, discloses it in the statement of changes in equity and in the statement of comprehensive income under net other comprehensive income.

7.12 Leases

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of the leased asset onto the lessee. All other lease agreements are treated by the Group as operating leases.

The Group as a lessor

Finance leases are disclosed in the statement of financial position as receivables, at amounts equal to the net investment in the lease less the principal component of lease payments for a given financial year calculated based on a pattern reflecting a constant periodic rate of return on the lessor's net investment outstanding in respect of the finance lease. Finance income from interest on a finance lease is disclosed in the relevant reporting periods based on a pattern reflecting a constant periodic rate of return on the net investment outstanding in respect of the finance lease.

Income from operating leases is recognised in the statement of comprehensive income on a straight-line basis over the lease term.

The Group as a lessee

Assets used under a finance lease are recognised as assets of the Group and are measured at fair value as at the acquisition date or, if lower, the present value of the minimum lease payments. The resultant obligation towards the lessor is presented in the statement of financial position under *Finance lease liabilities*. Lease payments are broken down into the interest component and the principal component so as to produce a constant rate of interest on the remaining balance of the liability. Finance costs are charged to the statement of comprehensive income.

Operating lease payments are recognised in the statement of comprehensive income on a straight-line basis over the lease term.

7.13 Impairment of non-financial non-current assets

As at the end of the reporting period, the Group assesses whether there is an indication of impairment of any of its assets. If the Group finds that there is such indication, or if the Group is required to perform annual impairment tests, the Group estimates the recoverable amount of a given asset.

The recoverable amount of an asset is equal to the higher of:

- the fair value of the asset or cash generating unit in which such asset is used, less cost to sell, or
- the value in use of the asset or cash generating unit in which such asset is used.

The recoverable amount is determined for the individual assets, unless a given asset does not generate separate cash flows largely independent from those generated by other assets or asset groups. If the carrying amount of an asset is higher than its recoverable amount, the value of the asset is impaired and an impairment loss is recognised up to the established recoverable amount.

In assessing value in use, the projected cash flows are discounted to their present value (at a pre-tax discount rate) which reflects current market assessments of the time value of money and the risks specific to the asset. Any impairment losses on non-financial assets used in operations are recognised under other expenses.

As at the end the reporting period, the Group assesses whether there is an indication that any impairment loss recognised in the previous periods with respect to a given asset should be reduced or reversed in full. If there is such indication, the Group again estimates the recoverable amount of the asset and the recognised impairment loss is reversed accordingly only if following the recognition of the most recent impairment loss there has been a change in the estimates used to determine the recoverable amount of the asset. In such a case, the carrying amount of the asset is increased up to its recoverable amount. The increased value may not exceed the carrying amount of the asset that would have been determined (net of accumulated amortisation/depreciation) if no impairment losses had been recognised on that asset in the previous years. Reversal of an impairment loss on a non-financial non-current asset is immediately recognised as other income. Following reversal of an impairment loss, in the subsequent periods the amortisation/depreciation charge for a given asset is adjusted so that its revised carrying amount, less residual value, can be regularly written off over the remaining useful life of that asset.

The Group offsets corresponding items of other income and expenses, including impairment losses and their reversals, in accordance with IAS 1 Presentation of Financial Statements (Section 34) and recognises them in the statement of comprehensive income on a net basis.

7.14 Inventories

Inventories are stated at the lower of cost and net realisable value.

Costs incurred in order to bring each inventory item to its present location and condition are accounted for in the following manner:

- materials and merchandise – at cost,
- finished goods and work-in-progress – at the cost of direct materials and labour and an appropriate portion of indirect production costs, established on the basis of normal capacity utilisation.

Net realisable value is the selling price estimated as at the end of the reporting period, net of value added tax, excise duty and fuel charge, less any rebates, discounts and other similar items, and less the estimated costs to complete and costs to sell.

Decrease in inventories is established with the weighted average method.

Mandatory stocks are disclosed as current assets given their short turnover cycle. For more information on mandatory stocks, see Note 19.2.

Impairment losses on products or semi-finished products, resulting from revaluation based on net realisable value rather than purchase price or production cost, are posted to production costs. Impairment losses on merchandise are charged to merchandise sold in the statement of comprehensive income.

As at the end of the reporting period, the Group estimates (based on an individual assessment of the usefulness of inventories for the purposes of the Group's business) the value of write-down of stored materials. Following a decline in prices of crude oil and refining products, the Group recognises a write-down of inventories to adjust their carrying amount, given the difference between their production cost and net realisable value, in accordance with IAS 2. Write-downs of stored materials made due to their impairment are charged to production costs.

If the reason for making an inventory write-down no longer exists, an equivalent of the entire or part of the write-down increases the value of the inventory item. If a write-down is used, write-down reversal is reflected in operating activities for the sake of clarity and due to its economic nature.

7.15 Trade and other receivables, prepayments and accrued income

Trade receivables, which typically become due and payable in 7 to 60 days, are recognised and carried at amounts initially invoiced, less impairment losses on doubtful receivables. Impairment losses on receivables are estimated when the collection of the full amount of receivables is no longer probable. Uncollectible receivables are written off through the statement of comprehensive income when recognised as unrecoverable accounts.

If the effect of time value of money is significant, the value of receivables is determined by discounting the projected future cash flows to their present value at a pre-tax discount rate reflecting the current market estimates of the time value of money. If the discount method is applied, an increase in receivables over time is recognised as finance income.

The Group recognises prepayments where costs relate to future reporting periods. Prepayments are recognised under other non-financial assets.

7.16 Cash and cash equivalents

Cash in hand and at banks, as well as short-term deposits held to maturity are measured at face value.

Cash and cash equivalents disclosed in the consolidated statement of cash flows comprise cash in hand, overdraft facilities as well as those bank deposits maturing within three months which are not treated as investment placements.

7.17 Non-current assets held for sale (or disposal groups)

Non-current assets (or disposal groups) are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. This condition is deemed to be met only if the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Classification of an asset as held for sale means that the management intends to complete the sale within one year from the change of its classification.

Non-current assets (or disposal groups) classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell.

7.18 Equity

Equity is recognised in the consolidated financial statements by categories, in accordance with applicable laws and constitutional documents of the consolidated entities.

The share capital of the LOTOS Group is the share capital of the Parent and is recognised at its par value, in the amount specified in the Company's Articles of Association and in the relevant entry in the National Court Register.

7.19 Borrowings and other debt instruments

All borrowings and other debt instruments are initially recognised at cost, equal to the fair value, less cost of obtaining the financing.

Following initial recognition, borrowings and other debt instruments are measured at amortised cost, using the effective interest rate method. Amortised cost includes the cost of obtaining financing and discounts, as well as premiums obtained on settlement of the liability. Upon removal of the liability from the statement of financial position or recognition of impairment losses, gains or losses are recognised in the statement of comprehensive income.

7.20 Employee benefit obligations

7.20.1 Retirement severance payments, length-of-service awards and other employee benefits

In accordance with the Collective Bargaining Agreement, the Group's employees are entitled to length-of-service awards and severance payments upon retirement due to old age or disability, as well as death benefits.

Also, the employees, retired employees, and pensioners covered by the Group's social benefits are entitled to benefits from a separate social fund, which is established pursuant to applicable national regulations (Company Social Benefits Fund).

According to IAS 19 Employee Benefits, old-age and disability retirement severance payments, as well as contributions to the Company Social Benefits Fund to be used for payment of future benefits to retired employees, are classified as defined post-employment benefit plans, while length-of-service awards, death benefits, and benefits paid to currently retired employees are recognised under other employee benefits.

Present value of future post-employment benefit obligations as at the end of the reporting period is calculated by an independent actuary using the projected unit credit method and is a discounted value of future payments which the employer has to make in order to fulfil its obligations under the work performed by employees in previous periods (until the end of the reporting period), defined individually for each employee, accounting for employee turnover (probability of employees leaving work), without including future employees.

The value of future employee benefit obligations includes length-of-service awards, old-age and disability retirement severance payments, social fund benefits payable to retired employees and pensioners, and estimated value of death benefits.

Length-of-service awards are paid out after a specific period of employment. Old-age and disability retirement severance payments are one-off and paid upon retirement. Amounts of severance payments and length-of-service awards depend on the length of employment and the average remuneration of an employee. The amount of death benefit depends on the length of employment of the deceased employee, and the benefit is payable to the family, in accordance with the rules set forth in the Polish Labour Code.

Actuarial gains and losses on post-employment benefits are recognised in other comprehensive income.

Employees of the Group companies are also entitled to holidays in accordance with the rules set forth in the Polish Labour Code. The Group calculates the cost of employee holidays on an accrual basis using the liability method. The value of compensation for unused holidays is recognised in the Group's accounting records based on the difference between the balance of holidays actually used and the balance of holidays used established proportionately to the passage of time, and disclosed in the financial statements as, respectively, current or non-current liabilities under other employee benefits during employment.
Obligations under other employee benefits during employment also include bonuses and awards granted as part of the Group's incentive pay systems.

For detailed information on employee benefits, see Note 29, containing the individual items of employee benefit obligations and employee benefit expenses, actuarial assumptions, as well as an analysis of sensitivity of estimates to changes of these assumptions. The Group recognises the cost of discount on its employee benefit obligations in finance costs.

Given the different nature of pension plans operated by the Group's foreign companies – LOTOS Exploration and Production Norge AS and the companies of the AB LOTOS Geonafta Group – and their negligible effect on the Group's obligations under length-of-service awards and post-employment benefits, those companies' obligations are presented separately as *Obligations under length-of-service awards and post-employment benefits at foreign companies*.

7.20.2 Profit distribution for employee benefits and special accounts

In accordance with the business practice in Poland, shareholders have the right to allocate a part of profit to employee benefits by making contributions to the Company's social benefits fund and to other special accounts. However, in the financial statements, such distributions are charged to operating expenses of the period to which the profit distribution relates.

7.21 Borrowing costs

Borrowing costs (i.e. interest and other costs incurred in connection with borrowings) are expensed in the period in which they were incurred, except costs which relate directly to the acquisition, construction or production of an asset being completed (including foreign exchange losses on interest, and foreign exchange losses on fees and commissions), which are capitalised as part of the cost of such asset (an asset being completed is an asset whose preparation for use or sale requires a significant amount of time).

To the extent that funds are borrowed specifically for the purpose of acquiring the asset being completed, the amount of the borrowing costs which may be capitalised as part of such asset is determined as the difference between the actual borrowing costs incurred in connection with a given credit facility or loan in a given period and the proceeds from temporary investments of the borrowed funds.

To the extent that funds are borrowed without a specific purpose and are later allocated for the acquisition of an asset being completed, the amount of the borrowing costs which may be capitalised is determined by applying the capitalisation rate to the expenditure on that asset.

7.22 Financial assets and liabilities

Financial assets and liabilities are classified into the following categories:

- Financial assets held to maturity,
- Financial assets and liabilities at fair value through profit or loss,
- Loans advanced and receivables,
- Financial assets available for sale,
- Financial liabilities at amortised cost

Financial assets held to maturity

Financial assets held to maturity are non-derivative financial assets with fixed or determinable payments and fixed maturities, which are quoted on an active market and which the Group has the positive intention and ability to hold to maturity, other than those:

- designated at fair value through profit or loss upon initial recognition,

- designated as available for sale,
- that qualify as loans and receivables.

Financial assets held to maturity are measured at amortised cost using the effective interest method.

Financial assets held to maturity are classified as non-current assets if they mature more than 12 months after the end of the reporting period.

Financial assets and liabilities at fair value through profit or loss

A financial asset at fair value through profit or loss is a financial asset that meets either of the following conditions:

a) it is classified as held for trading. Financial assets are classified as held for trading if they:
   - have been acquired principally for the purpose of being sold in the near future,
   - are part of a portfolio of identified financial instruments that are managed together and for which there is probability of profit-taking in the near future,
   - - are derivative instruments (except for those which are part of hedge accounting or financial guarantee contracts),

b) it has been assigned to this category in accordance with IAS 39 Financial Instruments: Recognition and Measurement upon initial recognition.

Measurement of financial assets at fair value through profit or loss consists in recognition of such assets at fair value by reference to their market value as at the end of the reporting period, without reflecting sale transaction costs. Any changes in the value of such instruments are recognised in the statement of comprehensive income as finance income or costs.

An entire contract can be designated as a financial asset at fair value through profit or loss if it contains one or more embedded derivatives. The above does not apply when an embedded derivative has no significant impact on the cash flows generated under the contract or when it is clear that if a similar hybrid instrument was first considered, separation of the embedded derivative would be prohibited under IFRS.

Financial assets may be designated as financial assets at fair value through profit or loss on initial recognition if the following criteria are met:

(i) such designation eliminates or significantly reduces a measurement or recognition inconsistency (an accounting mismatch); or
(ii) the assets are part of a group of financial assets that are managed and measured based on fair value, according to a well-documented risk management strategy; or
(iii) the assets contain embedded derivatives which should be presented separately.

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities initially designated as financial liabilities at fair value through profit or loss. Financial liabilities are classified as held for trading if they were acquired for the purpose of being sold in the near future. Derivative financial instruments, including separated embedded instruments, are also classified as held for trading, unless they are considered as effective hedges.

Financial liabilities may be designated as financial liabilities at fair value through profit or loss on initial recognition if the following criteria are met:

(i) such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring liabilities or recognising the gains and losses on them on different bases, or
(ii) the liabilities are part of a group of financial liabilities that are managed and measured based on fair value, according to a well-documented risk management strategy; or
(iii) the liabilities contain embedded derivatives which should be presented separately.

Financial liabilities classified as financial liabilities at fair value through profit or loss are measured based on their market value as at the end of the reporting period, without reflecting sale transaction costs. Changes in the fair value of such instruments are recognised in profit or loss as finance income or costs.

Based on the fair value measurement methods applied, the Group classifies its individual financial assets and liabilities according to the following levels (fair value hierarchy):

- Level 1: Financial assets and liabilities whose fair values are measured directly on the basis of quoted prices (used without adjustment) from active markets for identical assets or liabilities.
- Level 2: Financial assets and liabilities whose fair values are measured using measurement models when all significant input data is observable on the market either directly (unadjusted market prices) or indirectly (data based on market prices).
- Level 3: Financial assets and liabilities whose fair values are measured using measurement models when the input data is not based on observable market data (unobservable input data).

The Group discloses derivative transactions with positive fair values under financial assets held for trading. Derivative transactions with negative fair values are disclosed under financial liabilities held for trading.

The Group's financial assets and liabilities held for trading include the following types of derivatives: options, forward contracts (in particular forward rate agreements), futures contracts, swaps (in particular interest-rate swaps) and spot contracts. All the above types of forward transactions classified as derivatives are executed by the Group as part of its risk management policy (see below).

Fair value of commodity swaps is established by reference to discounted cash flows connected with the transactions, calculated on the basis of the difference between the average market price and the transaction price. The fair value is established on the basis of prices quoted on active markets, as provided by an external consultancy. (Level 2 in the fair value hierarchy).

Fair value of commodity options is established by reference to cash flows connected with the transactions, calculated on the basis of the difference between the option premium paid and the current market price of the option. The fair value has been established on the basis of prices quoted on active markets, as provided by an external consultancy (Level 2 in the fair value hierarchy).

Fair value of spots, forwards and currency swaps in the case of Grupa LOTOS S.A. is established by reference to future discounted cash flows from the transactions, calculated on the basis of the difference between the forward rate and the transaction price. The forward rate is calculated on the basis of the fixing rate quotations of the National Bank of Poland and the interest rate curve implied in FX swaps (Level 2 in the fair value hierarchy). Fair value of currency forwards held by LOTOS Asfalt sp. z o.o. is presented based on the information provided by the banks which are counterparties to those transactions (Level 2 in the fair value hierarchy).

The fair value of FRAs in the case of Grupa LOTOS S.A. is established by reference to future discounted cash flows connected with the transactions, calculated on the basis of the difference between the forward rate and the transaction price. The forward rate is calculated using the zero-coupon interest rate curve based on 6M or 3M LIBOR, depending on the type of transaction (Level 2 in the fair value hierarchy). The fair value of FRAs held by LOTOS Asfalt Sp. z o.o. and AB LOTOS Geonafta is presented based on the information provided by the banks which are counterparties to those transactions (Level 2 in the fair value hierarchy).

To manage risk related to carbon dioxide emission allowances, the Group assesses, on a case-by-case basis, the risk of expected deficit of emission allowances allocated free of charge under the carbon emission reduction system and manages the risk of changes in the price of emission allowance traded on an active market.

To hedge against the risk of changes in the price of CO_2 emission allowances, the Group enters into EUA, CER and ERU futures contracts. The fair value of the contracts is estimated based on the difference between the market price of a contract as quoted on the valuation date by the Intercontinental Exchange (ICE) and the actual transaction price (Level 1 in the fair value hierarchy).

If required, futures contracts to purchase carbon dioxide emission allowances open as at the last day of the reporting period are settled by the Group through physical delivery, with the intention to potentially use the allowances to offset the Group's actual CO_2 emissions. The valuation of futures contracts to purchase carbon dioxide emission allowances to be settled through physical delivery is not disclosed under financial assets/liabilities in the financial statements. However, the Group internally monitors and performs the valuation of its open futures positions as part of an overall assessment of the effectiveness of its CO_2 risk management (off balance sheet).

For information on the limit of free carbon dioxide emission allowances allocated to the Group, see Note 34. For a description of the Group's risk management process, see Note 32.2.

The Group applies hedge accounting. Changes in the fair value of derivative financial instruments designated to hedge cash flows, to the extent representing an effective hedge, are posted directly to other comprehensive income.

In the statement of financial position, derivative financial instruments are recognised under a separate item or, if their value is immaterial, under other assets and liabilities.

For more information on recognition and measurement of financial derivatives and hedge accounting, see Notes 7.24 and 7.25.

Loans advanced and receivables

Loans advanced and receivables are financial assets with fixed or determinable payments not classified as derivatives and not traded on any active market. They are disclosed under current assets if they mature within 12 months from the end of the reporting period. Loans and receivables with maturities exceeding 12 months from the end of the reporting period are classified as non-current assets.

The category includes: trade receivables, cash and cash equivalents, deposits, security deposits, investment receivables, security deposits receivable, finance lease receivables and other. In the statement of financial position, these are recognised under: *Trade receivables*, *Cash and cash equivalents*, *Other current and non-current assets*. For information on their recognition and measurement, see Notes 7.12, 7.15 and 7.16.

Financial assets available for sale

Financial assets available for sale are recognised at fair value increased by the transaction costs which may be directly attributed to the acquisition or issue of a financial asset. If quoted market prices from an active market are not available and the fair value cannot be reliably measured using alternative methods, available-for-sale financial assets are measured at cost less impairment. The positive or negative differences between the fair value of available-for-sale financial assets (if they have a market price derived from an active market or their fair value can be established in any other reliable manner) and their cost are recognised net of deferred tax in other comprehensive income. Impairment losses on available-for-sale financial assets are recognised in finance costs.

Any purchase or sale of financial assets is recognised at the transaction date. On initial recognition, financial assets are recognised at fair value including – in the case of financial assets other than those at fair value through profit or loss – transaction costs directly attributable to the purchase.

A financial asset is removed from the statement of financial position when the Group loses control over the contractual rights embodied in the financial instrument. This usually takes place when the instrument is sold or when all cash flows generated by the instrument are transferred to a non-related third party.

This category includes shares in other entities; in the statement of financial position they are posted under *Other financial assets*.

Financial liabilities at amortised cost

Financial liabilities, not classified as financial liabilities at fair value through profit or loss, are carried at amortised cost using the effective interest rate method.

Financial liabilities at amortised cost include bank and non-bank borrowings, bonds/notes, finance lease liabilities, trade payables, investment commitments, and other liabilities. These liabilities are recognised in the statement of financial position under: *Borrowings, other debt instruments and finance lease liabilities*, *Trade payables*, *Other liabilities and provisions*. For information on recognition and measurement of the above classes in this category of instruments, see Note 7.12, 7.19 and 7.27.

7.23 Impairment of financial assets

As at the end of the reporting period the Group determines whether there is an objective indication of impairment of a financial asset or a group of financial assets.

Assets carried at amortised cost

If there is an objective indication that the value of loans and receivables measured at amortised cost has been impaired, the impairment loss is recognised in the amount equal to the difference between the carrying amount of the financial asset and the present value of estimated future cash flows (excluding future losses relating to irrecoverable receivables, which have not yet been incurred), discounted at the initial effective interest rate (i.e. the interest rate used at the time of initial recognition). The carrying amount of an asset is reduced directly or by recognising relevant provisions. The amount of loss is recognised in the statement of comprehensive income.

The Group first determines whether there exists an objective indication of impairment with respect to each financial asset that is deemed material, and with respect to financial assets that are not deemed material individually. If the analysis shows that there exists no objective indication of impairment of an individually tested asset, regardless of whether it is material or not, the Group includes the asset into the group of financial assets with similar credit risk profile and tests such group for impairment as a whole. Assets which are tested for impairment individually, and with respect to which an impairment loss has been recognised or a previously recognised loss is deemed to remain unchanged, are not taken into account when a group of assets are jointly tested for impairment.

If an impairment loss decreases in the next period, and the decrease may be objectively associated with an event that occurred subsequent to the impairment loss recognition, the impairment loss is reversed. The subsequent reversal of an impairment loss is recognised in the statement of comprehensive income to the extent that the carrying amount of the asset does not exceed its amortised cost as at the reversal date.

Financial assets available for sale

If there exists an objective indication of impairment of a financial asset classified as an asset available for sale, the amount of the difference between (A) the cost of that asset (less any principal payments and amortisation charges) and its (B) current fair value, reduced by any impairment losses previously recognised in the statement of comprehensive income, (A – B) is derecognised from equity and charged to the statement of comprehensive income. Reversal of impairment losses concerning equity financial instruments classified as available for sale may not be recognised in the statement of comprehensive income. If the fair value of a debt instrument available for sale increases in the next period, and the increase may be objectively associated with an event that occurred subsequent to the impairment loss recognition in the statement of comprehensive income, the amount of the reversed impairment loss is recognised in the statement of comprehensive income.

Financial assets carried at cost

If there exists an objective indication of impairment of a non-traded equity instrument which is not carried at fair value since such value cannot be reliably determined, or of a related derivative instrument which must be settled by delivery of such non-traded equity instrument, the amount of impairment loss is established as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted with the market rate applicable to similar financial assets prevailing at a given time.

Impairment losses on financial assets and their reversals are recognised on a net basis as gains or losses under other income/expenses or finance income/costs, depending on the class of financial instruments.

7.24 Derivative financial instruments

Derivative instruments used by the Group to hedge against currency risk include in particular FX forwards. The Group also uses commodity swaps to hedge its exposure to commodity and petroleum product price risk, and in the case of sale of products at fixed prices with an embedded option it uses commodity options. The Group uses futures contracts to manage its exposure to prices of carbon dioxide (CO_2) emission allowances, and interest rate swaps (IRSs) and forward rate agreements (FRAs) to hedge its interest rate exposure.

Such financial derivatives are measured at fair value in line with the fair value hierarchy discussed above in the section devoted to financial asset and liability measurement policies. Derivative instruments are recognised as assets if their value is positive and as liabilities if their value is negative. Gains or losses resulting from changes in the fair value of a derivative which does not qualify for hedge accounting are charged directly to the net profit or loss for the financial year.

In the statement of financial position, financial instruments are presented as either current or non-current, depending on the expected time of realisation of assets and liabilities classified as held for trading.

7.25 Hedge accounting

As of January 1st 2011, the Parent commenced cash flow hedge accounting with respect to a USD-denominated credit facility designated as a hedge of future USD-denominated sales transactions. In the second half of 2012, the scope of application of cash flow hedge accounting was extended to include new hedging relationships established with respect to foreign-currency denominated facilities contracted to finance the 10+ Programme, designated as hedges of future USD-denominated petroleum product sales transactions.

The objective of cash flow hedge accounting is to guarantee a specified Polish złoty value of revenue generated in USD. The hedged items comprise a number of highly probable and planned USD-denominated refining product sale transactions, in particular the first portion of revenue (up to the amount of the designated principal repayment) in USD generated in a given calendar month, or if the amount of revenue in a given month is lower than the amount of the designated principal payment – the first portion of revenue generated in three successive months. If a subsequent portion of revenue is designated in a given calendar month, the hedged item is the first portion of revenue generated after the previously designated portion of revenue in USD in a given calendar month, or if the amount of revenue in a given month is lower than the amount of the designated principal repayment – a subsequent portion of revenue generated in three successive months. A hedged item is linked to relevant hedging instruments based on an individual document designating the hedging relationship.

The designated hedging instruments cover an obligation to repay a USD-denominated credit facility, whose settlement dates fall on business days of specified calendar months, as provided in the principal repayment schedule.

Changes in the fair value of derivative financial instruments designated to hedge cash flows, to the extent representing an effective hedge, are posted directly to other comprehensive income. Changes in the fair value of derivative financial instruments designated to hedge cash flows, to the extent not representing an effective hedge, are charged to other finance income or costs in the reporting period.

At the time when a hedge is undertaken, the Company formally designates and documents the hedging relationship, as well as its risk management objective and strategy for undertaking the hedge. The relevant documentation identifies (i) the hedging instrument, (ii) the hedged item or transaction, (iii) the nature of the hedged risk, and (iv) specifies how the Company will assess the hedging instrument's effectiveness in offsetting changes in the fair value of the hedged item or cash flows attributable to the hedged risk.

The hedge is expected to be highly effective in offsetting changes in fair value or cash flows attributable to the hedged risk. The hedge is assessed on an ongoing basis to determine whether it remains highly effective during all the reporting periods for which it was undertaken.

7.26 Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated. If the Group anticipates that the costs for which provisions have been recognised will be recovered, e.g. under an insurance agreement, the recovery of such funds is recognised as a separate asset, but only when such recovery is practically certain to occur. The cost related to a given provision is disclosed in the statement of comprehensive income net of any recoveries. If the effect of the time value of money is significant, the amount of provisions is determined by discounting projected future cash flows to their present value at a pre-tax discount rate reflecting the current market estimates of the time value of money and risks, if any, specific to a given obligation. If the discount method is applied, an increase in the provision as a result of lapse of time is recognised as finance costs. Provisions, other than provisions for decommissioning and reclamation costs, are charged against operating expenses, other expenses, or finance costs, depending on what circumstances the future obligation relates to.

7.26.1 Provisions for decommissioning and reclamation costs

Provisions for decommissioning and reclamation costs are recognised when the Group has an obligation to decommission oil and
gas extraction facilities or to demolish, disassemble or remove other property, plant and equipment and restore the site to its original condition, and when a reliable estimate can be made of the amount of the obligation.

If a decommissioning obligation arises with respect to new property, plant and equipment, such as production and transport infrastructure (pipelines) or refinery installations, it is recognised on completion of construction or installation. If a decommissioning obligation arises with respect to a production well, it is recognised on completion of drilling, irrespective of the hydrocarbon flow recorded.

A decommissioning obligation may be further adjusted over the useful life of a well, production or transport infrastructure, etc. to reflect changes in applicable laws or a decision to suspend certain operations. The recognised amount of the obligation is the present value of future expenditures, estimated for the local conditions and requirements.

On recognition of a decommissioning obligation, a matching decommissioning asset is recognised in the same amount under property, plant equipment, which is subsequently amortised in line with the asset subject to decommissioning.

The amount of the decommissioning provision and its corresponding asset is adjusted to reflect changes to the present value of estimated decommissioning and reclamation costs, other than provision discount reversals. Adjustments are also made for foreign exchange gains or losses arising from translation of a decommissioning obligation denominated in a foreign currency when it is certain that the obligation will be settled in that currency.

Periodic discount unwinding is recognised as finance costs in the statement of comprehensive income.
Deferred tax assets and liabilities are recognised in respect of the decommissioning provision and the corresponding decommissioning asset.

Under the Polish Geological and Mining Law of February 4th 1994 (Dz.U.05.228.1947, as amended), the Group is required to operate an Oil and Gas Extraction Facility Decommissioning Fund, whose financial resources may only be used to cover the cost of decommissioning of an oil and gas extraction facility or its designated part.

The amount of contribution to the Fund is calculated separately for each facility and represents an equivalent of 3% or more of the depreciation charge recognised on the facility's property, plant and equipment, determined in accordance with applicable corporate income tax laws. The Company is required to deposit the contributions in a separate bank account until decommissioning start date.

7.27 Trade and other payables, and accruals and deferred income

Current trade and other payables are reported at nominal amounts payable.

The Group derecognises a financial liability when it is extinguished, that is when the obligation specified in the contract is either discharged or cancelled or expires. When a debt instrument between the same parties is replaced by another instrument whose terms are substantially different, the Group treats such replacement as if the former financial liability was extinguished and recognises a new liability. Similarly, material modifications to the terms of a contract concerning an existing financial liability are presented as extinguishment of the former and recognition of a new financial liability. Any differences in the respective carrying amounts arising in connection with the replacement are charged to profit or loss.

Other non-financial liabilities include in particular value added tax, excise duty and fuel charge liabilities to the tax authorities and liabilities under received prepayments, which are to be settled by delivery of goods or tangible assets, or performance of services. Other non-financial liabilities are measured at nominal amounts payable.

Accrued expenses are recognised at probable amounts of current-period liabilities. The Group discloses accruals and deferred income under other non-financial liabilities or, if they refer to employee benefits, under employee benefit obligations.

7.28 Grants

If there is reasonable certainty that a grant will be received and that all related conditions will be fulfilled, grants are recognised at fair value.

If a grant concerns a cost item, it is recognised as income in matching with the expenses it is to compensate for. If it concerns an asset, its fair value is recognised as deferred income, and then it is written off annually in equal parts through the statement of comprehensive income over the estimated useful life of the asset.

7.29 Joint arrangements and similar agreements

IFRS 11 defines a joint arrangement as a contractual arrangement under which the business of two or more parties is subject to joint control. Joint control exists only when decisions about the relevant activities under the arrangement require the unanimous consent of all the parties.

Joint arrangements are classified into two types – joint operations and joint ventures. The distinction between the two is based on different rights and obligations of the parties under the joint arrangement.

If under the joint arrangement the parties with joint control of the arrangement have rights to the net assets of the arrangement, then it is a joint venture, which in principle requires the establishment of a separate vehicle. The Group's joint ventures include LOTOS-Air BP Polska Sp. z o.o., a jointly-controlled entity operating in the downstream segment, and the following entities operating in the upstream segment: Baltic Gas Sp. z o.o., Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k., and UAB Minijos Nafta, all of which are equity-accounted (See Note 7.11).

Joint arrangements under which the parties with joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement, are defined as joint operations.

The Group holds interests in joint operations in the upstream segment through a Norwegian company, LOTOS Exploration and Production Norge AS, a subsidiary of LOTOS Petrobaltic S.A. In accordance with IFRS 11, the Group recognises its interest in assets, liabilities, costs and expenses related to its joint operations on the Heimdal field in Norway.

Considering the IFRS 11 criteria, not all operations involving a number of participants are joint operations or joint ventures as defined in the standard. In some situations, the Group is a party to an arrangement whose nature is that of joint operations, but has no joint control of the arrangement. This happens when there is more than one combination of the parties that can agree to make significant decisions about the operations. For the purposes of correct recognition of revenues, costs, assets and liabilities, the Group does not apply IFRS 11 in such situations, but other relevant IFRSs, taking into account its interest in the arrangement underlying the operations.

The Group is a party to arrangements on joint operations in Norway which are not subject to IFRS 11. This applies to the operations on Sleipner fields, acquired on December 30th 2015 (see Note 13.1.3). The Group recognises the operations proportionately, i.e. according to its share in revenue, costs, receivables and liabilities relating to joint exploration and production of crude oil and natural gas in the Sleipner field. Therefore, there is no practical difference in recognising transactions relating to operations under the Sleipner licences with respect to the requirement to recognise joint operations under the Heimdal licence, which meet the definition of joint operations in accordance with IFRS 11.

7.30 Segment reporting

For management purposes, the LOTOS Group is divided into business units which correspond to the business segments, whereas for financial reporting purposes the Group's operating activity comprises two main reportable operating segments:

- upstream segment – comprising activities related to the acquisition of crude oil and natural gas reserves, and crude oil and natural gas production,
- downstream segment – comprising the production and processing of refined petroleum products and their wholesale and retail sale, as well as auxiliary, transport and service activities.

The reportable operating segments are identified at the Group level. The Parent is included in the downstream segment. The upstream segment comprises companies of the LOTOS Petrobaltic Group (excluding Energobaltic Sp. z o.o.).

Segment performance is assessed on the basis of revenue, EBIT and EBITDA.
EBIT is operating profit/(loss) and EBITDA is operating profit/(loss) before depreciation and amortisation.

The segments' revenue, EBIT and EBITDA do not account for intersegment adjustments.

Financial information of the operating segments used by the chief operating decision makers to assess the segments' performance is presented in Note 8.

7.31 Contingent liabilities and assets

In line with the policies applied by the Group, consistent with IAS 37 Provisions, Contingent Liabilities and Contingent Assets, a contingent liability is understood as:

- a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity, or
- a present obligation that arises from past events but is not recognised in the financial statements because:
  (i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation, or
  (ii) the amount of the obligation cannot be measured with sufficient reliability.

Contingent liabilities are not recognised in the statement of financial position, however information on contingent liabilities is disclosed, unless the likelihood of the outflow of resources embodying economic benefits is negligible.

In compliance with IFRS, the Group defines a contingent asset as a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

Contingent receivables are not recognised in the statement of financial position, however information on them is disclosed if the inflow of resources embodying economic benefits is likely to occur.

Examples of contingent assets and liabilities include liabilities or receivables related to pending court disputes whose future outcomes are neither known not fully controlled by the entity. For more information on pending court disputes and other contingent liabilities, see Note 35.1 and Note 35.2, respectively.

7.32 Carbon dioxide (CO_2) emission allowances

CO_2 emission allowances are presented by the Group in its financial statements in accordance with the net liability approach, which means that the Group recognises only those liabilities that result from exceeding the limit of emission allowances granted. The Group reviews the limits granted to it on an annual basis. The liability is recognised only after the Company actually exceeds the limit. Income from sale of unused emission allowances is recognised in the statement of comprehensive income at the time of sale.

Additionally purchased emission allowances are measured at acquisition cost less impairment, if any, taking into consideration the residual value of allowances, and presented as intangible assets.

If purchased allowances are used to cover a deficit existing on the date of settling the annual limit of emission allowances, the allowances thus used are offset at carrying amount with the liability previously recognised for covering the deficit.

8. Business segments

PLN '000	Upstream segment	Downstream segment	Other [1]	Consolidation adjustments	Consolidated
	year ended Dec 31 2015				
Revenue:	**698,898**	**22,369,102**	**15,712**	**(374,270)**	**22,709,442**
Intersegment sales	*322,632*	*43,014*	*8,624*	*(374,270)*	*-*
External sales	*376,266*	*22,326,088*	*7,088*	*-*	*22,709,442*
Operating profit/(loss) (EBIT)	**(57,278)**	**448,970**	**(637)**	**32,343**	**423,398**
Depreciation/amortisation	242,944	466,330	6,974	(1,680)	714,568
Operating profit/(loss) before depreciation and amortisation **(EBITDA)**	**185,666**	**915,300**	**6,337**	**30,663**	**1,137,966**

PLN '000	Upstream segment	Downstream segment	Other [1]	Consolidation adjustments	Consolidated
	Dec 31 2015				
Total assets	**4,382,325**	**16,099,172**	**101,004**	**(1,413,169)**	**19,169,332**
including:					
- exploration and evaluation assets	*462,126*	*-*	*-*	*-*	*462,126*
- development and production assets	*2,316,381*	*-*	*-*	*-*	*2,316,381*

[1] Includes LOTOS Gaz S.A. w likwidacji (in liquidation) and Energobaltic Sp. z o.o.

PLN '000	Upstream segment	Downstream segment	Other [1]	Consolidation adjustments	Consolidated
	year ended Dec 31 2014				
Revenue:	**906,279**	**28,157,947**	**25,535**	**(587,874)**	**28,501,887**
Intersegment sales	*523,278*	*47,559*	*17,037*	*(587,874)*	*-*
External sales	*383,001*	*28,110,388*	*8,498*	*-*	*28,501,887*
Operating profit/(loss) (EBIT)	**(624,120)**	**(774,492)**	**6,914**	**(1,310)**	**(1,393,008)**
Depreciation/amortisation	344,141	459,449	7,137	(1,786)	808,941
Operating profit/(loss) before depreciation and amortisation **(EBITDA)**	**(279,979)**	**(315,043)**	**14,051**	**(3,096)**	**(584,067)**

PLN '000	Upstream segment	Downstream segment	Other [1]	Consolidation adjustments	Consolidated
	Dec 31 2014				
Total assets	**3,944,812**	**16,028,893**	**112,330**	**(1,138,878)**	**18,947,157**
including:					
- exploration and evaluation assets	*241,445*	*-*	*-*	*-*	*241,445*
- development and production assets	*1,331,027*	*-*	*-*	*-*	*1,331,027*

[1] Includes LOTOS Park Technologiczny Sp. z o.o. w likwidacji (in liquidation), LOTOS Gaz S.A. w likwidacji (in liquidation) and Energobaltic Sp. z o.o.

Geographical structure of sales

PLN '000	Upstream segment	Downstream segment	Other (1)	Consolidated
	year ended Dec 31 2015			
Domestic sales:	**3,165**	**17,167,087**	**7,088**	**17,177,340**
products and services	*2,781*	*15,913,529*	*7,088*	*15,923,398*
merchandise and materials	*384*	*1,253,558*	*-*	*1,253,942*
Export sales:	**373,101**	**5,159,001**	**-**	**5,532,102**
products and services	*372,986*	*4,952,310*	*-*	*5,325,296*
merchandise and materials	*115*	*206,691*	*-*	*206,806*
Total	**376,266**	**22,326,088**	**7,088**	**22,709,442**

(1) Includes LOTOS Gaz S.A. w likwidacji (in liquidation) and Energobaltic Sp. z o.o.

PLN '000	Upstream segment	Downstream segment	Other (1)	Consolidated
	year ended Dec 31 2014			
Domestic sales:	**3,921**	**19,019,321**	**8,498**	**19,031,740**
products and services	*3,719*	*18,315,224*	*8,498*	*18,327,441*
merchandise and materials	*202*	*704,097*	*-*	*704,299*
Export sales:	**379,080**	**9,091,067**	**-**	**9,470,147**
products and services	*378,404*	*8,673,940*	*-*	*9,052,344*
merchandise and materials	*676*	*417,127*	*-*	*417,803*
Total	**383,001**	**28,110,388**	**8,498**	**28,501,887**

(1) Includes LOTOS Park Technologiczny Sp. z o.o. w likwidacji (in liquidation), LOTOS Gaz S.A. w likwidacji (in liquidation) and Energobaltic Sp. z o.o.

Sales by products, merchandise and services

PLN '000	Upstream segment	Downstream segment	Other (1)	Consolidated
	year ended Dec 31 2015			
Gasolines	-	3,649,735	-	3,649,735
Naphtha	-	880,530	-	880,530
Diesel oils	-	11,163,813	-	11,163,813
Bunker fuel	-	129,511	-	129,511
Light fuel oil	-	565,411	-	565,411
Heavy fuel oil	-	1,432,389	-	1,432,389
Aviation fuel	-	1,170,250	-	1,170,250
Lubricants	-	286,666	-	286,666
Base oils	-	519,654	-	519,654
Bitumens	-	711,251	-	711,251
LPG	-	444,376	-	444,376
Crude oil	133,781	254,234	-	388,015
Natural gas	230,560	-	-	230,560
Reformate	-	25,163	-	25,163
Other refinery products, merchandise and materials	-	456,983	-	456,983
Other products, merchandise and materials	512	350,921	7,047	358,480
Services	11,413	367,649	41	379,103
Effect of cash flow hedge accounting	*-*	*(82,448)*	*-*	*(82,448)*
Total	**376,266**	**22,326,088**	**7,088**	**22,709,442**

(1) Includes LOTOS Gaz S.A. w likwidacji (in liquidation) and Energobaltic Sp. z o.o.

PLN '000	Upstream segment	Downstream segment	Other (1)	Consolidated
	year ended Dec 31 2014			
Gasolines	-	4,660,642	-	4,660,642
Naphtha	-	750,974	-	750,974
Diesel oils	-	13,608,087	-	13,608,087
Bunker fuel	-	108,467	-	108,467
Light fuel oil	-	757,506	-	757,506
Heavy fuel oil	-	2,349,680	-	2,349,680
Aviation fuel	-	2,044,246	-	2,044,246
Lubricants	-	345,702	-	345,702
Base oils	-	580,307	-	580,307
Bitumens	-	1,055,843	-	1,055,843
LPG	-	629,750	-	629,750
Crude oil	156,103	-	-	156,103
Natural gas	218,843	-	-	218,843
Reformate	-	28,689		28,689
Other refinery products, merchandise and materials	-	553,505	-	553,505
Other products, merchandise and materials	881	320,948	8,457	330,286
Services	7,174	324,034	41	331,249
Effect of cash flow hedge accounting	-	*(7,992)*	-	*(7,992)*
Total	**383,001**	**28,110,388**	**8,498**	**28,501,887**

(1) Includes LOTOS Park Technologiczny Sp. z o.o. w likwidacji (in liquidation), LOTOS Gaz S.A. w likwidacji (in liquidation) and Energobaltic Sp. z o.o.

In 2015 and 2014, there were no customers whose share in the LOTOS Group's total revenue would significantly exceed 10%.

9. Income and expenses

9.1 Expenses by nature

PLN '000	Note	Year ended Dec 31 2015		Year ended Dec 31 2014
Depreciation/amortisation	8	714,568		808,941
Raw materials and consumables used (1)		16,860,134		24,734,942
Services		1,434,003		1,280,200
Taxes and charges		408,976	(2)	179,710
Employee benefits expense	9.2	685,254		681,865
Other expenses by nature		222,462		344,315
Merchandise and materials sold		1,336,113		978,764
Total expenses by nature		**21,661,510**		**29,008,737**
Change in products and adjustments to cost of sales		331,484		67,003
Total		**21,992,994**		**29,075,740**
including:				
Cost of sales		20,249,028		27,466,614
Distribution costs		1,284,846		1,162,071
Administrative expenses		459,120		447,055

(1) Including PLN 11,107 thousand of foreign exchange gains from operating activities, recognised as cost of sales (2014: PLN 65,110 thousand of foreign exchange losses) (see Note 31.3).

(2) The year-on-year increase in taxes and charges in 2015 relates mainly to the Parent and is attributable to the introduction, as of January 1st 2015, of a mandatory stocks charge, payable by fuel manufacturers to the Material Reserves Agency towards the costs of creating and financing public stocks of crude oil and petroleum products. In 2015, the Parent paid a stocks charge of PLN 219,928 thousand.

9.2 Employee benefits expenses

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Current salaries and wages		531,551	491,466
Social security and other employee benefits		148,628	144,793
Length-of-service awards, retirement and other post-employment benefits	29.2	5,075	45,606
Total employee benefits expenses	**9.1**	**685,254**	**681,865**
Change in products and adjustments to cost of sales		(152)	(20,579)
Total		**685,102**	**661,286**
including:			
Cost of sales		396,122	388,563
Distribution costs		34,384	30,301
Administrative expenses		254,596	242,422

9.3 Other income

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Gain on disposal of non-financial non-current assets		5,215	3,521
Grants	30.2	7.353	1,889
Reversal of impairment losses on receivables:	18.1; 31.3	1.927	-
- reversal of impairment losses		*10,021*	-
- impairment losses		*(8,094)*	-
Compensation (1)		16,870	14,025
Gain on sale of organised part of business	17	2.834	-
Reimbursed excise duty (2)		6,846	896
Other		7,246	6,376
Total		**48,291**	**26,707**

(1) Including: in 2015 chiefly PLN 12,764 thousand attributable to penalties for failure to collect guaranteed delivery amounts under contracts; in 2014 − PLN 7,927 thousand of compensation for a production stoppage in the Atla field (one of the Heimdal area assets).
(2) Reimbursements of excise duty unduly paid in earlier periods and deductions due to consumption of components or additives used in manufacture of finished products for which the excise duty had been settled at earlier stages of the trading process.

The Group offsets similar transaction types pursuant to IAS 1 – Presentation of Financial Statements, sections 34 and 35. The Group discloses material items of income and expense charged to profit or loss separately, as presented in the table above.

9.4 Other expenses

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Impairment loss on property, plant and equipment and other intangible assets:		85,817	806,141
Impairment losses:		*88,296*	*806,562*
- on property, plant and equipment classified as exploration and evaluation assets: Poland: Słupsk area, B-27, B-28 fields	*13.1.1*	*1.836*	*31,853*
- on property, plant and equipment classified as development assets: Norway: YME field	*13.1.1*	*1.485*	*578,448*
- on property, plant and equipment classified as production assets:	*13.1.1*	*6,314*	*48,562*
- Norway: Heimdal area	*13.1.3*	*-*	*45,854*
- Lithuania	*13.1.3*	*6.314*	*2,708*
- on intangible assets classified as exploration and evaluation assets:	*15.1*	*10,262*	*14,439*
- Norway: Heimdal area, PL498 and PL497 licences	*15.1.1*	*-*	*14,439*
- Lithuania	*15.1.1*	*10.027*	*-*
- Poland: Słupsk area	*15.1.1*	*235*	*-*
- on intangible assets classified as exploration, development and production assets: Lithuania	*15.1.2*	*52.419*	*100,604*
- on refinery and other property, plant and equipment:	*13.2*	*15.980*	*32,656*
- service stations	*13.2*	*10.228*	*15,765*
- bitumen production unit (LOTOS Asfalt Branch in Jasło)	*13.2*	*-*	*15,893*
- vessels	*13.2*	*4.499*	*-*
- other assets		*1.253*	*998*
Reversal of impairment losses:		*(2.479)*	*(421)*
- on refinery and other property, plant and equipment:		*(2.479)*	*(421)*
- service stations	*13.2*	*(2.416)*	*-*
- other assets		*(63)*	*(421)*
Loss on discontinued projects	13.1.1; 13.1.3; 15.1.1	27,395	11,935
- Norway: Heimdal area (Fulla field - PL362, PL035B), PL503 licence	15.1.1	*14,846*	*-*
- Poland: Sambia area	13.1.1; 15.1.1	*12,378*	*5,937*
- Lithuania: Zvaginai well	13.1.3	*-*	*5,772*
- other assets		*171*	*226*
Impairment loss on assets held for sale	17	36.634	-
Impairment losses on receivables:	18.1; 31.3	-	13,078
- impairment losses		*-*	*15,928*
- reversal of impairment losses		*-*	*(2,850)*
Provisions:		16,072	4,761
- provision for deficit in CO_2 emission allowances	*34*	*1.059*	*1,257*
- revaluation of estimated provision for future cost of removal of MOPU from the YME field	*30.1*	*10.287*	*-*
- other provisions		*4,726*	*3,504*
Fines and compensation		1,546	1,512
Property damage incurred during ordinary course of business		1,718	1,041
Cost brought forward		4,908	567
Charitable donations		1,866	1,067
VAT expense	*35.1*	160.909	-
Other		4,476	5,760
Total		**341,341**	**845,862**

The Group offsets similar transaction types pursuant to IAS 1 – Presentation of Financial Statements, sections 34 and 35. The Group discloses material items of income and expense charged to profit or loss separately, as presented in the table above.

9.5 Finance income

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Dividends received		1,120	1,103
Interest:		20,697	19,096
- on trade receivables	*31.3*	*2,847*	*6,349*
- on cash	*31.3*	*139*	*1,249*
- on deposits	*31.3*	*16,181*	*9,360*
- other		*1,530*	*2,138*
Revaluation of financial assets:		78,809	-
- valuation of derivative financial instruments	*31.3*	*290,447*	*-*
- settlement of derivative financial instruments	*31.3*	*(211,638)*	*-*
Other		11	1,541
Total		**100,637**	**21,740**

The Group offsets similar transaction types pursuant to IAS 1 – Presentation of Financial Statements, sections 34 and 35. The Group discloses material items of income and expense charged to profit or loss separately, as presented in the table above.

9.6 Finance costs

PLN '000	Note	Year ended Dec 31 2015		Year ended Dec 31 2014
Interest:		284,148		202,503
- on bank borrowings	*31.3*	*150,364*		*141,584*
- on non-bank borrowings	*31.3*	*7,870*		*9,576*
- on notes	*31.3*	*3,819*		*3,373*
- on trade payables	*31.3*	*236*		*87*
- on finance lease liabilities	*31.3*	*10,152*		*12,142*
- on factoring arrangements		*4,472*		*7,400*
- on other financial liabilities	*31.3*	*1,351*		*-*
- discount related to provisions for oil extraction facilities and for land reclamation, and other provisions	*30.1*	*22,202*		*20,426*
- cost of discount on employee benefits obligations	*29.1; 29.2*	*5,058*		*6,354*
- on liabilities to the state budget	*35.1*	*77,932*	(1)	*-*
- other		*692*		*1,561*
Exchange differences:		344,940		307,020
- on bank borrowings	*31.3*	*175,425*		*222,455*
- on translation of intra-Group loans(2)	*31.3*	*47,750*		*68,284*
- on realised foreign-currency transactions in bank accounts	*31.3*	*108,419*		*16,530*
- on notes, including intra-Group notes (2)	*31.3*	*41,975*		*43,698*
- on cash	*31.3*	*(8,874)*		*(11,564)*
- on cash blocked in bank accounts	*31.3*	*(20,435)*		*(37,630)*
- on investment commitments	*31.3*	*2,529*		*4,675*
- on trade receivables and payables	*31.3*	*(1,537)*		*(1,988)*
- on other financial assets and liabilities	*31.3*	*858*		*(1,074)*
- other		*(1,170)*		*3,634*
Revaluation of financial assets, including:		-		197,849
- valuation of derivative financial instruments		*-*		*191,271*
- settlement of derivative financial instruments		*-*		*6,578*
Bank fees		20,978		17,287
Bank guarantees		5,317		2,776
Other		32,860	(3)	547
Total		**688,243**		**727,982**

(1) Including a PLN 77,873 thousand cost related to interest on the tax arrears of the Parent (see Note 35.1).
(2) According to IAS 21 – The Effects of Changes in Foreign Exchange Rates, foreign exchange gains and losses on intra-Group foreign currency transactions are recognised in the Group's net profit or loss.
(3) Including PLN 29,212 thousand of impairment loss on capitalised costs of financing of the B8 Project.

The Group offsets similar transaction types pursuant to IAS 1 – Presentation of Financial Statements, sections 34 and 35. The Group discloses material items of income and expenses charged to profit or loss separately, as presented in the tables above.

10. Income tax

10.1 Tax expense

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
Current tax		82,052	69,377
Deferred tax	10.3	(14,026)	(726,720)
Total income tax charged to net profit or loss	**10.2**	**68,026**	**(657,343)**
Tax expense recognised in other comprehensive income (net), including:		(66,191)	(112,756)
- cash flow hedging	*23*	*(67,620)*	*(111,099)*
- actuarial gain/(loss) relating to post-employment benefits		*1,429*	*(1,657)*

For the entities operating in Poland, the current and deferred portion of income tax was calculated at the rate of 19% of taxable income.

In the case of Norwegian subsidiary LOTOS Exploration and Production Norge AS, the marginal tax rate is 78% of the tax base. LOTOS Exploration and Production Norge AS's activities are subject to taxation under two parallel tax systems: the corporate income tax system (27% tax rate) and the petroleum tax system (additional tax rate of 51%).

In the case of Lithuanian subsidiaries (AB LOTOS Geonafta Group), the current and deferred portion of income tax was calculated at the rate of 15%.

10.2 Corporate income tax calculated at effective tax rate and reconciliation of pre-tax profit to taxable income

PLN '000		Year ended Dec 31 2015	Year ended Dec 31 2014
Pre-tax loss		(195,274)	(2,123,715)
Income tax at 19%		**(37,102)**	**(403,506)**
Permanent differences:		53,612	3,869
- VAT expense	*35.1*	*30,753*	*-*
- interest on past-due public charges		*14,832*	*29*
- other permanent differences		*8,027*	*3,840*
Unrecognised deferred tax assets on account of tax losses carried forward		-	60,145
Tax effect of tax losses incurred in the period		(198)	-
Tax effect of tax losses deducted in the period		(5,273)	(1,416)
Tax effect of share in profit of equity-accounted entities		5,903	4,648
Adjustments disclosed in current year related to tax for previous years		(1,588)	454
Difference resulting from the application of tax rates other than 19%:		50,323	(322,100)
- Norway		*44,900*	*(322,323)*
- Lithuania		*5,114*	*968*
- Cyprus		*343*	*(746)*
- Netherlands Antilles		*(34)*	*1*
Other differences		2,349	563
Income tax expense		**68,026**	**(657,343)**

10.3 Deferred income tax

PLN '000	Note	Statement of financial position Dec 31 2015	Dec 31 2014	Change
Deferred tax assets		924,478	1,488,901	(564,423)
Deferred tax liabilities		(47,626)	(55,527)	7,901
Net deferred tax assets/(liabilities)	**10.3.1**	**876,852**	**1,433,374**	**(556,522)**
Exchange differences on translating deferred tax of foreign operations				54,914
Deferred tax disclosed under other comprehensive income/(loss), net	10.1			(66,191)
Other differences:				581,825
- uplift [1]				*(4,257)*
- effect of deferred tax recognised under other income as Gain on sale of organised part of business				*(1,360)*
- effect of accounting for the acquisition price of the Sleipner assets				*587,442*
Deferred tax expense recognised in net profit or loss	**10.1**			**14,026**

[1] Tax credit applicable in Norway (uplift). The determined uplift rate is 5.5% pa. The uplift is calculated based on the capitalised investment expenditure (offshore production installation) and is settled against taxable income over a period of four years from the year the expenditure was incurred. Any uplift unused in a given period may be settled in the future until fully used, with no time limit. The amount of LOTOS Production and Exploration Norge AS's unused uplift increased the deferred tax asset under the Group's tax losses settled over time, and had no effect on tax disclosed in the consolidated statement of comprehensive income.

Taxable temporary differences are expected to expire in 2016–2083.

As at December 31st 2015, the value of unrecognised tax assets on account of tax losses was PLN 683 thousand (December 31st 2014: PLN 63,025 thousand). The decrease in the amount of the unrecognised tax assets results from a partial settlement of relevant tax losses, as well as from the loss of the right to deduct tax losses due to expiry of the period when the tax losses could be settled in accordance with the tax regulations.

10.3.1 Deferred tax assets and liabilities

PLN '000	Note	Dec 31 2014	Deferred tax charged to net profit or loss	Deferred tax disclosed under other comprehensive income/(loss)	Exchange differences on translating deferred tax of foreign operations	Other differences	Dec 31 2015
Deferred tax assets							
Employee benefit obligations		52,300	2,804	(1,429)	(164)	1,360	54,871
Inventory write-downs		86,158	(35,250)	-	4	-	50,912
Impairment losses on property, plant and equipment and other intangible assets		310,872	7,340	-	(20,659)	-	297,553
Negative fair value of derivative financial instruments		19,916	5,678	-	-	-	25,594
Exchange differences on revaluation of foreign-currency denominated items		380	746	-	102	-	1,228
Impairment losses on receivables		17,425	(532)	-	-	-	16,893
Finance lease liabilities		24,333	15,040	-	-	-	39,373
Provisions for decommissioning of oil and gas facilities and land reclamation		275,558	9,980	-	(16,566)	-	268,972
Unrealised margin assets		9,164	(5,685)	-	-	-	3,479
Tax losses carried forward		1,320,293	82,737	-	(38,099)	(583,185)	781,746
Other provisions		11,148	526	-	2	-	11,676
Cash flow hedge accounting		96,787	-	67,620	-	-	164,407
Other		26,667	(5,880)	-	(102)	-	20,685
Total		**2,251,001**	**77,504**	**66,191**	**(75,482)**	**(581,825)**	**1,737,389**
Deferred tax liabilities							
Difference between the current tax base and carrying amount of property, plant and equipment and other intangible assets		719,907	25,168	-	(20,368)	-	724,707
Positive fair value of derivative financial instruments		-	37,921	-	-	-	37,921
Tax liabilities associated with the acquired exploration and production licences in Lithuania		29,627	(10,600)	-	(199)	-	18,828
Accrued interest		56,905	10,672	-	(1)	-	67,576
Other		11,188	317	-	-	-	11,505
Total		**817,627**	**63,478**	**-**	**(20,568)**	**-**	**860,537**
Net deferred tax assets/(liabilities)	10.3	**1,433,374**	**14,026**	**66,191**	**(54,914)**	**(581,825)**	**876,852**

11. Net loss per share

	Year ended Dec 31 2015	Year ended Dec 31 2014
Net loss attributable to owners of the Parent (PLN '000) (A)	(263,263)	(1,466,326)
Weighted average number of shares ('000) (B)	184,873	145,027
Net loss per share (PLN) (A/B)	**(1.42)**	**(10.11)**

Loss per share for each reporting period is calculated by dividing net loss for a given reporting period by the weighted average number of shares in the reporting period. The weighted average number of shares as at December 12th 2014 includes the new Series D shares in Grupa LOTOS S.A. (see Note 21).

In connection with the issue of rights to Series D shares and allotment of shares acquired in the exercise of pre-emptive rights, the Company − acting in accordance with the requirements of IAS 33 Earnings per Share − calculated earnings per share adjusted for the effect of the pre-emptive rights (issue at a discount, at a price of PLN 18.10 per share compared with the market price of the Company shares then at PLN 25.95).

Diluted net loss per share is equal to basic net loss per share as the Group carries no instruments with a dilutive effect.

12. Dividends

As at December 31st 2015 and December 31st 2014, Grupa LOTOS S.A. was restricted in its ability to distribute funds in the form of dividends. The restrictions followed from the credit facility agreement executed on June 27th 2008 for the financing of the 10+ Programme, whereby dividend amounts are subject to certain conditions, including generation of sufficient free cash and achievement of certain levels of financial ratios.

On June 1st 2015, the General Meeting of Grupa LOTOS S.A. passed a resolution on coverage of the Company's net loss for 2014. In accordance with the resolution, the 2014 net loss of PLN 1,285,910 thousand will be covered from future profits.

As at the date of issue of these consolidated financial statements, the Company's Management Board did not pass a resolution on coverage of the Company's 2015 net loss of PLN 37,102 thousand.

PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

13. Property, plant and equipment

PLN '000	Dec 31 2015	Dec 31 2014 (restated)
Property, plant and equipment classified as exploration, development and production assets		
Property, plant and equipment classified as exploration and evaluation assets	118,759	44,769
Property, plant and equipment classified as development assets	-	522,350
Property, plant and equipment classified as production assets	2,182,903	600,390
Total	2,301,662	1,167,509
Refinery and other property, plant and equipment		
Land	501,778	475,666
Buildings, structures	3,055,277	3,151,731
Plant and equipment	3,662,822	3,851,578
Vehicles, other	649,623	569,425
Property, plant and equipment under construction	397,260	265,974
Total	8,266,760	8,314,374
Total	**10,568,422**	**9,481,883**

13.1 Property, plant and equipment classified as exploration and evaluation, and development and production assets

PLN '000	Note	Property, plant and equipment classified as exploration and evaluation assets			Property, plant and equipment classified as development assets			Property, plant and equipment classified as production assets				Total
		Poland	Lithuania	Total	Poland	Norway	Total	Poland	Norway	Lithuania	Total	
Gross carrying amount Jan 1 2015		**91,930**	**-**	**91,930**	**578,046**	**1,535,085**	**2,113,131**	**497,119**	**582,851**	**136,105**	**1,216,075**	**3,421,136**
Purchase		*27,372*	-	*27,372*	*304,332*	-	*304,332*	*2,194*	*3,903*	*8,290*	*14,387*	*346,091*
Acquisition of Sleipner assets[1]		-	-	-	-	-	-	-	*394,956*	-	*394,956*	*394,956*
Exchange differences on translating foreign operations		-	-	-	-	*(84,158)*	*(84,158)*	-	*(87,469)*	*122*	*(87,347)*	*(171,505)*
Recognition of assets related to future costs of decommissioning of oil and gas extraction facilities	13.1.4	-	-	-	-	-	-	-	*605,423* [1]	-	*605,423*	*605,423*
Estimated costs of decommissioning of oil and gas extraction facilities	13.1.4	-	-	-	*10,054*	*1,485*	*11,539*	*(304)*	*5,480*	*(250)*	*4,926*	*16,465*
Reclassification of property, plant and equipment under construction to development assets		-	-	-	*30,857*	-	*30,857*	-	-	-	-	*30,857*
Reclassification of property, plant and equipment under construction to exploration and evaluation assets		*60,577*	-	*60,577*	-	-	-	-	-	-	-	*60,577*
Reclassification of development assets to production assets		-	-	-	*(865,348)*	-	*(865,348)*	*865,348*	-	-	*865,348*	-
Reclassification to non-current assets (or disposal groups) held for sale [2]		-	-	-	*(45,011)*	-	*(45,011)*	-	-	-	-	*(45,011)*
Reversal of asset related to decommissioning of oil and gas extraction facilities	30.1	-	-	-	*(2,750)*	-	*(2,750)*	-	-	-	-	*(2,750)*
Expenditure written off due to project discontinuation	9.4	*(12,123)* [3]	-	*(12,123)*	-	-	-	-	-	-	-	*(12,123)*
Other		-	-	-	*(10,180)*	-	*(10,180)*	*4,599*	*(7,941)*	*(286)*	*(3,628)*	*(13,808)*
Gross carrying amount Dec 31 2015		**167,756**	**-**	**167,756**	**-**	**1,452,412**	**1,452,412**	**1,368,956**	**1,497,203**	**143,981**	**3,010,140**	**4,630,308**
Accumulated depreciation Jan 1 2015		-	-	**-**	**55,696**	**-**	**55,696**	**312,353**	**199,741**	**50,873**	**562,967**	**618,663**
Depreciation		-	-	-	*2,427*	-	*2,427*	*20,294*	*129,831*	*19,065*	*169,190*	*171,617*
Exchange differences on translating foreign operations		-	-	-	-	-	-	-	*(19,307)*	*336*	*(18,971)*	*(18,971)*
Reclassification of development assets to production assets		-	-	-	*(58,123)*	-	*(58,123)*	*58,123*	-	-	*58,123*	-
Other		-	-	-	-	-	-	*(144)*	-	*(286)*	*(430)*	*(430)*
Accumulated depreciation Dec 31 2015		**-**	**-**	**-**	**-**	**-**	**-**	**390,626**	**310,265**	**69,988**	**770,879**	**770,879**
Impairment losses Jan 1 2015		*47,161*	-	**47,161**	-	*1,535,085*	**1,535,085**	**-**	**43,415**	**9,303**	**52,718**	**1,634,964**
Recognised	9.4	*1,836* [4]	-	*1,836*	-	*1,485*	*1,485*	-	-	*6,314* [5]	*6,314*	*9,635*
Exchange differences on translating foreign operations		-	-	-	-	*(84,158)*	*(84,158)*	-	*(2,786)*	*114*	*(2,672)*	*(86,830)*
Used/Reversed		-	-	-	-	-	-	-	*(2)*	-	*(2)*	*(2)*
Impairment losses Dec 31 2015		**48,997**	**-**	**48,997**	**-**	**1,452,412**	**1,452,412**	**-**	**40,627**	**15,731**	**56,358**	**1,557,767**
Net carrying amount Dec 31 2015		**118,759**	**-**	**118,759**	**-**	**-**	**-**	**978,330**	**1,146,311**	**58,262**	**2,182,903**	**2,301,662**

(1) Acquisition of Sleipner assets in Norway (property, plant and equipment − NOK 846,818 thousand, decommissioning assets − NOK 1,298,076 thousand; for more information on the transaction, see Note 13.1.3).

(2) As a result of the change of the technical concept for the project to convert the Petrobaltic rig into a production centre on the B-8 field, the Group reclassified the field development assets related to the project to assets held for sale (see Note 17). The assets represented expenditure incurred by LOTOS Petrobaltic S.A. on elements of the tubular legs of the rig, for which an impairment loss of PLN 36,634 thousand was recognised (see Note 9.4) and which were classified as non-current assets (or disposal groups) held for sale in the amount of PLN 8,377 thousand, the value being − in the Management Board's opinion − the net realisable value of the tubular legs (based on an analysis of current steel prices in Poland and on foreign markets, made by LOTOS Petrobaltic S.A.).

(3) Decommissioning of exploration and evaluation assets related to the Sambia E field.

(4) Słupsk area assets.

(5) Liziai and Ablinga fields.

		Property, plant and equipment classified as exploration and evaluation assets			Property, plant and equipment classified as development assets			Property, plant and equipment classified as production assets				Total
PLN '000	Note	Poland	Lithuania	Total	Poland	Norway	Total	Poland	Norway	Lithuania	Total	
Gross carrying amount Jan 1 2014		**224,532**	**617**	**225,149**	**196,741**	**1,572,207**	**1,768,948**	**527,959**	**563,107**	**112,881**	**1,203,947**	**3,198,044**
Purchase		*70,756*	*10,061*	*80,817*	*209,388*	*349*	*209,737*	*5,751*	*6,385*	*14,902*	*27,038*	*317,592*
Exchange differences on translating foreign operations		-	*7*	*7*	-	*(71,001)*	*(71,001)*	-	*(27,286)*	*3,473*	*(23,813)*	*(94,807)*
Recognition of assets related to future costs of decommissioning of oil and gas extraction facilities	13.1.4	-	-	-	*642*	-	*642*	-	-	*1,074*	*1,074*	*1,716*
Estimated costs of decommissioning of oil and gas extraction facilities	13.1.4	-	-	-	-	*27,743*	*27,743*	*(36,396)*	*33,455*	*(844)*	*(3,785)*	*23,958*
Reclassification of exploration and evaluation assets to production assets[1]		*(176,425)* [2]	*(10,685)* [3]	*(187,110)*	*176,425* [2]	-	*176,425*	-	-	*10,685* [3]	*10,685*	-
Expenditure written off due to project discontinuation		*(33,097)* [4]	-	*(33,097)*	-	-	-	-	-	*(5,772)* [5]	*(5,772)*	*(38,869)*
Sale		-	-	-	-	*(2,504)*	*(2,504)*	-	-	*(75)*	*(75)*	*(2,579)*
Other		*6,164*	-	*6,164*	*(5,150)*	*8,291*	*3,141*	*(195)*	*7,190*	*(219)*	*6,776*	*16,081*
Gross carrying amount Dec 31 2014		**91,930**	**-**	**91,930**	**578,046**	**1,535,085**	**2,113,131**	**497,119**	**582,851**	**136,105**	**1,216,075**	**3,421,136**
Accumulated depreciation Jan 1 2014		-	-	**-**	**52,007**	**-**	**52,007**	**284,532**	**-**	**33,532**	**318,064**	**370,071**
Depreciation		-	-	-	*3,579*	-	*3,579*	*28,505*	*210,962*	*16,208*	*255,675*	*259,254*
Exchange differences on translating foreign operations		-	-	-	-	-	-	-	*(11,221)*	*1,210*	*(10,011)*	*(10,011)*
Sale		-	-	-	-	-	-	-	-	*(75)*	*(75)*	*(75)*
Other		-	-	-	*110*	-	*110*	*(684)*	-	*(2)*	*(686)*	*(576)*
Accumulated depreciation Dec 31 2014		**-**	**-**	**-**	**55,696**	**-**	**55,696**	**312,353**	**199,741**	**50,873**	**562,967**	**618,663**
Impairment losses Jan 1 2014		*42,468*	-	**42,468**	-	*1,035,345*	**1,035,345**	**-**	**-**	**6,383**	**6,383**	**1,084,196**
Recognised		*31,853*	-	*31,853*	-	*578,447*	*578,447*	-	*45,854*	*2,708*	*48,562*	*658,862*
Exchange differences on translating foreign operations		-	-	-	-	*(76,203)*	*(76,203)*	-	*(2,439)*	*224*	*(2,215)*	*(78,418)*
Used/Reversed		*(27,160)*	-	*(27,160)*	-	*(2,504)*	*(2,504)*	-	-	*(12)*	*(12)*	*(29,676)*
Impairment losses Dec 31 2014		**47,161**	**-**	**47,161**	**-**	**1,535,085**	**1,535,085**	**-**	**43,415**	**9,303**	**52,718**	**1,634,964**
Net carrying amount Dec 31 2014		**44,769**	**-**	**44,769**	**522,350**	**-**	**522,350**	**184,766**	**339,695**	**75,929**	**600,390**	**1,167,509**

[1] Exploration and evaluation assets relating to mineral resources with demonstrable technical feasibility and commercial viability of extraction.
[2] B-8 field.
[3] Ablinga field and Zvaginai well.
[4] Decommissioning of the B-28 well and exploration and evaluation assets related to the Sambia W field.
[5] Decommissioning of the Zvaginai well.

13.1.1 Property, plant and equipment classified as exploration and evaluation assets

Property, plant and equipment are classified as exploration and evaluation assets until the technical feasibility and commercial viability of extracting the discovered resources are demonstrated.

Poland

As at December 31st 2015, property, plant and equipment classified as exploration and evaluation assets included mostly expenditure incurred on the B-21, B-23, B-27 and B-101 fields in the Baltic Sea.

Moreover, the Group holds an equity interest in special purpose vehicle Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. ("Baltic Gas", see Note 2 and Note 16), a joint venture operated by the Group jointly with CalEnergy Resources Poland Sp. z o.o. as part of further activities related to the B-4 and B-6 gas condensate formations in the Baltic Sea.

In 2015, the expenditure incurred by the Group on the B-21, B-27 and B-101 fields reached PLN 27,372 thousand. The expenditure made in 2014, of PLN 70,756 thousand, related to the B-21, B-27 and B-28 fields. Cash flows associated with that expenditure amounted to PLN 32,943 thousand (2014: PLN 64,761 thousand), whereas the amount of outstanding investment commitments was PLN 2,693 thousand as at December 31st 2015 (December 31st 2014: PLN 8,110 thousand).

As the Group decided to discontinue investments in the Sambia E block and its mining usage rights to the block expired, as at December 31st 2015 the Group wrote off the expenditure of PLN 12,123 thousand on hydrocarbon exploration and evaluation in that area, see Note 9.4 (as at December 31st 2014: PLN 5,937 thousand, expenditure written off on the Sambia W field).

Given a very low volume of potential recoverable reserves, in 2014 the Group decided to recognise an impairment loss of PLN 29,914 thousand on the expenditure incurred in 2014 on the B-27 well (see Note 9.4 to the consolidated financial statements for 2014) and an impairment loss of PLN 1,939 thousand on the expenditure incurred on the B-28 well and formation (see Note 9.4). The total amount of impairment losses was PLN 31,853 thousand (see Note 9.4 to the consolidated financial statements for 2014).

The Group also decided to plug and abandon the well in the B-28 field. It used previously recognised impairment losses of PLN 27,160 thousand to write off the discontinued projects in 2014, and thus the write-off did not affect the Group's consolidated net profit or loss for 2014.

Moreover, as the Group decided to discontinue further investments in the Sambia W field and its mining usage rights to the block expired, as at December 31st 2014 the Group wrote off its expenditure on hydrocarbon exploration and evaluation in the area of PLN 5,937 thousand (see Note 9.4).

13.1.2 Property, plant and equipment related to development of crude oil and natural gas resources

Poland

B-8 field

The Group's expenditure on the development of oil and gas resources included expenditure incurred on the B-8 field, which is located in the Baltic Sea, about 70 km north of Jastarnia (in the vicinity of the B-3 field).

In 2015, the Group's expenditure on the development of the B-8 field amounted to PLN 304,332 thousand (2014: PLN 209,388 thousand), and related mainly to the drilling of production wells and water injectors, conversion of the Petrobaltic platform, and transmission pipelines.

As the B-8 field was brought on stream in September 2015, the Group reclassified the related capital expenditure to *Property, plant and equipment classified as production assets*. As at December 31st 2015, the B-8 field production assets amounted to PLN 807,225 thousand.

Norway

YME field

The Group holds a 20% interest in two licences covering the YME field, which is situated 120 km to the south-west off the Norwegian coast (Egersund), in the southern part of the North Sea. The Group has not yet commenced production from the YME field due to technical defects in the Mobile Offshore Production Unit (MOPU).

As at December 31st 2015, property, plant and equipment related to the development of the YME field included expenditure of PLN 1,452m (NOK 3,278m) incurred by LOTOS Exploration and Production Norge AS ("LOTOS E&P Norge AS") on acquisition of interests in production licences and on development of the field.

In the previous years, due to significant delays in the implementation of the YME project, cost overruns and defects of the MOPU that had been intended to be used to produce hydrocarbons from the YME field, the Group tested the YME assets for impairment, which resulted in impairment losses being recognised on those assets. More details on the impairment tests performed in the previous years and the resulting impairment losses recognised on the YME assets are included in the Group's financial statements for the previous years (2012, 2013, 2014, see Note 13).

As discussed in Note 35.1 to the consolidated financial statements for 2014, in March 2013 Talisman Energy Norge AS, the then YME field operator ("Talisman", "Operator") and Single Buoy Moorings Inc. ("SBM"), supplier of the MOPU which was to be used to conduct production from the YME field, announced that an agreement had been reached to remove the defective MOPU (evacuated in mid-July 2012) from the YME field and to terminate all contracts and agreements existing between the parties in connection with the project.

As the decision-making process concerning the choice of the YME field development concept protracted and no development scenario has been selected by the YME consortium partners, in 2014 the Group re-analysed the development prospects for its YME assets and, consequently, recognised further impairment loss reducing the carrying amount of its YME assets to zero. The analysis accounted for the following facts:

- continued uncertainty and risks resulting from the protracted process of selecting Plans for Development and Operation of the YME field ("PDO") originally expected to be completed by the end of Q1 2014,
- lack of decision as to the YME field development scenario,
- absence of an approved version of the budget for further YME field development,
- delay of the estimated production launch at the field.

Considering the above circumstances, on June 30th 2014 an impairment loss was recognised in relation to all capital expenditure on the YME project. This means that impairment losses presented in the consolidated financial statements for 2014, taking into account the effect of currency exchange differences, was PLN 1,551m (NOK 3,275m). Impairment losses on the capital expenditure associated with the YME project included impairment recognised in respect of the decommissioning asset increase after the Operator provided an updated estimate of the cost of decommissioning of the YME field production infrastructure, which resulted in a concurrent increase in decommissioning asset charged to other expenses in the consolidated statement of comprehensive income of PLN 28m (NOK 55m). Accordingly, operating loss on the impairment of the YME field assets, including the remeasurement of the estimated provision for future decommissioning costs, recognised in the statement of comprehensive income for 2014 was PLN 578m (NOK 1,157m), whereas the effect on net profit (after accounting for the deferred tax effect) was PLN 196m (NOK 392m).

Given the nature of the Joint Operating Agreement between the YME project partners and the guarantees issued by LOTOS Petrobaltic S.A. for the benefit of the Norwegian government with respect to LOTOS E&P Norge AS's exploration and production activities on the Norwegian Continental Shelf, further capital expenditure on the YME field and the necessity to revalue the expected decommissioning costs are possible, in particular once the YME field decommissioning concept is selected and the Norwegian government approves the adopted abandonment plan.

As at December 31st 2015, based on a decision of a majority of the consortium members, approved by the Norwegian Petroleum and Energy Ministry by the letter dated June 30th 2015, a plan of complete decommissioning of the YME field infrastructure is currently being developed and is to be approved by the Norwegian government by June 30th 2016. The operator intends to extend the aforementioned time frame to the end of 2016 so as to check the feasibility of an alternative decommissioning scenario. It has been preliminarily assumed that the YME decommissioning process will be completed by 2019.

In the opinion of LOTOS E&P Norge AS, the amount of the provision for decommissioning of the infrastructure associated with the YME field (see Note 30.1) reflects the necessary commitment by LOTOS E&P Norge AS if the scenario of complete decommissioning materialises by 2019. This is a consequence of the phase (currently under way) of preparation of the YME field infrastructure decommissioning plan, adopted by the consortium with the votes of the majority of its members and reflected in the project budget to be approved, taking into account a reduction in the decommissioning cost estimate for 2016-2019 in connection with a drop in the market cost of such services in Norway following the decline in market prices of hydrocarbons.

Furthermore, work related to removal of the defective MOPU from the YME field, for which the partners obtained financing under an agreement with SBM, is still under way. The scheduled removal date of the MOPU has been changed (June 2016), and the amount of expected costs of the operation (most of which have been already contracted) has been properly reflected in these financial statements by updating relevant provisions in accordance with the best current knowledge of the Company's Management Board as at the date of these statements (see Note 30.1).

Taking into account the recognised impairment losses on the YME expenditure and the incurred tax losses that may be carried forward, in the consolidated statement of financial position as at December 31st 2015 the Group recognised a deferred tax assets. The total amount of the tax assets related to the Group's operations in Norway was PLN 677m (NOK 1,528m) as at December 31st 2015. Given that under the Norwegian tax legislation tax losses can be carried forward indefinitely, and taking into account the Group's acquisition of interests in the Heimdal assets on December 30th 2013 and interests in Sleipner assets on December 30th 2015, including interests in producing fields from which the Group derives revenue, the Management Board believes that the deferred tax assets recognised as at December 31st 2015 are fully realisable at the amount disclosed in these consolidated financial statements.

13.1.3 Property, plant and equipment classified as production assets

Poland

Offshore oil and gas extraction facility in the B-3 field

Property, plant and equipment classified as production assets and situated in Poland comprise the assets of the offshore extraction facility in the B-3 field, located in the Baltic Sea area, approximately 70 km north off Cape Rozewie. LOTOS Petrobaltic S.A.'s production infrastructure in the B-3 field includes the Baltic Beta production platform, the PG-1 unmanned riser platform, as well as subsea installations of the B3-6 and B3-9 nodes. This infrastructure supports the operation of more than ten production and injection wells.

Crude oil produced from the field (Rozewie crude) is transported via pipelines to a tanker moored to a loading buoy, and sold exclusively to the Company. Natural gas extracted together with crude oil (casinghead gas) is transported via a subsea pipeline to an onshore CHP plant in Władysławowo operated by Energobaltic Sp. z o.o. (a company of the LOTOS Petrobaltic Group). In 2015, capital expenditure on the offshore oil extraction facility in the B-3 field amounted to PLN 2,194 thousand (2014: PLN 5,751 thousand) and was incurred mainly on periodic construction inspections of the PG-1 and Baltic Beta platforms.

In the Management Board's opinion, as at December 31st 2015, there were no indications that the assets of the offshore oil extraction facility at the B-3 field should be tested for impairment. Considering the projected output from the B3 field until 2026 (ca. 1m tonnes), it can assumed that the revenue from the sale of the extracted oil will create a price surplus sufficient to enable depreciation of the remaining field assets' value (PLN 171,105 thousand). The Management Board believes that with stable production levels and the plans to drill an additional production well, the B-3 assets should be fully realisable.

B-8 field

Given that the Group made a decision that development of the B-8 field would be conducted on a project finance basis, in December 2013 a separate special purpose vehicle named B8 Spółka z ograniczoną odpowiedzialnością BALTIC spółka komandytowo-akcyjna ("SPV B-8") was established within the Group. In 2014, LOTOS Petrobaltic S.A. contributed to SPV B-8 mining usage rights, the right to use geological data, and the property, plant and equipment related to the project, including the Petrobaltic drilling platform. B-8 SPV will carry out further work related to the development of the field, including preparation of subsea installations and other tasks necessary to make the site ready for production. In August 2014, SPV B-8, Polskie Inwestycje Rozwojowe S.A., Bank Gospodarstwa Krajowego and Bank Pekao S.A. entered into agreements on the B-8 project financing through a note issue programme. In connection with the significant drop in oil prices, the concept for project execution and design documentation related to platform conversion changed, and the conditions precedent to the issue were not met. As at December 31st 2015, the financing had not yet been made available. The Company is currently holding negotiations with financial institutions concerning adjustment of the terms of financing of the B8 project to the new macroeconomic environment and the concept for project execution.

In 2015, the Group's expenditure on the development of the B-8 field amounted to PLN 304,332 thousand, and related mainly to the conversion of the Petrobaltic platform, transmission pipelines and water injection wells. As at December 31st 2015, the B-8 field development assets amounted to PLN 807,225 thousand.

As at December 31st 2015, the Group tested the assets for impairment and determined their recoverable amount as their value in use measured using the discounted future cash flows method.

Key assumptions underlying computation of the recoverable amount of the tested property, plant and equipment:

- the cash flow projection period was assumed to equal the asset's planned life,
- the discount rate was assumed to equal the weighted average cost of capital, and was calculated at 9.70% after taxation with the 19% marginal tax rate,
- production volumes were assumed to be in line with a competent person report prepared by Miller & Lents based on available current geological information,
- sales volumes, capital expenditure, operating expenses and field decommissioning costs were assumed in line with current projections for the B-8 field.

The following price assumptions were adopted for the purposes of the estimates:

- for crude oil in USD/bbl (per barrel of oil equivalent):
  - 2016–2019 – prices in line with the price assumptions for the available market scenarios,
  - 2020 and beyond − prices remaining stable in the long term on par with the 2019 level, adjusted for inflation.

Impairment testing of the B-8 field's development assets carried out in 2015 did not indicate the need to recognise any impairment losses on the assets.

Due to significant market volatility, in particular with respect to crude oil prices, the adopted assumptions may be subject to justifiable changes, and such changes may necessitate a revision of the carrying amounts of the field's assets in the future.

To determine the effect of key factors on the test results, the Group carried out an analysis of sensitivity to a -15%/+15% change of oil and gas price, -15%/+15% change in production volumes, and -15%/+15% change in the USD/PLN exchange rate.

The table below presents the estimated changes in impairment losses on the B-8 field's assets depending on the change in key assumptions:

Factor	Change	Impact on impairment losses (PLN '000)	
Crude oil and gas prices	+/- 15%.	-	- 107,154
Production volume	+/- 15%.	-	- 100,299
USD/PLN exchange rate	+/- 15%.	-	-
Discount rate	+/- 0.5%.	-	-

Norway

The upstream operations in Norway are carried out by LOTOS Production and Exploration Norge (LOTOS E&P Norge AS, a company of the LOTOS Petrobaltic Group) on the Norwegian Continental Shelf.

Acquisition of interests in Sleipner gas field licences in Norway

On October 30th 2015, LOTOS Exploration and Production Norge AS ("LOTOS E&P Norge AS"), a LOTOS Petrobaltic Group company, entered into an agreement with ExxonMobil Exploration and Production Norway AS ("Exxon", the "Seller"), to acquire a portfolio of assets in the Sleipner gas field located on the Norwegian Continental Shelf. In December 2015, LOTOS E&P Norge AS obtained all the necessary consents of the Norwegian authorities to finalise the transaction.

On December 30th 2015 ("acquisition date"), all conditions precedent to the agreement were fulfilled and all risks and rewards related to the ownership of the acquired Sleipner assets were transferred to LOTOS E&P Norge AS.

The Sleipner assets comprise interests in licences on the following fields in the central part of the North Sea:

Fields	Status	Licences	Shares
Slepiner Ost	production	PL 046 Inside	15%
Sleipner Vest	production	PL 046 Outside, PL 029	15%
Gungne	production	PL 046 Outside	15%
Loke	production	PL 046 Outside	15%
Alfa Sentral	pre-development	PL 046 E, F	28%
PL046 D	exploration	PL 046D	28%

Sleipner is a major gas hub (distribution centre) on the Norwegian Continental Shelf, linked to numerous countries, including Germany and the United Kingdom, by a gas pipeline network.

The operator on each of the production fields is Statoil. Apart from LOTOS E&P Norge AS, Total E&P Norge AS and ExxonMobil E&P Norway AS hold interests in these fields. The output from the fields is 70% natural gas and 30% condensate, that is light crude oil used in the production of gasoline and LPG. Proven and probable reserves (2P) attributable to the interests acquired by LOTOS E&P Norge AS in the production fields total 20.8m boe.

The Alfa Sentral field, in which LOTOS E&P Norge AS acquired an interest, is currently at a pre-development stage. The operator of the Alfa Sentral licence is Statoil and, apart from LOTOS E&P Norge AS, also Total E&P Norge AS holds interests there. Recoverable (contingent) resources (2C) attributable to the interests acquired by LOTOS E&P Norge AS in the Alfa Sentral field amount to 10.3m boe. The plans provide for the production of 4,000 boe/d from the interests allocated to LOTOS E&P Norge AS. Production from the field is planned to commence in late 2019.

The contractual price for the interests in the licences acquired in the Sleipner transaction was set by the parties at USD 160m as at January 1st 2015, which under the Norwegian tax law is referred to as the effective economic date of the transaction. Tax consequences of acquisition and sale of interests in licences located on the Norwegian Continental Shelf and shared by many investors require approval by the Norwegian Petroleum and Energy Ministry and Ministry of Finance. This requirement is imposed by the legislation governing crude oil taxation. The legislation requires that January 1st be assumed as the effective transaction date for tax purposes, and that payment for acquired interests include the agreed purchase price, an appropriate share in working capital, and the amount of settlements between the existing licence partners. The period from January 1st (the effective economic transaction date) to the date of actual transaction settlement is referred to as the transitional period.

Once the transaction is finalised, the buyer pays the agreed acquisition price and a pro and contra settlement takes place, as part of which the parties make mutual settlements relating to working capital, accounts to be settled with the joint venture partners as at January 1st, and respective shares in net cash flows from the licence in the transitional period.

The purchase of the Sleipner assets for the contractual price of USD 160m was financed under and settled through the pro and contra mechanism, that is using the cash flows acquired by LOTOS E&P Norge AS, generated in the period from the effective transaction date (January 1st 2015) to the actual date of finalising the transaction (the acquisition date, i.e. December 30th 2015). Under this mechanism, LOTOS E&P Norge AS was reimbursed USD 26.3m as the surplus of the settlement amount over the acquisition price.

Given the high amount of the deferred tax asset recognised in LOTOS E&P Norge AS accounts, no income tax for 2015 will be paid on those cash flows and the transaction will have no effect on the Group's financial result under the Norwegian tax regime.

The total value of the acquired Sleipner assets as disclosed in the consolidated financial statements is PLN 1,129.4m (NOK 2,548.9m) and accounts for the decommissioning asset's value of PLN 575.2m (NOK 1,298m). The table below presents the effect of accounting for the acquisition of Sleipner assets in these consolidated financial statements:

Reporting item	NOKm	PLNm
I. Production assets	846.8	375.2
II. Exploration and evaluation assets	404.1	179.0
Value of acquired Sleipner assets after pro and contra settlement, taking into account capitalised transaction costs and estimated future conditional payments (I + II)	1,250.9	554.2
III. Decommissioning assets	1,298.0	575.2
IV. Other assets and liabilities, net	82.6	36.6
Total (I+II+III+IV)	**2,631.5**	**1,166.0**
Settlement of acquisition price (A+B):	*1,030.9*	*456.7*
A. Price paid after pro and contra settlement (USD 160m - USD 186.3m)	*(228.6)*	*(101.3)*
B. Tax resulting from pro and contra settlement, on cash flows generated in transitional period (amount paid by Exxon, settled against deferred tax asset of LOTOS E&P Norge AS)	*1,259.5*	*558.0*
Capitalised transaction costs (C+D):	*302.6*	*134.1*
C. Amount of conditional future payments as per agreement	285.5	126.5
D. Capitalised transaction costs	17.1	7.6
E. Reclamation provision	*1,298.0*	*575.2*
Total (A+B+C+D+E)	**2,631.5**	**1,166.0**

The purchased property, plant and equipment comprise production infrastructure (plant and equipment). The remaining assets were included in intangible assets classified as exploration and evaluation assets. Under property, plant and equipment the Group recognises an asset related to future costs of decommissioning of an offshore oil extraction facility of PLN 575,177 thousand (NOK 1,298,076 thousand). The value of the asset is dependent on the revision of the estimated value of the relevant provision.

The reclamation provision recognised by the Group, representing the best estimate of future costs related to land reclamation, is recognised in the financial statements in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets, and in fulfilment of the obligation resulting from international land reclamation requirements. The estimated reclamation period for the deposits covered by the transaction will span from 2016 to 2033, therefore the amount of future costs was determined by the Group at a 4% discount rate and a 2% inflation rate. For information on provisions for offshore oil and gas extraction facilities on the North Sea, see Note 30.1.

On December 31st 2015, the Group analysed the sensitivity of the Sleipner assets to changes in key macroeconomic factors, as presented in the table below:

Factor	Change	Impact on impairment losses (PLN '000)	
Crude oil and gas prices	+/- 15%.	-	- 109,231
Production volume	+/- 15%.	-	- 120,934
USD/PLN exchange rate	+/- 15%.	-	-
Discount rate	+/- 0.5%.		

Heimdal offshore gas and condensate extraction facility
Skirne/Byggve, Atla and Vale fields

The Group's production assets located in the Heimdal area include interests in gas-condensate fields: Skirne/Byggve (30%), Alta (20%) and Vale (25.75%), acquired together with an interest (5%) in the Heimdal gas and condensate processing and export hub in December 2013.

The entire volume of gas and condensate produced by the Group from these fields is sold to external customers via a pipeline network delivering the products to various offtake points in the UK and continental Europe.

The production infrastructure of the Heimdal offshore facility comprises the Heimdal production platform with ancillary infrastructure (the Heimdal gas and condensate processing and export hub) and subsea production wells.

As at December 31st 2015, the Group tested the assets for impairment and determined their recoverable amount as their value in use measured using the discounted future cash flows method.

Key assumptions underlying computation of the recoverable amount of the tested property, plant and equipment:

- the cash flow projection period was assumed to equal the asset's planned life,
- the discount rate was assumed to equal the weighted average cost of capital, and was calculated at 7.33% after taxation with the 78% marginal tax rate (applicable in Norway),
- production and sales volumes, capital expenditure, operating expenses and field decommissioning costs were assumed as projected by the field operators.

The Management Board's estimates used in impairment testing as at December 31st 2015 take into account the additional benefits which were realised in 2015 or are very likely to be realised but were not taken into account in the impairment tests carried out as at December 31st 2014:

- Heimdal hub – from December 2015 to February 2016, the Heimdal platform's operator (Statoil Petroleum AS) drilled a new production well, which should be placed in service in Q1 2016 according to the operator's projections. The reserves attributable to the Group due to its interest in the Heimdal platform are close to 0.3m boe.
- Atla field – the field's physical production period increased significantly. According to previous forecasts, physical production should have stopped in 2015, but the field is still producing and its physical production is set to end no earlier than in Q2 2016.
- Skirne field – in accordance with the assumptions presented by the field's operator (Total E&P Norge AS), an increase in hydrocarbon output is expected.
- Vale field – the production profile covers low pressure production (LPP) – both the licence budget for 2016 and the long-term forecast for the field prepared by the operator (Centrica Resources (Norge) AS) provide for capital expenditure to be incurred in 2016 to enable low pressure production and, in consequence, achieve additional hydrocarbon output. The Group's share in the additional production made possible by LPP is ca. 1.1m boe.

The additional benefits listed above had a positive effect on the Management Board's estimates, reducing the negative impact of changes in the price of oil and gas.

The following price assumptions were adopted for the purposes of the estimates:
- for crude oil in USD/bbl (per barrel):
  - 2016–2019 – prices in line with the price assumptions for the available market scenarios,
  - 2020 and beyond − prices remaining stable in the long term on par with the 2019 level, adjusted for inflation.

– for natural gas in USD/bbl (per barrel):

- 2016–2019 − prices in line with the price assumptions for the available market scenarios, and in 2020 and beyond − prices remaining stable in the long term on par with the 2019 level, adjusted for inflation,

The USD/NOK exchange rate used for the purposes of the impairment test is a cross rate calculated based on forward curves for the EUR/USD and EUR/NOK currency pairs. The visible weakening of NOK compared to USD and EUR was also instrumental in mitigating negative price shifts.

Impairment tests of the Heimdal assets carried out in 2015 did not indicate the need to recognise any impairment losses on property, plant and equipment classified as production assets.

Due to significant market volatility, in particular with respect to oil and gas prices, the adopted assumptions may be subject to justifiable changes, and such changes may necessitate a revision of the carrying amounts of the LOTOS E&P Norge's assets in the future.

To determine the effect of key factors on the test results, the Group carried out an analysis of sensitivity to a -15%/+15% change of oil and gas price, -15%/+15% change in production volumes, and -15%/+15% change in the USD/NOK exchange rate.

The table below presents the estimated changes in impairment losses on the Heimdal assets of LOTOS E&P Norge depending on the change in key assumptions:

Factor	Change	Impact on impairment losses (PLN '000)	
Crude oil and gas prices	+/- 15%	-	-25,317
Production volume	+/- 15%	-	-25,393
USD/NOK exchange rate	+/- 15%	-	-25,393
Discount rate	+/- 0.5%		-6,309

As at December 31st 2014, the Group tested the assets for impairment and determined their recoverable amount as their value in use measured using the discounted future cash flows method.

Key assumptions underlying computation of the recoverable amount of the tested property, plant and equipment:
- the cash flow projection period was assumed to equal the asset's planned life,
- the discount rate was assumed to equal the weighted average cost of capital, and was calculated at 7.5% after taxation with the 78% marginal tax rate (applicable in Norway),
- production and sales volumes, capital expenditure, operating expenses and field decommissioning costs were assumed as projected by the field operators.

The following price assumptions were adopted for the purposes of the estimates:
- for crude oil in USD/bbl (per barrel):
  - 2015–2018 – prices in line with the price assumptions for the available market scenarios,
  - 2019 and beyond − prices remaining stable in the long term on par with the 2018 level, adjusted for inflation.

- for natural gas in p/th (pence/thermal units):
  - 2015–2020 − prices in line with the price assumptions for the available market scenarios, and in 2021 and beyond − prices remaining stable in the long term on par with the 2020 level, adjusted for inflation.

Following the impairment tests, an impairment loss was recognised on property, plant and equipment classified as production assets (Heimdal, Vale, Skirne, Atla) in a total amount of PLN 45,854 thousand (NOK 91,690 thousand); see Note 9.4 to the consolidated financial statements for 2014.

Following the impairment tests, an impairment loss of PLN 13,823 thousand (NOK 27,640 thousand) was also recognised on the Heimdal portfolio's intangible assets related to exploration for and evaluation of hydrocarbon resources in the Rind field; see Note 15.1.1 and Note 9.4 to the consolidated financial statements for 2014.

Lithuania

Onshore oil extraction facilities

The upstream operations in Lithuania are carried out by the AB LOTOS Geonafta Group, which comprises AB LOTOS Geonafta, UAB Genciu Nafta and UAB Manifoldas. The Group also holds interests in UAB Minijos Nafta, a joint venture.

The Group holds interests in 17 onshore oil fields in Lithuania, which are located within seven onshore licence areas (Plunge, Klaipėda, Girkalai, Kretinga, Nausodis, Genciu and Gargzdai). 13 of these fields are on production.

Key assets held by those companies include the following fields: Genciai (UAB Genciu Nafta), Girkalai, Kretinga, Nausodis (AB LOTOS Geonafta), Ablinga, Liziai, Siaures Vezaiciai, Auksoras (UAB Manifoldas), Agluonenai, Degliai, Pietu Siupariai, Pociai, Sakuciai, Siupariai, Uoksai, and Vilkyciai (UAB Minijos Nafta). In the Siaures Vezaiciai, Auksoras and Uoksai fields, production has been suspended.

Property, plant and equipment related to Lithuanian production operations include onshore extraction facilities of the AB LOTOS Geonafta Group companies, which comprise surface and underground infrastructure such as production wells, pumps, pipelines, crude oil and formation water tanks and a gas separation system. The production wells are fitted with surface and downhole pumps. Oil from the extraction facility is fed to a pipeline system connected to a storage centre, from where it is shipped by land to a marine terminal in Liepāja (Latvia). The oil is then transported to Gdańsk on a tanker ship and sold to the Company.

In 2015, the Group's capital expenditure on property, plant and equipment related to Lithuanian production infrastructure was PLN 8,290 thousand, compared with PLN 14,902 thousand in 2014.

Based on the results of an impairment test of the Lithuanian onshore extraction facilities performed as at December 31st 2015, the Group recognised an impairment loss of a total of PLN 6,314 thousand on production infrastructure associated with the Ablinga and Ližiai fields (2014: PLN 2,708 thousand on production infrastructure associated with the Ablinga field) (see Note 9.4.) The method and assumptions used to determine the recoverable amounts of the assets were consistent with those applied to determine the recoverable amounts of the Lithuanian production licences, tested as at December 31st 2015 (see Note 15.1.2.).

In addition, in 2014 the Group wrote off expenditure on property, plant and equipment related to the Zvaginai well of PLN 5,772 thousand (see Note 9.4.).

13.1.4 Assets related to future costs of decommissioning of oil and gas extraction facilities

PLN '000	Dec 31 2015	Dec 31 2014
Development assets	-	24,573
Production assets	706,029	178,162
Total	**706,029**	**202,735**

As part of its development and production assets, the Group discloses decommissioning assets for future costs of decommissioning of oil and gas extraction facilities depreciated with the units-of-production method. These assets are recognised along with the recognition and remeasurement of provisions for decommissioning of oil and gas extraction facilities.

PLN '000	Note	Development assets Poland	Development assets Norway	Development assets Total	Production assets Poland	Production assets Norway	Production assets Lithuania	Production assets Total	Total
Gross carrying amount Jan 1 2015		**28,571**	**129,699**	**158,270**	**72,558**	**266,534**	**2,298**	**341,390**	**499,660**
Recognised	*13.1; 30.1*	-	-	-	-	*605,423* [1]	-	*605,423*	*605,423*
Estimated costs related to decommissioning of oil and gas extraction facilities	*13.1; 30.1*	*10,054*	*1,485*	*11,539*	*(304)*	*5,480*	*(250)*	*4,926*	*16,465*
Exchange differences on translating foreign operations		-	*(8,401)*	*(8,401)*	-	*(47,631)*	*(6)*	*(47,637)*	*(56,038)*
Reversal of asset related to decommissioning of oil and gas extraction facilities	*13.1; 30.1*	*(2,750)*	-	*(2,750)*	-	-	-	-	*(2,750)*
Reclassification of development assets to production assets		*(35,875)*	-	*(35,875)*	*35,875*	-	-	*35,875*	-
Gross carrying amount Dec 31 2015		**-**	**122,783**	**122,783**	**108,129**	**829,806**	**2,042**	**939,975**	**1,062,760**
Accumulated depreciation/ amortisation Jan 1 2015		**3,998**	**-**	**3,998**	**72,217**	**90,069**	**942**	**163,228**	**167,226**
Depreciation/amortisation		*316*	-	*316*	*37*	*41,810*	*393*	*42,240*	*42,556*
Exchange differences on translating foreign operations		-	-	-	-	*(7,869)*	*6*	*(7,863)*	*(7,863)*
Reclassification of development assets to production assets		*(4,314)*	-	*(4,314)*	*4,314*	-	-	*4,314*	-
Accumulated depreciation/amortisation Dec 31 2015		**-**	**-**	**-**	**76,568**	**124,010**	**1,341**	**201,919**	**201,919**
Impairment losses Jan 1 2015		**-**	**129,699**	**129,699**	**-**	**-**	**-**	**-**	**129,699**
Recognised	*9.4*	-	*1,485*	*1,485*	-	-	-	-	*1,485*
Exchange differences on translating foreign operations		-	*(8,401)*	*(8,401)*	-	*(1,684)*	-	*(1,684)*	*(10,085)*
Used/Reversed		-	-	-	-	*33,713*	-	*33,713*	*33,713*
Impairment losses Dec 31 2015		**-**	**122,783**	**122,783**	**-**	**32,029**	**-**	**32,029**	**154,812**
Net carrying amount Dec 31 2015		**-**	**-**	**-**	**31,561**	**673,767**	**701**	**706,029**	**706,029**

[1] Acquisition of Sleipner assets in Norway (for more information on the transaction, see Note 13.1.3.).

PLN '000	Note	Development assets Poland	Development assets Norway	Development assets Total	Production assets Poland	Production assets Norway	Production assets Lithuania	Production assets Total	Total
Gross carrying amount Jan 1 2014		**27,929**	**108,194**	**136,123**	**108,954**	**245,671**	**2,224**	**356,849**	**492,972**
Recognised	13.1; 30.1	*642*	*-*	*642*	*-*	*-*	*1,074*	*1,074*	*1,716*
Estimated costs of decommissioning of oil and gas extraction facilities	13.1; 30.1	*-*	*27,743*	*27,743*	*(36,396)*	*33,455*	*(844)*	*(3,785)*	*23,958*
Exchange differences on translating foreign operations		*-*	*(6,238)*	*(6,238)*	*-*	*(12,592)*	*62*	*(12,530)*	*(18,768)*
Other		*-*	*-*	*-*	*-*	*-*	*(218)*	*(218)*	*(218)*
Gross carrying amount Dec 31 2014		**28,571**	**129,699**	**158,270**	**72,558**	**266,534**	**2,298**	**341,390**	**499,660**
Accumulated depreciation/amortisation Jan 1 2014		**3,998**	**-**	**3,998**	**67,378**	**-**	**725**	**68,103**	**72,101**
Depreciation/amortisation		*-*	*-*	*-*	*4,839*	*95,129*	*194*	*100,162*	*100,162*
Exchange differences on translating foreign operations		*-*	*-*	*-*	*-*	*(5,060)*	*23*	*(5,037)*	*(5,037)*
Accumulated depreciation/amortisation Dec 31 2014		**3,998**	**-**	**3,998**	**72,217**	**90,069**	**942**	**163,228**	**167,226**
Impairment losses Jan 1 2014		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Recognised		*-*	*136,985*	*136,985*	*-*	*-*	*-*	*-*	*136,985*
Exchange differences on translating foreign operations		*-*	*(7,286)*	*(7,286)*	*-*	*-*	*-*	*-*	*(7,286)*
Used/Reversed		*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Impairment losses Dec 31 2014		**-**	**129,699**	**129,699**	**-**	**-**	**-**	**-**	**129,699**
Net carrying amount Dec 31 2014		**24,573**	**-**	**24,573**	**341**	**176,465**	**1,356**	**178,162**	**202,735**

13.2 Refinery and other property, plant and equipment

PLN '000	Note	Land	Buildings, structures	Plant and equipment	Vehicles, other	Property, plant and equipment under construction	Total
Gross carrying amount Jan 1 2015 (restated)		**493,495**	**4,488,657**	**5,607,338**	**1,020,064**	**279,575**	**11,889,129**
Purchase		-	-	*1,287*	*5,004*	*462,888*	*469,179*
Transfer from property, plant and equipment under construction		*29,645*	*91,742*	*53,844*	*63,165*	*(238,396)*	-
Borrowing costs	*13.3*	-	-	-	-	*1,331*	*1,331*
Exchange differences on translating foreign operations		-	*2*	*987*	*17,178*	*93*	*18,260*
Estimated costs of decommissioning, land reclamation and clean-up[1]		-	*(2,095)*	*(142)*	-	-	*(2,237)*
Sale		*(1,892)*	*(7,217)*	*(11,447)*	*(2,484)*	*(262)*	*(23,302)*
Liquidation		*(18)*	*(1,974)*	*(9,902)*	*(34,854)* [2]	*(41)*	*(46,789)*
Expenditure written off due to project discontinuation	*9.4*	-	-	-	-	*(171)*	*(171)*
Finance lease		-	-	*24*	*97,344*	-	*97,368*
Reclassification of property, plant and equipment under construction to exploration and evaluation assets[3]		-	-	-	-	*(60,577)*	*(60,577)*
Reclassification of property, plant and equipment under construction to development assets[4]		-	-	-	-	*(30,857)*	*(30,857)*
Other		*365*	*1,862*	*(1,017)*	*(6,087)*	*(2,628)*	*(7,505)*
Gross carrying amount Dec 31 2015		**521,595**	**4,570,977**	**5,640,972**	**1,159,330**	**410,955**	**12,303,829**
Accumulated depreciation Jan 1 2015 (restated)		**16,762**	**1,299,460**	**1,750,284**	**447,678**	**-**	**3,514,184**
Depreciation		*1,897*	*177,529*	*240,036*	*83,133*	-	*502,595*
Exchange differences on translating foreign operations		-	*2*	*707*	*14,080*	-	*14,789*
Sale		-	*(5,570)*	*(10,185)*	*(2,435)*	-	*(18,190)*
Liquidation		-	*(1,139)*	*(9,520)*	*(34,359)* [2]	-	*(45,018)*
Finance lease		-	-	-	*(7,344)*	-	*(7,344)*
Other		-	*1,007*	*535*	*1,035*	-	*2,577*
Accumulated depreciation Dec 31 2015		**18,659**	**1,471,289**	**1,971,857**	**501,788**	**-**	**3,963,593**
Impairment losses Jan 1 2015 (restated)		**1,067**	**37,466**	**5,476**	**2,961**	**13,601**	**60,571**
Recognised	*9.4*	-	*9,991*	*976*	*4,881* [5]	*132*	*15,980*
Exchange differences on translating foreign operations		-	-	*7*	*118*	*3*	*128*
Used/Reversed		-	*(3,951)*	*(166)*	*(41)*	*(41)*	*(4,199)*
Other		*91*	*905*	-	-	-	*996*
Impairment losses Dec 31 2015		**1,158**	**44,411**	**6,293**	**7,919**	**13,695**	**73,476**
Net carrying amount Dec 31 2015		**501,778**	**3,055,277**	**3,662,822**	**649,623**	**397,260**	**8,266,760**

[1] Estimated cost of land reclamation and clean-up and dismantling of a subsea pipeline operated by subsidiary Energobaltic Sp. z o.o. (LOTOS Petrobaltic Group).
[1] Including retirement of worn-out spare parts in the amount of PLN 19,513 thousand
[3] Related to operations on Gaz Południe, Gotlandia, Łeba and Rozewie licence areas, which in line with the upstream segment management's decision will be continued in 2016. Applications were filed to convert the Łeba and Rozewie licences into combined oil and gas exploration, appraisal and production licences.
[4] Related to prepayments for capital expenditure on the development of the B-8 field.
[5] Including PLN 4,499 thousand related to impairment losses on vessels used in the LOTOS Petrobaltic Group.

PLN '000	Land	Buildings, structures	Plant and equipment	Vehicles, other	Property, plant and equipment under construction	Total
Gross carrying amount Jan 1 2014 (restated)	**472,934**	**4,392,014**	**5,532,666**	**699,067**	**260,389**	**11,357,070**
Purchase	-	47	1,202	20,029	585,101	606,379
Transfer from property, plant and equipment under construction	23,039	107,813	101,346	323,335	(555,533)	-
Borrowing costs	-	-	-	-	2,693	2,693
Exchange differences on translating foreign operations	-	50	1,131	21,010	(255)	21,936
Estimated costs of decommissioning, land reclamation and clean-up[(1)]	-	(762)	-	-	-	(762)
Reclassification to non-current assets (or disposal group) held for sale (2)	(764)	(6,771)	(6,010)	(27,639)	-	(41,184)
Sale	(1,881)	(1,362)	(12,890)	(2,279)	(4,050)	(22,462)
Decommissioning	-	(1,782)	(11,985)	(6,964)	-	(20,731)
Expenditure written off due to project discontinuation	-	-	-	-	(226)	(226)
Other	167	(590)	1,878	(6,495)	(8,544)	(13,584)
Gross carrying amount Dec 31 2014 (restated)	**493,495**	**4,488,657**	**5,607,338**	**1,020,064**	**279,575**	**11,889,129**
Accumulated depreciation Jan 1 2014 (restated)	**15,499**	**1,134,001**	**1,531,793**	**387,626**	**-**	**3,068,919**
Depreciation	1,530	171,185	243,783	76,004	-	492,502
Exchange differences on translating foreign operations	-	8	810	16,515	-	17,333
Reclassification to non-current assets (or disposal group) held for sale [(2)]	(24)	(2,601)	(4,278)	(23,614)	-	(30,517)
Sale	(121)	(583)	(12,541)	(2,077)	-	(15,322)
Decommissioning	-	(1,630)	(10,529)	(6,471)	-	(18,630)
Other	(122)	(920)	1,246	(305)	-	(101)
Accumulated depreciation Dec 31 2014 (restated)	**16,762**	**1,299,460**	**1,750,284**	**447,678**	**-**	**3,514,184**
Impairment losses Jan 1 2014 (restated)	**1,045**	**16,021**	**480**	**1,795**	**13,624**	**32,965**
Recognised	150	24,918	6,014	1,565	5	32,652
Used/Reversed	(13)	(1,968)	(1,015)	(36)	(28)	(3,060)
Reclassification to non-current assets (or disposal group) held for sale [(2)]	(115)	(1,505)	(3)	(363)	-	(1,986)
Impairment losses Dec 31 2014 (restated)	**1,067**	**37,466**	**5,476**	**2,961**	**13,601**	**60,571**
Net carrying amount Dec 31 2014 (restated)	**475,666**	**3,151,731**	**3,851,578**	**569,425**	**265,974**	**8,314,374**

[(1)] Estimated cost of land reclamation and clean-up and dismantling of a subsea pipeline operated by subsidiary Energobaltic Sp. z o.o. (LOTOS Petrobaltic Group).
[(2)] Jasło and Czechowice-Dziedzice Branches operating as separate, organised parts of business in Jasło and Czechowice-Dziedzice; see Note 17.

Refinery and other property, plant and equipment include chiefly Group's assets related to downstream and support activities, such as the service station network, rolling stock, storage depots, refinery infrastructure and property on which the production plants, production units, pipelines and office buildings are located. The item also comprises other upstream segment assets, including ships and a multi-purpose mobile drilling rig.

In 2015, capital expenditure incurred by the Group on refinery and other property, plant and equipment was PLN 469,179 thousand, and included primarily outlays on the extension of the service station chain, enlargement of the tanker fleet, construction of the Hydrogen Recovery Unit (HRU), Delayed Coking Unit (DCU) with auxiliary infrastructure (the EFRA Project), and classification surveys of vessels. In 2014, capital expenditure incurred by the Group on refinery and other property, plant and equipment was PLN 606,379 thousand, and related mainly to the extension of the fuel depot in Poznań, construction of the Hydrogen Recovery Unit, extension of the service station network, and acquisition of the multi-purpose drilling platform 'LOTOS Petrobaltic'.

Impairment losses on refinery and other property, plant and equipment

In 2015, the Group made a revaluation of its refinery and other property, plant and equipment. Impairment losses totalled PLN 15,980 thousand (2014: PLN 32,652 thousand) (see Note 9.4).

In 2015, LOTOS Paliwa Sp. z o.o. recognised an impairment loss on service station assets in the total amount of PLN 7,812 thousand; (2014: PLN 15,765 thousand; see Note 9.4). The recoverable amount of property, plant and equipment related to the service station network was determined based on the value in use of each station, calculated with the discounted cash flow method. Future cash flows were calculated based on five-year cash-flow projections, prepared using budget projections for 2016 (in 2014: for 2015) and the cash inflow and outflow plan for subsequent years, based on the development strategy until 2018. The residual value for the discounted cash flows was calculated using the growing perpetuity formula. A fixed growth rate of 2.79% (2014: 1%) was used to extrapolate cash-flow projections beyond the five-year period. The extrapolation was based on a quantitative forecast of the fuel consumption growth rate in Poland in 2014–2020. LOTOS Paliwa Sp. z o.o.'s net weighted average cost of capital (WACC) was assumed at 7.3% (2014: 6.13%), based on the company's capital structure. Discounted cash flows calculated separately for each cash-generating unit were grossed up.

Calculation of the value in use of cash-generating units is most sensitive to the following variables:

- gross margin, which depends on average values of unit margins in the period preceding the budget period (a 6% average year-on-year decline of the margin was assumed),
- discount rates, reflecting risks typical to the cash-generating unit (the median price for five-year PLN-denominated notes quoted in November 2015 was adopted),
- volumes based on fuel consumption growth rate (a 4% increase was assumed),
- market share in the budget period (a stable market share was assumed),
- growth rate used to extrapolate cash-flow projections beyond the budget period, based on a quantitative forecast of the fuel consumption growth rate in Poland in 2014−2020, prepared using POPiHN, GUS, NBP and JBC reports (for gasolines), and based on GDP market consensus. In the case of diesel oil, the data included also the market consensus on GDP and its constituent elements sourced from IBNGR, BZWBK, MILLENIUM, NBP, MG, EBOIR, WFM, OECD, KE, and ERSTE GROUP.

As regards the calculation of the service stations' value in use, the Management Board is of the opinion that no reasonably probable change to any of the key assumptions listed above will result in the carrying amount of the service station assets exceeding their recoverable amount to a significant extent.

As at December 31st 2014, LOTOS Asfalt Sp. z o.o. tested for impairment its Jasło and Czechowice plant assets. As a result of the test, LOTOS Asfalt Sp. z o.o. recognised an impairment loss of PLN 15,893 thousand on its Jasło plant assets (see Note 9.4). The impairment loss was recognised based on the assumption that the bitumen business would be restructured after the launch of the EFRA Project, and such restructuring would involve suspending the operation of the Jasło and Czechowice plants' infrastructure, while maintaining production in Gdańsk. The impairment test was performed using the discounted cash flow method. The analysis covered the planned cash flows in 2015–2017. The test assumed a sales volume growth in 2016–2017 (by about 27% in 2016 compared with 2015 and a further 9% in 2017 compared with 2016), expected in connection with Poland's absorption of funds available from the new EU budget until 2020 on development of its road infrastructure. The sales growth assumed for 2016 was based on the new EU financial framework and the schedule of investment projects planned as part of the National Road Construction Programme 2014–2020, which envisages considerable expenditure on road infrastructure. The company has taken into account the negative impact of the cement technology on its sales growth, however given that the road construction process involving this technology is quite advanced, the cementing work should not peak before the end of 2018. In 2016–2017 margins were assumed to remain roughly unchanged from their budgeted 2015 level, the net weighted average cost of capital (WACC) was put at 9%, and fixed costs were assumed to remain stable as were distribution costs per unit (comprising mainly costs of transport); the computations were performed using fixed prices (inflation was eliminated both from revenue/costs and the discount rate).

13.3 Other information concerning property, plant and equipment

PLN '000	Property, plant and equipment used under finance lease Dec 31 2015	Dec 31 2014
Gross carrying amount	334,209	198,575
Accumulated depreciation	93,403	47,328
Net carrying amount	240,806	151,229

The Group uses finance leases to finance primarily rolling stock assets (downstream segment); see also Note 27.4.

The table below presents items under which depreciation of property, plant and equipment is recognised:

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
Cost of sales	590,267	654,683
Distribution costs	68,197	63,030
Administrative expenses	20,302	17,128
Change in products and adjustments to cost of sales	(4,554)	16,915
Total	**674,212**	**751,756**

In 2015, the Group capitalised finance costs of PLN 1,331 thousand as property, plant and equipment under construction (2014: PLN 2,693 thousand) (see note 13.2). As at December 31st 2015, financing costs capitalised as property, plant and equipment under construction totalled PLN 5,050 thousand (December 31st 2014: PLN 5,655 thousand).

As at December 31st 2015, the Group's future contractual commitments, not disclosed in the statement of financial position, concerning expenditure on property, plant and equipment amounted to PLN 1,768,229 thousand and mainly related to the EFRA Project, development of the B-8 field (B8 Project), construction of a Hydrogen Recovery Unit (HRU) at the Refinery, and extension of the service station chain.

As at December 31st 2014, the Group's contractual commitments, not disclosed in the statement of financial position, concerning future expenditure on property, plant and equipment amounted to PLN 808,860 thousand and related mostly to the conversion of a drilling platform into a production platform at LOTOS Petrobaltic S.A., a delayed coking unit (the EFRA Project), construction of a Hydrogen Recovery Unit (HRU) at the Refinery, and extension of the service station network.

The Group's future contractual commitments follow from the 2013−2015 Efficiency and Growth Programme.

As at December 31st 2015, property, plant and equipment serving as collateral for the Group's liabilities was PLN 6,402,952 thousand (December 31st 2014: PLN 7,038,347 thousand).

14. Goodwill

Goodwill is allocated to cash-generating units, as presented in the table below.

PLN '000	Dec 31 2015	Dec 31 2014
Goodwill arising on the acquisition of an organised part of business by LOTOS Paliwa Sp. z o.o.:		
- LOTOS Gaz S.A. (wholesale of fuels)	10,009	10,009
- ESSO service stations network	31,759	31,759
- Slovnaft Polska service stations network	1,932	1,932
Total	**43,700**	**43,700**
Goodwill arising on the acquisition of:		
- LOTOS Partner Sp. z o.o.	1,862	1,862
- Energobaltic Sp. z o.o.	1,126	1,126
Total	**2,988**	**2,988**
Total goodwill	**46,688**	**46,688**

As at December 31st 2015 and December 31st 2014, impairment tests of individual cash-generating units to which goodwill was allocated did not reveal any impairment indicators.

The Group determines the recoverable amount of cash-generating units based on their respective values in use, calculated on the basis of a five-year cash flow projection. The residual value for the discounted cash flows was calculated using the growing perpetuity formula. A fixed growth rate of 2.79% (2014: 1%) was used to extrapolate cash-flow projections beyond the five-year period. The extrapolation was based on a quantitative forecast of the fuel consumption growth rate in Poland in 2014–2020.The discount rate adopted for the calculation reflects net WACC of 7.3% (2014: 6.13%). Discounted cash flows calculated separately for each cash-generating unit were grossed up.

The most material factors affecting the estimated values in use of cash-generating units were: gross margin, discount rate, volumes forecast, projected market shares in the budget period and estimated growth rate beyond the forecast period.

The Group believes that no reasonably probable change in the key parameters identified above would result in goodwill impairment.

15. Other intangible assets

PLN '000	Dec 31 2015	Dec 31 2014 (restated)
Intangible assets classified as exploration, development and production assets		
Exploration and evaluation assets	343,367	196,676
Crude oil and natural gas development and production licences	133,478	208,287
Total	**476,845**	**404,963**
Other intangible assets		
Licences, patents and trademarks	97,017	101,251
Other	34,047	47,473
Intangible assets under development	9,822	3,771
Total	**140,886**	**152,495**
Total	**617,731**	**557,458**

15.1 Intangible assets classified as exploration and evaluation assets, and development and production assets

PLN ‘000	Note	Exploration and evaluation assets				Development and production licences			Total
		Poland	Norway	Lithuania	Total	Poland	Lithuania	Total	
Gross carrying amount Jan 1 2015		**13,012**	**314,806**	**10,213**	**338,031**	**15,721**	**492,231**	**507,952**	**845,983**
Purchase		*15*	*8,100*	-	*8,115*	-	-	-	*8,115*
Acquisition of Sleipner assets[(1)]		-	*188,471*	-	*188,471*	-	-	-	*188,471*
Exchange differences on translating foreign operations		-	*(29,291)*	*(2)*	*(29,293)*	-	*(74)*	*(74)*	*(29,367)*
Expenditure written off due to project discontinuation	*9.4*	*(3,149)* [(2)]	*(14,846)* [(3)]	-	*(17,995)*	-	-	-	*(17,995)*
Gross carrying amount Dec 31 2015		**9,878**	**467,240**	**10,211**	**487,329**	**15,721**	**492,157**	**507,878**	**995,207**
Accumulated amortisation Jan 1 2015		**7,277**	**-**	**-**	**7,277**	**4,948**	**169,511**	**174,459**	**181,736**
Amortisation		*3,663*	-	-	*3,663*	*2,810*	*18,255*	*21,065*	*24,728*
Exchange differences on translating foreign operations		-	-	-	-	-	*309*	*309*	*309*
Expenditure written off due to project discontinuation	*9.4*	*(2,894)* [(2)]	-	-	(2,894)	-	-	-	*(2,894)*
Accumulated amortisation Dec 31 2015		**8,046**	**-**	**-**	**8,046**	**7,758**	**188,075**	**195,833**	**203,879**
Impairment losses Jan 1 2015		**-**	**134,078**	**-**	**134,078**	**-**	**125,206**	**125,206**	**259,284**
Recognised	*9.4*	*235* [(4)]	-	*10,027* [(5)]	*10,262*	-	*52,419* [(6)]	*52,419*	*62,681*
Exchange differences on translating foreign operations		-	*(8,608)*	*184*	*(8,424)*	-	*942*	*942*	*(7,482)*
Used/Reversed		-	-	-	-	-	-	-	-
Impairment losses Dec 31 2015		**235**	**125,470**	**10,211**	**135,916**	**-**	**178,567**	**178,567**	**314,483**
Net carrying amount Dec 31 2015		**1,597**	**341,770**	**-**	**343,367**	**7,963**	**125,515**	**133,478**	**476,845**

[(1)] Alfa Sentral and PL046 licences acquired as part of Sleipner assets in Norway (NOK 404,096 thousand; for more information on the transaction, see Note 13.1.3).
[(2)] Exploration and evaluation assets related to the Sambia E field.
[(3)] Exploration and evaluation assets related to the Heimdal field under Fulla (PL362 and PL035B) and PL503 licence.
[(4)] Słupsk area assets.
[(5)] Seismic survey assets.
[(6)] Assets related to Kretinga, Nausodis, Girkalai, Vezaiciai and Liziai fields.

PLN '000	Exploration and evaluation assets				Development and production licences			Total
	Poland	Norway	Lithuania	Total	Poland	Lithuania	Total	
Gross carrying amount Jan 1 2014	**9,608**	**297,589**	**11,645**	**318,842**	**6,459**	**477,207**	**483,666**	**802,508**
Purchase	*5,119*	*27,278*	*39*	*32,436*	*3,183*	*-*	*3,183*	*35,619*
Exchange differences on translating foreign operations	*-*	*(14,801)*	*293*	*(14,508)*	*-*	*13,260*	*13,260*	*(1,248)*
Reclassification of exploration and evaluation assets to production assets(1)	*-*	*-*	*(1,764)* (2)	*(1,764)*	*-*	*1,764* (2)	*1,764*	*-*
Expenditure written off due to project discontinuation	*(1,172)* (3)	*-*	*-*	*(1,172)*	*-*	*-*	*-*	*(1,172)*
Other	*(543)*	*4,740*	*-*	*4,197*	*6,079*	*-*	*6,079*	*10,276*
Gross carrying amount Dec 31 2014	**13,012**	**314,806**	**10,213**	**338,031**	**15,721**	**492,231**	**507,952**	**845,983**
Accumulated amortisation Jan 1 2014	**7,215**	**-**	**-**	**7,215**	**3,566**	**124,828**	**128,394**	**135,609**
Amortisation	*1,777*	*-*	*-*	*1,777*	*164*	*40,517*	*40,681*	*42,458*
Exchange differences on translating foreign operations	*-*	*-*	*-*	*-*	*-*	*4,166*	*4,166*	*4,166*
Expenditure written off due to project discontinuation	*(1,172)* (3)	*-*	*-*	(1,172)	*-*	*-*	*-*	*(1,172)*
Other	*(543)*	*-*	*-*	*(543)*	*1,218*	*-*	*1,218*	*675*
Accumulated amortisation Dec 31 2014	**7,277**	**-**	**-**	**7,277**	**4,948**	**169,511**	**174,459**	**181,736**
Impairment losses Jan 1 2014	**-**	**125,951**	**-**	**125,951**	**-**	**22,235**	**22,235**	**148,186**
Recognised	*-*	*14,439*	*-*	*14,439*	*-*	*100,604*	*100,604*	*115,043*
Exchange differences on translating foreign operations	*-*	*(6,312)*	*-*	*(6,312)*	*-*	*2,367*	*2,367*	*(3,945)*
Used/Reversed	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Impairment losses Dec 31 2014	**-**	**134,078**	**-**	**134,078**	**-**	**125,206**	**125,206**	**259,284**
Net carrying amount Dec 31 2014	**5,735**	**180,728**	**10,213**	**196,676**	**10,773**	**197,514**	**208,287**	**404,963**

(1) Exploration and evaluation assets relating to mineral resources with demonstrable technical feasibility and commercial viability of extraction.
(2) Seismic surveys of the Ablinga field.
(3) Sambia W licence and mining usage rights.

15.1.1 Intangible assets classified as exploration and evaluation assets

Intangible assets classified as exploration and evaluation assets are carried until the technical feasibility and commercial viability of extracting the mineral resources is demonstrated.

Poland

In 2015, the Group incurred expenditure of PLN 15 thousand on extension of licences and licence-related mining usage rights (2014: PLN 5,119 thousand). Cash flows associated with that expenditure amounted to PLN 3,754 thousand (2014: PLN 24 thousand), whereas the amount of outstanding investment commitments was PLN 1,356 thousand as at December 31st 2015 (December 31st 2014: PLN 5,095 thousand).

As at December 31st 2015, the Sambia E licence and mining usage rights had expired. The value of decommissioned assets comprising expenditure on intangible assets related to this licence area was PLN 3,149 thousand.

As at December 31st 2014, the Sambia W licence and mining usage rights had expired. The value of decommissioned assets comprising expenditure on intangible assets related to this licence area was PLN 1,172 thousand.

Norway

In 2015, expenditure on intangible assets classified as exploration and evaluation assets in Norway amounted to PLN 196,571 thousand and was attributable to the acquisition of a portfolio of assets in the Sleipner gas field (PLN 188,471 thousand; see Note 13.1.3) as well as investment in Heimdal assets (PLN 4,308 thousand) and other Norwegian fields (PLN 3,792 thousand). The acquisition of the portfolio of Sleipner assets was made with a pro and contra settlement (see Note 13.1.3), which made it possible to settle the entire transaction price using the tax asset of LOTOS E&P Norge AS, with no cash outflow. The work performed on the Heimdal fields jointly with other interest holders was settled between the operator and consortium members by way of cash calls, which were subsequently settled using the operators' billings issued after completing successive works, and as a result as at the end of the reporting period the expenditure incurred in 2015 had been paid and no related investment commitments were carried.

As part of the acquisition of natural gas assets in the Sleipner gas field, the Group acquired an interest in the PL046D field and in the Alfa Sentral field, which is currently at a pre-development stage. Production from the field is planned to commence in 2020.

In 2014, the Group's expenditure on hydrocarbon exploration and evaluation in the Heimdal licence area totalled PLN 21,518 thousand, and related mainly to the Trell licence (PL 102FG).

As at December 31st 2014, the Group recognised an impairment loss on intangible assets related to the Rind field, in an aggregate amount of PLN 13,823 thousand (NOK 27,640 thousand) (see Note 9.4).

Further, in 2014 the Group recognised an impairment loss on capitalised exploration expenses related to surveys performed within the PL 498 and PL 497 licence areas in the North Sea. The impairment loss on the licences was PLN 616 thousand (NOK 1,231 thousand) (see Note 9.4).

Lithuania

Following impairment tests, as at December 31st 2015 the Group recognised an impairment loss on assets comprising expenditure on seismic surveys carried out on UAB Manifoldas' fields in the amount of PLN 10,027 thousand (see Note 9.4).

15.1.2 Crude oil and natural gas development and production licences

Lithuania

The Group holds interests in 17 onshore oil fields in Lithuania, which are located within seven onshore licence areas (Plunge, Klaipėda, Girkalai, Kretinga, Nausodis, Genciu and Gargzdai). 13 of these fields are on production.

The production operations are carried out by companies of the AB LOTOS Geonafta Group, comprising AB LOTOS Geonafta, UAB Genciu Nafta and UAB Manifoldas. The Group also holds interests in UAB Minijos Nafta, a joint venture.

Key assets held by those companies include the following fields: Genciai (UAB Genciu Nafta), Girkalai, Kretinga, Nausodis (AB LOTOS Geonafta), Ablinga, Liziai, Siaures Vezaiciai, Auksoras (UAB Manifoldas), Agluonenai, Degliai, Pietu Siupariai, Pociai, Sakuciai, Siupariai, Uoksai, and Vilkyciai (UAB Minijos Nafta). In the Siaures Vezaiciai, Auksoras and Uoksai fields, production has been suspended.

As at December 31st 2015, production licences held by companies of the AB LOTOS Geonafta Group (AB LOTOS Geonafta (Girkaliai, Kretinga and Nausodis fields), UAB Manifoldas (Vėžaičiai, Ližiai and Ablinga fields)) were tested for impairment.

The Group determined the recoverable amount of the tested assets as their value in use measured using the discounted future cash flows method.

Key assumptions underlying computation of the recoverable amount of the tested intangible assets in Lithuania as at December 31st 2015 were as follows:

- the cash flow projection period was assumed to equal the asset's planned life,
- the discount rate was assumed to equal the weighted average cost, at 10.1%,
- production volumes were assumed to be in line with a competent person report prepared by Miller & Lents based on available current geological information,
- capital expenditure was assumed to match the projected production volumes.

The following crude oil price assumptions (USD/bbl) were adopted for the purposes of the estimates:

- 2016–2019 – prices in line with the price assumptions for the available market scenarios,
- 2020 and beyond − prices remaining stable in the long term on par with the 2019 level, adjusted for inflation.

As a result of the impairment tests, as at December 31st 2015 an impairment loss totalling PLN 52,419 thousand was recognised on production licences covering the Kretinga, Nausodis, Girkalai, Vezaiciai and Liziai fields; another impairment loss, of a total of PLN 6,314 thousand, was recognised on the property, plant and equipment comprising production infrastructure of the Ablinga and Liziai fields; see Note 13.1.3.

Due to significant market volatility, in particular with respect to crude oil prices, the adopted assumptions may be subject to justifiable changes, and such changes may necessitate a revision of the carrying amounts of the AB LOTOS Geonafta Group's assets in the future.

To determine the effect of key factors on the test results, the Group carried out an analysis of sensitivity to a -15%/+15% change of crude oil price, -15%/+15% change in production volumes, and -15%/+15% change in the USD/EUR exchange rate.

The table below presents the estimated changes in impairment losses on assets of the AB LOTOS Geonafta Group depending on the change in key assumptions:

Factor	Change	Impact on impairment losses (PLN '000)	
Crude oil and gas prices	+/- 15%	+ 39,969	- 40,011
Production volume	+/- 15%	+ 48,449	- 48,551
USD/EUR exchange rate	+/- 15%	+ 45,313	- 45,406
Discount rate	+/- 0.5%	- 3,448	+ 3,567

As at December 31st 2014, production licences held by companies of the AB LOTOS Geonafta Group (AB LOTOS Geonafta (Girkaliai, Kretinga and Nausodis fields), UAB Manifoldas (Vėžaičiai, Ližiai and Ablinga fields)) were tested for impairment.

The Group determined the recoverable amount of the tested assets as their value in use measured using the discounted future cash flows method.

Key assumptions underlying computation of the recoverable amount of the tested intangible assets in Lithuania as at December 31st 2014 were as follows:

- the cash flow projection period was assumed to equal the asset's planned life,
- the discount rate was assumed to equal the weighted average cost, at 10%,
- production volumes were assumed to be in line with a competent person report prepared by Miller & Lents based on available current geological information,
- capital expenditure was assumed to match the projected production volumes.

The following crude oil price assumptions (USD/bbl) were adopted for the purposes of the estimates:

- 2015–2018 – prices in line with the price assumptions for the available market scenario,
- 2019 and beyond − prices remaining stable on par with the 2018 level, adjusted for inflation.

As a result of the impairment tests, as at December 31st 2014 an impairment loss totalling PLN 100,604 thousand was recognised on production licences covering the Girkaliai, Kretinga, Vėžaičiai, Ližiai, and Ablinga fields; another impairment loss, of PLN 2,708 thousand, was recognised on the property, plant and equipment comprising production infrastructure of the Ablinga field; see Note 13.1.3 and Note 9.4.

15.2 Other intangible assets

PLN '000	Patents, trademarks and licences	Other	Intangible assets under development	Total
Gross carrying amount Jan 1 2015 (restated)	**192,477**	**73,369**	**12,804**	**278,650**
Purchase	-	*155*	*12,210*	*12,365*
Settlement of intangible assets under development	*5,721*	*458*	*(6,179)*	-
Exchange differences on translating foreign operations	-	*(1,158)*	-	*(1,158)*
Borrowing costs	-	-	*52*	*52*
Sale	-	-	*(30)*	*(30)*
Liquidation	*(154)*	*(7,790)* [1]	-	*(7,944)*
Other	*(137)*	*(368)*	*(2)*	*(507)*
Gross carrying amount Dec 31 2015	**197,907**	**64,666**	**18,855**	**281,428**
Accumulated amortisation Jan 1 2015 (restated)	**91,219**	**25,888**	**-**	**117,107**
Amortisation	*9,816*	*5,812*	-	*15,628*
Exchange differences on translating foreign operations	-	*(485)*	-	*(485)*
Liquidation	*(152)*	*(627)*	-	*(779)*
Other	-	*6*	-	*6*
Accumulated amortisation Dec 31 2015	**100,883**	**30,594**	**-**	**131,477**
Impairment losses Jan 1 2015 (restated)	**7**	**8**	**9,033**	**9,048**
Recognised	-	*17*	-	*17*
Used/Reversed	-	-	-	-
Impairment losses Dec 31 2015	**7**	**25**	**9,033**	**9,065**
Net carrying amount Dec 31 2015	**97,017**	**34,047**	**9,822**	**140,886**

[1] Including liquidation of CO_2 emission allowances of PLN 7,163 thousand, used for own needs.

PLN '000	Patents, trademarks and licences	Other	Intangible assets under development	Total
Gross carrying amount Jan 1 2014 (restated)	**175,733**	**67,118**	**19,143**	**261,994**
Purchase	*-*	*2,440*	*15,341*	*17,781*
Settlement of intangible assets under development	*17,048*	*4,742*	*(21,790)*	*-*
Exchange differences on translating foreign operations	*-*	*(837)*	*-*	*(837)*
Reclassification to non-current assets (or disposal groups) held for sale [(1)]	*(114)*	*-*	*-*	*(114)*
Borrowing costs	*-*	*-*	*110*	*110*
Sale	*-*	*4*	*-*	*4*
Liquidation	*(40)*	*(38)*	*-*	*(78)*
Other	*(150)*	*(60)*	*-*	*(210)*
Gross carrying amount Dec 31 2014 (restated)	**192,477**	**73,369**	**12,804**	**278,650**
Accumulated amortisation Jan 1 2014 (restated)	**82,123**	**20,615**	**-**	**102,738**
Amortisation	*9,222*	*5,505*	*-*	*14,727*
Exchange differences on translating foreign operations	*-*	*(267)*	*-*	*(267)*
Reclassification to non-current assets (or disposal groups) held for sale [(1)]	*(86)*	*-*	*-*	*(86)*
Sale	*-*	*4*	*-*	*4*
Liquidation	*(40)*	*(21)*	*-*	*(61)*
Other	*-*	*52*	*-*	*52*
Accumulated amortisation Dec 31 2014 (restated)	**91,219**	**25,888**	**-**	**117,107**
Impairment losses Jan 1 2014 (restated)	**3**	**26**	**9,033**	**9,062**
Recognised	*4*	*-*	*-*	*4*
Used/Reversed	*-*	*(18)*	*-*	*(18)*
Impairment losses Dec 31 2014 (restated)	**7**	**8**	**9,033**	**9,048**
Net carrying amount Dec 31 2014 (restated)	**101,251**	**47,473**	**3,771**	**152,495**

[(1)] Jasło and Czechowice-Dziedzice Branches operating as separate, organised parts of business in Jasło and Czechowice-Dziedzice; see Note 17.

Other intangible assets comprise licences relating to technological processes, including licences for technologies used in the refinery, licences for fuel production, storage and trading, software licences, patents, trademarks and acquired CO_2 emission allowances.

15.3 Other information on intangible assets

The table below presents items under which amortisation of intangible assets was recognised:

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
Cost of sales	21,565	42,570
Distribution costs	572	530
Administrative expenses	18,420	14,447
Change in products and adjustments to cost of sales	(201)	(362)
Total	**40,356**	**57,185**

In 2015, borrowing costs capitalised under intangible assets under development were PLN 52 thousand (2014: PLN 110 thousand). As at December 31st 2015, borrowing costs capitalised under intangible assets under development were PLN 114 thousand (December 31st 2014: PLN 64 thousand).

As at December 31st 2015, intangible assets serving as collateral for the Group's liabilities were PLN 135,528 thousand (December 31st 2014: PLN 155,525 thousand).

As at December 31st 2015, the Group's future contractual commitments not disclosed in the statement of financial position and related to expenditure on intangible assets (fee for technical support control software) amounted to PLN 5,585 thousand. As at December 31st 2014, the Group's future contractual commitments related to expenditure on intangible assets (software licences) amounted to PLN 552 thousand.

16. Equity-accounted joint ventures

The Group holds interests in equity-accounted joint ventures, which include:

- Joint venture agreement between Grupa LOTOS S.A. and BP Europe SE on joint operations related to supply of aviation fuel through **LOTOS - Air BP Polska Sp. z o.o.**
- Agreement on cooperation between LOTOS Petrobaltic S.A. and CalEnergy Resources Poland Sp. z o.o. with respect to development and production of gas and condensate reserves from the B-4 and B-6 fields in the Baltic Sea, performed through special purpose vehicles **Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. and Baltic Gas Sp. z o.o.** (general partner).
- Joint venture set up for the purpose of oil exploration and production operations in Lithuania, operated in the form of **UAB Minijos Nafta.**

For key information on equity-accounted joint ventures, see Note 2.

	The Group's ownership interest ownership interest		Carrying amount of (PLN '000)	
	Dec 31 2015	Dec 31 2014	Dec 31 2015	Dec 31 2014
Downstream segment				
LOTOS-Air BP Polska Sp. z o.o.	50.00%	50.00%	16,274	14,551
Upstream segment (LOTOS Petrobaltic Group)				
Baltic Gas Sp. z o.o.	49.99%	49.99%	11	12
Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. (1)	43.96%	62.40%	54,460	51,433
UAB Minijos Nafta	49.99%	49.99%	-	33,603
Total			**70,745**	**99,599**

(1) The ownership interests as at December 31st 2015 were determined based on the value of contributions made by individual partners relative to the sum of all contributions:

- Baltic Gas Sp. z o.o. (general partner) 0.001%, (December 31st 2014: 0.001%),
- LOTOS Petrobaltic S.A. (limited partner) 43.968% (December 31st 2014: 62.403%),
- CalEnergy Resources Poland Sp. z o.o. ("CalEnergy") (limited partner) 56.031% (December 31st 2014: 37.596%).

The Group's indirect ownership interest in Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp. k. (jointly-controlled entity) is 43.96% (December 31st 2014: 62.40%).

PLN '000	The Group's share in the companies' net profit or loss Year ended Dec 31 2015	 Year ended Dec 31 2014
Downstream segment		
LOTOS-Air BP Polska Sp. z o.o.	1,755	185
Upstream segment (LOTOS Petrobaltic Group)		
Baltic Gas Sp. z o.o.	(21)	(25)
Baltic Gas spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. (1)	(644)	(711)
UAB Minijos Nafta	(32,156) (2)	(23,914) (2)
Total	**(31,066)**	**(24,465)**

(1) In the partnership agreement, the shares of each of the partners in the profit or loss of Baltic Gas Sp. z o.o. i wspólnicy sp.k. were defined as follows:

- Baltic Gas Sp. z o.o. holds a 0.001% share in profit and a 100% share in loss,
- LOTOS Petrobaltic S.A. holds a 50.9995% share in profit and
- CalEnergy holds a 48.9995% share in profit.

Accordingly, for IFRS purposes, Baltic Gas Sp. z o.o. i wspólnicy sp.k is an entity jointly controlled by the Group (equity-accounted joint arrangement under IFRS 11).

(2) Including an impairment loss on the interest in UAB Minijos Nafta of PLN 28,457 thousand (2014: PLN 21,983 thousand), see Note 16.1.

16.1 Change in shareholdings in equity-accounted joint ventures

Downstream segment

LOTOS-Air BP Polska Sp. z o.o. PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**14,551**	**14,419**
Share in net profit/(loss)	1,755	185
Share in other comprehensive income/(losses), net (actuarial losses on post-employment benefits)	16	(30)
Share in losses on intra-Group transactions	(48)	(23)
At end of period	**16,274**	**14,551**

Upstream segment (LOTOS Petrobaltic Group)

Baltic Gas Sp. z o.o. PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**12**	**7**
Share capital increase	20	30
Share in net loss	(21)	(25)
At end of period	**11**	**12**

Baltic Gas Sp. z o.o. i wspólnicy sp.k. PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**51,433**	**51,796**
Increase in contributions	3,671	348
Share in net loss	(644)	(711)
At end of period	**54,460**	**51,433**

In 2015, the expenditure on cash contributions made to Baltic Gas Spółka z ograniczoną odpowiedzialnością i wspólnicy sp.k. totalled PLN 3,878 thousand, of which PLN 207 thousand was attributable to contributions made in 2014 (2014: PLN 309 thousand). The expenditure on these cash contributions was presented in the statement of cash flows from investing activities under *Cash contributions − equity-accounted joint ventures.*

UAB Minijos Nafta PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**33,603**	**63,576**
Dividends paid	(837)	(7,280)
Share in net loss:	(32,156)	(23,914)
- share in net loss of joint venture	*(3,699)*	*(1,931)*
- impairment loss on interests held in joint venture	*(28,457)*	*(21,983)*
Exchange differences on translating foreign operations	(610)	1,221
At end of period	**-**	**33,603**

The interest held in UAB Minijos Nafta (the AB LOTOS Geonafta Group) were tested for impairment as at December 31st 2015 and as at December 31st 2014. The Group determined the recoverable amount of the tested assets as their value in use measured using the discounted future cash flows method.

The key assumptions underlying computation of the recoverable amount of the tested assets are consistent with the assumptions used to compute the recoverable amount of the Lithuanian production licences held by companies of the AB LOTOS Geonafta Group tested for impairment as at December 31st 2015 and as at December 31st 2014, see Note 15.1.2.

Following the impairment tests, in 2015 and 2014 the Group recognised an impairment loss on the interest held in UAB Minijos Nafta. In 2015, the impairment loss amounted to PLN 28,457 thousand (2014: PLN 21,983 thousand) and brought the cost of the project to zero. The impairment losses on the interest held in UAB Minijos Nafta are disclosed in the consolidated statement of comprehensive income under *Share in net profit/loss of equity-accounted joint ventures.*

16.2 Condensed financial information on equity-accounted joint ventures

Statement of comprehensive income	LOTOS-Air BP Polska Sp. z o.o.	Baltic Gas Sp. z o.o.	Baltic Gas Sp. z o.o. i wspólnicy sp.k.	UAB Minijos Nafta
PLN '000	year ended Dec 31 2015			
Revenue	221,388	-	-	31,658
Cost of sales	(197,125)	-	(626)	(33,124)
Gross profit/(loss)	**24,263**	**-**	**(626)**	**(1,466)**
Distribution costs	(15,175)	-	-	(824)
Administrative expenses	(4,476)	(42)	(730)	(5,144)
Net other income/(expenses)	(159)	-	-	45
Operating profit/(loss)	**4,453**	**(42)**	**(1356)**	**(7,389)**
Net finance income/(costs)	(101)	-	68	(164)
Pre-tax profit/(loss)	**4,352**	**(42)**	**(1,288)**	**(7,553)**
Income tax expense	(842)	-	-	2
Net profit/(loss)	**3,510**	**(42)**	**(1,288)**	**(7,551)**
Other comprehensive income/(loss), net	32	-	-	-
Total comprehensive income/(loss)	**3,542**	**(42)**	**(1,288)**	**(7,551)**
Depreciation/amortisation	*(820)*	-	*(626)*	*(9,882)*

Statement of comprehensive income PLN '000	LOTOS-Air BP Polska Sp. z o.o.	Baltic Gas Sp. z o.o.	Baltic Gas Sp. z o.o. i wspólnicy sp.k.	UAB Minijos Nafta
	Year ended Dec 31 2014			
Revenue	478,279	-	-	57,212
Cost of sales	(457,504)	-	(626)	(47,228)
Gross profit/(loss)	**20,775**	**-**	**(626)**	**9,984**
Distribution costs	(15,849)	-	-	(1,088)
Administrative expenses	(4,347)	(50)	(615)	(14,488)
Net other income/(expenses)	56	-	(123)	(148)
Operating loss	**635**	**(50)**	**(1,364)**	**(5,740)**
Net finance income/(costs)	(137)	-	(58)	289
Pre-tax profit/(loss)	**498**	**(50)**	**(1,422)**	**(5,451)**
Income tax expense	(129)	-	-	1,076
Net loss	**369**	**(50)**	**(1,422)**	**(4,375)**
Other comprehensive income/(loss), net	(60)	-	-	-
Total comprehensive income/(loss)	**309**	**(50)**	**(1,422)**	**(14,995)**
Depreciation/amortisation	*(779)*	-	*(626)*	*(10,900)*

Statement of financial position PLN '000	Note	LOTOS-Air BP Polska Sp. z o.o.	Baltic Gas Sp. z o.o.	Baltic Gas Sp. z o.o. i wspólnicy sp.k.	UAB Minijos Nafta
		Dec 31 2015			
Non-current assets		10,698	1	125,589	66,077
Current assets, including:		29,232	31	8,700	15,025
Cash and cash equivalents		*12,790*	*5*	*6,359*	*6,946*
Total assets		**39,930**	**32**	**134,289**	**81,102**
Non-current liabilities		4,228	-	-	18,274
Current liabilities		16,487	11	9,918	4,860
Total liabilities		**20,715**	**11**	**9,918**	**23,134**
Net assets		**19,215**	**21**	**124,371**	**57,968**
		50%	**49.99%**	*	**49.99%**
Share of net assets		9,608	11	54,460	28,978
Impairment loss on shares		-	-	-	28,978
Fair value measurement		6,736(1)	-	-	-
Elimination of intra-Group transactions		(70)	-	-	-
Interest in joint ventures	**16**	**16,274**	**11**	**54,460**	**-**

Statement of financial position PLN '000	Note	LOTOS-Air BP Polska Sp. z o.o.	Baltic Gas Sp. z o.o.	Baltic Gas Sp. z o.o. i wspólnicy sp.k.	UAB Minijos Nafta
		Dec 31 2014			
Non-current assets		11,598	1	97,869	122,455
Current assets, including:		37,046	25	7,596	13,401
Cash and cash equivalents		*6,220*	*9*	*3,375*	*2,791*
Total assets		**48,644**	**26**	**105,465**	**135,856**
Non-current liabilities		5,081	-	-	18,031
Current liabilities		27,888	2	23,859	5,889
Total liabilities		**32,969**	**2**	**23,859**	**23,920**
Net assets		**15,675**	**24**	**81,606**	**111,936**
		50%	49.99%	*	49.99%
Share of net assets		7,838	12	51,433	55,968
Impairment loss on shares		-	-	-	(22,365)
Fair value measurement		6,736(1)	-	-	-
Elimination of intra-Group transactions		(23)	-	-	-
Interest in joint ventures	16	**14,551**	**12**	**51,433**	**33,603**

* For IFRS purposes, Baltic Gas Sp. z o.o. i wspólnicy sp.k is an entity jointly controlled by the Group (equity-accounted joint arrangement under IFRS 11); see Note 16 above.

(1) PLN 6,736 thousand gain on fair value measurement of a retained interest in a previously controlled entity as at the date of loss of control.

For information on transactions with joint ventures in which the Group holds interests, see Note 36.1.

17. Non-current assets (or disposal groups) held for sale

PLN '000	Dec 31 2015	Dec 31 2014
Upstream segment	8,377	1,661
Downstream segment	-	8,774
Total	**8,377**	**10,435**

Upstream segment

PLN 8,377 thousand of assets held for sale recognised as at December 31st 2015 was attributable to tubular elements, on which the Group incurred capital expenditure in connection with the development of the B-8 field (see Note 13.2). The capital expenditure incurred by LOTOS Petrobaltic S.A. for that purpose totalling PLN 45,011 thousand, taking into account capitalised cost of cancellation fee payable to the producer of prefabricated tubular elements, was offset by a PLN 36,634 thousand impairment loss on that capital expenditure recognised in 2015 (see Note 9.4) following a change of the concept of conversion of the Petrobaltic drilling rig into a production centre. In the opinion of the Management Board the amount of assets held for sale of PLN 8,377 thousand as at December 31st 2015 represents the net realisable value of the tubular legs (based on an analysis of current steel prices in Poland and on foreign markets, made by LOTOS Petrobaltic S.A.).

As at December 31st 2014, the Group's non-current assets held for sale included two helicopters which were sold in Q4 2015. Cash proceeds from the sale in 2015 amounted to PLN 3,700 thousand and were presented in the statement of cash flows under *Sale of property, plant and equipment and other intangible assets.*

Downstream segment

As at December 31st 2014, disposal groups comprised the Jasło and Czechowice-Dziedzice Branches, operating as separate, organised parts of business, offering services in the area of maintenance of mechanical and electrical operations and controlling devices, overhaul and repair services, and technical tests and analyses, which were sold in 2015.

18. Trade receivables and other assets

PLN '000	Note	Dec 31 2015	Dec 31 2014
Financial assets			
Non-current financial assets			
Other financial assets:	31.1	145,991	71,102
Security deposits receivable		*20,458*	*20,631*
Finance lease receivables	*18.2*	*11,018*	*9,111*
Shares		*9,752*	*9,752*
Oil and Gas Extraction Facility Decommissioning Fund (1)	*32.4.1*	*31,794*	*30,911*
Cash for work related to the removal of the MOPU from the YME field (2)	*32.3.1; 32.4.1*	*69,453*	-
Security deposit	*32.4.1*	*3,176*	-
Other receivables		*340*	*697*
Total		**145,991**	**71,102**
Current financial assets			
Trade receivables	31.1	1,550,900	1,406,501
- including from related entities	*36.1*	*12,219*	*23,318*
Other financial assets:	31.1	672,466	1,260,931
Security deposits receivable		*7,761*	*10,085*
Deposits	*32.4.1*	*85,519*	*31,432*
Cash earmarked for the EFRA project	*32.4.1*	*438,329*	-
Cash for work related to the removal of the MOPU from the YME field (2)	*32.3.1.; 32.4.1.*	*39,087*	*179,377*
Cash for other capital expenditure commitments	*32.4.1.*	*10,620*	-
Settlements under joint operations (Norwegian fields) (3)		*15,431*	*26,100*
Security deposits (margins) related to the use of gas fuel distribution and transmission system		*13,952*	*7,342*
Restricted cash - issue of shares		-	*996,939*
Receivables under commodity swap settlement		*49,208*	-
Receivables under payment cards (service stations)		*4,426*	*3,134*
Other receivables		*8,133*	*6,522*
Total		**2,223,366**	**2,667,432**
Total financial assets		**2,369,357**	**2,738,534**
Non-financial assets			
Non-current non-financial assets			
Fees and commissions related to B8 project financing		-	23,839
Costs related to financing of the EFRA Project		48,568	-
Other		6,449	12,347
Total		**55,017**	**36,186**
Current non-financial assets			
Value-added tax receivable		95,753	71,262
Property and other insurance		28,294	16,729
Prepayments for lease of railway locomotives		-	2,336
Excise duty on inter-warehouse transfers		31,015	36,661
Prepaid deliveries		13,607	9,457
Prepayments for IT services		7,141	4,617
Other		8,060	17,543
Total		**183,870**	**158,605**
Total non-financial assets		**238,887**	**194,791**
Total		**2,608,244**	**2,933,325**
including:			
non-current		*201,008*	*107,288*
current:		*2,407,236*	*2,826,037*
- trade payables		*1,550,900*	*1,406,501*
- other		*856,336*	*1,419,536*

) Cash deposited in the bank account of the Oil and Gas Facility Decommissioning Fund (created pursuant to the Geological and Mining Law of February 4th 1994 and the Minister of Economy's Regulation of June 24th 2002) to cover future costs of decommissioning of oil facilities, see Note 30.1.

(2) Cash held in an escrow account associated with the agreement concluded between the parties involved in the YME Project in Norway (for more details on the agreement, see Note 35.1, see also Note 30.1 and Note 13.1.2).

(3) Receivables of LOTOS Exploration and Production Norge AS (LOTOS Petrobaltic Group, the upstream segment) under mutual settlements between the operator and consortium members concerning specific Norwegian fields.

As at December 31st 2014, *Restricted cash - issue of shares* comprised cash proceeds from the issue of Series D shares in Grupa LOTOS S.A., deposited in a separate bank account of the Central Securities Depository of Poland (see Note 21) until the day of registration of the share capital increase.

The Company uses the issue proceeds to pursue the objectives indicated in the Prospectus approved by the Polish Financial Supervision Authority on November 7th 2014 (the "Prospectus"), including the construction of a delayed coking unit with auxiliary infrastructure (the "EFRA Project") and development of the B-4 and B-6 gas fields by LOTOS Petrobaltic S.A. in collaboration with CalEnergy Resources Poland Sp. z o.o. (see "Use of proceeds from the offering" in the Prospectus).

Net of issue costs incurred in 2015, proceeds from the issue of Series D shares in the Company amounted to PLN 981.3m and are presented in the consolidated statement of cash flows under *Proceeds from issue of Series D shares in Grupa LOTOS S.A.*

The Company also notes that pursuant to the agreement for assistance in the form of non-public aid executed with the Minister of the State Treasury, acting as a representative of the State Treasury, the Company undertook to use PLN 535.0m from the Business Restructuring Fund, which had been allocated by the State Treasury to cover the Issue Price of the Offer Shares subscribed for by the State Treasury in exercise of its pre-emptive rights, to finance the EFRA Project. As at December 31st 2015, the funds were presented under *Cash earmarked for the EFRA project*. The funds are deposited in a separate bank account, which is reflected in the consolidated statement of cash flows under *Cash earmarked for the EFRA* project in cash flows from investing activities.

As at December 31st 2015 and December 31st 2014, the item *Deposits* included the Parent's deposits designated for the overhaul shutdown of the refinery planned for 2017, deposits securing payments of interest under credit facilities contracted for the financing of the 10+ Programme, as well as for financing and refinancing of inventories, referred to in Note 27.1.

The collection period for trade receivables in the ordinary course of business is 7−35 days.
As at December 31st 2015, the Group's receivables of PLN 20,845 thousand (December 31st 2014: PLN 31,676 thousand) were assigned by way of security for the Group's liabilities.

For a description of the financial instruments, see Note 7.23. For a description of objectives and policies of financial risk management, see Note 32.

For currency risk sensitivity analysis of financial assets, see Note 32.3.1.

For interest rate risk sensitivity analysis of financial assets, see Note 32.4.1.

The maximum credit risk exposure of financial assets is presented in Note 32.6.

18.1 Change in impairment losses on receivables

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**177,694**	**175,293**
Recognised	8,599	18,077
Exchange differences on translating foreign operations	-	12
Used	(3,766)	(11,222)
Reversed	(10,920)	(4,604)
Other	33	138 (1)
At end of period	**171,640**	**177,694**

(1) Additional amounts awarded in court proceedings.

The amounts resulting from recognition or reversal of impairment losses on receivables are presented under other income or expenses (the principal portion) and under finance income or costs (the default interest portion). In the statement of comprehensive income, recognised and reversed impairment losses on receivables are presented on a net basis under: Other income/expenses (in accordance with the adopted accounting policy the Group offsets corresponding items of Other income and Other expenses in line with Section 34 and 35 of IAS 1 Presentation of Financial Statements).

Recognised impairment losses included PLN 8,094 thousand in respect of the principal (2014: PLN 15,928 thousand) and PLN 505 thousand in respect of interest (2014: PLN 2,149 thousand).

Reversed impairment losses included PLN 10,021 thousand in respect of the principal (2014: PLN 2,850 thousand) and PLN 899 thousand in respect of interest (2014: PLN 1,754 thousand).

In 2015, the Group disclosed the recognised and reversed impairment losses on the principal under Other expenses, in the amount of PLN 1,927 thousand, including: PLN 8,094 thousand under recognised impairment losses, and PLN 10,021 thousand under impairment loss reversal (see Note 9.3).

In 2014, the Group disclosed the recognised and reversed impairment losses on the principal under Other expenses in the amount of PLN 13,078 thousand, including: PLN 15,928 thousand under recognised impairment losses, and PLN 2,850 thousand under impairment loss reversal (see Note 9.4).
The table below presents aging of past due receivables for which no impairment losses were recognised:

PLN '000	Dec 31 2015	Dec 31 2014
Up to 1 month	26,123	41,973
From 1 to 3 months	707	5,752
From 3 to 6 months	359	956
From 6 months to 1 year	1,262	385
Over 1 year	358	24
Total	**28,809**	**49,090**

No impairment losses were recognised on past due receivables because they are secured against credit risk with a mortgage, pledge, insurance policy, bank guarantee or surety.

As at December 31st 2015 and December 31st 2014, the share of trade receivables from the Group's five largest customers as at the end of the reporting period was approximately 32% and 25%, respectively, of total trade receivables (individually: 1%–11%). In the Group's opinion, with the exception of receivables from the above-mentioned customers, there is no material concentration of credit risk. The Group's maximum exposure to credit risk as at the end of the reporting period is best represented by the carrying amounts of those instruments.

18.2 Finance lease receivables

The Group has developed and operates the "LOTOS Family" Franchise Programme, which defines the procedures for managing service stations. The Group has entered into franchise agreements with entities operating service stations at their own risk and for their own account (Partners). Receivables under franchise agreements represent mainly expenditure on the design of DOFO service stations operated by dealers under agreements executed for periods from 5 to 10 years.

	Minimum lease payments		**Present value of minimum lease payments**	
PLN '000	**Dec 31 2015**	**Dec 31 2014**	**Dec 31 2015**	**Dec 31 2014**
Up to 1 year [1]	5,608	4,429	5,568	4,394
From 1 to 5 years	10,940	8,951	10,862	8,881
Over 5 years	157	232	156	230
Total	**16,705**	**13,612**	**16,586**	**13,505**
Less unrealised finance income	(120)	(107)	-	-
Present value of minimum lease payments	**16,585**	**13,505**	**16,586**	**13,505**
including:				
non-current			*11,018*	*9,111*
current			*5,568*	*4,394*

[1] Present value of minimum lease payments is disclosed under *Trade receivables.*

19. Inventories

PLN '000	Dec 31 2015	Dec 31 2014
Finished goods	863,428	1,184,960
Semi-finished products and work in progress	319,533	556,424
Merchandise	116,801	223,540
Materials	1,936,054	1,952,205
Total	**3,235,816**	**3,917,129**
including inventories measured at:		
cost	*493,696*	*469,201*
net realisable value	*2,742,120*	*3,447,928*

Inventories are measured at the lower of cost or cost less write-downs to net realisable value less costs to sell.

Following a change in prices of crude oil and refining products in 2015, in H1 2015 the Group reversed inventory write-downs recognised in Q4 2014, and in Q3 and Q4 2015 the Group recognised a write-down to adjust the carrying amount of inventory to the net realisable value, in accordance with IAS 2 (see Note 19.1).

As at December 31st 2015, carrying amount of inventories securing liabilities under borrowings was PLN 2,734,698 thousand (December 31st 2014: PLN 3,330,652 thousand).

19.1 Change in inventory write-downs

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**453,409**	**2,919**
Recognised	267,840	451,551
Exchange differences on translating foreign operations	21	1
Used	(328)	(892)
Reversed	(453,247)	(170)
At end of period	**267,695**	**453,409**
including:		
Finished goods	*62,906*	*200,340*
Semi-finished products and work in progress	*28,712*	*40,913*
Merchandise	*34,089*	*5,834*
Materials	*141,988*	*206,322*

The effect of revaluation of inventories is taken to cost of sales.

19.2 Mandatory stocks

The Group maintains mandatory stocks as required by the following acts:

- Act on Stocks of Crude Oil, Petroleum Products and Natural Gas, and on the Rules to be Followed in the Event of Threat to National Fuel Security or Disruptions on the Petroleum Market of February 16th 2007 (Dz.U. of 2007, No. 52, item 343, dated March 23rd 2007, as amended).
- Regulation of the Minister of Economy, Labour and Social Policy, on fuel stocks at power utility companies, dated February 12th 2003 (Dz.U. No. 39, item 338, as amended).

These regulations define the rules for creating, maintaining and financing stocks of crude oil, petroleum products and fuels at power utility companies.

The Group's mandatory stocks include crude oil, petroleum products (liquid fuels), LPG and coal. In the downstream segment, mandatory stocks are maintained mainly by the Parent. As at December 31st 2015, the carrying amount of mandatory stocks was PLN 1,881,494 thousand (December 31st 2014: PLN 2,243,655 thousand).

20. Cash and cash equivalents

PLN '000	Dec 31 2015	Dec 31 2014
Cash at bank	858,003	345,493
Cash in hand	542	400
Other cash	1,154	2,322
Total cash and cash equivalents in the statement of financial position	**859,699**	**348,215**
Overdraft facilities	(581,629)	(514,902)
Total cash and cash equivalents in the statement of cash flows	**278,070**	**(166,687)**

Cash at banks bears interest at variable rates linked to short-term interest rates prevailing on the interbank market. Short-term deposits are placed for a range of maturities, from one day to one month, depending on the Group's current cash needs, and bear interest at interest rates set for them.

As at December 31st 2015, the amount of undrawn funds available to the Group under working capital facilities in respect of which all conditions precedent had been fulfilled (including the working capital facility provided by Bank Syndicate (4) (see Note 27.1) was PLN 505,299 thousand (December 31st 2014: PLN 676,138 thousand).

As at December 31st 2015, cash in bank accounts serving as security for the Group's liabilities was PLN 3,399 thousand (December 31st 2014: PLN 3,197 thousand).

21. Share capital

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**184,873**	**129,873**
Issue of Series D shares	-	55,000
At end of period	**184,873**	**184,873**
including		
Series A shares	*78,700*	*78,700*
Series B shares	*35,000*	*35,000*
Series C shares	*16,173*	*16,173*
Series D shares	*55,000*	*55,000*

By Resolution No. 1396/2014 of December 11th 2014, the Management Board of the Warsaw Stock Exchange resolved to introduce 55,000,000 allotment certificates for Series D ordinary bearer shares in the Company, with a par value of PLN 1 per share, assigned code PLLOTOS00074 by the CSDP, to trading on the main market, by way of the ordinary procedure, with effect from December 12th 2014.

As at December 31st 2015, the share capital was divided into 184,873,362 ordinary shares paid in full, with a par value of PLN 1 per share, including 55,000,000 Series D shares introduced to trading in 2014 and 129,873,362 Series A, Series B and Series C shares from previous issues. One share confers the right to one vote at the General Meeting and carries the right to dividend.

January 9th 2015 saw the registration of Grupa LOTOS S.A.'s share capital increase from PLN 129,873,362 to PLN 184,873,362. Following the entry of the share capital increase in the National Court Register, the total number of voting rights conferred by all shares issued by Grupa LOTOS S.A. was 184,873,362.

22. Share premium

Share premium represents the excess of the issue price over the par value of Series B, C and D shares, net of costs directly attributable to the share issue.

Dec 31 2015 PLN '000	Series B	Series C	Series D	Total
Share premium	980,000	340,773	940,500	2,261,273
Costs directly attributable to the share issue	(9,049)	(376)	(23,538)	(32,963)
Total	**970,951**	**340,397**	**916,962**	**2,228,310**

Dec 31 2014 PLN '000	Series B	Series C	Series D	Total
Share premium	980,000	340,773	940,500	2,261,273
Costs directly attributable to the share issue	(9,049)	(376)	(22,222)	(31,647)
Total	**970,951**	**340,397**	**918,278**	**2,229,626**

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**2,229,626**	**1,311,348**
Series D share premium	-	940,500
Costs directly attributable to Series D share issue	(1,316)	(22,222)
At end of period	**2,228,310**	**2,229,626**

23. Cash flow hedging reserve

Cash flow hedging reserve comprises changes in the valuation of foreign-currency denominated bank borrowings used as hedging instruments designated to hedge cash flows, less the effect of income tax.

Changes in the fair value of derivative financial instruments designated to hedge cash flows, to the extent representing an effective hedge are charged to the cash flow hedging reserve, while the ineffective portion is charged to finance income or costs in the reporting period.

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period		**(412,535)**	**61,019**
Valuation of cash flow hedging instruments	31.3	(355,973)	(584,653)
- effective portion		*(356,477)*	*(584,731)*
- ineffective portion (1)		*504*	*78*
Income tax on valuation of cash flow hedging instruments	10.1	67,620	111,099
At end of period		**(700,888)**	**(412,535)**

(1) The ineffective portion, charged to finance costs.

24. Retained earnings

Retained earnings comprise capital reserves created and used in accordance with the rules stipulated by the applicable laws and provisions of the Articles of Association, as well as current period's profit.

Furthermore, retained earnings include actuarial gains/losses relating to defined post-employment benefits, recognised inclusive of tax effect, which are posted under *Other comprehensive income/(loss), net* in the statement of comprehensive income.

As at December 31st 2015 and December 31st 2014, Grupa LOTOS S.A. was restricted in its ability to distribute dividends, as described in detail in Note 12.

24.1 Restricted ability of subsidiaries to transfer funds to the Parent in the form of dividends

In 2015 and 2014, the ability of subsidiaries of the LOTOS Group to transfer funds to Grupa LOTOS S.A. in the form of dividends was restricted due to the following arrangements:

- Under credit facility agreements, the amount of distributable financial surplus generated by LOTOS Paliwa Sp. z o.o. in a financial year was contingent on compliance with specified performance targets.
- At AB LOTOS Geonafta, there are restrictions on dividend payment under credit facility agreements, which make such payment conditional upon the bank's prior consent.
- At LOTOS Exploration and Production Norge AS, there are restrictions on dividend payment under credit facility agreements, which make such payment conditional upon the bank's prior consent.

The dividend restrictions were binding as at December 31st 2015 and December 31st 2014.

In addition, as at December 31st 2015 dividend payment by LOTOS Asfalt Sp. z o.o. was restricted under the credit facility agreement for the financing of the EFRA Project, which permits distribution of dividends only after payment of the first instalment of the facility, due on December 21st 2018. Payment of dividends from operating cash flows is conditional upon fulfilment of the requirements defined in the agreement, including generation of a sufficient cash surplus and achievement of financial ratios at prescribed levels.

25. Exchange differences on translating foreign operations

Exchange differences on translating foreign operations comprise exchange differences resulting from the translation into PLN of the financial statements of foreign companies and groups of companies.

26. Non-controlling interests

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period	**175**	**289**
Share in profit/(loss)	*(37)*	*(46)*
Share in other comprehensive income/(loss), net	*-*	*5*
Share in total comprehensive income/(loss)	(37)	(41)
Change in share of net assets of LOTOS Petrobaltic S.A.	-	10
Sale of shares in LOTOS Petrobaltic S.A. to the Parent	-	(83)
At end of period	**138**	**175**

27. Borrowings, other debt instruments and finance lease liabilities

PLN '000	Note	Dec 31 2015	Dec 31 2014
Bank borrowings:	27.1	6,481,034	6,215,612
- investment credit facilities		*4,744,306*	*4,650,868*
- working capital facilities		*883,818*	*784,214*
- inventory refinancing and financing facilities		*1,170,728*	*1,052,449*
- funds in bank deposits securing repayment of interest and principal instalments		*(317,818)*	*(271,919)*
Non-bank borrowings	27.2	92,146	102,783
Notes	27.3	218,100	213,479
Finance lease liabilities	27.4	208,028	131,794
Total		**6,999,308**	**6,663,668**
including:			
non-current		*4,454,460*	*4,495,562*
current		*2,544,848*	*2,168,106*

27.1 Bank borrowings

Bank borrowings by currency and maturity

Dec 31 2015	Currency of credit facility advanced to the Group			Total
PLN '000	EUR	USD	PLN	
2016	9,620	1,672,960	601,446	2,284,026
2017	-	670,378	49,935	720,313
2018	-	803,858	50,536	854,394
2019	-	669,037	43,089	712,126
2020	-	594,802	43,764	638,566
after 2020	-	1,135,397	136,212	1,271,609
Total	**9,620**	**5,546,432**	**924,982**	**6,481,034**

Dec 31 2014	Currency of credit facility advanced to the Group			Total
PLN '000	EUR	USD	PLN	
2015	9,550	1,687,928	419,909	2,117,387
2016	-	724,077	34,304	758,381
2017	-	464,917	34,872	499,789
2018	-	549,642	35,473	585,115
2019	-	591,468	28,029	619,497
after 2019	-	1,535,223	100,220	1,635,443
Total	**9,550**	**5,553,255**	**652,807**	**6,215,612**

Repayment of the above facilities is secured with:

- power of attorney over bank accounts

- registered pledge over bank accounts
- registered pledge over inventories
- registered pledge over existing and future movables
- pledge over shares in subsidiaries
- mortgage
- assignment of property, plant and equipment
- assignment of rights under inventory insurance agreement
- assignment of rights under inventory storage agreements
- assignment of rights to compensation from the State Treasury due in the event of the requirement to sell mandatory stocks below market price
- assignment of rights under insurance agreements
- assignment of rights under licence agreements
- assignment of rights under agreements for sale of products
- assignment of rights under project agreements
- assignment of rights under crude oil sales agreements,
- shares in subsidiaries
- assignment of rights under conditional loan agreement
- representation on voluntary submission to enforcement
- blank promissory note
- bank guarantees

Bank borrowings bear interest based on:
- 1M, 3M or 6M LIBOR (USD), depending on the interest period selected at a given time − in the case of USD-denominated facilities,
- 1M or 3M EURIBOR − in the case of EUR-denominated facilities,
- O/N, 1M or 3M WIBOR - in the case of PLN-denominated facilities.

Bank margins on the contracted facilities are within the range of 0.30pp. – 4.0pp.

As at December 31st 2015, the average effective interest rate for the credit facilities denominated in USD and EUR was approximately 2.55% (2.42% as at December 31st 2014). The average effective interest rate for PLN-denominated facilities (excluding the syndicated facilities contracted by the Parent) was approximately 3.59% (3.88% as at December 31st 2014).

For sensitivity analysis of borrowings with respect to currency and interest rate risks, see Notes 32.3.1 and 32.4.1, respectively.

For analysis of contractual maturities of the borrowings, see Note 32.5.

Borrowings by lender

PLN '000	Dec 31 2015	Dec 31 2014
Pekao S.A.	33,284	20,315
PKO BP S.A.*	505,618	677,184
Bank Millennium S.A.	47,507	-
Nordea Bank Litwa	84,450	33,619
Bank Ochrony Środowiska S.A.	-	4,844
Bank Syndicate (1)	1,170,728	1,052,449
Bank Syndicate (2)	2,956,633	2,974,259
Bank Syndicate (3)	1,091,873	1,092,447
Bank Syndicate (4)	560,469	428,209
Bank Syndicate (5)	125,018	141,696
Bank Syndicate (6)	-	62,509
Bank Syndicate (7)	92,503	-
Consortium of financial institutions (8)	130,769	-
Funds in bank deposits securing payment of interest and principal**	(317,818)	(271,919)
Total	**6,481,034**	**6,215,612**
including:		
non-current	*4,197,008*	*4,098,225*
current	*2,284,026*	*2,117,387*

Bank Syndicate (1): Pekao S.A., mBank S.A., ING Bank Śląski S.A., Société Générale S.A., Bank Handlowy w Warszawie S.A., Bank Zachodni WBK S.A.

Bank Syndicate (2): Banco Bilbao Vizcaya Argentaria S.A., Bank of Tokyo-Mitsubishi UFJ (Holland) N.V., Pekao S.A., BNP Paribas S.A., Caja de Ahorros y Monte de Piedad de Madrid, Credit Agricole CIB (previously Calyon), DnB Nor Bank ASA, DnB Nord Polska S.A., ING Bank Śląski S.A., KBC Finance Ireland, Kredyt Bank S.A., Nordea Bank AB, PKO BP S.A., The Royal Bank of Scotland plc, Société Générale S.A., Bank Zachodni WBK S.A., Rabobank Polska S.A., Bank Gospodarki Żywnościowej S.A., Sumitomo Mitsui Banking Corporation Europe Ltd.,

Bank Syndicate (3): Banco Bilbao Vizcaya Argentaria S.A. and BNP Paribas S.A.,

Bank Syndicate (4): Pekao S.A., PKO BP S.A., BNP Paribas S.A., ING Bank Śląski S.A., Rabobank Polska S.A. and Bank Gospodarki Żywnościowej S.A.

Bank Syndicate (5): Pekao S.A., PKO BP S.A.,

Bank Syndicate (6): Nordea Bank Finland Plc. Lithuania Branch, PKO BP S.A.

Bank Syndicate (7): Pekao S.A., mBank S.A.

Consortium of financial institutions (8): Bank Gospodarstwa Krajowego, Bank Millennium S.A., Pekao S.A., Bank Zachodni WBK S.A., PKO BP S.A., Powszechny Zakład Ubezpieczeń S.A., Powszechny Zakład Ubezpieczeń na Życie S.A. and Société Générale S.A.

* including credit facilities advanced by Nordea Bank Polska S.A. (acquired by PKO BP S.A.).

** In accordance with IAS 32, Grupa LOTOS S.A. offsets a financial asset (cash reserved for repayment of the facilities) against a financial liability under the facilities, because it holds a valid legal title to set off the amounts and intends to realise the asset and settle the liability at the same time. Accumulation of funds for the repayment of credit facilities is expressly provided for in the documentation relating to the investment facilities obtained to finance the 10+ Programme, as well as the inventory financing and refinancing facility. The Company is required to set aside and maintain funds for repayment of principal instalments and interest due over the next six months. The purpose of adopting the net-basis presentation approach in the statement of financial position is to reflect the expected future cash flows from settlement of two or more financial instruments.

Bank borrowings of the Parent

Inventory financing and refinancing facility

As at December 31st 2015, the nominal amount drawn under the credit facility for the refinancing and financing of inventories, advanced by Bank Syndicate (1), amounted to PLN 1,170.3m (USD 300m).

In connection with the credit facility incurred to finance and refinance inventories, Grupa LOTOS S.A. is required to maintain the Tangible Consolidated Net Worth (TCNW) as specified in the facility agreement. The Company is also required to comply with the covenant requiring it to maintain the Loan to Pledged Inventory Value Ratio at a level not higher than specified in the facility agreement. As at December 31st 2015 and December 31st 2014, the covenants were complied with.

Amendments to the inventory refinancing and financing facility

On November 18th 2015, Grupa LOTOS S.A. and Bank Syndicate (1) signed an amendment extending by 12 months, i.e. until December 20th 2016, the term of the credit facility agreement for refinancing and financing of Grupa LOTOS S.A.'s inventories of October 10th 2012, providing for a revolving credit facility of up to USD 400m (i.e. PLN 1,268m, as translated at the mid rate quoted by the National Bank of Poland for the date of the Agreement, i.e. October 10th 2012).
The other terms of the credit facility agreement, as well as its provisions concerning penalties, did not change, and do not differ from those commonly applied in agreements of such type.

Investment facilities

As at December 31st 2015, the Company had drawn (in nominal terms) PLN 4,074.8m (USD 1,044.5m) under investment facilities advanced by Bank Syndicates (2) and (3).As at December 31st 2014 that amount was PLN 4,102.6m (USD 1,169.8m).

In connection with the credit facilities incurred to finance the 10+ Programme, Grupa LOTOS S.A. has been required to maintain the Tangible Consolidated Net Worth (TCNW) ratio of no less than specified in the facility agreements. As at December 31st 2015 and December 31st 2014, the requirement was complied with.

Working-capital facilities

The working-capital facility was made available to Grupa LOTOS S.A. by Bank Syndicate (4) in the form of overdraft facilities which are used by the Company on an as-needed basis.

The Parent may also finance its working capital requirements of up to PLN 400m with funds available under credit facilities from PKO BP S.A. (a PLN 300m credit facility agreement of June 26th 2009, as amended) and Pekao S.A. (a PLN 100m credit facility agreement of May 16th 2012, as amended). As at December 31st 2015 and December 31st 2014, the Company carried no liabilities under these facilities.

Agreement for the financing of the EFRA Project

On June 30th 2015, LOTOS Asfalt Sp. z o.o. and a consortium of financial institutions (Consortium of financial institutions (8)), comprising:

- Bank Gospodarstwa Krajowego,
- Bank Pekao S.A.,
- Bank Millennium S.A.,

- Bank Zachodni WBK S.A.,
- Bank PKO BP S.A.,
- Bank Société Générale S.A.,
- Powszechny Zakład Ubezpieczeń S.A.,
- Powszechny Zakład Ubezpieczeń na Życie S.A.

signed a credit facility agreement (and auxiliary agreements) under which the company will secure additional funds necessary to finance the implementation of the EFRA Project. The agreement provides for the advancement of two credit facilities:

- an investment credit facility (TLF) of up to USD 432m (PLN 1,626m translated at the USD/PLN mid rate quoted by the National Bank of Poland as at June 30th 2015), repayable on December 21st 2024,
- a working capital facility of up to PLN 300m, to be disbursed in two tranches:
  – up to PLN 100m, repayable by June 30th 2020,
  – up to PLN 200m, repayable by December 21st 2024.

The interest rate of the investment credit facility is based on 3M or 6M LIBOR, depending on the selected interest period, while the working capital facility bears interest based on 1M WIBOR.

The main security instruments include a ceiling mortgage over rights to property, registered pledges over all assets and rights (including over new units and inventories) of LOTOS Asfalt Sp. z o.o.'s , registered and financial pledge over bank accounts of LOTOS Asfalt Sp. z o.o., assignment of rights under agreements related to the EFRA Project, insurance agreements and trade contracts, power of attorney over bank accounts, and a declaration on submission to enforcement.

Other security instruments provided under the agreement include a registered and financial pledge over shares in LOTOS Asfalt Sp. z o.o. held by Grupa LOTOS S.A., Grupa LOTOS S.A.'s declaration on submission to enforcement and assignment of both parties' rights under a loan agreement of June 30th 2015 between Grupa LOTOS S.A. and LOTOS Asfalt Sp. z o.o., including under a promissory note securing the loan. The agreement provides for a conditional revolving loan of up to USD 53m, repayable by January 17th 2026. The loan is to be used to finance the EFRA Project if LOTOS Asfalt Sp. z o.o. fails to generate its own funds in the required amount, and will also improve LOTOS Asfalt Sp. z o.o.'s liquidity.

On September 7th 2015, the parties signed the security documents constituting part of the conditions precedent for disbursement of funds under the credit facility agreement, while on October 9th 2015 LOTOS Asfalt Sp. z o.o. received a notice from the facility agent confirming the satisfaction of all conditions precedent for the disbursement, which means that drawdowns under the facility may begin. Accordingly, the existing agreements for overdraft facilities used by LOTOS Asfalt Sp. z o.o. will be terminated by the end of October 2015 and the outstanding debt thereunder will be repaid with proceeds from the working capital facility contracted in connection with the EFRA Project.

As at December 31st 2015, liabilities under the above credit facility agreements totalled PLN 110m for the working capital facility and PLN 21.4m (USD 5.5m) for the investment facility.

Bank borrowings of other Group companies

The aggregate liabilities under bank borrowings of other Group companies as at December 31st 2015 were PLN 888.2m (December 31st 2014: PLN 940.2m). The outstanding amount comprised mainly liabilities incurred by LOTOS Paliwa Sp. z o.o. and companies of the LOTOS Petrobaltic S.A. Group: LOTOS Exploration and Production Norge AS, SPV Baltic Sp. z o.o. and AB LOTOS Geonafta.

Bank borrowings of LOTOS Exploration and Production Norge AS

As at December 31st 2015, LOTOS Exploration and Production Norge AS disclosed PLN 234.2m (USD 60m) in liabilities under the investment facility for financing of the acquisition of Heimdal assets, advanced by PKO BP S.A. (agreement of December 11th 2013). As at December 31st 2014, liabilities under the agreement were PLN 281.6m (USD 80.0m).

In addition, LOTOS Exploration and Production Norge AS uses a capital facility from PKO BP S.A., which is intended for the financing of its day-to-day operations and investment activities. As at December 31st 2015, the outstanding amount under the credit facility agreement was PLN 175.6m (USD 45m), while as at December 31st 2014 it was PLN 206.8m (USD 58.8m).

Bank borrowing of SPV Baltic Sp. z o.o.

On January 31st 2014, SPV Baltic Sp. z o.o. executed an investment facility agreement with Nordea Bank Polska S.A. (currently PKO BP S.A.) to finance the purchase of a drilling rig (agreement of December 20th 2013). As at December 31st 2015, liabilities under this credit facility were PLN 83.6m (December 31st 2014: PLN 92.6m).

Bank borrowings of AB LOTOS Geonafta

On June 29th 2015, AB LOTOS Geonafta (a LOTOS Petrobaltic Group company operating in the upstream segment) and Nordea Bank AB Lithuanian Branch signed an annex to the credit facility agreement of September 27th 2012, under which Nordea Bank AB Lithuanian Branch granted AB LOTOS Geonafta:

- a long-term credit facility of up to USD 20m,
- a working capital facility of up to USD 10m,

to refinance its existing credit facilities.

The long-term credit facility is repayable on June 30th 2019. The final repayment date of the working capital facility is June 30th 2016 and will be automatically extended by annual periods until June 30th 2019. The interest rate of the long-term credit facility is based on 6M LIBOR, and the working capital facility bears interest based on 1M LIBOR. The security instruments for the facilities include mortgage, registered pledge over inventories, pledge over bank accounts, assignment of rights under crude oil sale agreements, pledge over shares in related entities: UAB Genciu Nafta and UAB Manifoldas, and pledge over the companies' bank accounts.

As at December 31st 2015, liabilities of AB LOTOS Geonafta under the agreement were PLN 84.5m (USD 21.8m).

Bank borrowings of LOTOS Paliwa Sp. z o.o.

Liabilities of LOTOS Paliwa Sp. z o.o. under bank borrowings are associated primarily with investment facilities granted by PKO BP S.A., Pekao S.A. and mBank S.A. for the refinancing and financing of acquisition of service stations, including under the new agreement signed in January 2015.

On January 26th 2015, LOTOS Paliwa Sp. z o.o. and a consortium of Pekao S.A. and mBank S.A. (Bank Syndicate (7)) signed an agreement for a PLN 100m credit facility for the refinancing of capital expenditure incurred on building new service stations. Repayment of the facility is secured with mortgages. The facility is repayable by March 31st 2025, The facility bears interest based on 3M WIBOR.

As at December 31st 2015, liabilities under the above investment facility agreements totalled PLN 241.8m (December 31st 2014: PLN 168.9m).

In addition, as at December 31st 2015, LOTOS Paliwa Sp. z o.o. disclosed PLN 21.2m in liabilities under a working capital facility granted by Pekao S.A. (December 31st 2014: PLN 4.1m).

Proceeds from and repayment of bank borrowings

In 2015, proceeds from the Group's bank borrowings were PLN 798.2m (2014: PLN 563m), and cash outflows on repayment of borrowings were PLN 1,161.5m (2014: PLN 1,030.4m). These amounts are presented in the consolidated statement of cash flows as cash flows from financing activities under *Proceeds from bank borrowings* and *Repayment of bank borrowings*, respectively.

In 2015, proceeds from bank borrowings related to:

- credit facilities of LOTOS Asfalt Sp. o.o. (PLN 204.2m),
- investment credit facilities of LOTOS Paliwa Sp. z o.o. (PLN 100m),
- investment credit facility of LOTOS Terminale S.A. (PLN 50.9m),
- working capital facilities of the Parent (PLN 60.1m),
- credit facilities of AB LOTOS Geonafta (PLN 338.7m),
- working capital facility of LOTOS Exploration and Production Norge AS (PLN 44.3m).

In 2015, repayments of bank borrowings related mainly to:

- investment credit facilities of the Parent (PLN 460m),
- working capital facilities of the Parent (PLN 60.1m),
- working capital facilities of LOTOS Asfalt Sp. z o.o. (PLN 65m),
- investment credit facilities of LOTOS Paliwa (PLN 27.2m),
- credit facilities of LOTOS Exploration and Production Norge AS (PLN 167.1m),
- credit facilities of AB LOTOS Geonafta (PLN 362.2m),
- investment facility of SPV Baltic Sp. z o.o. (PLN 9.1m).

In 2015 and 2014, no defaults under the facilities occurred at the Group.

27.2 Non-bank borrowings

PLN '000	Dec 31 2015	Dec 31 2014
Provincial Fund for Environmental Protection and Water Management of Gdańsk	8,498	10,150
Agencja Rozwoju Przemysłu S.A.	83,648	92,633
Total	**92,146**	**102,783**
including:		
non-current	*80,966*	*92,146*
current	*11,180*	*10,637*

Repayment of the above loans is secured with:

- registered pledge over assets,
- registered and financial pledges over shares,
- assignment of rights under insurance policies,

- assignment of rights under agreements for sale of services,
- blank promissory notes,
- representation on voluntary submission to enforcement,
- sureties issued by Group companies.

The loans bear interest based on 1M WIBOR or the promissory note rediscount rate.

As at December 31st 2015, the average effective interest rate for the loans was approximately 4.99% (December 31st 2014: 4.96%).

For interest rate risk sensitivity analysis of the loans, see Note 32.4.1.

For analysis of contractual maturities of the loans, see Note 32.5.

Loans by maturity

Dec 31 2015 PLN '000	PLN-denominated loans advanced to the Group
2016	11,180
2017	11,997
2018	11,349
2019	11,985
2020	12,659
after 2020	32,976
Total	**92,146**

Dec 31 2014 PLN '000	PLN-denominated loans advanced to the Group
2015	10,637
2016	11,180
2017	11,997
2018	11,349
2019	11,985
after 2019	45,635
Total	**102,783**

Loans advanced to the LOTOS Petrobaltic Group

On January 31st 2014, SPV Baltic Sp. z o.o. entered into an agreement for a loan of up to PLN 100m with Agencja Rozwoju Przemysłu S.A. to finance the purchase of an offshore drilling rig (agreement of December 20th 2013). As at December 31st 2015, liabilities under the agreement were PLN 83.6m (December 31st 2014: PLN 92.6m).

Loans of other Group companies

On June 16th 2014, LOTOS Kolej Sp. z o.o. executed a PLN 6.9m loan agreement with the Provincial Fund for Environmental Protection and Water Management of Gdańsk for co-financing of the modernisation of locomotives. As at December 31st 2015, liabilities under the loan agreement were PLN 6.2m (December 31st 2014: PLN 6.9m). The company also has a loan from the Provincial Fund for Environmental Protection and Water Management of Gdańsk (agreement of December 21st 2011) as co-financing for the upgrade of a rail tank car cleaning facility. As at December 31st 2015, liabilities under the loan agreement were PLN 2.3m (December 31st 2014: PLN 3.3m).

Proceeds from and repayment of loans

In 2015, the Group did not contract any loans (2014: PLN 106.9m), whereas loan repayments amounted to PLN 10.8m (2014: PLN 13m). These amounts were disclosed in the consolidated statement of cash flows from financing activities under *Proceeds from non-bank borrowings* and *Repayment of non-bank borrowings*, respectively.

27.3 Notes

Notes issued by the LOTOS Petrobaltic Group

In 2013, LOTOS Petrobaltic S.A. (upstream segment) issued medium-term notes (Series: A, B, C, D, and E, with a total par value of USD 65.9m) under an agreement with Bank Pekao S.A. of October 29th 2013. Pursuant to the agreement, LOTOS Petrobaltic S.A. may issue notes for up to the USD equivalent of PLN 200m. The notes were acquired by Bank Pekao S.A.

As at December 31st 2015, PLN 218.1m (December 31st 2014: PLN 213.5m) was outstanding under notes in issue.

In connection with a default on one of covenants under the Note Programme Agreement, non-current liabilities under the note issue totalling PLN 179.1m were reclassified to current liabilities. As at December 31st 2015 and the date of issue of these financial statements, the liabilities under the notes were not declared due and payable by the bank.

Proceeds and payments related to notes

In 2015, the Series B notes with a total nominal value of USD 5m were redeemed. The related expenses, of PLN 19.4m, were presented in the statement of cash flows from financing activities of the Group, under *Redemption of notes*.

In 2014, the Series A notes with a total nominal value of USD 5m were redeemed and the related expenses, presented in the statement of cash flows from financing activities of the Group under *Redemption of notes*, were PLN 17.4m.

Notes by maturity date

Dec 31 2015 PLN '000	**Notes of the Group issued in USD**
2016	218,100
2017	-
2018	-
2019	-
2020	-
after 2020	-
Total	**218,100**

Dec 31 2014 PLN '000	**Notes of the Group issued in USD**
2015	17,587
2016	35,045
2017	160,847
2018	-
2019	-
after 2019	-
Total	**213,479**

For sensitivity analysis of the notes with respect to currency and interest rate risks, see Notes 32.3.1 and 32.4.1, and for information on their maturities see Note 32.5.

Notes of other Group companies

In addition, from July 2010 to August 2015 LOTOS Asfalt Sp. z o.o. operated a short-term note issue programme. In 2015 and 2014, LOTOS Asfalt Sp. z o.o. did not issue any notes under the programme and as at December 31st 2015 and December 31st 2014 did not carry any liabilities under notes in issue.

27.4 Finance lease liabilities

PLN '000	Minimum lease payments		Present value of minimum lease payments	
	Dec 31 2015	Dec 31 2014	Dec 31 2015	Dec 31 2014
Up to 1 year	54,648	35,286	31,542	22,495
From 1 to 5 years	198,708	109,607	145,431	91,178
Over 5 years	34,135	18,511	31,055	18,121
Total	**287,491**	**163,404**	**208,028**	**131,794**
Less finance costs	(79,463)	(31,610)	-	-
Present value of minimum lease payments	**208,028**	**131,794**	**208,028**	**131,794**
including:				
non-current			*176,486*	*109,299*
current			*31,542*	*22,495*

The Group uses finance leases primarily to finance rolling stock assets.

For sensitivity analysis of finance lease liabilities with respect to currency and interest rate risks, see Notes 32.3.1 and 32.4.1, and for information on maturities, see Note 32.5.

27.4.1 Undisclosed liabilities under operating lease agreements

As at December 31st 2015 and December 31st 2014, future minimum lease payments under non-cancellable operating leases were as follows:

PLN '000	Dec 31 2015	Dec 31 2014
Up to 1 year	109,979	107,960
From 1 to 5 years	350,794	128,309
Over 5 years	48,171	12,866
Total	**508,944**	**249,135**

The Group uses operating leases primarily to finance rolling stock assets.

28. Derivative financial instruments

PLN '000	Dec 31 2015	Dec 31 2014
Financial assets		
Non-current financial assets		
Commodity swaps (commodities and petroleum products)	367	-
Currency forward and spot contracts	7,024	-
Interest rate swap (IRS)	992	-
Options	314	-
Total	**8,697**	**-**
Current financial assets		
Commodity swaps (commodities and petroleum products)	198,224	-
Currency forward and spot contracts	7,058	536
Options	49	-
Currency swap	3,151	3,894
Total	**208,482**	**4,430**
Total financial assets	**217,179**	**4,430**
Financial liabilities		
Non-current financial liabilities		
Commodity swaps (commodities and petroleum products)	8,548	9,483
Currency forward and spot contracts	6	-
Interest rate swap (IRS)	45,752	53,143
Total	**54,306**	**62,626**
Current financial liabilities		
Commodity swaps (commodities and petroleum products)	49,507	19,854
Currency forward and spot contracts	903	56,365
Interest rate swap (IRS)	26,511	22,341
Currency swap	33,924	37,357
Total	**110,845**	**135,917**
Total financial liabilities	**165,151**	**198,543**

Derivative financial instruments used by the Group are contracted by Grupa LOTOS S.A. and LOTOS Asfalt. For a description of the derivative financial instruments, see Note 7.25. For a description of objectives and policies of financial risk management, see Note 32. For the classification of derivative financial instruments by fair value hierarchy, see Note 31.2.

For market risk sensitivity analysis of derivative financial instruments related to changes in prices of petroleum commodities and products, see Note 32.1.1.
For currency risk sensitivity analysis of derivative financial instruments, see Note 32.3.1.
For interest rate sensitivity analysis of derivative financial instruments, see Note 32.4.1.
For maturities of derivative financial instruments, see Note 32.5.
For information on the maximum credit risk exposure of derivative financial instruments (financial assets), see Note 32.6.

29. Employee benefit obligations

PLN '000	Note	Dec 31 2015	Dec 31 2014
Non-current liabilities			
Post-employment benefits	29.1	38,459	41,510
Length-of-service awards and other benefits	29.1	143,793	143,941
Total	**29.1**	**182,252**	**185,451**
Current liabilities			
Post-employment benefits	29.1	4,224	3,681
Length-of-service awards and other benefits	29.1	12,184	11,716
Bonuses, awards and unused holidays		78,409	51,520
Salaries and wages payable		27,384	17,121
Total		**122,201**	**84,038**
Total liabilities		**304,453**	**269,489**

29.1 Obligations under length-of-service awards and post-employment benefits

In accordance with the Group's remuneration systems, the Group employees are entitled to post-employment benefits upon retirement. Length-of-service awards are paid after a specific period of employment. Therefore, based on valuations prepared by professional actuary firms or based on own estimates, the Group recognises the present value of obligations under length-of-service awards and post-employment benefits. The table below provides information on the amount of the obligations and reconciliation of changes in the obligations during the reporting period.

PLN '000	Note	Post-employment benefits	Length-of-service awards and other benefits	Total
Jan 1 2015		**40,359**	**155,657**	**196,016**
Reclassification to liabilities directly associated with assets held for sale (or disposal groups)		1,963	7,125	9,088
Current service cost		2,488	12,929	15,417
Cost of discount	29.3; 9.6	1,031	4,027	5,058
Past service cost		(1,694)	(6,323)	(8,017)
Benefits paid		(2,916)	(12,497)	(15,413)
Actuarial (gain)/loss under profit or loss	29.2	-	(4,941)	(4,941)
Actuarial (gain)/loss under other comprehensive income	29.2	(712)	-	(712)
Dec 31 2015		**40,519**	**155,977**	**196,496**
including:				
non-current		*36,476*	*143,793*	*180,267*
current		*4,043*	*12,184*	*16,229*
Obligations under length-of-service awards and post-employment benefits at foreign companies [(1)]		2,164	-	2,164
Dec 31 2015	**29.2**	**42,683**	**155,977**	**198,660**
including:				
non-current		*38,459*	*143,793*	*182,252*
current		*4,224*	*12,184*	*16,408*

PLN '000	Note	Post-employment benefits	Length-of-service awards and other benefits	Total
Jan 1 2014		**32,808**	**130,650**	**163,458**
Current service cost		1,206	9,289	10,495
Cost of discount	9.6; 29.2	1,251	5,103	6,354
Past service cost		47	362	409
Benefits paid		(1,840)	(12,575)	(14,415)
Actuarial (gain)/loss under profit or loss	29.2	-	29,953	29,953
Actuarial (gain)/loss under other comprehensive income	29.2	8,850	-	8,850
Dec 31 2014		**42,322**	**162,782**	**205,104**
including:				
non-current		*38,723*	*150,586*	*189,309*
current		*3,599*	*12,196*	*15,795*
Obligations under length-of-service awards and post-employment benefits at foreign companies [(1)]		4,832	-	4,832
Exchange differences on translating foreign operations		-	-	-
Reclassification to liabilities directly associated with assets held for sale (or disposal groups)		(1,963)	(7,125)	(9,088)
Dec 31 2014		**45,191**	**155,657**	**200,848**
including:				
non-current		*41,510*	*143,941*	*185,451*
current		*3,681*	*11,716*	*15,397*

[(1)] Given the different nature of the pension plans operated by the Group's foreign companies – LOTOS Exploration and Production Norge AS and the companies of the AB LOTOS Geonafta Group – and their immaterial effect on the Group's total obligations under length-of-service awards and post-employment benefits, those companies' obligations are presented separately as *Obligations under length-of-service awards and post-employment benefits at foreign companies.*

29.2 Total cost of future employee benefit payments charged to profit or loss

PLN '000	Note	year ended Dec 31 2015	year ended Dec 31 2014
Items recognised in profit or loss:		**10,133**	**51,960**
Length-of-service awards, retirement and other post-employment benefits	9.2	5,075	45,606
- current service cost		*15,417*	*10,495*
- past service cost		*(8,017)*	*409*
- effect of foreign operations		*2,616*	*4,749*
- actuarial (gain)/loss	29.1	*(4,941)*	*29,953*
Cost of discount	9.6 29.1	5,058	6,354
Items recognised in other comprehensive income:		**654**	**8,933**
Actuarial (gain)/loss	29.1	(712)	8,850
Effect of foreign operations		1,366	83
Total comprehensive income		**10,787**	**60,893**

29.3 Actuarial assumptions

The table below presents the key assumptions adopted by the actuary as at the balance-sheet date to calculate the amount of the obligation.

	Dec 31 2015	Dec 31 2014
Discount rate (%)	2.90%	2.70%
Expected inflation rate (%)	2.50%	2.50%
Employee turnover ratio (%)	2.33%	2.43%
Expected growth rate of salaries and wages (%) in the following year	0.00%	4.00%
Expected growth rate of salaries and wages (%) in the following years	2.50%	2.50%

- The employee attrition probability is based on the historical data on employee turnover at the Group and statistical data on employee attrition in the industry. The employee turnover ratios applied by the actuary were determined separately for men and women and broken down into nine age categories. The employee turnover ratio is now calculated on an average basis.
- The mortality and life expectancy ratios are based on the Life Expectancy Tables of Poland for 2014, published by the Polish Central Statistics Office (GUS), and assume that the Group's employee population is representative of the average Polish population in terms of mortality (December 31st 2014: Life Expectancy Tables of Poland for 2013).
- The changes resulting from amendments to the Act on Pensions and Disability Pensions from Social Security Fund (Pensions Act) were accounted for, in particular changes relating to the retirement age of women and men, including its extension over a defined period to 67 years for both women and men. The amendments to the Pensions Act resulted in a change in the operation of individual benefit plans, giving rise to additional past service costs.
- It was assumed that employees would retire in accordance with the standard procedure, as prescribed by the Pensions Act, with the exception of employees who, according to the information provided by the Company, meet the conditions for early retirement entitlement.
- Based on the historical data, it was assumed that in 60% of cases half of the full amount of death benefits is paid.
- The discount rate on future benefits was assumed at 2.9%, i.e. reflecting the assumptions made at the corporate level (December 31st 2014: 2.7%, reflecting the assumptions made at the corporate level).

29.4 Termination benefits

In 2015, termination benefits and compensation payable in respect of non-compete obligation totalled PLN 6,939 thousand (2014: PLN 3,363 thousand).

In 2015, provisions for termination benefits totalled PLN 125 thousand (2014: PLN 69 thousand).

29.5 Sensitivity analysis

The table below presents results of calculations for changed key actuarial assumptions: the salaries and wages growth rate and the discount rate.

Initial obligation balance

PLN '000 Salaries and wages growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total[(1)]
base	base	143,252	36,185	8,765	8,294	196,496
base + 1%	base	156,497	40,800	9,687	9,890	216,874
base - 1%	base	131,832	32,340	7,968	7,048	179,188
base	base + 0.5%	136,694	34,038	8,319	7,613	186,664
base	base - 0.5%	150,371	38,563	9,250	9,071	207,255

The tables below present results of calculations for changed key actuarial assumptions: the salaries and wages growth rate, medical care contributions, and the discount rate.

Current service cost projected for 2016

PLN '000 Salaries and wages growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total[(1)]
base	base	11,267	2,071	689	327	14,354
base + 1%	base	12,660	2,471	787	439	16,357
base - 1%	base	10,092	1,751	606	247	12,696
base	base + 0.5%	10,647	1,902	646	285	13,480
base	base - 0.5%	11,946	2,262	736	378	15,322

Cost of discount projected for 2016

PLN '000 Salaries and wages growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total[(1)]
base	base	3,824	933	238	233	5,228
base + 1%	base	4,208	1,066	265	279	5,818
base - 1%	base	3,493	821	215	196	4,725
base	base + 0.5%	4,260	1,020	264	250	5,794
base	base - 0.5%	3,336	829	209	211	4,585

Total current service cost and cost of discount projected for 2016

PLN '000 Salaries and wages growth rate	Discount rate	Length-of-service awards	Old-age and disability retirement severance payments	Death benefits	Social benefits fund	Total[(1)]
base	base	15,091	3,004	927	560	19,582
base + 1%	base	16,868	3,537	1,052	718	22,175
base - 1%	base	13,585	2,572	821	443	17,421
base	base + 0.5%	14,907	2,922	910	535	19,274
base	base - 0.5%	15,282	3,091	945	589	19,907

[(1)] Given the different nature of pension plans operated by the Group's foreign companies – LOTOS Exploration and Production Norge AS and the companies of the AB LOTOS Geonafta Group – and their negligible effect on the Group's obligations under length-of-service awards and post-employment benefits, such companies' obligations were not presented in the review.

30. Trade payables, other liabilities and provisions

PLN '000	Note	Dec 31 2015	Dec 31 2014
Financial liabilities			
Non-current financial liabilities			
Other financial liabilities:	31.1	8,906	5,549
Investment commitments		*8,070*	*4,539*
Other		*836*	*1,010*
Total		**8,906**	**5,549**
Current financial liabilities			
Trade payables	31.1	1,232,510	1,692,839
Other financial liabilities:	31.1	172,825	191,295
Investment commitments		*110,710*	*120,498*
Liabilities to insurers		*1,432*	*19,244*
Settlements related to operations on Norwegian fields(1)		*43,792*	*39,668*
Other		*16,891*	*11,885*
Total		**1,405,335**	**1,884,134**
Total financial liabilities		**1,414,241**	**1,889,683**
Non-financial liabilities			
Non-current non-financial liabilities			
Provisions	30.1	1,269,053	638,209
Grants		11,157	12,263
Other		3,455	1,542
Total		**1,283,665**	**652,014**
Current non-financial liabilities			
Provisions	30.1	143,291	140,219
Liabilities to the state budget other than corporate income tax (2)		1,003,389	723,762
Grants		23,924	29,655
Prepaid deliveries		3,925	1,553
Liabilities under the NAVIGATOR loyalty programme		12,655	13,367
Other		43,736	37,459
Total		**1,230,920**	**946,015**
Total non-financial liabilities		**2,514,585**	**1,598,029**
Total		**3,928,826**	**3,487,712**
including:			
non-current		*1,292,571*	*657,563*
current:		*2,636,255*	*2,830,149*
- trade payables		*1,232,510*	*1,692,839*
- other		*1,403,745*	*1,137,310*

(1) Liabilities of LOTOS Exploration and Production Norge AS (LOTOS Petrobaltic Group, the upstream segment) under mutual settlements between the operator and consortium members concerning specific Norwegian fields.
(2) Including PLN 604,528 thousand in excise duty and fuel charge liabilities (December 31st 2014: PLN 586,199 thousand).

Trade payables do not bear interest and are, as a rule, paid in 7-60 days. Other liabilities do not bear interest, and their average payment period is one month. Amounts resulting from the difference between value added tax receivable and value added tax payable are paid to the relevant tax authorities on a monthly basis. Interest payable is usually settled on a monthly basis during a financial year.

For currency risk sensitivity analysis of trade payables and other liabilities, see Note 32.3.1.

For information on maturities of trade payables and other liabilities, see Note 32.5.

30.1 Provisions

PLN '000	Note	Provisions for decommissioning and reclamation costs: Provision for oil & gas extraction facilities: Poland	Norway		Lithuania	Provisions for retired refinery and other installations	Total	Other provisions		Total
Jan 1 2015		**183,579**	**497,194**		**14,302**	**30,504**	**725,579**	**52,849**		**778,428**
Recognised		-	*610,121*	(1)	*361*	*512*	*610,994*	*150,353*	(3)	*761,347*
Remeasurement of decommissioning costs		*5,574*	*17,253*		*(1,245)*	*(2,319)*	*19,263*	*4,794*		*24,057*
Change in provisions for liabilities attributable to approaching maturity date (discount unwinding effect)	*9.6*	*4,965*	*15,943*		*720*	*64*	*21,692*	*510*		*22,202*
Interest on Oil and Gas Extraction Facility Decommissioning Fund		*469*	-		-	-	*469*	-		*469*
Exchange differences on translating foreign operations		-	*(59,326)*		*(5)*	-	*(59,331)*	*(8,587)*		*(67,918)*
Used		-	*(94,746)*	(2)	-	*(480)*	*(95,226)*	*(2,008)*		*(97,234)*
Reversed		*(2,750)*	-		-	*(2,511)*	*(5,261)*	*(3,746)*		*(9,007)*
Dec 31 2015		**191,837**	**986,439**		**14,133**	**25,770**	**1,218,179**	**194,165**		**1,412,344**
including:										
non-current		*191,837*	*882,753*		*14,133*	*24,142*	*1,112,865*	*156,188*		*1,269,053*
current		-	*103,686*		-	*1,628*	*105,314*	*37,977*		*143,291*

Provisions for decommissioning and reclamation costs:

Provision for the Polish oil and gas extraction facilities – a provision for future costs of decommissioning of the oil and gas extraction facilities in the B-3 and B-8 licences areas and the Oil and Gas Extraction Facility Decommissioning Fund, set up to cover future costs of decommissioning of oil and gas facilities, in accordance with the Geological and Mining Law of February 4th 1994 and the Minister of Economy's Regulation of June 24th 2002.

Provision for the Norwegian oil and gas extraction facilities − a provision for future costs of decommissioning of the oil extraction facilities in the YME field (including provision for future cost of MOPU removal), and the oil and gas extraction facilities in the Heimdal and Sleipner fields.

Provision for the Lithuanian oil and gas extraction facilities − a provision for future costs of decommissioning of the Lithuanian oil extraction facilities.

Provisions for retired refinery installations and other installations − a provision for land reclamation and the cost of disassembly and decommissioning of the retired installations at LOTOS Terminale S.A., a provision for estimated cost of disassembly of the subsea pipeline operated by a subsidiary Energobaltic Sp. z o.o. (of the LOTOS Petrobaltic Group), as well as for land reclamation and clean-up.

(1) Recognition of a provision for decommissioning in connection with the acquisition of the Sleipner assets (see Note 13.1.3).

(2) The amount mainly includes PLN 62,043 thousand of used provisions for future costs of removal of the MOPU and disassembly of plant and equipment at the YME field. The provision was recognised in connection with the agreement between Talisman (the YME field operator) and SBM (rig owner) reached in March 2013 (see also Note 35 and 13.1.2).

(3) Including PLN 133,157 thousand (NOK 285,500 thousand) related to a provision for contingent payments under the Sleipner assets acquisition agreement (see Note 13.1.3).

PLN '000	Note	Provisions for decommissioning and reclamation costs – Provision for oil & gas extraction facilities – Poland		Norway		Lithuania	Provisions for retired refinery and other installations	Total	Other provisions		Total
Jan 1 2014 (restated)		**216,666**		**562,268**		**13,026**	**36,128**	**828,088**	**27,534**		**855,622**
Recognised		*642*		*-*		*1,074*	*685*	*2,401*	*29,898*	*(4)*	*32,299*
Remeasurement of decommissioning costs		*(36,396)*	*(1)*	*61,198*	*(2)*	*(844)*	*(762)*	*23,196*	*-*		*23,196*
Change in provisions for liabilities attributable to approaching maturity date (discount unwinding effect)	*9.6*	*2,008*		*17,043*		*669*	*274*	*19,994*	*432*		*20,426*
Interest on Oil and Gas Extraction Facility Decommissioning Fund		*659*		*-*		*-*	*-*	*659*	*-*		*659*
Exchange differences on translating foreign operations		*-*		*(22,482)*		*377*	*-*	*(22,105)*	*(1,396)*		*(23,501)*
Used		*-*		*(120,833)*	*(3)*	*-*	*(1,257)*	*(122,090)*	*(2,752)*		*(124,842)*
Reversed		*-*		*-*		*-*	*(4,564)*	*(4,564)*	*(867)*		*(5,431)*
Dec 31 2014		**183,579**		**497,194**		**14,302**	**30,504**	**725,579**	**52,849**		**778,428**
including:											
non-current		*183,579*		*384,153*		*14,302*	*27,403*	*609,437*	*28,772*		*638,209*
current		*-*		*113,041*		*-*	*3,101*	*116,142*	*24,077*		*140,219*

Provisions for decommissioning and reclamation costs:

Provision for the Polish oil and gas extraction facilities − a provision for future costs of decommissioning of the oil and gas extraction facilities in the B-3 and B-8 licence areas.

Provision for the Norwegian oil and gas extraction facilities − a provision for future costs of decommissioning of the oil extraction facilities in the YME field (including provision for future cost of MOPU removal), and the oil and gas extraction facilities in the Heimdal field.

Provision for the Lithuanian oil and gas extraction facilities − a provision for future costs of decommissioning of the Lithuanian oil extraction facilities.

Provisions for retired refinery installations and other installations − a provision for land reclamation and the cost of disassembly and decommissioning of the retired installations at LOTOS Terminale S.A., a provision for estimated cost of disassembly of the subsea pipeline operated by a subsidiary Energobaltic Sp. z o.o. (of the LOTOS Petrobaltic Group), as well as for land reclamation and clean-up.

(1) As at December 31st 2014, the Group analysed the costs necessary to decommission the oil extraction facility in the Baltic Sea in the B-3 licence area following the extension of the B-3 production licence in 2014 from 2016 to 2026. According to the analysis, the costs necessary to decommission the offshore oil extraction facility in this area are lower than the previous year's estimates by PLN 36,396 thousand.

(2) Including the effect of remeasurement of the provision for future costs of decommissioning of the offshore oil extraction facilities in the YME field, which resulted in an increase of decommissioning asset, charged to operating costs as a one-off expense of PLN 27,743 thousand in the consolidated statement of comprehensive income (see Note 13.1 and 13.1.4).

(3) The amount mainly includes PLN 98,611 thousand of used provisions for future costs of removal of the MOPU and disassembly of plant and equipment at the YME field. The provision was recognised in connection with the agreement between Talisman (the YME field operator) and SBM (rig owner) reached in March 2013 (see also Note 35 and 13.1.2).

(4) Including PLN 21,901 thousand from remeasurement of the provision for contingent payments under the Heimdal assets acquisition agreement.

Provision for oil & gas extraction facilities − Norway

Provision for decommissioning and reclamation of oil extraction facility in the YME field

As at December 31st 2015, the provision for decommissioning and reclamation of the oil extraction facility in the YME field, totalling PLN 141,407 thousand (NOK 319,132 thousand), was disclosed under *Other liabilities and provisions* and reflected the current estimate, made based on the Group's best knowledge, of future costs of removal of the YME infrastructure and costs of land reclamation, assuming that the project is decommissioned in 2031. As at December 31st 2014, the provision was PLN 146,816 thousand (NOK 310,065 thousand).

In the opinion of the Company's Management Board, the disclosed value of the provision for the costs of decommissioning of the infrastructure associated with the YME field and land reclamation following the facility's decommissioning reflects the necessary commitment by LOTOS E&P Norge AS if the scenario of earlier complete decommissioning materialises. This is a consequence of the phase (currently under way) of preparation of the YME field infrastructure decommissioning plan, adopted by the Consortium with the votes of the majority of its members and reflected in the project budget to be approved for 2016, taking into account a reduction in the decommissioning cost estimate in connection with a drop in the market cost of such services.

Provision for removal of the defective MOPU from the YME field

As described in Note 35.1, in March 2013, the operator of the YME field, Talisman Energy Norge AS ("Talisman," "Operator"), and the supplier of the Mobile Offshore Production Unit (MOPU) to be operated on the YME field, Single Buoy Moorings Inc. ("SBM"), announced that an agreement had been reached to remove the defective MOPU (evacuated in mid-July 2012) from the YME field and to terminate all existing contracts and agreements between the parties in connection with the YME project. Following the agreement, the Group recognised provision for the future removal of the MOPU from the YME field, in the amount of PLN 281,859 thousand (NOK 526,151 thousand). The provision was gradually used in subsequent years. In 2015 the provision amount was increased as a result of an increase of PLN 10,287 thousand (NOK 22,057 thousand) in the estimated cost of the removal, see Note 9.4. As at December 31st 2015, the provision was PLN 39,087 thousand (NOK 88,213 thousand). In 2015, the Group used PLN 62,043 thousand (NOK 133,024 thousand) from the provision.

The amount of the provision for removal of the MOPU from the YME field disclosed in the statement of financial position as at December 31st 2015 was determined based on the following assumptions:

- the MOPU will be removed from the YME field not later than in 2016;
- the provision fully covers the unspent, as at December 31st 2015, budget for removing the MOPU, approved by the interest holders of the YME licence.

For information on the YME project and details of the provision for decommissioning of the remaining subsea infrastructure associated with the YME field, see also Note 13.1.2.

Provision for decommissioning and reclamation of gas extraction facilities in the Heimdal field

In connection with the acquisition in 2013 of new production assets on the Norwegian Continental Shelf (Heimdal), a provision for future costs of decommissioning of the acquired production assets was recognised at PLN 265,709 thousand (NOK 496,004 thousand). Decommissioning of the non-current assets of the offshore oil and gas extraction facility at the Heimdal field and reclamation work are scheduled for 2016–2035. As at December 31st 2015, the provision was disclosed in the Group's statement of financial position under *Other liabilities and provisions* at PLN 230,767 thousand (NOK 520,802 thousand). As at December 31st 2014, the provision was PLN 256,066 thousand (NOK 540,794 thousand).

Provision for decommissioning and reclamation of gas extraction facilities in the Sleipner fields

In connection with the acquisition in 2015 of the Sleipner assets on the Norwegian Continental Shelf, a provision for future costs of decommissioning of the acquired production assets was recognised at PLN 605,423 thousand (NOK 1,298,076 thousand, see Note 13.1.3). Decommissioning of the newly acquired non-current assets of the offshore oil and gas extraction facility at the Sleipner field and reclamation work are scheduled for 2016–2033. As at December 31st 2015 the provision was disclosed in the Group's statement of financial position under *Other liabilities and provisions* at PLN 575,178 thousand.

Other provisions

As at December 31st 2015, the Group recognised a provision for contingent payments under the Heimdal assets acquisition agreement, of PLN 29,379 thousand (NOK 66,303 thousand). As at December 31st 2015, the provision was PLN 26,010 thousand (NOK 54,932 thousand).

In 2015, the Group recognised a provision for contingent payments under the Sleipner assets acquisition agreement. As at December 31st 2015, the provision was PLN 126,506 thousand (NOK 285,500 thousand).

Furthermore, as at December 31st 2015 and December 31st 2014, the Group also disclosed a provision of PLN 15,318 thousand related to court proceedings instigated by WANDEKO, to which LOTOS Paliwa Sp. z o.o. is a party (see Note 35.1).

30.2 Grants

PLN '000	Note	Year ended Dec 31 2015	Year ended Dec 31 2014
At beginning of period		**41,918**	**42,569**
Grants received in period		516	1,238
Deferred grants	9.3	(7,353)	(1,889)
At end of period		**35,081**	**41,918**
including:			
non-current		*11,157*	*12,263*
current		*23,924*	*29,655*

The grants are primarily related to licences received free of charge and grants from the Eco Fund for the use of waste gas from an offshore oil and gas extraction facility for heating purposes.

The Group receives also government assistance within the meaning of IAS 20 Accounting for Government Grants and Disclosure.

Until April 30th 2011, the Group benefited from tax credit available to producers of bio-components under Art. 19a of the Corporate Income Tax Act of February 15th 1992 (consolidated text: Dz.U. of 2011, No. 74, item 397). The state aid awarded in line with the laws referred to above was approved by virtue of the European Commission's Decision No. 57/08 of September 18th 2009 concerning authorisation for the grant of state operating aid for biofuels. This relief has enabled biofuel producers to deduct from their income tax payable up to 19% of the surplus value of their produced biofuels over the value of their produced liquid fuels of the same calorific value, calculated at average prices. European Commission's approval for the tax relief expired on April 30th 2011, and the unsettled amount of the relief was accounted for in current prepayments for corporate income tax.

The Group benefited from a tax credit available to entities introducing new technologies pursuant to Art. 18b of the Corporate Income Tax Act of February 15th 1992 (consolidated text: Dz.U. of 2011, No. 74, item 397). The tax credit enabled the Group to deduct from taxable income up to 50% of expenditure incurred on new technologies. It was settled at the end of 2014.

31. Financial instruments

31.1 Carrying amount

Dec 31 2015 PLN '000	Note	Categories of financial instruments: Financial assets/liabilities at fair value through profit or loss – held for trading	Loans and receivables	Financial assets available for sale (1)	Financial liabilities at amortised cost	Total
Classes of financial instruments						
Financial assets						
Derivative financial instruments	28; 31.2	217,179	-	-	-	217,179
Trade receivables	18	-	1,550,900	-	-	1,550,900
Cash and cash equivalents	20	-	859,699	-	-	859,699
Other financial assets	18	-	808,705	9,752	-	818,457
Total		**217,179**	**3,219,304**	**9,752**	**-**	**3,446,235**
Financial liabilities						
Borrowings, other debt instruments and finance lease liabilities	27	-	-	-	6,999,308	6,999,308
Derivative financial instruments	28; 31.2	165,151	-	-	-	165,151
Trade payables	30	-	-	-	1,232,510	1,232,510
Other financial liabilities	30	-	-	-	181,731	181,731
Total		**165,151**	**-**	**-**	**8,413,549**	**8,578,700**

Dec 31 2014 PLN '000	Note	Categories of financial instruments: Financial assets/liabilities at fair value through profit or loss – held for trading	Loans and receivables	Financial assets available for sale [(1)]	Financial liabilities at amortised cost	Total
Classes of financial instruments						
Financial assets						
Derivative financial instruments	28; 31.2	4,430	-	-	-	4,430
Trade receivables	18	-	1,406,501	-	-	1,406,501
Cash and cash equivalents	20	-	348,215	-	-	348,215
Other financial assets	18	-	1,322,281	9,752	-	1,332,033
Total		**4,430**	**3,076,997**	**9,752**	**-**	**3,091,179**
Financial liabilities						
Borrowings, bonds, other debt instruments and finance lease liabilities	27	-	-	-	6,663,668	6,663,668
Derivative financial instruments	28; 31.2	198,543	-	-	-	198,543
Trade payables	30	-	-	-	1,692,839	1,692,839
Other financial liabilities	30	-	-	-	196,844	196,844
Total		**198,543**	**-**	**-**	**8,553,351**	**8,751,894**

[(1)] As at December 31st 2015 and December 31st 2014, the Group held shares in other undertakings measured at historical cost less impairment.

As at December 31st 2015 and December 31st 2014, the fair value of financial assets and liabilities did not materially differ from their carrying amounts.

31.2 Fair value hierarchy

PLN '000	Dec 31 2015 Level 2	Dec 31 2014 Level 2
Financial assets		
Commodity swap	198,591	-
Commodity options	363	-
Currency forward and spot contracts	14,082	536
Interest rate swap (IRS)	992	-
Currency swap	3,151	3,894
Total	**217,179**	**4,430**
Financial liabilities		
Commodity swap	58,055	29,337
Currency forward and spot contracts	909	56,365
Interest rate swap (IRS)	72,263	75,484
Currency swap	33,924	37,357
Total	**165,151**	**198,543**

31.3 Items of income, expenses, gains and losses disclosed in the statement of comprehensive income by category of financial instrument

Year ended Dec 31 2015 PLN '000	Note	Categories of financial instruments: Financial assets/ liabilities at fair value through profit or loss – held for trading	Loans and receivables	Financial assets available for sale	Financial liabilities at amortised cost	Total
Classes of financial instruments						
Trade receivables:		**-**	**34,410**	**-**	**-**	**34,410**
Interest income	9.5	-	*2,847*	-	-	*2,847*
Foreign exchange (gains)/losses recognised in cost of sales	9.1	-	*27,835*	-	-	*27,835*
Foreign exchange gains/(losses) recognised in finance costs	9.6	-	*1,801*	-	-	*1,801*
Impairment losses	9.3	-	*1,927*	-	-	*1,927*
Cash and cash equivalents:		**-**	**9,013**	**-**	**-**	**9,013**
Interest income	9.5	-	*139*	-	-	*139*
Foreign exchange gains/(losses)	9.6	-	*8,874*	-	-	*8,874*
Other financial assets:		**-**	**61,576**	**-**	**-**	**61,576**
Income from interest on deposits	9.5	-	*16,181*	-	-	*16,181*
Foreign exchange gains/(losses) on translation of intra-Group loans	9.6	-	*75,871*	-	-	*75,871*
Foreign exchange gains/(losses) on notes, including intra-Group	9.6	-	*(50,053)*	-	-	*(50,053)*
Foreign exchange gains/(losses) on cash blocked in bank accounts	9.6	-	*20,435*	-	-	*20,435*
Foreign exchange gains/(losses) on other financial assets	9.6	-	*(858)*	-	-	*(858)*
Derivative financial instruments (financial assets/liabilities):		**78,809**	**-**	**-**	**-**	**78,809**
Gains/(losses) on fair value measurement of derivative financial instruments	9.5	*290,447*	-	-	-	*290,447*
Gains/(losses) on realisation of derivative financial instruments	9.5	*(211,638)*	-	-	-	*(211,638)*
Borrowings, other debt instruments and finance lease liabilities		**-**	**-**	**-**	**(1,010,013)**	**(1,010,013)**
Interest expense	9.6	-	-	-	*(172,205)*	*(172,205)*
Gains/(losses) on cash flow hedge accounting charged to revenue	8	-	-	-	*(82,448)*	*(82,448)*
Foreign exchange gains/(losses) on bank borrowings	9.6	-	-	-	*(175,425)*	*(175,425)*
Foreign exchange gains/(losses) on realised foreign-currency transactions in bank accounts	9.6	-	-	-	*(108,419)*	*(108,419)*
Foreign exchange gains/(losses) on translation of intra-Group loans	9.6	-	-	-	*(123,621)*	*(123,621)*
Foreign exchange gains/(losses) on notes, including intra-Group	9.6	-	-	-	*8,078*	*8,078*
Gains/(losses) on measurement of cash flow hedges recognised in other comprehensive income	23	-	-	-	*(355,973)*	*(355,973)*
Trade and other payables:		**-**	**-**	**-**	**(17,228)**	**(17,228)**
Interest expense	9.6	-	-	-	*(236)*	*(236)*
Foreign exchange (gains)/losses recognised in cost of sales	9.1	-	-	-	*(16,728)*	*(16,728)*
Foreign exchange gains/(losses) recognised in finance costs	9.6	-	-	-	*(264)*	*(264)*
Other financial liabilities:		**-**	**-**	**-**	**(3,880)**	**(3,880)**
Interest expense	9.6				*(1,351)*	*(1,351)*
Foreign exchange gains/(losses) on investment commitments	9.6				*(2,529)*	*(2,529)*
Total		**78,809**	**104,999**	**-**	**(1,031,121)**	**(847,313)**

Year ended Dec 31 2014 PLN '000	Note	Categories of financial instruments Financial assets/ liabilities at fair value through profit or loss – held for trading	Loans and receivables	Financial assets available for sale	Financial liabilities at amortised cost	Total
Classes of financial instruments						
Trade receivables:		**-**	**27,055**	**-**	**-**	**27,055**
Interest income	9.5	-	*6,349*	-	-	*6,349*
Foreign exchange (gains)/losses recognised in cost of sales	9.1	-	*32,523*	-	-	*32,523*
Foreign exchange gains/(losses) recognised in finance costs	9.6	-	*1,261*	-	-	*1,261*
Impairment losses	9.4	-	*(13,078)*	-	-	*(13,078)*
Cash and cash equivalents:		**-**	**12,813**	**-**	**-**	**12,813**
Interest income	9.5	-	*1,249*	-	-	*1,249*
Foreign exchange gains/(losses)	9.6	-	*11,564*	-	-	*11,564*
Other financial assets:		**-**	**214,449**	**-**	**-**	**214,449**
Income from interest on deposits	9.5	-	*9,360*	-	-	*9,360*
Foreign exchange gains/(losses) on translation of intra-Group loans	9.6	-	*146,336*	-	-	*146,336*
Foreign exchange gains/(losses) on notes, including intra-Group	9.6	-	*19,808*	-	-	*19,808*
Foreign exchange gains/(losses) on cash blocked in bank accounts	9.6	-	*37,630*	-	-	*37,630*
Foreign exchange gains/(losses) on other financial assets	9.6	-	*1,315*	-	-	*1,315*
Derivative financial instruments (financial assets/liabilities):		**(197,849)**	**-**	**-**	**-**	**(197,849)**
Gains/(losses) on fair value measurement of derivative financial instruments	9.6	*(191,271)*	-	-	-	*(191,271)*
Gains/(losses) on realisation of derivative financial instruments	9.6	*(6,578)*	-	-	-	*(6,578)*
Borrowings, other debt instruments and finance lease liabilities		**-**	**-**	**-**	**(1,276,431)**	**(1,276,431)**
Interest expense	9.6	-	-	-	*(166,675)*	*(166,675)*
Gains/(losses) on cash flow hedge accounting charged to revenue	8	-	-	-	*(7,992)*	*(7,992)*
Foreign exchange gains/(losses) on bank borrowings	9.6	-	-	-	*(222,455)*	*(222,455)*
Foreign exchange gains/(losses) on realised foreign-currency transactions in bank accounts	9.6	-	-	-	*(16,530)*	*(16,530)*
Foreign exchange gains/(losses) on translation of intra-Group loans	9.6	-	-	-	*(214,620)*	*(214,620)*
Foreign exchange gains/(losses) on notes, including intra-Group	9.6	-	-	-	*(63,506)*	*(63,506)*
Gains/(losses) on measurement of cash flow hedges recognised in other comprehensive income	23	-	-	-	*(584,653)*	*(584,653)*
Trade and other payables		**-**	**-**	**-**	**(96,993)**	**(96,993)**
Interest expense	9.6	-	-	-	*(87)*	*(87)*
Foreign exchange (gains)/losses recognised in cost of sales	9.1	-	-	-	*(97,633)*	*(97,633)*
Foreign exchange gains/(losses) recognised in finance costs	9.6	-	-	-	*727*	*727*
Other financial liabilities:		**-**	**-**	**-**	**(4,916)**	**(4,916)**
Foreign exchange gains/(losses) on investment commitments	9.6	-	-	-	*(4,675)*	*(4,675)*
Foreign exchange gains/(losses) on other financial liabilities	9.6	-	-	-	*(241)*	*(241)*
Total		**(197,849)**	**254,317**	**-**	**(1,378,340)**	**(1,321,872)**

32. Objectives and policies of financial risk management

The Group is exposed to financial risks, including:

- market risk (risk related to prices of commodities and petroleum products, risk related to prices of CO2 allowances, currency risk, interest rate risk),
- liquidity risk,
- credit risk related to financial and trade transactions.

The Parent operates a Financial Risk Management Office, which coordinates and exercises ongoing supervision of the Group's financial risk management processes.

Furthermore, the Price Risk and Trading Committee, appointed by the Management Board, supervises the work on development of policies and procedures, and monitors implementation of the Group's strategy in the area of its responsibilities. Specifically, the Committee provides opinions on or initiates key price and trading risk management initiatives, makes recommendations, and submits proposals for actions that require the Management Board's approval.

In addition, to ensure effective management of liquidity, debt structure and external finance raising by companies of the LOTOS Group, the Management Board has appointed the Liquidity Optimisation and Financing Coordination Team.

Financial risk management seeks to achieve the following key objectives:

- increase the probability that budget and strategic objectives will be met,
- limit cash flow volatility,
- ensure short-term financial liquidity,
- optimise the expected level of cash flows and risk,
- support operating, investment and financial processes, and create value in the long term.

With a view to implementing the above objectives, the Group has put in place relevant tools and developed a number of documents, approved at the relevant decision-making levels, defining the framework for ensuring effectiveness and safety of the Group's financial activities, including:

- the methodology for quantifying exposures to particular risks,
- the time horizon for hedging a given risk,
- acceptable financial instruments,
- the method of assessing financial risk management,
- limits within risk management,
- the reporting method,
- credit limits,
- documentation and operating standards,
- division of responsibilities for execution of transactions, risk analysis and control, as well as documentation of and accounting for transactions, among various corporate units.

The Parent monitors and reports all managed market risks on an ongoing basis. Grupa LOTOS S.A. uses liquid derivatives which can be measured by applying commonly used valuation models. The valuation of derivative financial instruments is performed based on market inputs provided by reliable sources. Opening positions with respect to risks which do not arise as part of the Group's core business is prohibited.

In 2015, the Parent continued to apply the hedge accounting policies implemented in 2011 and 2012 with respect to its cash flows (i.e. foreign-currency facilities used to finance the 10+ Programme, designated as hedges of future USD-denominated petroleum product sale transactions).

32.1 Risk related to prices of commodities and petroleum products

The Group considers risk related to prices of commodities and petroleum products to be particularly important.

The Company identifies the following factors of this risk:

- volatility of the refining margin, measured as the difference between the liquid index of a reference petroleum product basket (e.g. aviation fuel, gasoline, diesel oil, fuel oil) and the liquid index of reference commodity (e.g. Urals crude),
- volatility of prices with respect to the raw material and product inventory volumes deviating from the required levels of mandatory and operational stocks,
- volatility of differentials between the reference indices and indices used in commercial contracts (e.g. Urals-Brent differential, i.e. the difference between different types of crude oil),
- use of non-standard pricing formulae in commercial contracts.

On February 16th 2015, the Parent's Management Board approved the "Grupa LOTOS S.A.'s commodity and petroleum products price risk management policy", which introduced the classification system for transaction portfolios, defined their business functions, described how risk is understood and how portfolio exposures are set, specified permitted financial instruments and limitations on their use, and transaction execution standards, and also provided guidelines on how to evaluate risk management performance and set relevant limits. Where permitted by the policy, the Management Board of Grupa LOTOS S.A. delegates setting transaction limits to lower-level decision-makers.

Under the approved policy, the Company may continue to offer its customers petroleum products at fixed prices. The transactions executed in 2015 covered bitumen components. To preserve the original price risk profile the Group entered into commodity swaps and options.

Under the approved policy, to take advantage of the contango environment on the futures market and improve the margin, the Group entered into commodity swaps based on the Brent (Dtd) index and purchased (and recorded as inventory) additional volumes of crude oil.

Open commodity swaps as at December 31st 2015:

Type of contract	Underlying index	Valuation period	Amount in tonnes in the valuation period	Fair value (PLN '000)	
				Financial assets	Financial liabilities
Commodity swap	3.5 PCT Barges FOB Rotterdam	Mar 2016–Nov 2017	92,845	22	(58,042)
Commodity swap	Gasoil 0.1 pct Crg CIF NWE_ARA	May 2016–Nov 2017	(2,603)	839	(13)
Commodity swap	Brent (Dtd)	Mar–May 2016	(249,931)	197,730	-
			Total	**198,591**	**(58,055)**

The above swap transactions for a total of 92,845 tonnes based on the 3.5 PCT Barges FOB Rotterdam liquid index in the period from March 2016 to November 2017 and (2,603) tonnes based on the Gasoil 0.1 pct Crg CIF NWE ARA liquid index in the period from May 2016 to November 2017 were entered into to reverse the risk profile relating to the prices of commodities and petroleum products and arising in connection with the sale of bitumen components at fixed prices. The swap transactions for a total of (249,931) tonnes based on the Brent (Dtd) index in the period from March to May 2016 were entered into in contango.

Open commodity swaps as at December 31st 2014:

Type of contract	Underlying index	Valuation period	Amount in tonnes in the valuation period	Fair value (PLN '000)	
				Financial assets	Financial liabilities
Commodity swap	3.5 PCT Barges FOB Rotterdam	Apr 2015–Sep 2017	41,690	-	(29,338)
			Total	**-**	**(29,338)**

The above swap transactions for a total of 41,690 tonnes based on the 3.5 PCT Barges FOB Rotterdam liquid index in the period from April 2015 to September 2017 were entered into to reverse the risk profile relating to the prices of commodities and petroleum products and arising in connection with the sale of bitumen components at fixed prices.

Open commodity options as at December 31st 2015:

Type of contract	Underlying index	Valuation period	Amount in tonnes in the valuation period	Fair value (PLN '000)	
				Financial assets	Financial liabilities
Commodity options	3.5 PCT Barges FOB Rotterdam	Mar 2016–Oct 2017	27,105	363	-
			Total	**363**	**-**

The above options for a total of 27,105 tonnes based on the 3.5 PCT Barges FOB Rotterdam liquid index in the period from March 2016 to October 2017 were entered into to reverse the risk profile relating to the prices of commodities and petroleum products and arising in connection with the sale of bitumen components at fixed prices.

The Company's Management Board points out that the importance of price risk management and of trading activities within the Group has been steadily growing. Given the need to manage new processes and enhance the efficiency of ongoing operations in this area, as well as to improve operational safety, the Group implemented an ERTM (Energy Trading and Risk Management) IT system in 2014.

32.1.1 Market risk sensitivity analysis: fluctuations in prices of commodities and petroleum products

Below is presented an analysis of the sensitivity of the Company's financial transactions to the risk of fluctuations in prices of commodities and petroleum products as at December 31st 2015 and 2014, assuming a price change (+/-) equal to the annual implied volatility of the underlying index:

	Dec 31 2015			Dec 31 2014		
	Carrying	Change*		Carrying	Change**	
PLN '000	amount	+ implied volatility	- implied volatility	amount	+34,22%	-34,22%
Financial assets [(1)]	198,954	(93,473)	95,080	-	-	-
Financial liabilities [(1)]	(58,055)	27,125	(27,131)	(29,338)	15,325	(15,325)
Total	**140,899**	**(66,348)**	**67,949**	**(29,338)**	**15,325**	**(15,325)**

[(1)] Total commodity swaps and options.

*With respect to the instruments held as at December 31st 2015, the above deviations of underlying index prices have been calculated based on the annual implied volatility of the index on which the executed transactions of December 31st 2015 are based, posted on the SuperDerivatives website. The volatility was +/- 43.48% for the 3.5 PCT Barges FOB Rotterdam index, +/- 32.9% for the Gasoil 0.1 pct Crg CIF NWE_ARA index, and +/- 35.65% for the Brent (Dtd) index.

**With respect to the instruments held as at December 31st 2014, the above deviations of underlying index prices have been calculated based on the annual implied volatility of the index on which the executed transactions of December 31st 2014 are based, published by SuperDerivatives.

The effect of the underlying index price changes on the fair value has been examined assuming that the currency exchange rates remain unchanged.

32.2 Risk related to prices of carbon (CO_2) allowances

The risk related to prices of carbon dioxide emissions allowances is managed within the Parent on an ongoing basis in line with the assumptions set forth in the strategy for managing the risk related to prices of carbon dioxide (CO_2) approved by the Management Board of Grupa LOTOS S.A. The Group balances its future CO_2 emission allowance deficits and surpluses depending on the market situation and within defined limits. In line with the approved strategy and limits, the Parent executes the following transactions for emission units:

- EUA (Emission Unit Allowance) – represents an allowance to emit one tonne of CO_2,
- CER (Certified Emission Reduction Unit) – represents one tonne of CO_2 equivalent (tCO_2e) effectively reduced. Certified emission reduction units are obtained in connection with investment projects implemented in developing countries where no CO_2 emission limits have been defined.
- ERU (Emission Reduction Unit) – represents one tonne of CO_2 equivalent (tCO_2e) effectively reduced. ERUs are certified emission units, obtained through investment projects implemented in countries where the CO_2 reduction costs are lower.

As at December 31st 2015, the deficit of allowances in the 2013–2020 trading period (Phase III) was 1,095,003 tonnes. Taking into account derivative transactions for a total of 1,715,000 tonnes, however, the Parent holds surplus emissions allowances for 619,997 tonnes, which have been purchased in view of the market situation and the anticipated strategic deficit in emission allowances after 2020.

As at December 31st 2014, the deficit of allowances in the 2013–2020 trading period (Phase III) was 573,770 tonnes. Taking into account derivative transactions for a total of 1,149,000 tonnes, however, the Parent holds surplus emissions allowances for 575,230 tonnes, which have been purchased in view of the market situation and the anticipated strategic deficit in emission allowances after 2020.

To manage risk related to carbon dioxide emission allowances, the Group evaluates the risk of deficit of free emission allowances allocated under the NAP on a case-by-case basis.

If required, futures contracts to purchase carbon (CO_2) allowances open as at the last day of the reporting period are settled by the Group through physical delivery, with the intention to potentially use the allowances to offset the Group's actual CO_2 emissions. The valuation of contracts settled through physical delivery is not disclosed under financial assets/liabilities in the financial statements. However, the Group internally monitors and performs the valuation of such contracts as part of an overall assessment of the effectiveness of its CO_2 risk management (off balance sheet).

EUA futures contracts open as at December 31st 2014 which the Group considered likely to be settled through physical delivery and used for the Group's own purposes are not disclosed in the financial statements as at the last day of the reporting period, and their fair value is recorded only as an off-balance sheet item.

In 2014, the Group swapped its ERUs for 29,000 tonnes for EUAs due to the spread between those two types of emission allowances.

Contract position as at December 31st 2015 and 2014:

Open CO2 allowances contracts as at December 31st 2015:

Type of contract	Contract settlement period	Number of allowances in the period	Phase	Fair value (PLN '000)*	
				Financial assets	Financial liabilities
EUA Futures	Dec 2016−Dec 2019	1,715,000	Phase III	5,857	(191)
			Total	**5,857**	**(191)**

*Off-balance-sheet value, used exclusively for statistical purposes and as part of monitoring in risk management.

Open CO2 allowances contracts as at December 31st 2014:

Type of contract	Contract settlement period	Number of allowances in the period	Phase	Fair value (PLN '000)*	
				Financial assets	Financial liabilities
EUA Futures	Dec 2015–Dec 2018	1,149,000	Phase III	6,062	(402)
			Total	**6,062**	**(402)**

*Off-balance-sheet value, used exclusively for statistical purposes and as part of monitoring in risk management.

For information on carbon dioxide (CO_2) emission allowances, see Note 34.

32.2.1 Market risk sensitivity analysis: fluctuations in prices of carbon dioxide (CO_2) emission allowances

As at December 31st 2015 and 2014, the Group held futures for the purchase of carbon dioxide (CO_2) emission allowances.

The Group does not perform a sensitivity analysis for the fair value of futures contracts to purchase CO2 emission allowances held by it as at the end of the reporting period if it intends to settle the contracts through physical delivery and use them to cover own allowance deficits under the carbon emission reduction system. Therefore, no sensitivity analysis has been performed with reference to the EUA futures held as at December 31st 2015 and 2014.

32.3 Currency risk

In its operations the Group is exposed to currency risks related to:
- trading in commodities and petroleum products and other merchandise,
- investment cash flows,
- cash flows from financing activities, including deposits and borrowings,
- valuation of derivative instruments,

indexed to or denominated in a currency other than the functional currency.

Since August 20th 2015, currency risk has been managed in line with the assumptions stipulated in the Grupa LOTOS S.A. Currency Risk Management Policy. Under the new policy, exposure is understood as material positions exposed to currency risk and affecting the liquidity in the management horizon in accordance with the scheduled payment dates. The central risk metric is Cash-Flow-at-Risk (CFaR), computed based on the CorporateMetrics™ methodology, with the CFaR value limit and the maximum hedge ratio being the key limits. The exposure management horizon is linked with the budget forecast horizon, which varies from three to five consecutive quarters depending on the time of the year.

The Group actively manages its currency exposure by optimising the expected values of cash flows and risk within applicable limits, taking into account expected market developments.

As USD is used in market price quotations for crude oil and petroleum products, it was decided that USD is the most appropriate currency for contracting and repaying long-term credit facilities to finance the 10+ Programme, as this would reduce the structurally long position, and consequently also the strategic currency risk.

The Group has a structural long position in USD (it benefits from a rise in the USD/PLN exchange rate) as its cash inflows dependent on the USD exchange rate (mainly revenue from sale of petroleum products) are higher than the corresponding cash outflows (e.g. on purchase of crude oil, credit facility repayment).

Under the EFRA project, Group companies concluded EUR/USD currency contracts designed to hedge euro-denominated capital expenditure against the US dollar as the main financing currency.

Open currency contracts as at December 31st 2015:

Type of contract	Purchase/sale	Contract settlement period	Currency pair (base/quote)	Amount in base currency ('000)	Fair value (PLN '000)	
					Financial assets	Financial liabilities
Currency spot	Purchase	Jan 2016	USD/PLN	13,000	227	-
Currency spot	Purchase	Jan 2016	EUR/PLN	500	-	-
Currency forward	Purchase	Oct 2016−Jun 2018	EUR/USD	186,700	8,663	(6)
Currency forward	Sale	Jan−Sep 2016	USD/PLN	(128,000)	5,192	(903)
Currency swap	Purchase	Feb 2016	USD/PLN	100,000	2,088	-
Currency swap	Sale	Jan−Jul 2016	USD/PLN	(362,000)	1,063	(33,924)
				Total	**17,233**	**(34,833)**

Open currency contracts as at December 31st 2014:

Type of contract	Purchase/sale	Contract settlement period	Currency pair (base/quote)	Amount in base currency ('000)	Fair value (PLN '000)	
					Financial assets	Financial liabilities
Currency spot	Purchase	Jan 2015	USD/PLN	14,000	-	(548)
Currency spot	Purchase	Jan 2015	EUR/PLN	3,000	-	(76)
Currency forward	Purchase	Jan−Feb 2015	USD/PLN	16,000	-	(331)
Currency forward	Purchase	Feb 2015	EUR/PLN	5,000	253	-
Currency forward	Purchase	Mar 2015	EUR/USD	5,000	-	(1,386)
Currency forward	Sale	Jan−Sep 2015	USD/PLN	(251,000)	-	(53,938)
Currency forward	Sale	Feb 2015	EUR/PLN	(5,000)	11	(86)
Currency forward	Sale	Mar 2015	EUR/USD	(3,500)	272	-
Currency swap	Purchase	Feb 2015	USD/PLN	16,000	3,894	-
Currency swap	Purchase	Apr 2015	EUR/USD	5,500	-	(672)
Currency swap	Sale	Jan–Jul 2015	USD/PLN	(207,300)	-	(36,685)
				Total	**4,430**	**(93,722)**

32.3.1 Sensitivity analysis with respect to market risk associated with fluctuations in currency exchange rates

Currency structure of selected financial instruments as at December 31st 2015:

Dec 31 2015 (PLN '000)	Note	USD	USD translated into PLN	EUR	EUR translated into PLN	Carrying amount in foreign currency translated into PLN as at the balance-sheet date
Classes of financial instruments						
Financial assets						
Trade receivables		61,664	240,553	5,917	25,043	265,596
Cash and cash equivalents		33,184	129,511	16,415	69,957	199,468
Notes		71,567	279,191	-	-	279,191
Other financial assets:		250,322	976,577	43,791	186,604	1,163,181
Loans advanced to related entities		*200,776*	*783,232*	-	-	*783,232*
Deposits		*7,750*	*30,238*	*42,934*	*182,965*	*213,203*
Security deposit		-	-	*745*	*3,176*	*3,176*
Cash for work related to the removal of the MOPU from the YME field	*18*	*27,808*	*108,540*	-	-	*108,540*
Other receivables		*13,988*	*54,567*	*112*	*463*	*55,030*
Total		**416,737**	**1,625,832**	**66,123**	**281,604**	**1,907,436**
Financial liabilities						
Borrowings		1,601,594	6,268,236	2,257	9,620	6,277,856
Notes		127,465	497,410	-	-	497,410
Finance lease liabilities		-	-	16,170	68,907	68,907
Trade payables		208,414	813,054	7,855	34,100	847,154
Other financial liabilities		6,915	26,368	9,472	40,364	66,732
Total		**1,944,388**	**7,605,068**	**35,754**	**152,991**	**7,758,059**

Currency structure of selected financial instruments as at December 31st 2014:

Dec 31 2014 (PLN '000)	Note	USD	USD translated into PLN	EUR	EUR translated into PLN	Carrying amount in foreign currency translated into PLN as at the balance-sheet date
Classes of financial instruments						
Financial assets						
Trade receivables		61,228	214,662	5,076	21,652	236,314
Cash and cash equivalents		8,965	33,745	9,990	42,508	76,253
Notes		65,418	229,434	-	-	229,434
Other financial assets:		317,964	1,137,610	1,454	6,198	1,143,808
Loans advanced to related entities		*264,274*	*926,790*	*1,410*	*6,010*	*932,800*
Deposits		*8,962*	*31,432*	-	-	*31,432*
Cash for work related to the removal of the MOPU from the YME field	*18*	*44,725*	*179,377*	-	-	*179,377*
Other receivables		*3*	*11*	*44*	*188*	*199*
Total		**453,575**	**1,615,451**	**16,520**	**70,358**	**1,685,809**
Financial liabilities						
Borrowings		1,869,172	6,575,835	2,241	9,550	6,585,385
Notes		126,359	443,978	-	-	443,978
Finance lease liabilities		-	-	18,764	79,976	79,976
Trade payables		375,997	1,318,705	8,750	37,255	1,355,960
Other financial liabilities		7,985	28,768	4,701	19,988	48,756
Total		**2,379,513**	**8,367,286**	**34,456**	**146,769**	**8,514,055**

For the purposes of sensitivity analysis, the currency structure presented above also accounts for intra-Group foreign currency transactions sensitive to changes in foreign exchange rates, which affect the Group's currency risk pursuant to IAS 21 The Effects of Changes in Foreign Exchange Rates with respect to recognition of relevant foreign exchange gains or losses in the Group's net profit or loss.

Apart from currency spots, forwards and swaps, the Group held foreign-currency derivatives, including commodity swaps, commodity options, interest-rate swaps and futures. Depending on the type of derivative, the Group applies the appropriate method of fair value measurement, which also determines the method of calculating the effect of changes of foreign exchange rates on the value of individual derivatives (for more detailed information on the derivative measurement methods see Note 7.24).The tables below, presenting sensitivity of financial instruments to currency risk as at December 31st 2015 and December 31st 2014, also present the effect of currency rate changes on the carrying amounts of the derivative financial instruments.

Currency risk sensitivity analysis as at December 31st 2015, including the effect on financial performance, assuming a 10.675% change of the USD/PLN exchange rate and a 6.9% change of the EUR/PLN exchange rate:

Dec 31 2015	Effect of exchange rate increase/decrease on net profit/loss for the year			
	+10,675%	+6,9%	-10,675%	-6,9%
PLN '000	USD	EUR	USD	EUR
Classes of financial instruments				
Financial assets				
Derivative financial instruments	(58,908)	54,659	59,510	(54,659)
Trade receivables	25,679	1,728	(25,679)	(1,728)
Cash and cash equivalents	13,825	4,827	(13,825)	(4,827)
Notes	29,804	-	(29,804)	-
Other financial assets:	104,250	12,876	(104,250)	(12,876)
Loans advanced to related entities	*83,610*	*-*	*(83,610)*	*-*
Deposits	*3,228*	*12,625*	*(3,228)*	*(12,625)*
Security deposits (margins)	*-*	*219*	*-*	*(219)*
Cash blocked in bank accounts	*11,587*	*-*	*(11,587)*	*-*
Other receivables	*5,825*	*32*	*(5,825)*	*(32)*
Total financial assets	**114,650**	**74,090**	**(114,048)**	**(74,090)**
Financial liabilities				
Borrowings	177,753 (1)	664	(177,753) (1)	(664)
Notes	53,099	-	(53,099)	-
Finance lease liabilities	-	4,755	-	(4,755)
Derivative financial instruments	173,924	(305)	(173,918)	305
Trade payables	86,794	2,353	(86,794)	(2,353)
Other financial liabilities	2,815	2,785	(2,815)	(2,785)
Total financial liabilities	**494,385**	**10,252**	**(494,379)**	**(10,252)**
Total	**(379,735)**	**63,838**	**380,331**	**(63,838)**

(1) The calculation of the effect of an exchange rate change on the balance-sheet item takes into account the effect of cash flow hedge accounting. Assuming a 10.675% change of the USD/PLN exchange rate, the effect of cash flow hedge accounting would potentially lead to a change of PLN (434,990) thousand/PLN 434,990 thousand in the fair value of borrowings. Furthermore, the calculation takes into account the effect of paid front-end arrangement fees (measured at the exchange rate effective on the payment date), reducing financial liabilities under borrowings, which would potentially result in a change of PLN 4,968 thousand/PLN (4,968) thousand in the fair value of borrowings, assuming a 10.675% change of the USD/PLN exchange rate.

The above deviations of carrying amounts in PLN, which are dependent on currency exchange rates, were calculated on the basis of an implied annual change of the exchange rates as at December 31st 2015 by 10.675% (USD/PLN) and 6.9% (EUR/PLN), published by Reuters. This sensitivity analysis has been performed with reference to the balance of instruments held as at December 31st 2015.

Below is presented an analysis of the Company's sensitivity to currency risk as at December 31st 2014, along with the effect on the net profit or loss, assuming a 12.142% increase or decrease in the USD/PLN exchange rate and a 7.2% increase or decrease in the EUR/PLN exchange rate.

Dec 31 2014	Effect of exchange rate increase/decrease on net profit/loss for the year			
	+12.142%	+7.2%	-12.142%	-7.2%
PLN '000	USD	EUR	USD	EUR
Classes of financial instruments				
Financial assets				
Derivative financial instruments	6,099	(307)	(6,099)	307
Trade receivables	26,064	1,559	(26,064)	(1,559)
Cash and cash equivalents	4,097	3,061	(4,097)	(3,061)
Notes	27,858	-	(27,858)	-
Other financial assets:	138,128	447	(138,128)	(447)
Loans advanced to related entities	*112,531*	*433*	*(112,531)*	*(433)*
Deposits	*3,816*	-	*(3,816)*	-
Cash blocked in bank accounts	*21,780*	-	*(21,780)*	-
Other receivables	*1*	*14*	*(1)*	*(14)*
Total financial assets	**202,246**	**4,760**	**(202,246)**	**(4,760)**
Financial liabilities				
Borrowings	307,057 (1)	688	(307,057) (1)	(688)
Notes	53,908	-	(53,908)	-
Finance lease liabilities	-	5,758	-	(5,758)
Derivative financial instruments	185,269	(3,374)	(185,269)	3,374
Trade payables	160,117	2,682	(160,117)	(2,682)
Other financial liabilities	3,493	1,439	(3,493)	(1,439)
Total financial liabilities	**709,844**	**7,193**	**(709,844)**	**(7,193)**
Total	**(507,598)**	**(2,433)**	**507,598**	**2,433**

(1) The calculation of the effect of an exchange rate change on the balance-sheet item takes into account the effect of cash flow hedge accounting. Assuming a 12.142% change of the USD/PLN exchange rate, the effect of cash flow hedge accounting would potentially lead to a change of PLN (498,143) thousand/PLN 498,143 thousand in the fair value of borrowings. Furthermore, the calculation takes into account the effect of paid front-end arrangement fees (measured at the exchange rate effective on the payment date), reducing financial liabilities under borrowings, which would potentially result in a change of PLN 6,762 thousand/PLN (6,762) thousand in the fair value of borrowings, assuming a 12.142% change of the USD/PLN exchange rate.

The above deviations of carrying amounts in PLN, which are dependent on currency exchange rates, were calculated on the basis of an implied annual change of the exchange rates as at December 31st 2014 by 12.142% (USD/PLN) and 7.2% (EUR/PLN), published by Reuters. This sensitivity analysis has been performed with reference to the balance of instruments held as at December 31st 2014. The purpose of taking a different approach to setting the percentage change in exchange rates in 2014 was to better reflect the fluctuations in exchange rates on financial markets.

32.4 Interest rate risk

The Parent is exposed to the risk of changes in cash flows caused by interest rate movements, as certain assets and liabilities held by the Parent have interest income and expense driven by floating interest rates. This position is driven primarily by the investment credit facilities under the 10+ and EFRA Programmes, as well as a financing and refinancing credit facility where the amount of interest is computed by reference to the floating LIBOR USD rate. The Parent manages the interest rate risk within the granted limits using interest rate swaps.

In a long-term perspective, a partial risk mitigation effect was achieved through the choice of a fixed interest rate for a tranche of the term facility contracted to finance the 10+ Programme (credit facility designated in the table as 'Bank Syndicate 3'; see Note 27.1).

Open interest rate contracts as at December 31st 2015:

Type of contract	Period	Notional amount (USD '000)	Company receives	Financial assets (PLN '000)	Financial liabilities (PLN '000)
Interest rate swap (IRS)	Jul 2011–Jan 2018	200,000	6M LIBOR	-	(61,260)
Interest rate swap (IRS)	Jan 2015–Jan 2019	50,000	3M LIBOR	992	(11,003)
			Total	**992**	**(72,263)**

In the listing above, IRS transactions are aggregated according to the currency of the notional amount and the reference rate. The 'Period' column shows the earliest start date and the latest end date of the period for contracts classified in a given group.

Open interest rate contracts as at December 31st 2014:

Type of contract	Period	Notional amount (USD '000)	Company receives	Financial assets (PLN '000)	Financial liabilities (PLN '000)
Interest rate swap (IRS)	Jul 2011–Jan 2018	200,000	6M LIBOR	-	(69,290)
Interest rate swap (IRS)	Jan 2015–Jan 2019	50,000	3M LIBOR	-	(6,194)
			Total	**-**	**(75,484)**

32.4.1 Market risk sensitivity analysis: fluctuations in interest rates

Below is presented an analysis of the Group's sensitivity to interest rate risk as at December 31st 2015, assuming a 1.14% change in interest rates:

Dec 31 2015 PLN '000	Note	Carrying amount	Change +1.14%	Change -1.14%
Classes of financial instruments				
Financial assets				
Derivative financial instruments (1)	28	992	(33,397)	36,285
Cash and cash equivalents	20	859,699	9,801	(9,801)
Other financial assets:		677,978	7,728	(7,728)
Oil and gas extraction facility decommissioning fund	*18*	*31,794*	*362*	*(362)*
Deposits	*18*	*85,519*	*975*	*(975)*
Security deposit	*18*	*3,176*	*36*	*(36)*
Cash earmarked for the EFRA project	*18*	*438,329*	*4,997*	*(4,997)*
Cash for work related to the removal of the MOPU from the YME field	*18*	*108,540*	*1,237*	*(1,237)*
Cash for other capital expenditure commitments	*18*	*10,620*	*121*	*(121)*
Total		**1,538,669**	**(15,868)**	**18,756**
Financial liabilities				
Bank borrowings	27.1	6,481,034	61,685 (2)	(61,685) (1)
Non-bank borrowings	27.2	92,146	1,050	(1,050)
Notes	27.3	218,100	2,486	(2,486)
Finance lease liabilities	27.4	208,028	2,372	(2,372)
Derivative financial instruments (1)	28	72,263	(25,352)	26,330
Total		**7,071,571**	**42,241**	**(41,263)**

(1) Interest rate swap (IRS). The difference between the change in the valuation amount, when the interest rate curve moves up or down 1.14%, arises at the time of calculating and discounting future cash flows (relating to the contract settlement) as at the valuation date. The cash flows are discounted at different interest rates (in the first case the interest rate curve is moved up 1.14%, in the second case the curve is moved down 1.14%).

(2) Net of fixed interest borrowings and paid front-end fees reducing liabilities under borrowings.

Below is presented an analysis of the Company's sensitivity to interest rate risk as at December 31st 2014, assuming a 0.72% change in interest rates:

Dec 31 2014 PLN '000	Note	Carrying amount	Change +0.72%		Change -0.72%	
Classes of financial instruments						
Financial assets						
Cash and cash equivalents	20	348,215	2,507		(2,507)	
Other financial assets:		241,720	1,741		(1,741)	
Oil and gas extraction facility decommissioning fund	*18*	*30,911*	*223*		*(223)*	
Deposits	*18*	*31,432*	*226*		*(226)*	
Security deposits (margins)	*18*	*-*	*-*		*-*	
Cash blocked in bank accounts	*18*	*179,377*	*1,292*		*(1,292)*	
Total		**589,935**	**4,248**		**(4,248)**	
Financial liabilities						
Bank borrowings	27,1	6,215,612	36,963	(1)	(36,963)	(1)
Non-bank borrowings	27,2	102,783	740		(740)	
Notes	27,3	213,479	1,537		(1,537)	
Finance lease liabilities	27,4	131,794	949		(949)	
Derivative financial instruments [2]	28	75,484	(20,063)		20,681	
Total		**6,739,152**	**20,126**		**(19,508)**	

[1] Net of fixed rate borrowings and paid arrangement fees reducing liabilities under borrowings.

[2] Interest rate swap (IRS). The difference between the change in the valuation amount, when the interest rate curve moves up or down 0.72%, arises at the time of calculating and discounting future cash flows (relating to the contract settlement) as at the valuation date. The cash flows are discounted at different interest rates (in the first case the interest rate curve is moved up 0.72%, in the second case the curve is moved down 0.72%).

This sensitivity analysis has been performed with reference to the balance of instruments held as at December 31st 2015 and December 31st 2014. The effect of the interest rate changes on the fair value has been examined assuming that the currency exchange rates remain unchanged. In the case of derivative instruments held as at December 31st 2015, for the purpose of interest rate sensitivity analysis the interest rate curve is moved up or down by the annual historical volatility as at December 31st 2015, calculated based on historical volatility data for the interest rates of interest rate swaps (IRS) with a 6-month interest payment period and 3-year expiry term, published by Reuters. As regards the instruments held as at December 31st 2014, a hypothetical change of reference interest rates (3M LIBOR, 6M LIBOR) was used. The purpose of taking a different approach to setting the percentage change in interest rates in 2014 was to better reflect the fluctuations in interest rates on financial markets.

32.5 Liquidity risk

The liquidity risk management process at the Group consists in monitoring projected cash flows and the portfolio of financial assets and liabilities, matching maturities of the assets and liabilities, analysing working capital, and optimising cash flows within the Group. This process requires that units operating in different business areas closely cooperate in activities undertaken in order to ensure safe and effective allocation of the liquidity.

The majority of the Group's Polish subsidiaries participate in a real cash-pooling arrangement, whereby the Parent manages the structure on an on-going basis to optimise liquidity and interest balances.

In the period covered by the budget, liquidity is monitored on an ongoing basis across the Group as part of the financial risk management. In the mid- and long term, it is monitored as part of the planning process, which helps to develop a long-term financial strategy.

In the area of financial risk, in addition to active management of market risk, the Group observes the following liquidity management rules:

- no margins in derivative financial instrument trading on the OTC market,
- limited possibility of early termination of financial transactions,
- limits for low-liquidity spot financial instruments,
- credit limits for counterparties in financial and trade transactions,
- ensuring adequate quality and diversification of available financing sources,
- internal control processes and organisational efficiency facilitating prompt contingency response.

Contractual maturities of financial liabilities as at December 31st 2015 and December 31st 2014:

Contractual maturities of financial liabilities as at December 31st 2015:

Dec 31 2015 PLN '000	Note	Carrying amount	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Bank borrowings (other than overdraft facilities)	27.1	5,899,405	6,993,805	437,891	1,353,819	132,216	2,797,770	2,272,109
Overdraft facilities	27.1	581,629	581,629	581,629	-	-	-	-
Non-bank borrowings	27.2	92,146	106,994	7,698	7,687	15,586	42,838	33,185
Notes	27.3	218,100	218,100	-	218,100	-	-	-
Finance lease liabilities	27.4	208,028	287,491	25,901	28,747	57,162	141,546	34,135
Trade payables	30	1,232,510	1,232,510	1,232,494	16	-	-	-
Other financial liabilities	30	181,731	181,731	168,498	4,325	6,360	956	1,592
Total		**8,413,549**	**9,602,260**	**2,454,111**	**1,612,694**	**211,324**	**2,983,110**	**2,341,021**

Contractual maturities of financial liabilities as at December 31st 2014:

Dec 31 2014 PLN '000	Note	Carrying amount	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Bank borrowings (other than overdraft facilities)	27.1	5,700,710	6,470,152	394,908	1,596,229	857,460	1,924,878	1,696,677
Overdraft facilities	27.1	514,902	514,902	514,902	-	-	-	-
Non-bank borrowings	27.2	102,783	122,641	3,306	12,343	13,782	47,123	46,087
Notes	27.3	213,479	213,732	-	17,687	35,072	160,973	-
Finance lease liabilities	27.4	131,794	163,404	17,500	17,786	35,441	74,166	18,511
Trade payables	30	1,692,839	1,692,839	1,692,755	84	-	-	-
Other financial liabilities	30	196,844	196,844	183,552	8,754	4,538	-	-
Total		**8,553,351**	**9,374,514**	**2,806,923**	**1,652,883**	**946,293**	**2,207,140**	**1,761,275**

Maturity structure of derivative financial instruments as at December 31st 2015:

Dec 31 2015 PLN '000	Note	Carrying amount*	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Commodity swap	28	140,536	140,559	191,269	(42,405)	(8,305)	-	-
Commodity options		363	363	3	46	314	-	-
Currency forward and spot contracts		13,173	13,875	(629)	6,878	6,815	811	-
Interest rate swap (IRS)		(71,271)	(72,032)	(30,911)	3,946	(20,963)	(25,944)	1,840
Currency swap		(30,773)	(30,915)	(30,915)	-	-	-	-
Total		**52,028**	**51,850**	**128,817**	**(31,535)**	**(22,139)**	**(25,133)**	**1,840**

Maturity structure of derivative financial instruments as at December 31st 2014:

Dec 31 2014 PLN '000	Note	Carrying amount*	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Commodity swap	28	(29,337)	(29,337)	(2,414)	(17,440)	(7,670)	(1,813)	-
Currency forward and spot contracts		(55,829)	(52,648)	(43,928)	(8,720)	-	-	-
Interest rate swap (IRS)		(75,484)	(76,610)	(23,975)	1,629	(20,792)	(33,472)	-
Currency swap		(33,463)	(31,655)	(27,983)	(3,672)	-	-	-
Total		**(194,113)**	**(190,250)**	**(98,300)**	**(28,203)**	**(28,462)**	**(35,285)**	**-**

*Carrying amount (positive fair value of derivative financial instruments plus negative fair value of derivative financial instruments) represents the fair value of derivative financial instruments disclosed in the statement of financial position (excluding CO_2 emission allowance futures purchased to be used for settlement).

32.6 Credit risk

Management of credit risk related to counterparties in financial transactions consists in the verification of creditworthiness of the current and potential counterparties and monitoring of credit exposure against the granted limits.
Credit exposure includes bank deposits and derivatives measurement.

The counterparties must have an appropriate credit rating assigned by leading rating agencies or hold guarantees from institutions meeting the minimum rating requirement. The Group enters into financial transactions with reputable firms with sound credit standing, and diversifies the group of institutions with which it maintains relationship.

As at December 31st 2015 and December 31st 2014, the concentration of credit risk exposure to any single counterparty in financial transactions of the Group did not exceed PLN 839.799 thousand and PLN 284.174 thousand, respectively (or 13.95% and 4.44% of the Parent's equity, respectively). For information on the structure of the Group's borrowings by lender see Note 27.1.

As regards management of counterparty risk in non-financial transactions, all customers who request trading on credit terms are subject to credit assessment, whose results determine the level of possible credit limits. The Parent defines guidelines for managing counterparty risk in non-financial transactions to ensure that appropriate standards of credit analysis and operational security are observed across the entire Group.

As at December 31st 2015 and December 31st 2014, the concentration of credit risk exposure to any single counterparty in trade transactions of the Group did not exceed PLN 163,009 thousand and PLN 141,880 thousand, respectively (or 2.71% and 2.21% of the Parent's equity, respectively).

Credit risk is measured by the maximum exposure to risk of individual classes of financial assets. Carrying amounts of financial assets represent the maximum credit risk exposure.

Maximum financial assets credit risk exposures as at the end of the reporting period:

PLN '000	Note	Dec 31 2015	Dec 31 2014
Derivative financial instruments	28; 31.2	217,179	4,430
Trade receivables	18	1,550,900	1,406,501
Cash and cash equivalents	20	859,699	348,215
Other financial assets	18	818,457	1,332,033
Total	**31.1**	**3,446,235**	**3,091,179**

In the Management Board's opinion, the risk related to non-performing financial assets is reflected in the recognised impairment losses. For information on impairment of financial assets, see Notes 9.4 and 18.1.

For information on concentrations of trade receivables credit risk, see Note 18.1.

For ageing analysis of receivables past due but not impaired, see Note 18.1.

33. Capital management

The objective of the LOTOS Group financial policy is to maintain long-term liquidity, while using an appropriate level of financial leverage to support the achievement of the principal objective of maximising the return on equity for shareholders.

This is achieved through constant effort to develop the desired capital structure at the Group level.

The LOTOS Group uses the debt to equity ratio, calculated as net debt to equity, to monitor its financing structure.

Net debt comprises bank and non-bank borrowings, notes and liabilities under finance leases less cash and cash equivalents and restricted cash earmarked for the implementation of the objectives of the issue of Grupa LOTOS S.A. Series D shares (see Note 18). Equity includes equity attributable to owners of the Parent plus non-controlling interests.

PLN '000	Note	Dec 31 2015	Dec 31 2014
Non-current liabilities			
Bank borrowings	27.1	4,197,008	4,098,225
Non-bank borrowings	27.2	80,966	92,146
Notes	27.3	-	195,892
Finance lease liabilities	27.4	176,486	109,299
Total		**4,454,460**	**4,495,562**
Current liabilities			
Bank borrowings	27.1	2,284,026	2,117,387
Non-bank borrowings	27.2	11,180	10,637
Notes	27.3	218,100	17,587
Finance lease liabilities	27.4	31,542	22,495
Total		**2,544,848**	**2,168,106**
Restricted cash − issue of shares(1)	18	(438,329)	(996,939)
Cash and cash equivalents	20	(859,699)	(348,215)
Net debt		**5,701,280**	**5,318,514**
Equity attributable to owners of the Parent		7,712,060	8,258,288
Non-controlling interests	26	138	175
Total equity		**7,712,198**	**8,258,463**
Net debt to equity		**0.74**	**0.64**

(1) As at December 31st 2015, cash earmarked for the EFRA Project (see issue objectives in Note 18). As at December 31st 2014, cash proceeds from the issue of Series D shares in Grupa LOTOS S.A. were deposited in a separate bank account of the Central Securities Depository of Poland (see Note 21) until the registration of the share capital increase.

34. Carbon dioxide (CO_2) emission allowances

The CO_2 emission allowances for 2013-2020 presented below account for allowances granted pursuant to the Regulations of the Council of Ministers, as well as for other free allowances allocated by the European Commission.

Number of free CO_2 emission allowances for 2013-2020 and actual CO_2 emissions:

in thousand tonnes	2013	2014	2015	2016	2017	2018	2019	2020	Total
Allowances allocated under the National Allocation Plan (1)	1,766	1,688	1,652	1,613	1,576	1,540	1,505	1,461	12,801
Actual CO_2 emissions(2)	1,745	1,875	1,947	-	-	-	-	-	5,567

(1) The number of free CO_2 allowances in 2013–2020 as part of the National Allocation Plan (NAP) under the Regulation of the Council of Ministers of March 31st 2014 (Dz.U. of 2014, item 439) and the Regulation of the Council of Ministers of April 8th 2014 (Dz.U. of 2014, item 472), containing a list of installations covered by the greenhouse gas emission allowance trading system along with the number of allowances allocated to them. The figures also account for additional free emission allowances from the European Commission reserve, allocated in connection with the expansion of the refinery's production capacities following the introduction of natural gas to produce hydrogen.

(2) (CO_2) emissions, calculated based on the production data for the installations covered by the emission trading scheme. The data for 2015 was verified in accordance with Art. 59 of the Act on Trading in Greenhouse Gas Emission Allowances of April 28th 2011.

As at December 31st 2015, considering the proposed amount of allowances to be allocated under the European Union Emissions Trading Scheme for 2015 and the actual volume of emissions, the Group reported a deficit of allocated CO_2 emission allowances, and therefore recognised a PLN 1,059 thousand provision as at December 31st 2015 (December 31st 2014: PLN 2,784 thousand). The PLN 1,059 thousand effect of the provision on EBIT (2014: PLN 1,257 thousand) is presented under Other expenses (see Note 9.4).

For information on the risk related to prices of CO_2 emission allowances, see Note 32.2.

35. Contingent liabilities and assets

35.1 Material court, arbitration or administrative proceedings and other risks of the Parent or its subsidiaries

Material court proceedings to which the Parent is a party

Proceedings brought by PETROECCO JV Sp. z o.o. seeking compensation for losses incurred as a result of monopolistic practices

In May 2001, PETROECCO JV Sp. z o.o. brought an action against the Company seeking the court's decision awarding it PLN 6,975 thousand (plus statutory interest from May 1st 1999) as compensation for losses incurred as a result of the Company's monopolistic practices favouring some customers by fulfilling their orders to a disproportionately larger extent than the orders of PETROECCO JV Sp. z o.o. The alleged use of the monopolistic practices by the Company was confirmed by a decision of the Anti-Monopoly Office of September 26th 1996, in which the Office ordered the Company to abandon such practices. The Company was also ordered to abandon the monopolistic practices pursuant to a decision of October 22nd 1997 issued by the Provincial Court of Warsaw – the Anti-Monopoly Court.

However, following the Company's objection referring to the statute of limitation, this decision was overruled in 2003 and remanded for re-examination. The Company questioned whether any damage had been incurred by PETROECCO JV Sp. z o.o., the amount of the alleged damage, and the existence of the cause and effect relationship between the monopolistic practices and the damage. As a result of further hearings, after evidence was taken based on an opinion of the expert witness of Instytut Nafty i Gazu (Oil and Gas Institute) of Kraków, which was favourable to Grupa LOTOS S.A., in 2013 the action filed by PETROECCO J. Sp. z o.o. was dismissed by the Court in its entirety. In January 2015, PETROECCO JV Sp. z o.o. filed a cassation appeal against the ruling of the court of second instance, again favourable to the Company. The Supreme Court refused to examine the cassation complaint filed by PETROECCO JV Sp. z o.o. As at the date of approval of these financial statements, the case is pending.

Assuming that there was little risk of an unfavourable outcome of the case, Grupa LOTOS S.A. did not recognise any provisions for potential liabilities related to the case.

Administrative and administrative court proceedings initiated upon a motion to declare invalid a decision expropriating certain property for the benefit of the State Treasury

The Company is a party to the proceedings against the State Treasury for declaring invalid the expropriation decision, based on which the Company acquired the perpetual usufruct right to land and ownership rights to buildings erected thereon.

The proceedings cover real estate with a total area of 87,000 m², where a part of the tank farm of the Refinery's wastewater treatment plant is erected. The proceedings were instigated on a motion filed by former owners of the real estate, which calls for declaring invalid the expropriation decision issued by the President of the City of Gdańsk on June 14th 1983 in its entirety or, failing that, declaring it invalid with respect to the amount of compensation paid. In September 2014, the Gdańsk Province Governor issued a decision refusing to declare invalid the expropriation decision the former owners appealed against. Currently, the case is being reviewed by the Minister of Infrastructure. As at the date of approval of these financial statements, the decision is not final.

The Company believes the risk of an adverse conclusion of the proceedings to be low and without any material effect on these financial statements.

Tax settlements

In 2015, the Company's VAT settlements for 2010–2011 were subject to two inspections carried out by tax inspection authorities. On June 23rd 2015, the Company received reports on the inspection of its tax ledgers as part of the proceedings. The Company submitted reservations concerning the reports. On September 30th 2015, the Company received two decisions issued by the Director of the Tax Audit Office in Bydgoszcz, in which it assessed the VAT payable by the Company for the period from January to December 2010 and from January to December 2011, identifying VAT arrears of PLN 48.4m for 2010 and PLN 112.5m for 2011. In these decisions, the Director of the Tax Audit Office stated that certain transactions with two of the Company's trade partners involved fraudulent tax practices, arguing that the Company failed to exercise due care in executing transactions with those trade partners and that it should at least have been aware that the transactions were connected to and resulted from a tax fraud committed at an earlier stage, which precluded the Company from making any VAT deductions. Having reviewed the decisions, the Company dismissed the allegations of the Director of the Tax Audit Office as entirely groundless and on October 14th 2015 appealed them to the Director of the Tax Chamber in Gdańsk. Director or the Tax Chamber in Gdańsk upheld the decision of the Director of the Tax Audit Office in Bydgoszcz where it referred to the period January–December 2010. The Company lodged a complaint against the decision of the Director of the Tax Chamber in Gdańsk with the Provincial Administrative Court of Gdańsk.

In connection with these decisions, a VAT expense of PLN 160.9m (see Note 9.4) and a cost related to interest on the tax arrears of PLN 77.9m (see Note 9.6) were recognised in the statement of comprehensive income for 2015.

Court proceedings instigated by or against companies of the LOTOS Group

Proceedings involving a LOTOS Petrobaltic Group company

Agreement signed by LOTOS Exploration and Production Norge AS

LOTOS Exploration and Production Norge AS ("LOTOS E&P Norge AS") was a party to proceedings held before an arbitration court in Norway in connection with claims filed by Single Buoy Moorings Inc. ("SBM"), the supplier of a MOPU (Mobile Offshore Production Unit) for the operation of the YME field, against Talisman Energy Norge AS, the operator of the YME field ("Talisman", the "Operator") and the other YME licence holders. The share of SBM's claims attributable to LOTOS E&P Norge AS was 20%.

In March 2013, Talisman Energy Norge AS ("Talisman", the then operator of the YME field) and Single Buoy Moorings Inc. ("SBM", owner of the MOPU) announced that an agreement was reached to terminate all existing contracts and agreements executed by the parties in connection with the YME project and remove the defective MOPU from the YME field. Under the agreement, SBM paid USD 470m to the consortium members, and Talisman Energy, on behalf of the licence holders, agreed to make the necessary preparations and remove the platform from the field. SBM agreed to be responsible for towing and scrapping the unit onshore. Following completion of certain works, the ownership of elements of the YME field in situ subsea infrastructure delivered by SBM will be transferred to the consortium members, who will be required to perform reclamation (and disassembly) activities related to the infrastructure. The parties will cover the costs of decommissioning work as set out in the agreement. The agreement was approved by all partners in the YME licence, including LOTOS E&P Norge AS. The agreement provided for the terms of termination of all pending arbitration proceedings (between SBM and Talisman and the other YME licence holders).

In accordance with the provisions of the agreement with SBM, USD 12.22m was paid to LOTOS E&P Norge AS's bank account in March 2013. The payment represented a part of LOTOS E&P Norge AS's 20% interest in the amount of USD 470m, paid by SBM to the consortium members. The balance of the Group's share in the amount due to the consortium members under the agreement, that is USD 81.78m, was transferred to the escrow account of the YME project, to be gradually released to finance the removal of the MOPU and related infrastructure from the field, in accordance the agreement. In December 2013, Talisman and Excalibur Maritime Contractors ("EMC") signed an agreement to remove the defective MOPU, and in February 2014 Talisman informed the Group of the execution of an agreement between EMC and Single Buoy Moorings Inc. ("SBM") for the towing of the MOPU. In June 2014, the Group was notified that SBM and Veolia Environmental Services concluded an agreement on the scrapping of the platform.

The MOPU is planned to be removed from the YME field in mid-2016 (June/July).

As at December 31st 2015, available cash deposited in the escrow account, denominated in the presentation currency, was recognised in the amount of PLN 108,540 thousand under *Other assets* in the statement of financial position. The available provision for future costs of removal of the MOPU and disassembly of the related fixed assets was recognised in the amount of PLN 39,087 thousand under the current portion of *Other liabilities and provisions*. As the amount of the provision is the Management Board's best estimate as at the reporting date, the assumptions may be subject to reasonable changes that may in the future cause the need to remeasure the provisions for future costs of decommissioning of the platform.

Proceedings involving LOTOS Petrobaltic S.A.

In March 2013, LOTOS Petrobaltic S.A. received a payment notice for approximately GBP 6.5m from AGR Subsea Ltd. ("AGR"). The claim concerns AGR's remuneration for the performance of a contract to unearth the legs of the Baltic Beta platform. LOTOS Petrobaltic S.A. questioned the amount demanded by AGR as remuneration for the services and has proposed to pay PLN 16m (the equivalent of GBP 3.2m, translated at the mid rate quoted by the National Bank of Poland for December 31st 2012) to AGR under the claim. The dispute concerns the nature of the contract, the reasons of its delayed and incomplete performance, as well as the grounds for LOTOS Petrobaltic S.A. to terminate the contract and demand reimbursement of costs incurred by LOTOS Petrobaltic S.A. to hire replacement contractors to complete the work. AGR Subsea Ltd. did not accept the settlement and brought the case to court. The dispute was referred to mediation by virtue of the court's decision, which was accepted by LOTOS Petrobaltic S.A. The mediation started in April 2014 and was extended a number of times. By virtue of the Regional Court's decision of February 2016, this case and the case instigated based on the suit filed by LOTOS Petrobaltic against AGR (see below) were joined to be examined together.

In October 2013, LOTOS Petrobaltic S.A. filed a claim against AGR to the Regional Court of Gdańsk for payment of GBP 5.6m to cover the costs of hiring the replacement contractors. In March 2014, the Regional Court of Gdańsk, 9th Commercial Division, in writ-of-payment proceedings, issued an order of payment. AGR filed a complaint against the order. In April 2015, the court referred the case to mediation, to which LOTOS Petrobaltic S.A. did not agree. As at the date of issue of these consolidated financial statements, talks are in progress to settle the dispute amicably. By virtue of the Regional Court's decision of February 2016, the case will be examined jointly with the case brought to court by AGR against LOTOS Petrobaltic (see above).

As at December 31st 2015 and 2014, no liability towards AGR was recognised by the Group in these consolidated financial statements.

Given the complex nature of the dispute, it is difficult to assess the risk arising in relation to the court proceedings, because if the judgement is unfavourable to one of the parties, that party may have to incur additional expenses related to the proceedings, including costs of legal representation and costs of enforcement.

Proceedings involving other companies of the LOTOS Group

WANDEKO vs. LOTOS Paliwa Sp. z o.o.

LOTOS Paliwa Sp. z o.o. was a party to court proceedings instigated by Mr Andrzej Wójcik conducting business as WANDEKO. On July 28th 2015, the Court issued a judgment dismissing Mr Wójcik's action in its entirety. As at the issue date of these consolidated financial statements, the judgment was not final. As at December 31st 2015, LOTOS Paliwa Sp. z o.o. recognised a PLN 15,318 thousand provision related to that case (see Note 30.1).

Proceedings involving LOTOS Gaz S.A. w likwidacji (in liquidation)

In 2009, LOTOS Gaz S.A. filed its claims in the bankruptcy liquidation proceedings against KRAK − GAZ sp. z o.o. In March 2012, the bankruptcy court issued a decision recognising the claims of LOTOS Gaz S.A. w likwidacji (in liquidation) totalling PLN 23,695 thousand, and acknowledged that claims of PLN 21,132 thousand were secured with mortgages. In accordance with an approved separate plan for the distribution of funds obtained through the bankruptcy proceedings of KRAK − GAZ Sp. z o.o., LOTOS Gaz S.A. w likwidacji (in liquidation) recovered a portion of its claims, in the amount of PLN 4,567 thousand. As at the date of approval of these consolidated financial statements, the bankruptcy proceedings are pending.

35.2 Other contingent liabilities

- On July 17th 2015, the Company deposited two promissory notes issued by the Company for up to PLN 40,000 thousand and PLN 200,000 thousand, respectively, with the Head of the Customs Office in Gdańsk. The promissory notes were deposited as lump-sum security for future liabilities related to excise duty in the amount of PLN 800,000 thousand, valid until August 19th 2017. The promissory note for PLN 240,000 thousand deposited as security for excise duty and valid until August 19th 2015 was returned to the Company on September 30th 2015.

- An unconditional and irrevocable guarantee issued by LOTOS Petrobaltic S.A. for the benefit of the government of Norway on June 17th 2008, concerning the activities of LOTOS E&P Norge AS related to its exploration and production operations on the Norwegian Continental Shelf, was effective as at December 31st 2015 and December 31st 2014. In the guarantee, LOTOS Petrobaltic S.A. undertook to assume any financial liabilities which may arise in connection with the operations of LOTOS E&P Norge AS on the Norwegian Continental Shelf, consisting in exploration for and extraction of the natural resources from the sea bottom, including their storage and transport using means of transport other than ships.

Contingent liabilities also include future investment commitments presented in Notes 13.3 and 15.3.

36. Related parties

36.1 Transactions with related entities in which the Group holds shares

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
Equity-accounted joint ventures		
Sale	200,263	456,244
Purchases	117	510

PLN '000	Note	Dec 31 2015	Dec 31 2014
Equity-accounted joint ventures			
Receivables	18	12,219	23., 18

In 2015 and 2014, the Group traded primarily with LOTOS-Air BP Polska Sp. z o.o. The transactions involved sale of aviation fuel. The aggregate value of these transactions executed in 2015 was PLN 198,816 thousand (2014: PLN 455,578 thousand). As at December 31st 2015, the balance of outstanding receivables under these transactions was PLN 12,219 thousand (December 31st 2014: PLN 23,291 thousand).

For general information on joint ventures in which the Group holds interests see Note 2, and for key information on equity-accounted joint ventures, see Note 16.

36.2 Entity having control of the Group

As at December 31st 2015 and December 31st 2014, the State Treasury held a 53.19% interest in Grupa LOTOS S.A. In 2014 and 2015, no transactions were concluded between Grupa LOTOS S.A. and the State Treasury.

36.2.1 Transactions with related entities of which the State Treasury has control, joint control or significant influence

In 2015, the Group executed transactions with parties related to it through the State Treasury. The aggregate value of the transactions was material. They were concluded at arm's length in the course of the Group's regular business activities and involved mainly sale of fuels, sale and purchase of storage services, sale and purchase of transport services, purchase of electricity, natural gas and other fuels.

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
Sale	335,843	640,112
Purchases	1,757,779	1,447,552

PLN '000	Dec 31 2015	Dec 31 2014
Receivables	27,859	27,205
Liabilities	130,356	134,198

36.3 Remuneration of members of the Management and Supervisory Boards, along with information on loans and other similar benefits granted to members of the management and supervisory staff

The remuneration paid to members of the Company's Management and Supervisory Boards was as follows:

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
Management Board		
Short-term employee benefits (salaries), including:	1,183	1,346
- length-of-service awards (jubilee benefits)	-	57
Management Board – subsidiaries (1)		
Short-term employee benefits (salaries and wages)	3,631	3,646
Supervisory Board		
Short-term employee benefits (salaries and wages)	252	228
Total (2)	**5,066**	**5,220**

(1) Remuneration paid to members of the Company's Management Board for serving in corporate bodies of direct and indirect subsidiaries.
(2) The amount reflects changes in the composition of the Company's Supervisory Board.

Other employee benefits

PLN '000	Dec 31 2015	Dec 31 2014
Management Board		
Post-employment benefits, length-of-service awards and other benefits	654	631
Current liabilities under annual bonus (1)	311	156
Total	**965**	**787**

(1) Pursuant to the Act on Remunerating Persons Who Manage Certain Legal Entities (the Public Sector Salary Cap Act).

In 2015 and 2014, the Group did not enter into any material transactions with any members of the Management Board or Supervisory Board of the Company, did not advance any loans, make any advance payments, issue any guarantees to or conclude any other agreements with any Management Board or Supervisory Board members which would be advanced, made, issued or concluded otherwise than on an arm's length basis or which would have a material bearing on these consolidated financial statements.

Based on representations submitted by members of the Company's Management and Supervisory Boards, in 2014−2015 Grupa LOTOS S.A. was not aware of any transactions concluded with the Company or a company of the LOTOS Group by the spouses, relatives, or relatives by affinity in the direct line up to the second degree, of the members of the Management and Supervisory Boards or persons related to them through guardianship or adoption or other persons with whom they have personal relationships.

36.4 Remuneration paid or payable to other members of key management staff

Remuneration paid to members of key management staff (other than members of the Management Board of Grupa LOTOS S.A.)

PLN '000	Year ended Dec 31 2015	Year ended Dec 31 2014
Short-term employee benefits (salaries), including:	26,032	26,918
- annual bonus paid	*3,339* (1)	*3,331* (2)
- length-of-service award paid	*777*	-

(1) Remuneration paid in 2015 on account of annual bonus for 2014.
(2) Remuneration paid in 2014 on account of annual bonus for 2013.

Other employee benefits

PLN '000	Dec 31 2015	Dec 31 2014
Post-employment benefits, length-of-service awards and other benefits	11,903	12,190
Current liabilities under annual bonus	7,171	3,875
Loans and other similar benefits	26	31
Total	**19,100**	**16,096**

In 2015, Grupa LOTOS S.A. did not advance any loans to its key management personnel (2014: PLN 30 thousand).

36.5 Transactions with related parties of members of the Management Board and the Supervisory Board

In 2015, the Group did not execute any material transactions with parties related to it through members of the Supervisory Board of Grupa LOTOS S.A. (2014: PLN 160,176 thousand).

In 2014 and 2015, the Group did not execute any material transactions with parties related to it through members of the Management Board of Grupa LOTOS S.A.

APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS

These consolidated financial statements were authorised for issue by the Management Board on March 2nd 2016.

Signatures of the Management Board members and the person responsible for keeping the accounting books of Grupa LOTOS S.A.

President of the Management Board,
Chief Executive Officer

Paweł Olechnowicz

Vice-President of the Management Board,
Chief Financial Officer

Mariusz Machajewski

Vice-President of the Management Board, Chief Exploration and Production Officer

Zbigniew Paszkowicz

Vice-President of the Management Board,
Chief Strategy and Development Officer

Marek Sokołowski

Vice-President of the Management Board,
Chief Refining and Marketing Officer

Maciej Szozda

Chief Accountant

Tomasz Południewski