32. Objectives and policies of financial risk management

The Group is exposed to financial risks, including:

- market risk (risk related to prices of raw materials and petroleum products, risk related to prices of CO_2 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,
- maximise the result on market risk management within the assumed risk level limits,
- 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 the underlying position and 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 2014, 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 raw materials and petroleum products

The Group considers risk related to prices of raw materials 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 feedstock (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.

To secure petroleum product prices for future deliveries to customers, the Group has implemented a system whereby the risk may be transferred from customers to the Group. This requires simultaneous execution of appropriate derivative transactions and application of procedures ensuring credit and operational security.

As part of the activities described above, in 2014, in connection with its sale of bitumen components at fixed prices, the Group entered into commodity swap contracts for 2014–2017, which enabled it to retain its original price risk profile. The swap contracts concluded in that period were settled partly in the year when they were entered into, and partly in the coming years.

Open commodity swaps as at December 31st 2014:

				Fair value (PLN '000)	
Type of contract	**Underlying index**	**Valuation period**	**Amount in tonnes in the valuation period**	**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 raw materials and petroleum products and arising in connection with the sale of bitumen components at fixed prices.

Open commodity swaps as at December 31st 2013:

				Fair value (PLN '000)	
Type of contract	**Underlying index**	**Valuation period**	**Amount in tonnes in the valuation period**	**Financial assets**	**Financial liabilities**
Commodity swap	3.5 PCT Barges FOB Rotterdam	Mar–Oct 2014	20,989	736	-
Total				**736**	**-**

The above swap transactions for a total of 20,989 tonnes based on the 3.5 PCT Barges FOB Rotterdam liquid index in the period from March to October 2014 were entered into to reverse the risk profile relating to the prices of raw materials and petroleum products and arising in connection with the sale of bitumen components at fixed prices.

The 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 raw materials 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 raw materials and petroleum products as at December 31st 2014 and December 31st 2013, assuming a price change of +/- 34.22% and +/- 10%, respectively:

			Dec 31 2014 Change			Dec 31 2013 Change
PLN '000	**Carrying amount**	**+34,22%**	**-34.22%**	**Carrying amount**	**+10%**	**-10%**
Financial assets [1]	-	-	-	736	3,695	(3,695)
Financial liabilities [1]	(29,338)	15,325	(15,325)	-	-	-
Total	**(29,338)**	**15,325**	**(15,325)**	**736**	**3,695**	**(3,695)**

[1] Commodity swaps.

This sensitivity analysis has been performed with reference to the instruments held as at December 31st 2014 and December 31st 2013. 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 transactions open at December 31st 2014 are based, posted on the SuperDerivatives website. For the instruments held as at December 31st 2013, the calculation is based on a hypothetical +/- 10% price change. The effect of the underlying index price changes on the fair value has been examined assuming that the currency exchange rates remain unchanged. The purpose of taking a different approach to setting the percentage deviation of prices in 2014 was to better reflect the fluctuations in market prices of raw materials and petroleum products as at December 31st 2014.

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 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.

As at December 31st 2013, the deficit of allowances in the 2013–2020 trading period (Phase III) was 1,209,102 tonnes. Taking into account derivative transactions for a total of 1,696,000 tonnes, however, the Parent held surplus emissions allowances for 486,898 tonnes.

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 2014 and December 31st 2013:

Open CO_2 allowances contracts as at December 31st 2014:

				Fair value (PLN '000)*	
Type of contract	**Contract settlement period**	**Number of allowances in the period**	**Phase**	**Financial assets**	**Financial liabilities**
Futures EUA	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.

Open CO_2 allowances contracts as at December 31st 2013:

				Fair value (PLN '000)*	
Type of contract	**Contract settlement period**	**Number of allowances in the period**	**Phase**	**Financial assets**	**Financial liabilities**
Futures EUA	Dec 2014–Dec 2017	1,696,000	Phase III	1,182	(5,230)
		Total		**1,182**	**(5,230)**

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

For information on CO_2 emission allowances, see Note 34 <http://raportroczny.lotos.pl/en/financial-information/consolidated-financial-statements-for-2014/notes-to-the-financial-statements/34.-carbon-dioxide-co2-emission-allowances> .

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

As at December 31st 2014 and December 31st 2013, 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 CO_2 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 its 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 2014 and December 31st 2013.

32.3 Currency risk

The Group manages currency risk in line with the assumptions stipulated in The Strategy of Currency Risk Management at Grupa LOTOS S.A. The exposure management horizon is linked with the budget horizon, which varies from three to five consecutive quarters depending on the time of the year. In its operations the Group is exposed to currency risks related to:

- trading in raw materials, petroleum products and other commodities,
- 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.

The Group actively manages its currency exposure within defined 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).

Each currency swap comprises a pair of transactions, which in this analysis are assigned to purchase or sale under currency swap.

Open currency contracts as at December 31st 2014:

					Fair value (PLN '000)	
Type of contract	Purchase/sale	Contract settlement period	Currency pair (base/quote)	Amount in base currency ('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-15	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-15	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)**

Open currency contracts as at December 31st 2013:

					Fair value (PLN '000)	
Type of contract	Purchase/sale	Contract settlement period	Currency pair (base/quote)	Amount in base currency ('000)	Financial assets	Financial liabilities
Currency spot	Purchase	Jan 2014	USD/PLN	21,000	-	(125)
Currency spot	Purchase	Jan 2014	EUR/PLN	1,500	-	(4)
Currency forward	Purchase	Jan–Nov 2014	USD/PLN	20,000	-	(783)
Currency forward	Purchase	Jan 2014	EUR/PLN	4,700	-	(105)
Currency forward	Sale	Mar–Oct 2014	USD/PLN	(169,000)	34,924	-
Currency swap	Purchase	Jan–Nov 2014	USD/PLN	25,000	-	(845)
Currency swap	Purchase	Jan 2014	EUR/USD	1,850	-	(18)
Currency swap	Sale	Jan–Dec 2014	USD/PLN	(393,450)	38,275	-
Currency swap	Sale	Jan 2014	EUR/USD	(7,500)	-	(10)
				Total	**73,199**	**(1,890)**

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 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 blocked in bank accounts	*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**

Currency structure of selected financial instruments as at December 31st 2013:

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		121,143	364,884	10,922	45,112	409,996
Cash and cash equivalents		23,338	70,277	8,492	28,635	98,912
Notes		59,268	178,516	-	-	178,516
Other financial assets:		436,078	1,313,611	9,976	41,376	1,354,987
Loans advanced to related entities		*361,974*	*1,090,321*	*7,208*	*29,895*	*1,120,216*
Deposits		*3,105*	*9,352*	*603*	*2,501*	*11,853*
Security deposit (margin)		-	-	*2,150*	*8,917*	*8,917*
Cash blocked in bank accounts	*18*	*70,999*	*213,938*	-	-	*213,938*
Other receivables		-	-	*15*	*63*	*63*
Total		**639,827**	**1,927,288**	**29,390**	**115,123**	**2,042,411**
Financial liabilities						
Borrowings		2,096,295	6,320,969	1,180	4,892	6,325,861

Notes	125,211	377,210	-	-	377,210
Finance lease liabilities	-	-	21,259	88,164	88,164
Trade payables	641,265	1,931,493	12,510	50,877	1,982,370
Other financial liabilities	9,240	27,829	3,909	16,211	44,040
Total	**2,872,011**	**8,657,501**	**38,858**	**160,144**	**8,817,645**

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 the instruments listed above, the Group held foreign-currency derivatives, including commodity swaps, interest-rate swaps, futures, as well as spot contracts, forwards and currency swaps. 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 7.25).The tables below, presenting sensitivity of financial instruments to currency risk as at December 31st 2014 and December 31st 2013, also present the effect of currency rate changes on the carrying amounts of the derivative financial instruments.

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.

	Effect of exchange rate increase/decrease on net profit/loss for the year			
	+12,142%	**+7,2%**	**-12.142%**	**-7.2%**
Dec 31 2014 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] 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.

Below is presented an analysis of the Company's sensitivity to currency risk as at December 31st 2013, along with the effect on the net profit or loss, assuming a 4% increase or decrease in the USD/PLN and EUR/PLN exchange rates.

Dec 31 2013 PLN '000	Effect of exchange rate increase/decrease on net profit/loss for the year			
	+4%	+4%	-4%	-4%
	USD	EUR	USD	EUR
Classes of financial instruments				
Financial assets				
Derivative financial instruments	(75,226)	(41)	75,226	41
Trade receivables	14,595	1,804	(14,595)	(1,804)
Cash and cash equivalents	2,811	1,145	(2,811)	(1,145)
Notes	7,141	-	(7,141)	-
Other financial assets:	52,545	1,656	(52,545)	(1,656)
Loans advanced to related entities	*43,613*	*1,196*	*(43,613)*	*(1,196)*
Deposits	*374*	*100*	*(374)*	*(100)*
Security deposits (margins)	-	*357*	-	*(357)*
Cash blocked in bank accounts	*8,558*	-	*(8,558)*	-
Other receivables	-	*3*	-	*(3)*
Total financial assets	**1,866**	**4,564**	**(1,866)**	**(4,564)**
Financial liabilities				
Borrowings	96,997 (1)	196	(96,997) (1)	(196)
Notes	15,088	-	(15,088)	-
Finance lease liabilities	-	3,527	-	(3,527)
Derivative financial instruments	(13,591)	(132)	13,591	132
Trade payables	77,260	2,035	(77,260)	(2,035)
Other financial liabilities	1,113	648	(1,113)	(648)
Total financial liabilities	**176,867**	**6,274**	**(176,867)**	**(6,274)**
Total	**(175,001)**	**(1,710)**	**175,001**	**1,710**

(1) 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 4% change of the USD/PLN exchange rate, the effect of cash flow hedge accounting would potentially lead to a change of PLN (158,436) thousand/PLN 158,436 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 2,593 thousand/PLN (2,593) thousand in the fair value of borrowings, assuming a 4% 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 a hypothetical 4% change of the exchange rates. This sensitivity analysis has been performed with reference to the balance of instruments held as at December 31st 2013.

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 expected repayment schedules under the credit facilities obtained to finance and refinance stocks and to finance investments under the 10+ Programme, as well as the amount of interest computed with 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 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)**

Open interest rate contracts as at December 31st 2013:

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	-	(70,543)
Interest rate swap (IRS)	Jan 2015–Jan 2019	50,000	3M LIBOR	-	(1,720)
			Total	**-**	**(72,263)**

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 2014, assuming a +/- 0.72% change in interest rates:

Dec 31 2014 PLN '000	Note	Carrying amount	Change	
			+0,72%	-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)
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)
Loans	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%).

Below is presented an analysis of the Company's sensitivity to interest rate risk as at December 31st 2013, assuming a +/-0.2% change in interest rates:

Dec 31 2013 PLN '000	Note	Carrying amount	Change	
			+0,2%	-0.2%
Classes of financial instruments				
Financial assets				
Cash and cash equivalents	20	495,839	992	(992)
Other financial assets:		284,426	569	(569)
Oil and gas extraction facility decommissioning fund	*18*	*29,866*	*60*	*(60)*
Deposits	*18*	*29,593*	*59*	*(59)*
Security deposits (margins)	*18*	*11,029*	*22*	*(22)*

Cash blocked in bank accounts	*18*	*213,938*	*428*	*(428)*
Total		**780,265**	**1,561**	**(1,561)**
Financial liabilities				
Bank borrowings	27.1	5,851,809	9,642 (1)	(9,642) (1)
Loans	27.2	10,306	21	(21)
Notes	27.3	198,240	396	(396)
Finance lease liabilities	27.4	151,031	302	(302)
Derivative financial instruments (2)	28	72,263	(6,017)	6,081
Total		**6,283,649**	**4,344**	**(4,280)**

(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 0.2%, 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 0.2%, in the second case the curve is moved down 0.2%).

This sensitivity analysis has been performed with reference to the balance of instruments held as at December 31st 2014 and December 31st 2013. 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 2014, 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 2014, 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 2013, 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 2014 and December 31st 2013:

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
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	-	-	-	-
Loans	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**

Contractual maturities of financial liabilities as at December 31st 2013:

Dec 31 2013 (restated) PLN '000	Note	Carrying amount	Contractual cash flows	Up to 6 months	6–12 months	1–2 years	2–5 years	Over 5 years
Borrowings (other than overdraft facilities)	27.1	5,352,895	6,148,523	256,245	1,276,268	604,337	1,967,022	2,044,651
Overdraft facilities	27.1	498,914	498,914	498,914	-	-	-	-
Loans	27.2	10,306	10,698	3,769	3,519	1,084	2,326	-
Notes	27.3	198,240	198,485	-	15,060	15,060	168,365	-
Finance lease liabilities	27.4	151,031	191,646	18,032	16,962	33,213	89,623	33,816
Trade payables	30	2,395,237	2,395,237	2,393,681	1,556	-	-	-
Other financial liabilities	30	189,729	189,729	120,615	68,879	235	-	-
Total		**8,796,352**	**9,633,232**	**3,291,256**	**1,382,244**	**653,929**	**2,227,336**	**2,078,467**

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	28	(55,829)	(52,648)	(43,928)	(8,720)	-	-	-
Interest rate swap (IRS)	28	(75,484)	(76,610)	(23,975)	1,629	(20,792)	(33,472)	-
Currency swap	28	(33,463)	(31,655)	(27,983)	(3,672)	-	-	-
Total		**(194,113)**	**(190,250)**	**(98,300)**	**(28,203)**	**(28,462)**	**(35,285)**	**-**

Maturity structure of derivative financial instruments as at December 31st 2013:

Dec 31 2013 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	736	736	409	327	-	-	-
Currency forward and spot contracts	28	33,907	41,180	24,229	16,951	-	-	-
Interest rate swap (IRS)	28	(72,263)	(73,301)	(20,446)	1,055	(17,772)	(33,866)	(2,272)
Currency swap	28	37,402	43,863	29,416	14,447	-	-	-
Total		**(218)**	**12,478**	**33,608**	**32,780**	**(17,772)**	**(33,866)**	**(2,272)**

* Carrying amount (positive fair value of derivative financial instruments less 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 2014 and December 31st 2013, the concentration of credit risk exposure to any single counterparty in financial transactions of the Group did not exceed PLN 284.174 thousand and PLN 249.010 thousand, respectively (i.e. 4.44% and 3.49% of the Parent's equity). 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 2014 and December 31st 2013, the concentration of credit risk exposure to any single counterparty in trade transactions of the Group did not exceed PLN 141,880 thousand and PLN 161,066 thousand, respectively (i.e. 2.21% and 2.26% of the Parent's equity).

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 2014	Dec 31 2013 (restated)
Derivative financial instruments	28; 31.2	4,430	73,935
Trade receivables	18	1,406,501	1,591,649
Cash and cash equivalents	20	348,215	495,839
Other financial assets	31.1	1,332,033	391,633
Total	**31.1**	**3,091,179**	**2,553,056**

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.