

42. Financial instruments

Description of financial instruments

Financial assets and liabilities held for trading

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. Financial assets and liabilities held for trading include the following types of derivatives: swaps, futures, forwards, options, interest-rate swaps, forward rate agreement.

Fair value of commodity swaps is established by reference to future 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 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 futures contracts for carbon dioxide (CO₂) allowances (EUA, CER) is established by reference to the difference between the market price quoted by the Intercontinental Exchange (ICE) for the valuation date and the transaction price (Level 1 in the fair value hierarchy).

Fair value of spots and currency forwards 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 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 FRAs 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. This is considered Level 2 in the fair value hierarchy.

Financial assets available for sale

Non-current financial assets available for sale measured at fair value as at December 31st 2011 and December 31st 2010 include mainly shares and equity interests for which there is no active market.

Loans advanced and receivables

On September 23rd 2003 and April 8th 2004, Grupa LOTOS S.A. and Rafineria Nafty GLIMAR S.A. signed loan agreements for the financing of operating and investing activities, including the Glimar Hydrocomplex project, for a total amount of PLN 90m. By December 31st 2004, Grupa LOTOS S.A. had advanced PLN 48m to Rafineria Nafty GLIMAR S.A. under these agreements. Additionally, in connection with the Letter of Comfort executed by Grupa LOTOS S.A. on February 12th 2004 for the benefit of Bank Przemysłowo-Handlowy S.A., the Company undertook commitments relating to the co-financing of the Glimar Hydrocomplex project and maintaining appropriate financial standing of Rafineria Nafty GLIMAR S.A. In the opinion of the Company's Management Board, these commitments do not represent financial liabilities as at the balance-sheet date.

As at December 31st 2011 and December 31st 2010, the assets under loans advanced were fully covered by an impairment charge.

Financial liabilities at amortised cost

Financial liabilities at amortised cost include bank borrowings, overdraft facilities and liabilities under finance lease.

None of the following economic events or situations requiring disclosure occurred at the Group during the financial year ended December 31st 2011:

- The Group did not reclassify any financial assets (IFRS 7, paragraph 12);
- No collateral was established to the benefit of the Group on any class of assets, which would result in credit enhancements (IFRS 7, paragraph 15);
- The Group did not issue any instrument that contains both the liability and equity component (IFRS 7, paragraph 17);

- The Group met all contractual provisions (IFRS 7, paragraph 18);
- Interest income in connection with impaired financial assets was recognised by the Group as immaterial (IFRS 7, paragraph 20.d);
- The Group did not acquire any financial assets at a price different from their fair value (IFRS 7, paragraph 28);
- The Group did not obtain any assets by taking possession of collateral held as security (IFRS 7, paragraph 38).

None of the following economic events or situations requiring disclosure occurred at the Group during the financial year ended December 31st 2010 and December 31st 2009:

- The Group did not reclassify any financial assets (IFRS 7, paragraph 12);
- No collateral was established to the benefit of the Group on any class of assets, which would result in credit enhancements (IFRS 7, paragraph 15);
- The Group did not issue any instrument that contains both the liability and equity component (IFRS 7, paragraph 17);
- The Group met all contractual provisions (IFRS 7, paragraph 18);
- Interest income in connection with impaired financial assets was recognised by the Group as immaterial (IFRS 7, paragraph 20.d);
- The Group does not apply hedge accounting as the formal requirements are not met; accordingly, changes in fair value of derivative instruments are charged against profit or loss (IFRS 7, paragraph 22);
- The Group did not acquire any financial assets at a price different from their fair value (IFRS 7, paragraph 28);
- The Group did not obtain any assets by taking possession of collateral held as security (IFRS 7, paragraph 38).

42.1 Fair value of financial instruments

as at Dec 31 2011 PLN '000	Note	Financial assets at fair value through profit or loss - held for trading	Loans and receivables	Financial assets available for sale	Financial liabilities at fair value through profit or loss - held for trading	Financial liabilities at amortised cost	Total
Shares:		-	-	9,746	-	-	9,746
- non-current	23	-	-	9,746	-	-	9,746
- current	28	-	-	-	-	-	-
Decommissioning fund	23	-	24,491	-	-	-	24,491
Deposits:		-	78,671	-	-	-	78,671
- non-current	23	-	38,106	-	-	-	38,106
- current	28	-	40,565	-	-	-	40,565
Security deposits (margins)	23	-	11,748	-	-	-	11,748
Loans and advances:		-	1,614	-	-	-	1,614
- non-current		-	-	-	-	-	-
- current	28	-	1,614	-	-	-	1,614
Derivative financial instruments:		49,300	-	-	-	-	49,300
- non-current	23	12,098	-	-	-	-	12,098
- current	28	37,202	-	-	-	-	37,202
Trade and other receivables (net of receivables from the state budget):		-	2,170,484	-	-	-	2,170,484
- non-current	25	-	33,313	-	-	-	33,313
- current	26	-	2,137,171	-	-	-	2,137,171
Cash and cash equivalents	30	-	383,680	-	-	-	383,680
Trade and other payables (net of public creditors):	37.1	-	-	-	-	(3,054,041)	(3,054,041)
- non-current		-	-	-	-	(15,194)	(15,194)
- current		-	-	-	-	(3,038,847)	(3,038,847)
Borrowings and other debt instruments:	34	-	-	-	-	(7,391,629)	(7,391,629)
- non-current		-	-	-	-	(4,983,889)	(4,983,889)
- current		-	-	-	-	(2,407,740)	(2,407,740)

Notes:	35	-	-	-	-	-	-
- non-current		-	-	-	-	-	-
- current		-	-	-	-	-	-
Financial liabilities		-	-	-	(267,778)	(197,000)	(464,778)
Lease liabilities:	37.3	-	-	-	-	(197,000)	(197,000)
- non-current		-	-	-	-	(177,585)	(177,585)
- current		-	-	-	-	(19,415)	(19,415)
Derivative financial instruments:	37.2	-	-	-	(267,778)	-	(267,778)
- non-current		-	-	-	(127,364)	-	(127,364)
- current		-	-	-	(140,414)	-	(140,414)
Total		49,300	2,670,688	9,746	(267,778)	(10,642,670)	(8,180,714)

As at December 31st 2011, the Group held no financial assets whose terms would be renegotiated due to possible default or impairment.

As at December 31st 2011, the Group did not carry any financial assets or liabilities measured at fair value through profit or loss whose components would be designated as measured at fair value through profit or loss on initial recognition (fair value option).

As at December 31st 2011, the Group did not carry any financial assets held to maturity.

As at December 31st 2011, the carrying amount of loans, receivables and financial liabilities measured at amortised cost did not significantly differ from their fair value (not applicable to borrowings and other debt instruments bearing interest at a fixed rate). 82% of contracted borrowings and other debt instruments bore interest at floating rates, with interest payable in a short term. The other borrowings and debt instruments (18%) bore interest at fixed rates.

As at December 31st 2011, non-current financial assets available for sale measured at fair value include mainly shares and equity interests for which there is no active market.

The methods and assumptions adopted for the measurement of fair value of financial instruments are described in Notes 10 (<http://raportroczny.lotos.pl/en/financial-data/consolidated-financial-statements-2011/notes-to-the-financial-statements/10.-accounting-policies/>) and 42 (<http://raportroczny.lotos.pl/en/financial-data/consolidated-financial-statements-2011/notes-to-the-financial-statements/42.-financial-instruments/>).

Dec 31 2010 (restated) PLN '000	Note	Financial assets at fair value through profit or loss - held for trading	Loans and receivables	Financial assets available for sale	Financial liabilities at fair value through profit or loss - held for trading	Financial liabilities at amortised cost	Total
Shares:		-	-	9,927	-	-	9,927
- non-current	23	-	-	9,915	-	-	9,915
- current	28	-	-	12	-	-	12
Decommissioning fund	23	-	21,668	-	-	-	21,668
Deposits:		-	5,932	-	-	-	5,932
- non-current	23	-	-	-	-	-	-
- current	28	-	5,932	-	-	-	5,932
Security deposits (margins)	23	-	3,108	-	-	-	3,108
Loans and advances:		-	-	-	-	-	-
- non-current		-	-	-	-	-	-
- current	28	-	-	-	-	-	-
Derivative financial instruments:		69,370	-	-	-	-	69,370
- non-current	23	19,408	-	-	-	-	19,408
- current	28	49,962	-	-	-	-	49,962
Trade and other receivables (net of receivables from the state budget):		-	1,810,637	-	-	-	1,810,637
- non-current	25	-	28,612	-	-	-	28,612

- current	26	-	1,782,025	-	-	-	1,782,025
Cash and cash equivalents	30	-	382,601	-	-	-	382,601
Trade and other payables (net of public creditors):	37.1	-	-	-	-	(2,061,584)	(2,061,584)
- non-current		-	-	-	-	(26,211)	(26,211)
- current		-	-	-	-	(2,035,373)	(2,035,373)
Borrowings and other debt instruments:	34	-	-	-	-	(6,326,794)	(6,326,794)
- non-current		-	-	-	-	(4,403,453)	(4,403,453)
- current		-	-	-	-	(1,923,341)	(1,923,341)
Notes:	35					(52,670)	(52,670)
- non-current		-	-	-	-	-	-
- current		-	-	-	-	(52,670)	(52,670)
Financial liabilities		-	-	-	(279,807)	(74,255)	(354,062)
Lease liabilities:	37.3	-	-	-	-	(74,255)	(74,255)
- non-current		-	-	-	-	(71,559)	(71,559)
- current		-	-	-	-	(2,696)	(2,696)
Derivative financial instruments:	37.2	-	-	-	(279,807)	-	(279,807)
- non-current		-	-	-	(80,107)	-	(80,107)
- current		-	-	-	(199,700)	-	(199,700)
Total		69,370	2,223,946	9,927	(279,807)	(8,515,303)	(6,491,867)

As at December 31st 2010, the Group held no financial assets whose terms would be renegotiated due to the possibility of default or impairment.

As at December 31st 2010, the Group did not carry any financial assets or liabilities measured at fair value through profit or loss whose components would be designated as measured at fair value through profit or loss on initial recognition (fair value option).

As at December 31st 2010, the Group did not carry any financial assets held to maturity.

As at December 31st 2010, the carrying amount of loans, receivables and financial liabilities measured at amortised cost did not significantly differ from their fair value (not applicable to borrowings bearing interest at a fixed rate). 83% of contracted borrowings and other debt instruments bore interest at floating rates, with interest payable in a short term. The other borrowings and debt instruments (17%) bore interest at fixed rates.

As at December 31st 2010, non-current financial assets available for sale measured at fair value include mainly shares and equity interests for which there is no active market.

The methods and assumptions adopted for the measurement of fair value of financial instruments are described in Notes 10 (<http://raportroczny.lotos.pl/en/financial-data/consolidated-financial-statements-2011/notes-to-the-financial-statements/10.-accounting-policies/>) and 42 (<http://raportroczny.lotos.pl/en/financial-data/consolidated-financial-statements-2011/notes-to-the-financial-statements/42.-financial-instruments/>).

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

Year ended Dec 31 2011 PLN '000	Note	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
Interest income/(expenses)		-	20,202	-	(168,358)	(148,156)
Foreign exchange gains/(losses)		-	183,259	-	(737,412)	(554,153)
Impairment losses reversed/(recognised)	12.2, 12.5	-	(6,902)	-	-	(6,902)
Gains/(losses) on fair value measurement of derivative financial instruments	12.6	(9,769)	-	-	-	(9,769)

Gains/(losses) on realisation of derivative financial instruments	12.6	(120,661)	-	-	-	(120,661)
Gains/(losses) on fair value measurement of hedging instruments		-	-	-	(516,892)	(516,892)
Gains/(losses) on sale	12.3, 12.6	-	-	957	-	957
Total		(130,430)	196,559	957	(1,422,662)	(1,355,576)

Year ended Dec 31 2010 (restated) PLN '000	Note	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
Interest income/(expenses)		-	18,829	-	(75,231)	(56,402)
Foreign exchange gains/(losses)		-	4,893	-	(67,821)	(62,928)
Impairment losses reversed/(recognised)		-	(7,729)	(2)	-	(7,731)
Gains/(losses) on fair value measurement of derivative financial instruments	12.6	(75,945)	-	-	-	(75,945)
Gains/(losses) on realisation of derivative financial instruments	12.6	(117,091)	-	-	-	(117,091)
Gains/(losses) on fair value measurement of hedging instruments		-	-	-	-	-
Gains/(losses) on sale	12.3, 12.6	-	-	-	-	-
Total		(193,036)	15,993	(2)	(143,052)	(320,097)

42.3 Sensitivity analysis with respect to market risk related to fluctuations in FX rates, interest rates and prices of carbon dioxide (CO₂) emission allowances.

42.3.1 Sensitivity analysis with respect to market risk related to fluctuations in FX rates

Below is presented an analysis of the Group's sensitivity to currency risk as at December 31st 2011, along with the effects on the financial performance assuming a 4% increase or decrease in the USD/PLN and EUR/PLN currency exchange rates and constant levels of all other variables.

Dec 31 2011 PLN '000	+4% change in exchange rate, effect on year's result		-4% change in exchange rate, effect on year's result	
	USD	EUR	USD	EUR
Trade and other receivables	6,377	2,491	(6,377)	(2,491)
Financial assets - derivative financial instruments	(27,887)	1,805	27,887	(1,805)
Loans advanced	35,137	2,090	(35,137)	(2,090)
Notes	6,154	-	(6,154)	-
Deposits	1,620	1,060	(1,620)	(1,060)
Security deposits (margins)	-	385	-	(385)
Cash and cash equivalents	1,365	1,710	(1,365)	(1,710)
Trade and other payables	(98,412)	(2,100)	98,412	2,100
Borrowings and other debt instruments	(149,424) ⁽¹⁾	(8,731)	149,424 ⁽¹⁾	8,731
Liabilities under issue of notes	(6,125)	-	6,125	-
Financial liabilities - derivative financial instruments	(40,711)	41,162	40,711	(41,162)
Finance lease liabilities	-	(7,715)	-	7,715
Total	(271,906)	32,157	271,906	(32,157)

(1) taking into account the effect of cash flow hedge accounting. Assuming a 4% increase or decrease in the USD/PLN exchange rate, the effect on other comprehensive income could potentially lead to a change of PLN (156,095) 156,095 thousand in the fair value of the facilities.

Below is presented an analysis of the Group's sensitivity to currency risk as at December 31st 2010, along with the effects on the financial performance assuming a 4% increase or decrease in the USD/PLN and EUR/PLN currency exchange rates and constant levels of all other variables.

Dec 31 2010 (restated) PLN '000	+4% change in exchange rate, effect on year's result		-4% change in exchange rate, effect on year's result	
	USD	EUR	USD	EUR
Trade and other receivables	6,959	2,163	(6,959)	(2,163)
Financial assets - derivative financial instruments	(56,694)	14,855	56,694	(14,855)
Loans advanced	27,703	59	(27,703)	(59)
Notes	4,812	-	(4,812)	-
Deposits	237	-	(237)	-
Security deposits (margins)	-	40	-	(40)
Cash and cash equivalents	1,223	1,113	(1,223)	(1,113)
Trade and other payables	(61,656)	(4,129)	61,656	4,129
Borrowings and other debt instruments	(263,276)	(1,478)	263,276	1,478
Liabilities under issue of notes	(4,821)	-	4,821	-
Financial liabilities - derivative financial instruments	10,783	27,526	(10,783)	(27,526)
Finance lease liabilities	-	(2,897)	-	2,897
Total	(334,730)	37,258	334,730	(37,258)

42.3.2 Sensitivity analysis with respect to market risk related to fluctuations in interest rates

Below is presented an analysis of the Group's sensitivity to interest rate risk as at December 31st 2011, assuming a 0.2% increase or decrease in the interest rate

Dec 31 2011 PLN '000	Note	Carrying amount	Change	
			+0.2%	-0.2%
Cash and cash equivalents	30	383,680	767	(767)
Decommissioning fund	23	24,491	49	(49)
Financial assets - derivative financial instruments (1)		23,738	(696)	699
Deposits		78,671	157	(157)
Security deposits (margins)	23	11,748	23	(23)
Borrowings and other debt instruments	34	(7,391,629)	(12,093)	12,093
Finance lease liabilities	37.3	(197,000)	(394)	394
Financial liabilities - derivative financial instruments(1)		(172,134)	11,027	(11,151)
Total		(7,238,435)	(1,160)	1,039

(1) Including interest rate swap (IRS).

As at December 31st 2011, the carrying amount of financial assets and liabilities (cash and cash equivalents, decommissioning fund, deposits, security deposits (margins), derivative financial instruments, liabilities under borrowings and other debt instruments, finance lease and derivative financial instruments) which are sensitive to interest rate risk amounted to PLN 7,238,435 thousand net.

A change in interest rates up or down by 0.2% could potentially lead to a change in the value of financial assets and liabilities as at December 31st 2011 of PLN 1,160 (PLN 1.039) thousand net.

Below is presented an analysis of the Group's sensitivity to interest rate risk as at December 31st 2010, assuming a 0.2% increase or decrease in the interest rate.

Dec 31 2010	Note	Carrying amount	Change
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(restated) PLN '000			+0.2%	-0.2%
Cash and cash equivalents	30	382,601	765	(765)
Decommissioning fund	23	21,668	43	(43)
Financial assets - derivative financial instruments ⁽¹⁾		29,742	(1,358)	1,366
Deposits		5,932	12	(12)
Security deposits (margins)	23	3,108	6	(6)
Borrowings and other debt instruments	34	(6,326,794)	(10,565)	10,565
Finance lease liabilities	37.3	(74,255)	(149)	149
Financial liabilities - derivative financial instruments ⁽¹⁾		(228,237)	13,690	(13,839)
Total		(6,186,235)	2,444	(2,585)

⁽¹⁾ Including interest rate swap (IRS) and forward rate agreements (FRAs).

As at December 31st 2010, the carrying amount of financial assets and liabilities (cash and cash equivalents, decommissioning fund, deposits, security deposits (margins), derivative financial instruments, liabilities under borrowings and other debt instruments, finance lease and derivative financial instruments) which are sensitive to interest rate risk amounted to PLN (6,186,235) thousand net.

A change in interest rates up or down by 0.2% could potentially lead to a change in the value of financial assets and liabilities as at December 31st 2010 of PLN 2,444 (PLN 2,585) thousand net.

42.3.3 Sensitivity analysis with respect to market risk related to fluctuations in prices of carbon dioxide (CO₂) emission allowances

As at December 31st 2011 and December 31st 2010, the Parent held futures for the purchase of carbon dioxide (CO₂) emission allowances (EUA – Emissions Unit Allowance), measured at fair value.

Below is presented an analysis of the Group's sensitivity to risk related to fluctuations in prices of carbon dioxide (CO₂) emission allowances as at December 31st 2011 and December 31st 2010, assuming a 10% increase or decrease in the interest rate.

PLN '000	Dec 31 2011			Dec 31 2010		
	Carrying amount	Change		Carrying amount	Change	
		+10%	-10%		+10%	-10%
Financial assets	8,304	(1,261)	1,261	615	(867)	867
Financial liabilities	(15,607)	912	(912)	(463)	691	(691)
Total	(7,303)	(349)	349	152	(176)	176

This is a translation of a document originally issued in Polish.