5. Use of accounting assumptions, estimates and judgements

The preparation of financial statements in accordance with the International Financial Reporting Standards requires making 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 an ongoing 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 the actuarial assumptions and valuation of employee benefit obligations, see Note 25.3.

Depreciation and amortisation

Depreciation and amortisation of the assets of onshore and offshore oil and 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.

Depreciation and amortisation charges on refining and other non-current 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 2016 pertained mainly to the Parent and resulted in a PLN 1,565 thousand decrease in its depreciation and amortisation.

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 assets can be utilised. If taxable profit 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

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

As at December 31st 2016, 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 Note 13.

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

In line with the Group's accounting policy, revenue from sale 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 sale 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 2016 amounted to PLN 121,095 thousand and PLN 34,003 thousand, respectively (2015: PLN 13,742 thousand and PLN 9,974 thousand).

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

As at the end of each reporting period, the Group analyses the costs necessary to decommission oil and 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 estimated amount of 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 those provisions, see Note 7.26.1 and for information on provisions disclosed in these financial statements for 2016, see Note 26.1.

Professional judgement in accounting

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 – in accordance with 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 in the Heimdal fields in Norway, and in joint ventures (see Note 14), as defined in IFRS 11, and in that respect, considering all facts and circumstances, it had joint control.

As at December 31st 2016, the Group also held interests in the Sleipner gas fields in Norway. Upon their acquisition in December 2015 (see Note 13.1.1 in the *Consolidated financial statements for 2015*), the Group entered into an agreement with the other holders of the Sleipner, Gungne, Loke, Alfa Sentral and PL046D licences. Considering the IFRS 11 criteria, the Group's operations in 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 in the Sleipner fields, 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 initial 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 classified as development or production assets.

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 Note 7.11. For presentation and details of those assets in these financial statements, see Note 13.2.