Amber Grid

AB AMBER GRID CORPORATE STRATEGY

2017–2022

A CONDENSED VERSION

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SUMMARY

The present strategy paper aims to outline AB Amber Grid's (hereinafter referred to as either Amber Grid or the Company) strategic directions, goals, objectives and actions / programmes for the period spanning 2017-2022, as well as to develop specific performance measurement target indicators based on which the Company will evaluate its performance both in the short term and in the long term. A long-term strategy of the Company (which started operating as an independent Transmission System Operator on 1 August 2013) was approved back in 2015. The present strategy paper for 2017-2022 presents updated data, forecasts, objective assessment of the business environment developments and changes in the market situation with a potential impact on the Company's long-term strategy.

Amber Grid's strategy is based on the integration into a single regional natural gas market, on efficiency, modernisation and fostering of the infrastructure. These elements are essential in terms of the pursuit of the strategic and financial goals set by the shareholder.

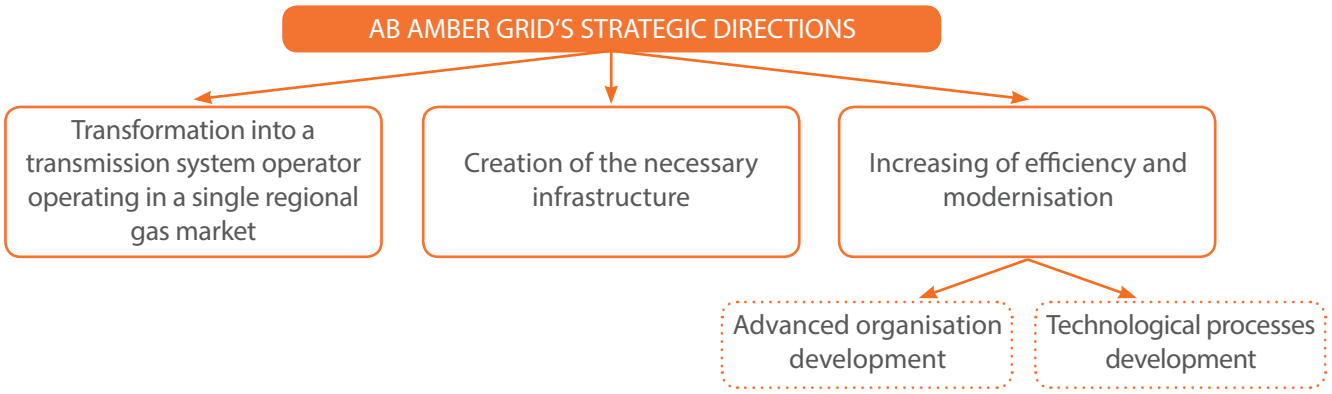
AB Amber Grid's Mission Statement: with a view to the safeguarding of national strategic interests, to develop in an efficient manner the gas transmission system, to ensure reliable gas transportation, to make an active contribution to the development of an integrated European gas transmission system and to create conditions for the development of a competitive gas market.

Amber Grid is Lithuania's gas transmission system operator. The Company owns, operates and develops natural gas infrastructure – Lithuania's gas transmission pipelines and ancillary facilities – and secures safe and reliable gas transportation. The Company's main tasks are to connect gas systems, to grant a non-discriminatory access to the system, to transport gas supplies in a safe and reliable way, to create conditions for competition on the gas market, to contribute to the process of making gas, as an energy resource, advance general economic growth.

AB Amber Grid's Vision Statement: through pro-active steps, in cooperation with the Region's gas transmission system operators to create favourable conditions for the functioning of a regional gas market within an integrated European gas network.

In the perspective of 2017-2022 Amber Grid sees the gas markets of the four countries of the Eastern Baltic Region (Lithuania, Latvia, Estonia and Finland) as a single gas market, i.e. a market operating according to harmonised rules, a market belonging a single area in terms of gas trading, balancing and entry-exit points. Upon the completion of the construction of the gas system interconnector linking the transmission pipelines of Amber Grid and GAZ-SYSTEM SA (i.e upon the completion of the implementation of the Gas Interconnection Poland-Lithuania Project (hereinafter – the GIPL Project), the Region's gas market will be effectively interconnected with the gas market of the European Union (hereinafter – the EU).

Guided by the corporate vision and the strategic objectives as set by the State of Lithuania and the shareholder – to increase the corporate value



and to ensure strategic interests of the State – AB Amber Grid will mainly focus on the following three strategic directions:

- transformation into a transmission system operator operating in an integrated gas market;
- creation the necessary infrastructure;
- increasing of efficiency and modernisation.

Amber Grid's strategic directions are in line with the strategic directions outlined by the main shareholder, UAB EPSO-G: development of regional operations and ensuring the success of strategic projects, operational efficiency, creative and progressive organisation.

In order to implement the strategic directions, Amber Grid works on the development of an appropriate organisational culture rooted in its corporate values. Amber Grid is guided by common human values, by national values and by professional values. Amber Grid's values form the basis for corporate behaviour, corporate activities and organisation culture.

The Company has identified the following six key corporate values:

- mutual trust;
- competence;
- cooperation;
- openness;
- responsibility;
- result-orientation.

Each of the corporate strategic directions was later specified through the elaboration of respective programmes containing respective strategic objectives, tasks, measures, desired outcomes and deadlines.

Some of the corporate strategic objectives have concrete measurable target indicators that were developed, based on which the Company will evaluate its performance both in the short term and in the long term.

The present long-term strategy paper also analyses the current situation, presents the results of the analysis of the Company's internal and external impact factors, the analysis of strengths, weaknesses, opportunities and threats (SWOT), and a description of the risk management measures, financial targets and target indicators, principles of the strategy evaluation, improvement and maintenance.

1. DESCRIPTION OF ACTIVITIES

1.1. Company Activities

Amber Grid is Lithuania's natural gas transmission system operator responsible for the transmission of natural gas (transportation via high-pressure pipelines) to system users, for the operation, maintenance and development of the natural gas transmission infrastructure. Amber Grid was registered on 25 June 2013 following the spin-off of the natural gas transmission activity (including the assets, rights and obligation attributed to this activity) from AB Lietuvos Dujos. The Company launched operations on 1 August 2013 with the entering into force of an interim natural gas transmission licence issued to the Company by the National Commission for Energy Control and Prices (hereinafter – the NCC).

The new legal entity was established in implementation of the third energy package of the EU and of the applicable provisions of the Republic of Lithuania Law on Natural Gas. The incorporation Amber Grid marked the implementation of the legal, functional and organisational unbundling of the natural gas transmission activity from other gas activities.

When on 21 May 2014 E.ON Ruhrgas International GmbH and on 19 June 2014 OAO Gazprom transferred the Company's shares in favour of UAB EPSO-G (controlled by the Ministry of Energy of the Republic of Lithuania) and when on 30 June 2014 the composition of the Board of Directors of the Company was changed by respective decisions of the Extraordinary General Meeting of Shareholders, Amber Grid's activities and ownership control became fully unbundled from the natural gas companies engaged in gas production and supply activities. On 10 April 2015, the NCC issued in respect of the Company an open-ended transmission system operator's

license and thus the Company, in accordance with the applicable EU requirements, was designated a certified transmission system operator.

End 2016 Amber Grid acquired from the Finnish company Gasum OY a 34% stake held at the time at UAB GET Baltic after which Amber Grid became the sole owner of UAB GET Baltic. UAB GET Baltic runs an electronic trading platform for short-term and long-term natural gas products at various trading sites located in Lithuania, Latvia and Estonia.

Since 1 November 2015, Amber Grid is a member of the European Network of Natural Gas Transmission System Operators (ENTSO).

1.2. The Company's Shareholder Structure

As of 30 June 2017, the Company's shareholding structure was as follows: more than 2,300 natural and legal persons from Lithuania and abroad, of which one shareholder, UAB EPSO-G, had a controlling block of shares (96.58%). The remainder of the Company's shares (3.42%) is quoted on the Stock Exchange NASDAQ Vilnius Baltic Secondary List (the acronym of the Company at the Exchange is AMG1L).

The main shareholder of the Company, UAB EPSO-G, is 100%-owned by the Ministry of Energy of the Republic of Lithuania; UAB EPSO-G also has the controlling interest in Lithuania's electricity transmission system operator, Litgrid AB, and other companies. The parent company's governing structure chart is shown in Figure 1.

1.3. The Company's Services and Customers

As a natural gas transmission system operator, the Company provides system users, other operators and natural gas market participants with the following services:

- transmission of natural gas in the territory of Lithuania;
- balancing of natural gas flows in the transmission system;
- administration of funds intended to compensate for the costs of the construction, operation and maintenance of the Liquefied Natural Gas (hereinafter – LNG) terminal, its infrastructure and connector.

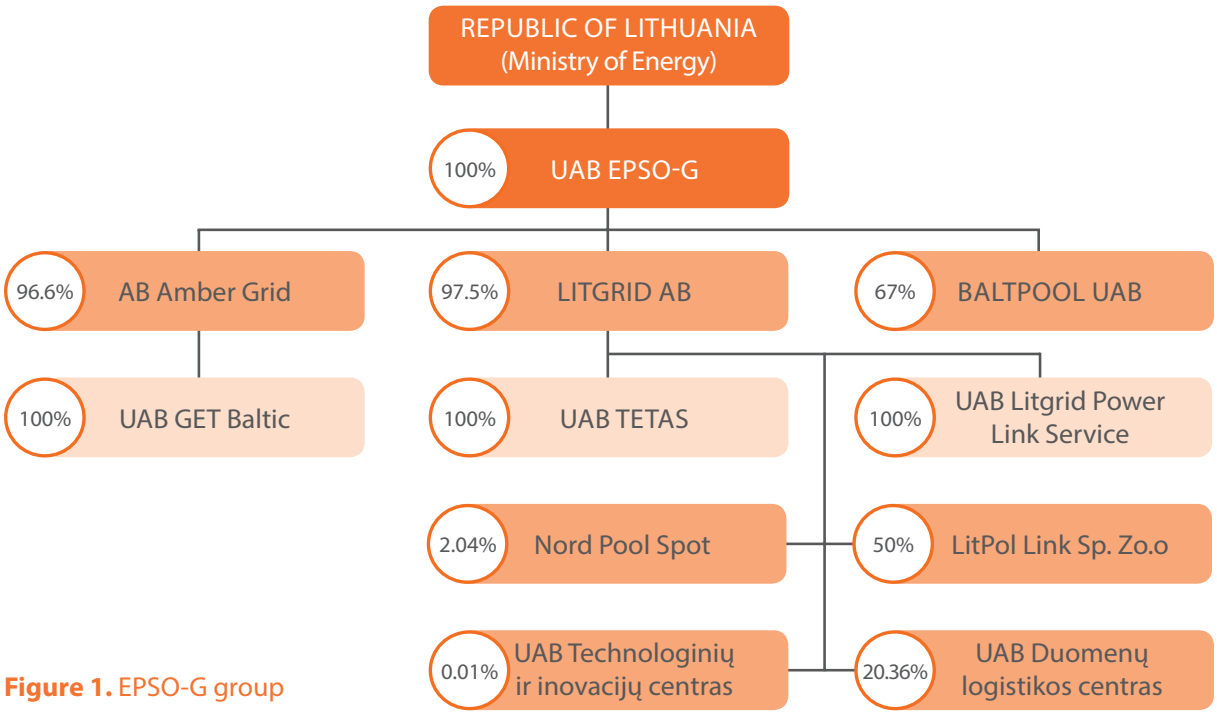


Figure 1. EPSO-G group

The Company's customers of are Lithuania's large producers of electricity, district heating, industrial companies and medium-sized businesses, natural gas supply companies, to which the Company renders natural gas transmission services. The structure of the natural gas transmission system users (based on natural gas transmission quantities) is presented in Figure 2.

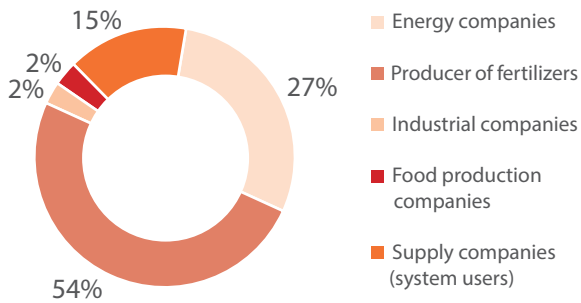


Figure 2. The structure of natural gas transmission quantities (%) for the needs of system users, 2016

Currently, Lithuania's natural gas transmission system comprises:

- 2,115 km of gas transmission pipelines;
- 68 points of connection with distribution systems and system users;
- 2 cross-border gas metering stations;
- 2 gas compressor stations.

Below (see Figure 3) we present a map featuring Lithuania's natural gas transmission system and highlighting the main infrastructure facilities operated by Amber Grid.

Pricing of the Natural Gas Transmission Activity

Amber Grid's natural gas transmission and balancing service prices are regulated by the NCC. In addition to that, the NCC is also in charge of the setting of the specific rate of the so-called security of supply-related additional natural gas price

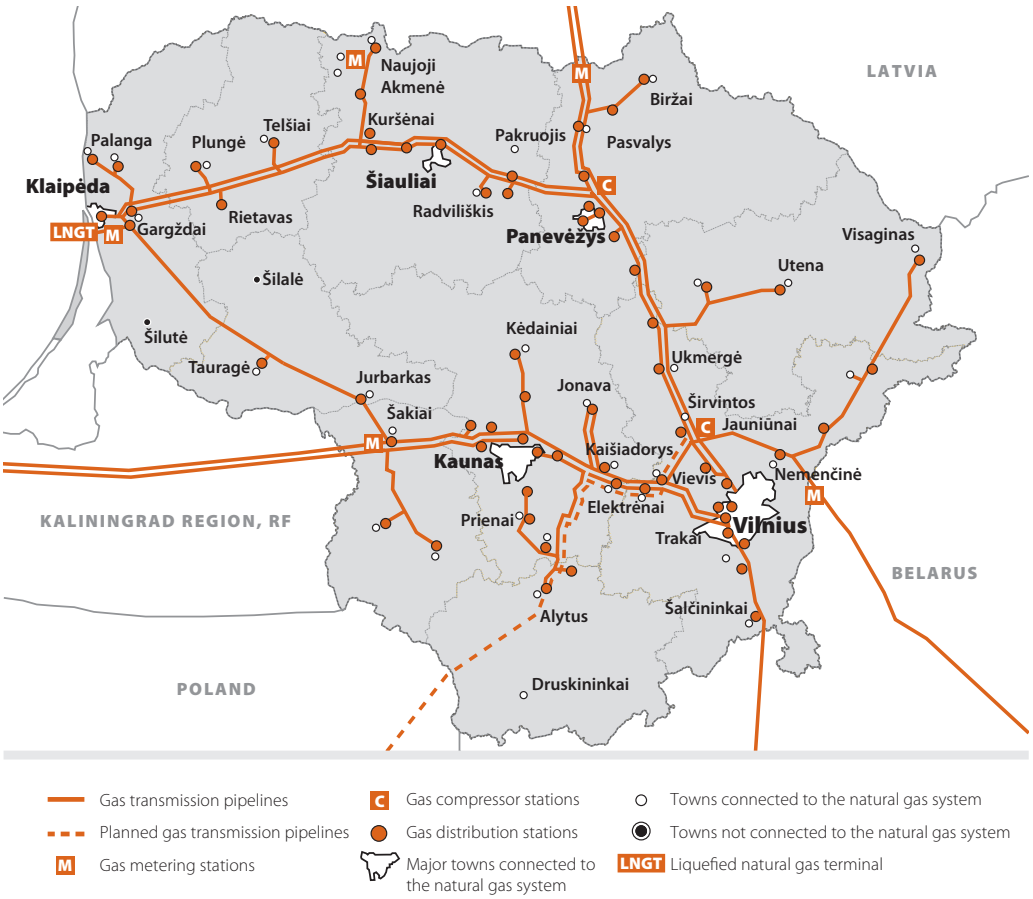


Figure 3. A map of Lithuania's Natural Gas Transmission System

component aimed to compensate for the costs of the construction and the operating costs of the LNG terminal, its infrastructure and connector and the costs of the administration of these funds. In October of 2013, the NCC set in respect of the Company a natural gas transmission price cap for the new five-year regulation term (from 1 January 2014 to 31 December 2018), which is subject to annual adjustments in accordance with the procedure established by law. The main income of the Company currently comes from the natural gas transmission services.

The price dynamics for 2010-2017 is shown in Figure 4. Based on the information provided by the Company end August 2017 to the NCC for adjusting the price caps for the year 2018 and taking into account the information supplied by natural gas transmission system users for the survey conducted by the Company in September 2017 regarding their planned gas transmission quantities in Lithuania for the year 2018, it is forecast that the average price of the service in question for the needs of Lithuanian consumers in 2018, as compared to the one of 2017, will go down by approx. 20%.

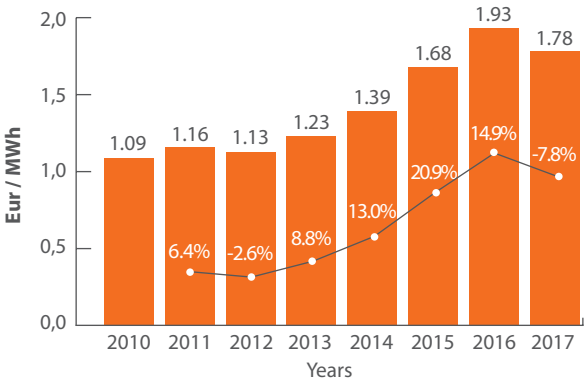


Figure 4. Dynamics of the average natural gas transmission service prices[1] in 2010-2017

It should be noted that in implementation of the applicable legislative provisions of the EU, at the beginning of the year 2015, Lithuania introduced a brand new capacity allocation and pricing model based on natural gas transmission system entry-exit points, which replaced the formerly employed gas transmission service pricing model based on the so-called "postage stamp" principle.

In order to increase the correlation between gas transmission service costs, profits and payment for the services, end 2015 the NCC amended the Methodology for the Setting of State-regulated Prices in the Natural Gas Sector. The new Methodology provides for a three-component gas transmission service price and provides for the charging of a new price component – price for consumption capacity[2]. Starting with 2016, at transmission system internal exit point a three-component price is charged: (1) price component for gas transmission capacity booked, (2) price component for consumer's capacity (a new price component), and (3) price component for gas transmission quantity. The recovery of part of the gas transmission system cost through the application of the price component for the consumers capacity creates preconditions for the formation of a rational behaviour on the part of the natural gas transmission system users – motivates them to make an effective use of the transmission capacities booked, thus reducing gas transmission infrastructure using costs, which in turn allows optimisation of investments in the transmission system. More detailed information on natural gas transmission service prices is available on the Company's website www.ambergrid.lt (see the Transmission Service section "Prices and Taxes").

On 7 September 2017, national regulatory authorities (the NRAs) of Lithuania, Latvia, Estonia and Finland reached an agreement in principle on the methodological guidelines for the regional natural gas market (the Guidelines). The

[1] Average gas transmission prices (exclusive of the indicators attributed to the service of gas transportation to/from third country) for 2016-2017, also exclusive of the indicators attributed to gas transmission through the cross-border Kiemenai Gas Metering Station entry/exit point; i.e. the prices cover average prices for the needs of Lithuania's domestic consumers). For the years 2010-2017, the average prices that are comprised of the price component for gas transmission capacities (from 2016 onwards not only for the capacities booked, but also for the consumer's capacities) and the price component for gas transmission quantities are expressed in units of energy (MWh) (gas pricing in units of energy was introduced only from 2015, until 2015 gas pricing was per volume unit (per thousand m^3)).

[2] Natural gas consumption capacities – maximum daily natural gas quantity needed by natural gas system user and/or consumer to meet their maximum natural gas demand per each natural gas delivery point. Consumer capacities are calculated and set according to procedure as stipulated by the Government, which also provides for a mechanism to encourage consumers/system users, when booking the transmission capacity, not to exceed their consumption capacities levels declared or set in their respect.

Guidelines suggest splitting the process for the implementation of common East Baltic Region's transmission services pricing scheme into two stages and stipulate that:

- In order to reduce barriers for cross-border gas transportation, ensure competitive gas prices and make a full use of the potential of the Region's gas infrastructure facilities that are already in place, as soon as from July 2018, Lithuania, Latvia and Estonia would start applying a transitional gas transmission tariff system aimed at uniform pricing scheme for gas entry into the common market area, thus eliminating any taxation of gas flows between these countries and introducing an Inter-TSO Compensation (ITC) mechanism;

- From the beginning of the year 2020, with the putting into operation of the gas pipeline interconnector between Estonia and Finland and the implementation of the final the East Baltic Region market functioning scheme, the principles of pricing regulation at the East Baltic Regional level would be effectively harmonised in order to apply a uniform pricing system for gas entry into this Region and in order to secure the implementation of the Inter TSO Compensation (ITC) mechanism.

Given the contents of the Guidelines, it is planned that from the mid-year 2018 onwards, the Company's transmission services pricing will, among other things, depend on decisions taken at a regional level.

2. ANALYSIS OF ENVIRONMENTAL FACTORS

Further this paper analyses the internal and external factors with the greatest impact on the Company's operations. According to the Strategic Planning and Strategic Management Guidelines issued by the Ministry of Economy of the Republic of Lithuania, Amber Grid's Operating Strategy sees the environmental impact as a combination of external environmental factors (political, economic, social, legal, environmental and technological), internal strengths and weaknesses and opportunities and threats arising from the outside. All this has an impact on strategic directions selected by the Company. The figure below shows the main internal and external impact factors affecting the business of Amber Grid.

In the beginning of 2016, the Company made an exhaustive analysis which assessed the natural gas transmission business prospects for the period untill 2035. The analysis served as a basis for Amber Grid's business environment factors analysis, as well as for the formation of the strategic goals and objectives.

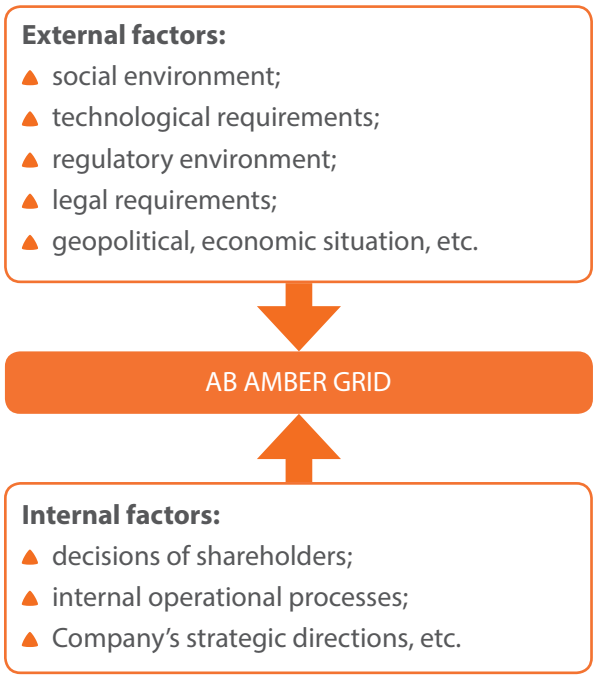


Figure 5. A matrix of internal and external factors impacting AB Amber Grid

The business environment in which Amber Grid operates is constantly influenced by:

- the volatile legal frameworks of the EU and of Lithuania;
- energy policy and environmental policy;
- changes in the regulatory environment;
- development of technologies in the energy sector.

For these reasons, the Company's development and strategic directions are in part based on assumptions.

Even though the Company cannot control external factors that are analysed by the Strategy below, any such factors are, nevertheless, subject continuous evaluatation and monitoring. In the light of changing circumstances, the Company aims to timely predict any pending risks, to avoid threats and take advantage of any growth and business development opportunities available.

Upon the consideration of the said circumstances, it is possible to determine with a sufficient degree of objectivity the specific direction that Amber Grid should choose and predict the results it can achieve during the Strategy's implementation period.

2.1. Analysis of the Company's Internal Environment

Amber Grid was established through the spin off from AB Lietuvos Dujos of its natural gas transmission system operator's activity, the natural gas transmission system infrastructure and other assets, as well as the human and other resources related to this activity. The Company, which was formed as a result of the spin off, engages in a single core activity – the Transmission System Operator's activity – and has functions that are clearly defined and is not engaged in any activities that are unrelated to the core business. One of the keys to carrying out natural gas transmission operations in an effective manner is management /control of internal processes, their efficiency and expediency.

The Company has sufficient technological, managerial and financial capacity to carry out its core activities.

The natural gas infrastructure used for the Company's operations has been developed since 1961. More than 50% of the total stock of the existing gas pipelines were laid more than 25 years ago.

The Company operates 67 gas distribution stations (GDS), 3 gas metering stations (GMS) and 2 gas compressor stations (CS).

The Company's investment and operating policies support maintaining the infrastructure in an adequate condition and meeting the applicable reliability standards. Before 2015, the infrastructure used to cater exclusively for natural gas transportation from a single source. Since the end of 2014, with the construction of a LNG terminal in Klaipėda, gas supplies to Lithuania started being imported from two sources. The LNG terminal has enabled market participants to import gas from global markets. The putting into operation of the Klaipėda-Kuršėnai gas transmission pipeline end 2015 opened up the possibility for a full use of the capacities of the LNG import terminal and for transportation of gas both here in Lithuania and in the direction of the other Baltic States. The LNG terminal can meet about 90% of the demand of the three Baltic States, it ensures diversification of natural gas supplies and secures the supplies. Works for the implementation of the Gas Interconnection Poland-Lithuania (the GIPL) project are going as planned. The GIPL construction project is scheduled for completion by the end of 2021.

At present, the technologies that are used by the Company meet the Company's minimum business needs of the gas transmission activity. The technologies currently used are being replaced by state-of- the-art ones. From 2015 on, the Company's information systems are being adapted to the developments related to natural gas supply diversification, and changes in accounting of the sales of gas transportation capacities and natural gas quantities units. The information technology systems used by the Company are being harmonised with the information technological systems used by other regional gas transmission operators in the fields of transmission capacity management, gas fow balancing and gas trade. Having said that, as of today, the information systems used for the Company's internal processes still have no common database, and have different data structures, which aggravates the integration of the systems. These shortcomings are expected to be phased out within a few years time, with the introduction of an Assets Management System and a Pipeline Integrity Management System (PIMS).

Upon the unbundling of the natural gas transmission activities, the staff responsibilities and functions subject to transfer from AB Lietuvos Dujos to Amber Grid were only any such staff responsibilities and functions that were actually required for the engagement in natural gas transmission activities proper, and in this way any

non-core activities and staff responsibilities that were unrelated to the natural gas transmission activities proper, were eliminated. In the process of the creation of the Company, out of a group of employees that were transferred from AB Lietuvos Dujos and of a number of additionally recruited new employees a team of was formed of experienced and highly skilled employees with high managerial capacity, capable of successfully running the Company's business and ensuring the implementation of the Company's strategy. A survey of the Company's internal climate revealed that the dominant values prevailing at Amber Grid are responsibility, integrity, mutual trust and result-orientation and, in general, the internal situation is better than the average situation for Lithuania's companies.

The Company's, as a separate legal business unit's, operations were launched on 1 August 2013, and most of the internal management processes were successfully taken over from AB Lietuvos Dujos. Due to the operational specifics of Amber Grid, the Company has to implement and review a number of its internal processes: its motivation systems, IT systems integration, project management, etc. They have been included in the Company's business plans and started to be implemented.

The Company's financial condition is good and stable. The business nature and the regulation allow the Company to receive revenues covering the necessary costs and receive regulated returns on investment. The Company's leverage ratio enables efficient execution of its investment and development projects.

AB Amber Grid's Structure and Management Principles

Acting in line with the Corporate Governance Guidelines for State-owned Energy Sector Company Group (as approved by the Minister of Energy's order as of 7 September 2015), on 26 April 2016, the General Meeting of Shareholders approved a new version of AB Amber Grid's Articles of Association, providing for corporate governance principles that are uniform throughout the entire UAB EPSO-G Group and adjusted the competences of the governing bodies. The Company's Articles of Association read that the Company's Board shall consist of five (5) members elected for a four-year period. Amber Grid's Board was formed in accordance with applicable recommendations of the Organisation for Economic Co-operation and Development (OECD), the NASDAQ Vilnius and other recognised international organisations and in line with good corporate governance practices.

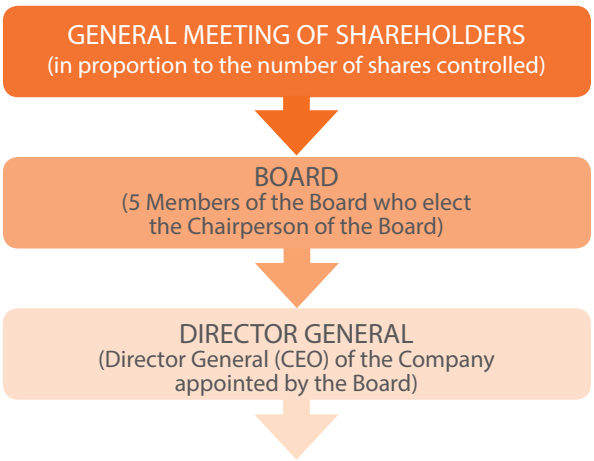


Figure 6. Amber Grid's governance principles

In 2014, Amber Grid became part of UAB EPSO-G Group and, consequently, a company indirectly controlled by the State. The Company's management structure is broadly consistent with the applicable regulations on state policies established in respect of state-controlled enterprises.

The Company's corporate governance is implementing the good governance principles and state-controlled companies corporate governance policies.

2.2. Analysis of the Company's External Environment

The gas transmission activity is subject to licensing. The license grants exclusive rights to render gas transmission services throughout the entire territory of the Republic of Lithuania. The Company operates in a strictly regulated environment that is constantly changing and is dependent on legislative provisions of the EU and Lithuania's national legislation and various natural gas transmission sector regulatory policy requirements as well as on the actions of the regulatory authorities in charge of the implementation of these policies.

2.2.1. An Overview of the Most Important Developments in the Region

In the past few years, natural gas demand in Eastern Baltic Region, which includes Finland, Estonia, Latvia and Lithuania, has been on the decline. From 2012 to 2016, it shrank by nearly 32%. The main causes include the conversion from gas to other primary fuels in the heat production sector, the trend of conversion to biomass as a primary fuel for energy production, the availability of low-cost electricity imports, which makes local electricity production uncompetitive, and the decline in gas demand by industrial companies, e.g. in the shrinking paper production sector in Finland. In the Region, the largest quantities of natural gas are consumed in Finland (29.4 TWh). Lithuania consumes the largest quantities of natural gas among the three Baltic States – 23.3 TWh, i.e. almost two times more than Latvia (14 TWh) and over four times more than Estonia (5.5 TWh). It is forecast that natural gas consumption will stabilise at this level.

The European Natural Gas Sector is being rapidly changed by the implementation of the third energy package of the EU. This legislative package is aimed at the liberalisation of the natural gas market and at the promotion of competition among different natural gas suppliers. Legislation relevant to the Gas Sector is as follows:

The Directive:

- DIRECTIVE 2009/73/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC.

The Regulations:

- REGULATION (EC) No 715/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005,
- REGULATION (EC) No 713/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

In implementation of the regulations and directives of the third energy package of the EU, the European countries have been unbundling their natural gas transmission businesses from the gas supply and distribution businesses of their vertically integrated natural gas companies. The aim is to create an integrated natural gas market of the European countries, thus creating preconditions for greater market liquidity, for a competitive pricing, for a more efficient use of the infrastructure and for an improved security of supply situation.

The most important current developments faced by the Eastern Baltic Sea Region are related to the natural gas transmission system operators' activities, in particular, to the unbundling of gas companies' activities and transfer of their shares to new legal entities, and the gas sector representatives' cooperation in the development of a liberal and integrated gas market.

Lithuania and Estonia have already established their separate companies engaged exclusively in gas transmission activity: Amber Grid and Elering Gaas AS. The latter is also engaged in electricity transmission operations. Since the beginning of 2017, Latvia's natural gas transmission system operator is AS Conexus Baltic Grid that was established through the spin-off from AS Latvijas Gaze of its activities of gas transmission through gas transmission pipelines and of gas storage system operator. The preparations for the unbundling of the gas transmission business from the gas distribution and supply business are currently underway also in Finland.

A well-functioning regional market of the Eastern Baltic countries requires harmonisation of the legislation and regulations throughout the Region as well as putting in place an adequate infrastructure.

To coordinate the development of a Regional Market, at the beginning of the year 2015, a special working group was set up, comprising the Eastern Baltic Region's transmission system operators, ministries in charge of the energy sector and the national regulatory authorities. In March of 2016, the consulting firm, *Frontier Economics*, that was commissioned by transmission system operators, prepared an Eastern Baltic Regional Market Development Study. It was funded by the Baltic Sea Region Energy Cooperation Organisation, BASREC.

The Study advised that the most advantageous markets integration option would be to combine the Lithuanian, Latvian, Estonian and Finnish gas markets into a single market area, with a single entry-exit points system for the four countries and with a single virtual trading point and one balancing zone. On the basis of this Study, a Working Group, drafted an Eastern Baltic Regional Gas Market Development Action Plan, which in December of 2016 was approved by the prime-ministers of the Baltic States. Since 2016, the Working Group has been working on the implementation of the Action Plan and aims to implement the common gas market by the end of the year 2019.

Since May 2016, AB Amber Grid, together with the Latvian and Estonian TSOs, has been working on the implementation of the Implicit Capacity Allocation (NPP) mechanism. It is an interim instrument for the integration of markets until a common regional gas market is effectively developed. Using the NPP scheme, short-term trading on the natural gas exchange is becoming integrated, since orders made in one country to buy or sell gas for the next day are automatically displayed on other trading hubs of the Baltic States, together with price of gas transportation between the Baltic States. In January 2017, the national regulatory authorities approved the implementation of the NPP scheme in the Baltic States. The TSOs of the Baltic States, together with the natural gas exchange, GET Baltic, have successfully implemented the scheme and it has been operating since 1 July 2017. As part of the implementation of the NPP scheme, GET Baltic opened trading hubs in all the Baltic States and thus became regional.

Moreover, there are plans to make investments into the integration of the Region's natural gas transmission systems.

The Region is intended to be integrated with the European natural gas market through the construction of the Gas Interconnector Poland-Lithuania (GIPL). In October of 2015, an agreement was concluded among Amber Grid, GAZ-SYSTEM A.S. and the EU Innovation and Networks Executive Agency, whereby the GIPL project was granted EU financial support covering 60% of the eligible project costs. In 2017, the original EU financial assistance contracts were amended. The amendments were initiated by the Polish transmission system operator, GAZ-SYSTEM S.A., that was faced with problems during the preparation of the GIPL project and that proposed to alter the pipelines' route in Polish territory. As a result, the scope of the GIPL project in the territory of the Republic of Poland has changed and its implementation dates have changed, too. Estimated total project value is about EUR 510 million. The project implementation deadline was extended until 31 December 2021.

In August of 2016, the European Commission decided to grant the Balticconnector gas pipeline construction and the cross-border connection between Estonia and Latvia capacity expansion project financial support of EUR 188 million. Total project costs are estimated at EUR 250 million.

The Balticconnector gas pipeline link will interconnect Estonia's and Finland's gas transmission systems and will create preconditions for Finland's integration into the Region's gas market. The transmission system operators are also planning new investments in the expansion of the already existing cross-border interconnection between Latvia and Lithuania and in the Incukalns Underground Gas Storage Facility in Latvia in order to enhance its capacity to supply gas in the winter season. Klaipėda LNG Terminal's services are intended to be developed through the development of LNG bunkering services intended to supply ships with fuel and to deliver LNG supplies to smaller terminals, as well as through the construction of an over-ground LNG Distribution Station, that with the help of vehicle transporters would deliver gas supplies to areas outside the reach of the gas transmission system.

2.2.2. Political, Economic, Social, Technological, Environmental and Legal Impact Factors

The factor with the greatest impact on the Company's plans will be Lithuania's national authorities' decisions on the National Independence Energy Strategy, which will set Lithuania's national strategic directions for energy and specific energy sectors' development priorities as well as decisions relating to the promotion and development of biofuel and other energy resources, decisions on the energy efficiency improvement, implementation of provisions of the Network Codes as adopted

by the EU regarding gas pipeline safety, reliability, interoperability and access terms and conditions, trade, pricing and other fields.

The legal environment, which has a significant impact on the Company's business decisions, in particular the ones in the fields of the national energy policy and the EU assistance policies, is highly dependent on political developments and is noted for frequent changes in legislation regulating the gas transmission sector, that may negatively affect the long-term sustainability of the Company's strategic decisions.

The most important economic factors affecting the natural gas transmission sector include the promotion and development of the use of biofuel and other renewable resources in the energy sector as well as a more efficient use of energy and energy resources. Due to the large subsidies that are provided in various forms: through incentive tariffs in buying up energy, through direct grants or through a catalytic regulatory regime of the national economy, unequal conditions are being created that hinder competition, which all result in a rapid growth in the use of biofuel, both in the electricity and district heating sectors, and which reduce the demand for natural gas and undermine its competitiveness in the market, and, with infrastructure costs being largely stable, cause an increase in gas transmission and distribution service prices and the LNG Terminal operating costs (the natural-gas-supply-security-related additional price component) for market participants. In addition to that, in state-regulated energy fields, whose investments are subject to approval by the regulatory authorities, any decisions to invest in the use of alternative fuels for combined heat and power production so far have been accepted without having previously made a comprehensive socio-economic assessment, which promotes overinvestment and creates a risk of the implementation of economically unfeasible investment projects.

Other important economic factors that can affect the Company's business decisions are the Company's customer structure, which determines a strong dependence of the Company's operating income on a small number of large gas system users (10 of the largest system users generate about 90% of the Company's revenue); and the availability of EU support funds for the development and modernisation of the gas transmission system.

Technological factors affecting the Company's operating decisions are linked to the keeping of the natural gas infrastructure facilities used in the Company's operations in good working order. It is necessary to take into account the fact that 57% of the gas pipelines were constructed more than 25 years ago. The condition of the existing pipelines is being inspected using various advanced techniques such as the intelligent pigging (internal diagnostics) technique, the external diagnostics based on electromagnetic field measurements, aerial pipeline inspection with the help of a helicopter carrying a laser-based highly sensitive gas leak detection equipment, etc. The findings of the inspections serve as a basis for carrying out essential repairs of individual sections of the Company's gas transmission pipelines, thus ensuring security and reliability of the transmission system.

An indirect impact on the gas transmission business is exerted also by various social factors that determine consumers' behaviour – inciting them to consume less gas and to choose a different type of fuel instead – is a relatively low purchasing power of Lithuania's population, the high emigration rate and the negative demographic trends. Having said that, in the course of the past years, the gas prices decreased significantly and the gas quality parameters improved (there was a significant improvement in the gas supply security situation and the possibility to choose their suppliers or procure gas supplies at the Gas Exchange).

The Company's operations are also impacted by the environmental policies of the EU – the ever stricter environmental requirements may result in the need for additional investments, in addition to that, in implementation of the environmental provisions, a priority is given to renewable energy development policies, which all have a significant impact on the decline in the consumption of natural gas.

2.2.3. Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

In view of the Strategic Planning and Strategic Management Guidelines prepared by the

Ministry of Economy, in order to summarise the analysis of the environmental factors, an Analysis of Strengths, Weaknesses, Opportunities and Threats (hereinafter – the SWOT) was carried out. The Analysis identified Amber Grid's strengths and weaknesses that depend on the Company's internal factors. The Analysis also identified the opportunities and threats – the external factors that are beyond the Company's control.

The internal and external environment analysis identified the essential strengths and weaknesses of AB Amber Grid and identified the most significant external threats and opportunities.

The results of the SWOT Analysis constitute a basis for the formulation of operational scenarios, strategic directions and targets. The results of the Analysis must be taken into account when setting the strategic objectives, when drawing up action plans, which are used for the attainment of the Company's strategic objectives. The following sections describe the strategic directions, objectives, specify in detail the strategic objectives and programs, which are formulated in the light of the findings of the SWOT Analysis.

3. STRATEGY OF AB AMBER GRID

3.1. Mission, Vision, Strategic Directions and Values

The Transmission System Operator's activity carried out by AB Amber Grid is regulated in detail by the EU law and the national law of the Republic of Lithuania. Therefore, the fundamental points of the Company's strategy stem from the legislation governing the activity in question – from the third energy package of the EU, the Republic of Lithuania Law on Natural Gas and its implementing legislation, and the National Energy Independence Strategy. The Company's strategy is impacted by the energy policy of the EU and the national energy policy of the Republic of Lithuania and the regulatory policies implemented by the regulatory authorities of the EU as well as the national regulatory authorities. The regulatory policies pursued by the regulatory authority directly affect the Company's strategic plans in terms of financial prospects. Amber Grid's Natural Gas Transmission System Operator's Ten-year Network Development Plan is subject to review and approval of by the NCC. The Company's strategy is also influenced by the fact that the Company's activity is materially related to the activities of transmission system operators of other countries and on their strategies. In addition to that, the Company belongs to a Group controlled by the State of Lithuania, which in turn is impacted by the policies set in respect of state-owned enterprises by the state of Lithuania, which indirectly establish the expected rate of return, the strategic planning guidelines and governance/management principles.

In 2015 the European Commission unveiled an ambitious Energy Union Package covering security of supplies, a single energy market development, energy efficiency, research, innovation and pollution abatement dimensions. Over the next decade, the most important tasks of the energy sector will be to ensure a high level of utilization of the existing infrastructure for the national development, transparency, and strengthening of regional cooperation. Amber Grid sees its contribution to the implementation of the European energy policy in the development of a single Baltic Regional Natural Gas Market as well as construction and expansion of inter-system links.

The Mission. Amber Grid is Lithuania's Gas Transmission System Operator. The Company owns, operates and develops natural gas infrastructure – Lithuania's gas transmission pipelines and related facilities – and ensures safe and reliable gas transportation. The Company's main tasks are to connect gas systems, grant a non-discriminatory access to the system, safely and reliably transport gas, facilitate competition in the gas market, help gas, as a source of energy, contribute to the growth of the economy. All this has been articulated in brief by Amber Grid in its Mission Statement:

AB Amber Grid's Mission: with a view to the safeguarding of national strategic interests, to develop in an effcient manner the gas transmission system, to ensure reliable gas transportation, to make an active contribution to the development of an integrated European gas transmission system and to create conditions for the development of a competitive gas market.

The Vision. In the perspective of 2017-2022 Amber Grid sees the gas markets of the three Baltic States, Lithuania, Latvia and Estonia and Finland (upon the implementation of the Estonian-Finnish gas interconnection project) as a single integrated gas market, i.e. as the one operating in accordance with harmonized rules, sharing a single area in terms of gas trade, balancing and the entry-exit points. Upon the construction of the inter-system links interconnecting the gas pipelines of Amber Grid and GAZ-SYSTEM S.A. (i.e. upon the implementation of the GIPL project),

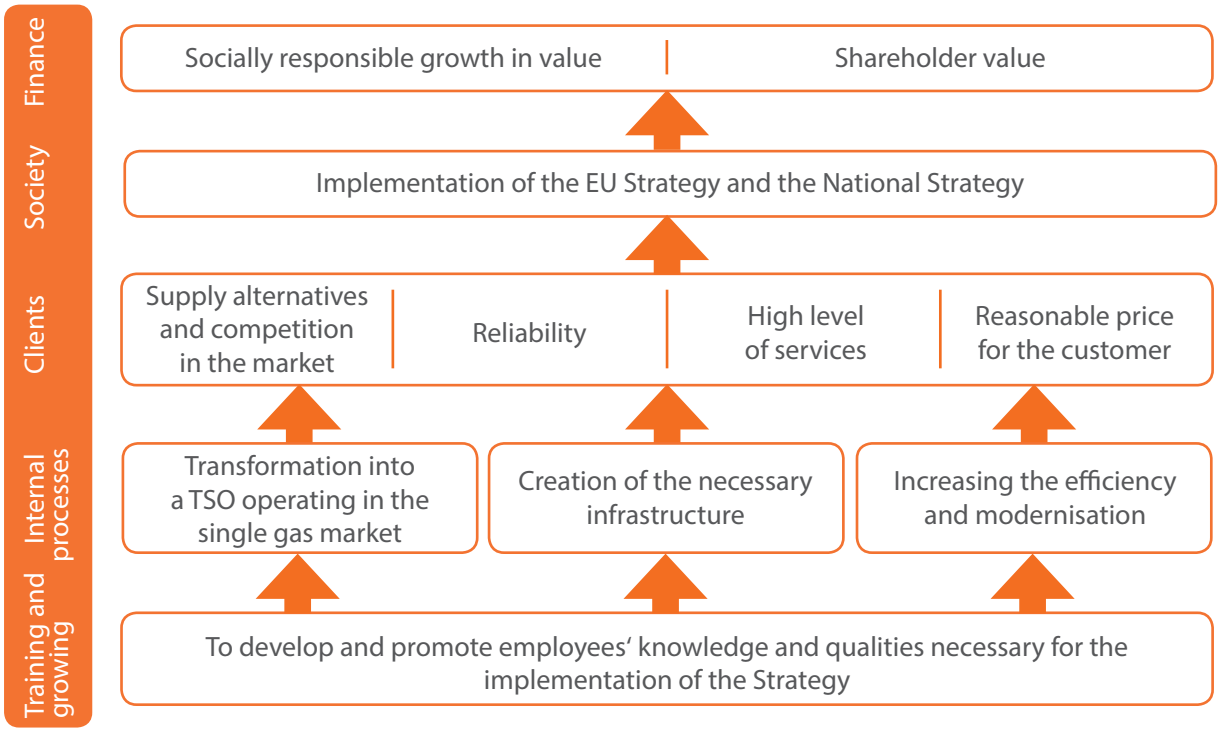


Figure 7. AB Amber Grid's Strategy Fact Sheet

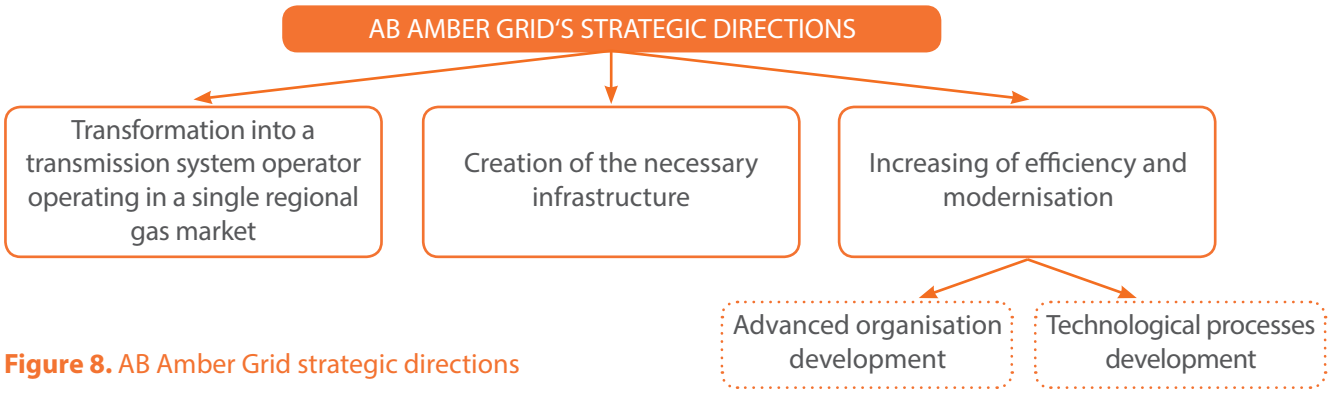


Figure 8. AB Amber Grid strategic directions

the Region's gas market will become interconnected with the gas market of the EU. During the planning period in question, through the implementation of the strategic programs for transformation, new infrastructure development and operational excellence, Amber Grid's Vision is as follows:

AB Amber Grid's Vision: through pro-active steps, in cooperation with the Region's gas transmission system operators, to create favourable conditions for the functioning of a regional gas market within an integrated European gas network.

Strategic Directions

„The strategic directions of Amber Grid are in line with the strategic directions as outlined by the main shareholder, UAB EPSO-G: development of regional operations and ensuring success of strategic projects, efficient operations, creative and progressive organisation.

The National Energy Independence Strategy sets out the objectives to be implemented by the Company:

- to secure gas supply alternatives;
- to promote competition in the gas market.

According to the Strategic Planning and Strategic Management Guidelines, one of the Company's strategic directions is its efficiency raising.

Amber Grid's Strategy is based on the integration into a single regional natural gas market, on efficiency and modernisation and fostering of the infrastructure. These elements are essential for the attainment of the strategic and financial objectives set out by the shareholder. The following diagram summarises the strategy of Amber Grid.

In the pursuit of the Company's vision and aiming at the strategic goals – ensure the national strategic interests, value growth and increase of shareholder value – Amber Grid will focus on three strategic directions: (i) transformation into a TSO that would operate in an integrated gas market; (ii) putting in place any necessary infrastructure and (iii) increasing efficiency and modernisation.

For each of the Company's strategic directions we have developed programmes containing strategic objectives, tasks, measures, desired outcomes and deadlines.

Values

With a view to the implementation of the Strategic Directions, Amber Grid is forming an appropriate organisational culture based on the Company's values. The Company has identified six key corporate values: mutual trust, competence, cooperation, openness, responsibility, and result-orientation.

Amber Grid is guided by common human values, by national values and by professional values. Amber Grid's values form a basis for the Company's behaviour, activities, and corporate culture.

3.2. Strategic Objectives and Performance Measurement Indicators

For each of the corporate strategic directions Amber Grid has set out specific strategic objectives (see Fig. 9), which will be sought by the Company within the Strategy implementation period (until the year 2022).

In respect of some of the corporate strategic objectives specific measurement (target) indicators have been set out based on which the Company will evaluate performance in the short term and in the long term.

3.3. Strategic Tasks and Actions/ Programmes

The strategic tasks set out in respect of Amber Grid are aimed at the attainment of each of the aforesaid corporate strategic objectives. In order to implement these tasks, the Company for each of the strategic directions has formed action programmes, which guide the Company in its activities.

4. RISKS AND RISK MANAGEMENT

Risk management constitutes an integral part of Amber Grid's activities. The Company's risks are identified, analysed and evaluated in the context of the Company's objectives, activities and external environment. The Company fully implemented a risk management system in 2016; the system comprises risk identification, analysis, evaluation, provision for any control measures, preparation of a risk management action plan and implementation of the measures of the plan, monitoring and supervision of the risk management process.

By management of risks it is sought to maintain an adequate level of control of the Company's business processes, to minimise the occurrence of any events that may cause risks and any possible adverse effects and to ensure that risks do not exceed the risk levels that are acceptable to Amber Grid and that the Company's objectives are duly implemented.

The Company's risks fall into four broad categories: strategic, operational, compliance-related and financial risks, which in turn may be further subdivided into smaller sub-categories.

5. FINANCIAL OBJECTIVES AND TARGET INDICATORS

The Company's financial objectives and indicators are focused on the execution of the Mission and the Vision. The target indicators were set in view of the fact that the Company's activity is subject to regulation, therefore the achievement one or another target indicator depends not only on the performance of the Company itself, but also on the provisions of the Methodology for Natural Gas Transmission Service Price Regulation.

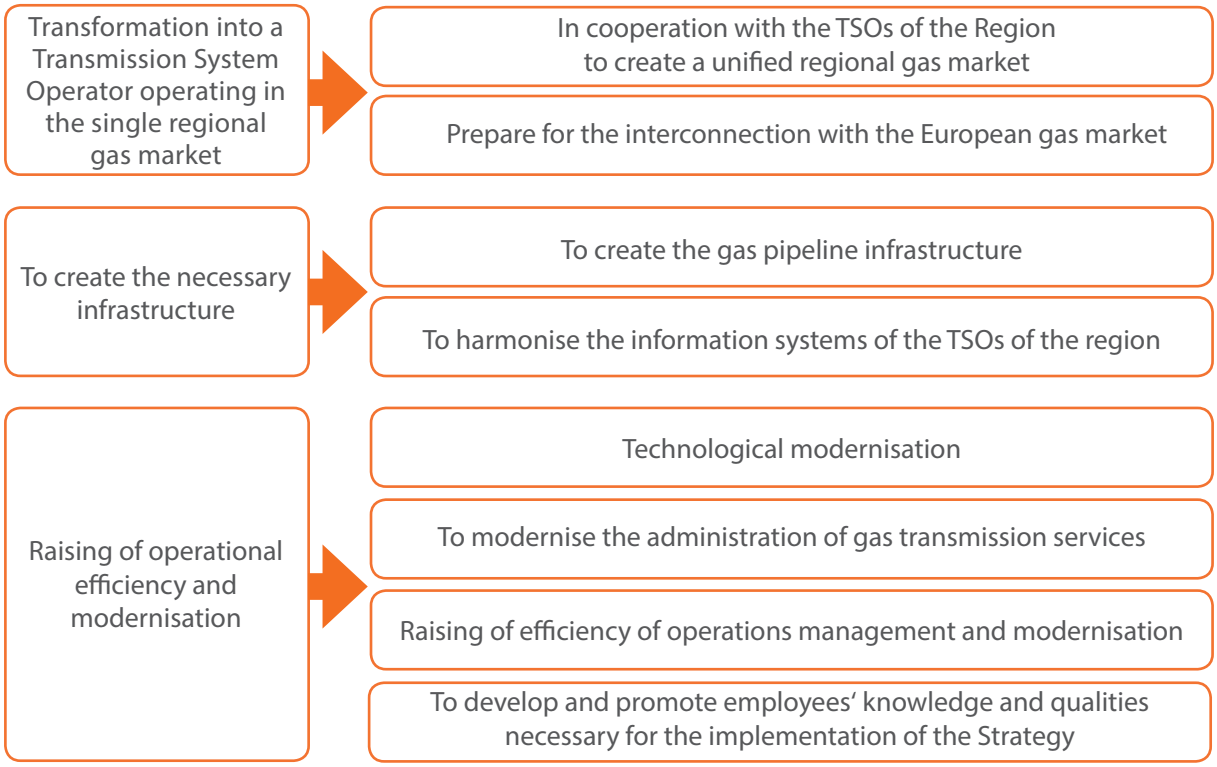


Figure 9. Interface of AB Amber Grid's strategic directions and objectives

For the regulation period 2014-2018, it has been set that the natural gas transmission price cap shall be calculated as the ratio of sum total of the basic costs of the gas transmission activity and the return on investments and the natural gas transmission quantity. Starting with 2015, separate price caps have been set at the entry-exit points and they are set per transmission capacities unit. The NCC calculated the value of return on investments (ROI) as a product of multiplication of the normative rate of return on investments and the value of regulated assets attributed to the gas transmission services (RAB). The normative rate of return on investments was set as the weighted cost of capital (WACC) equal to 7.09%.

The values of the Company's profitability indicators (profit margins, return on equity, return on assets, etc.) and the growth in the Company's value is in essence impacted by the value of the ROI as authorised by the NCC and the increase of the efficiency of the Company's operations.

As the target indicator summarising the execution of the ***Company's financial targets the Company has selected the indicator of the Company's Earnings Before Interest, Taxes Depreciation and Amortisation (EBITDA),*** which can be defined as the Company's ability to repay its debts, to duly settle its corporate income tax obligations and to run the core business activity. In the general case, the EBITDA is calculated by adding to the earnings from normal business operations the result of the financial activities and the depreciation and amortisation of the non-current assets. The larger the value of the Company's non-current tangible assets and depreciation indicator, the larger is the EBITDA relative to the operating profit earned by the Company. Therefore, the aforesaid target indicator is particularly suitable for the comparison and evaluation of the performance of such companies that, just as Amber Grid, are carrying out large-scale capital investments. This indicator lends itself to comparison and evaluation of results of various companies regardless of their financing sources used to finance the activities or their structure.

One of the strategic directions of the Company – the development of the necessary infrastructure – will be implemented in accordance with the following investment and financial management solutions:

- For project financing, any and all possible financing instruments (subsidies, grants, bank loans, etc.) will be considered.
- The financing of the implementation of the Infrastructure Development Programme will be ensured through the optimisation of the Company's capital structure and thus increasing its capital efficiency. In the implementation of the investment programme, the financial debt will not exceed the comparable debt level averages of companies operating in the European gas sector.
- Any decisions on investments in assets reconstruction, modernisation and development will be taken exclusively upon the assessment of their compliance with the Company's Strategy.
- When making any investment decisions, any such decisions will be subjected to the application of the assessment of their compliance with the required level of return on investments, risk and compliance to strategy principles.

The Company contributes to the implementation of the national strategic priorities through the implementation of strategic projects that meet the aforesaid requirements.

In view of the National Energy Independence Strategy priority projects, in 2018-2022, the Company plans the implementation of a number of major investment projects aimed at the diversification of gas supply sources and ensuring gas supply reliability for Lithuania's consumers.

For the integration of Lithuania's Gas Transmission System into a common gas system of the EU there are plans to construct a Gas Interconnection Poland-Lithuania. Amber Grid has been granted a financial assistance of the EU covering 42.6% of the eligible costs of the Project in the Lithuanian territory, as well as a financial assistance for the covering of 50% of the Company's contribution to cover the CBCA payments.

In order to make an effective use of Klaipėda LNG Terminal, in 2015 we completed the implementation of the Klaipėda-Kuršėnai Gas Pipeline Construction Project. AB Amber Grid was allocated a EU grant covering 43% of the eligible project costs, and part of the investments was co-financed by the Latvian Natural Gas Transmission System Operator.

There are also plans to carry out a joint project of the Lithuanian and Latvian natural gas companies aimed at the enhancement of the throughput capacity of the natural gas link between the two countries, aimed at achieving a higher level of integration between the gas systems of the Baltic States and at facilitating the development of the natural gas markets of the Baltic States.

For the implementation of the Company's strategic directions and programs a variety of funding sources will be used: the Company's operating income, borrowed capital and the EU grants.

6. IMPLEMENTATION OF THE STRATEGY

In order to carry out the programs outlined in the Strategy, in order to achieve the objectives and thus advance in the implementation of the Company's Vision and Mission, AB Amber Grid continuously assesses and monitors the progress made in the Strategy implementation process. On the basis of the information amassed we identify the problem areas of the Company's activity calling for improvement. Where in the assessment process any new external impact factors or any profound changes in economic, political and/or social, environments or any changes in other essential Strategy assumptions are identified, the Company's Strategy may be subject to improvement, and the original values of the target indicators may be subject to adjustment.

The assessment of the implementation of the Strategy will be based on representative indicators that were set in respect of each strategic objective and/or programme.

The monitoring of the achievement of the target indicators shall performed periodically. In case of any discrepancies, the Company's activities shall be subject to improvement, e.g. the Company's organisational structure, processes, actions shall be improved or new employees shall be recruited. Where necessary, the values of the original target indicators shall be subject to adjustment. The Company's medium-term plans shall be subject to amendment and, where necessary, the Long-term Strategy shall be amended as well – the Company seeks to be ambitious, while simultaneously making an objective assessment of and taking into account any changes in its business environment and the market situation.

The monitoring of the Strategy shall be carried out on a systematic and regular basis, and the information on the results of the monitoring shall be used in the Company's management/governance process and/or presented to other interested parties, which will not just ensure the availability of information relevant to the management needs, but will also facilitate the implementation of one of the Company's values – openness.