New energy for clean future

Amber Grid

Green start

OUR GOAL

Our goal is to act together on the way of transformation of the energy of Lithuania to a climate-neutral economy. By understanding the meaning of clean energy, we are focusing on the "green start" line, we are ready to start our journey towards creation of green energy, preservation of environment, ecology and atmosphere.

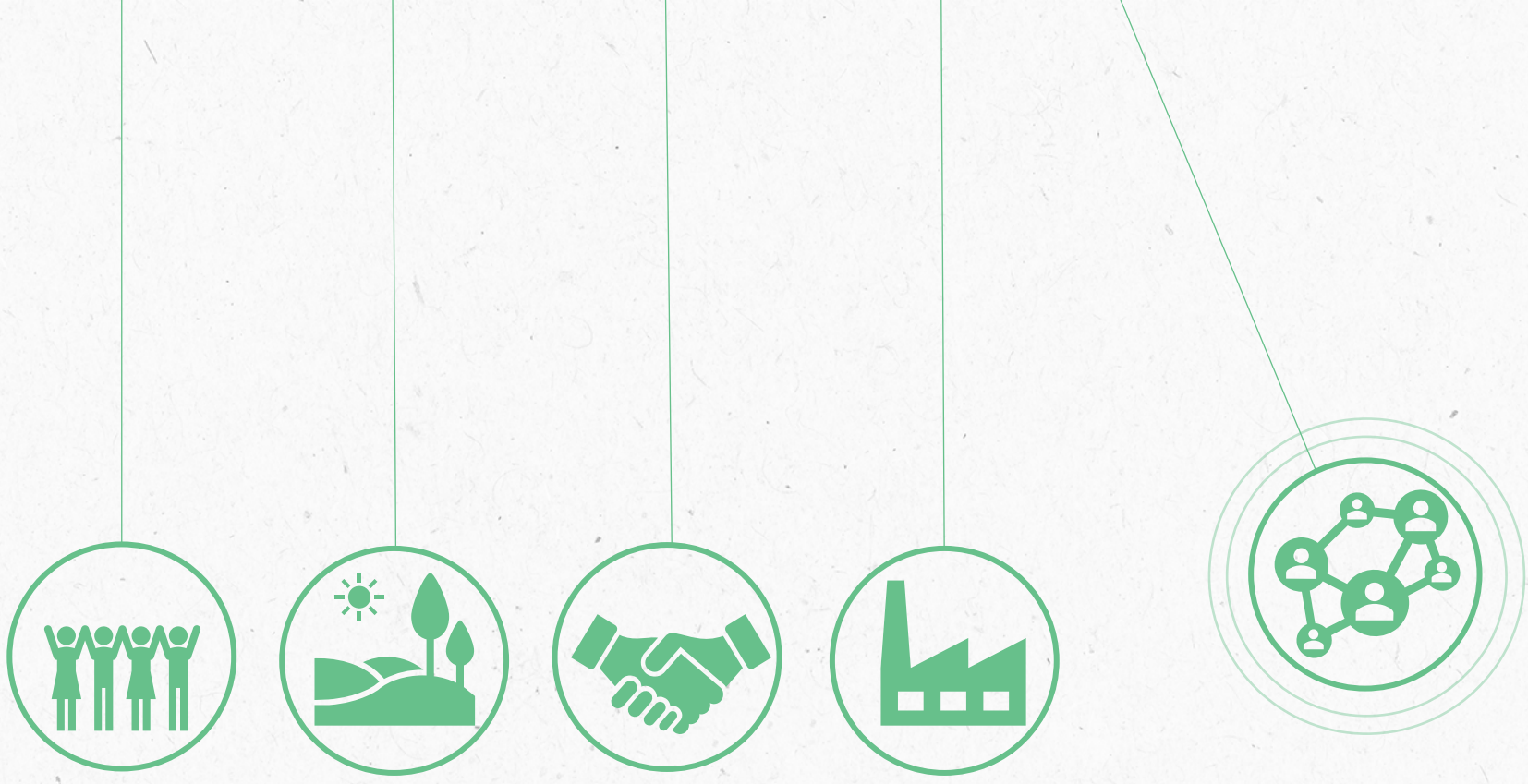
Until 2030 we will strive to develop a system that enables competition and the use of climate-friendly energy. Amber Grid is changing and transforming energy by integrating gas markets, innovating and working towards green energy.

THE NATURAL GAS TRANSPORTATION SYSTEM

The natural gas transportation system, including main gas pipelines, gas distribution, metering and compressor stations, is an integral part of the Lithuanian energy system. It plays an important role in the creation of an environment-neutral economy and, more importantly, a cleaner and safer future.

AMBER GRID'S TASK

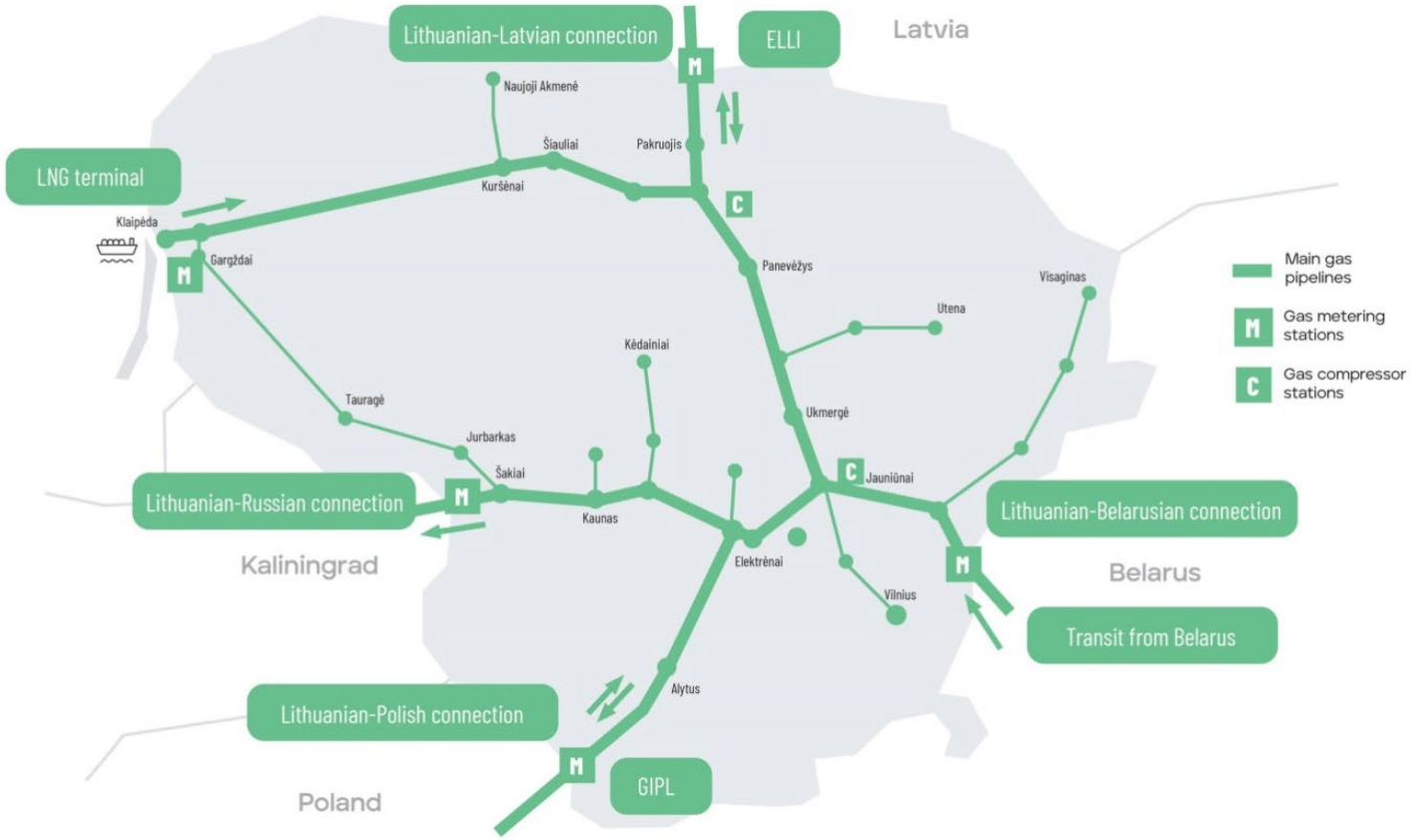
Amber Grid's task is to transform the natural gas system by adapting it to the safe transport of renewable energy resources - a mixture of biogas, methane and hydrogen, as well as to create a new system for the transport of pure hydrogen. We aim to integrate into the common European market by creating a unified system that will help the country to confidently adhere to the European Green Deal, and consumers to use clean energy at the best price.



The axis of the strategy is the value to the parties concerned

In this journey of transformation, we focus on five stakeholders to whom we are committed to generate value.

Lithuanian gas transmission system



Main gas pipelines
2288 km

Gas distribution stations
64

Gas metering stations
4

Gas compressor stations
2

We will help Lithuania to change

By implementing the strategy, we help Lithuania achieve the goals of the National Energy Independence Strategy: to significantly increase the share of renewable and clean energy resources in the overall energy consumption balance - resources that emit low quantities of carbon dioxide (CO_2) into the environment during the energy production and consumption process.

	2020	2030	2050
SHARE OF RENEWABLE ENERGY SOURCES OF THE NATIONAL ENERGY CONSUMPTION	**30%**	**45%**	**80%**
SHARE OF RENEWABLE ENERGY SOURCES IN THE TRANSPORT SECTOR	**10%**	**15%**	**50%**

During the period of 2030–2050, Power-to-Gas technology intended for production of hydrogen from electricity and its transmission to the customers through the gas network will have an accelerated development as it becomes of particular importance.

Sources: NEIS, NECP.
The national goals will be updated together with the 2024 NECP update being prepared by the Ministry of Energy of the Republic of Lithuania.

We seek for the common goal of Europe

The objective of Lithuania, our company and the whole national energy sector is to replace fossil fuel with renewable energy sources. This is part of a greater objective: to create a sustainable environment. The objective is emphasised by The European Green Deal.

This is a new strategy of the European Union aimed at transforming the community into a just and flourishing society with a modern, competitive economy which uses natural resources efficiently.

Together, we seek to make the EU economy climate-neutral (decarbonised) by 2050. This way, economic growth would be decoupled from the use of non-renewable natural resources.

European Green Deal

- Zero pollution target
- Accelerating the transition to clean and smart mobility
- Building and renovating in a resource-efficient way
- Mobilising industry for a clean circular economy
- Supplying clean and affordable energy, with security of energy supply
- Increasing the EU's climate ambition for 2030 and 2050
- Preserving and restoring ecosystems and biodiversity
- From 'Farm to Fork': designing a fair, healthy and environmentally friendly food system

Energy transformation

DECARBONISATION OF THE TRANSMISSION SYSTEM

The goal of the Amber Grid is to 2030 transform the natural gas system by adapting it to the safe transportation of renewable energy resources and creating a cleaner future for the society. After adapting the gas transmission system to new energy, not only natural gas, biomethane but also hydrogen would flow through Lithuanian gas pipelines. Hydrogen blending in the gas network is envisaged as a transitional measure to encourage the emergence of the green hydrogen market and the development of the first transport capacities.

Within a decade, we will adapt the entire gas transmission infrastructure managed by Amber Grid to the safe transportation of renewable energy resources to suppliers and customers.

DEVELOPMENT OF HYDROGEN TRANSPORTATION NETWORK

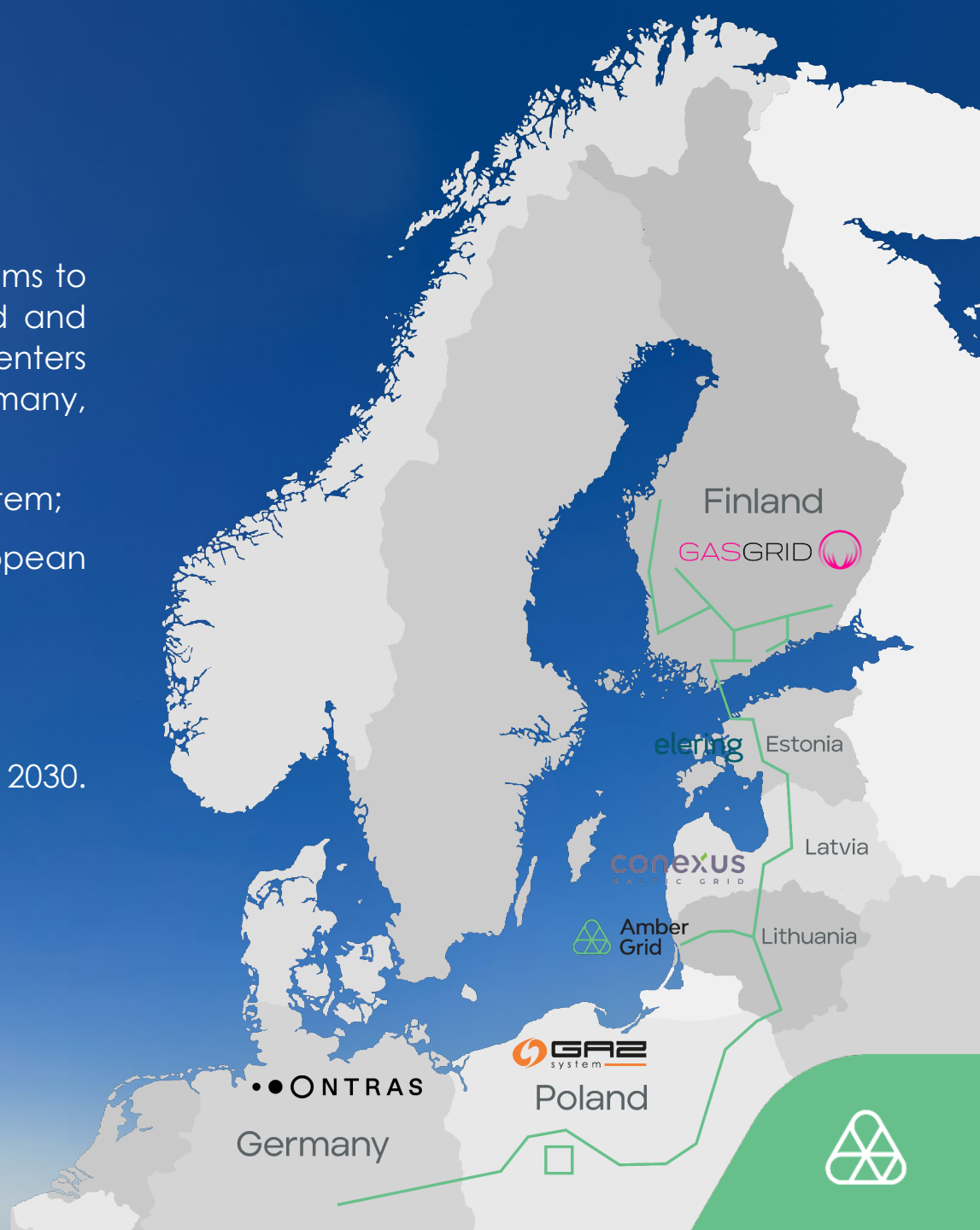
It is important to single out the initiative for the development of the pure hydrogen network in the Baltic region, which aims to create connections of pure hydrogen gas systems between countries where a large supply of pure hydrogen resources is predicted (Finland, Lithuania) due to the huge potential of renewable energy, developed capacities and availability with European countries (Germany, Poland), which will be able to import hydrogen from other European or neighboring countries to meet hydrogen demand.

Energy transformation

The development of the Nordic-Baltic Hydrogen Corridor project aims to create a green hydrogen transportation corridor between Finland and Germany, connecting hydrogen production, supply and storage centers in Finland, Sweden, Estonia, Latvia, Lithuania, Poland and Germany, contributing to:

- decarbonisation of the country, region and European energy system;
- creation and development of a competitive and liquid European hydrogen market;
- cross-border regional cooperation.

THE END OF THE PROJECT IMPLEMENTATION IS 2030.



Energy transformation

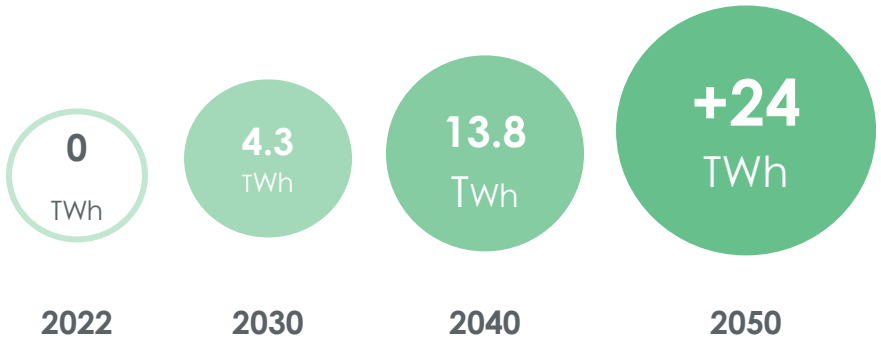
HYDROGEN DEMAND

in 2023 EPSO-G, together with the consulting company DNV, prepared transformation study for the Lithuanian energy system until 2050. The purpose of the study is to model scenarios for the possible development of the Lithuanian energy system, assessing development projects, possibilities, changes in energy consumption, and the responsible parties.

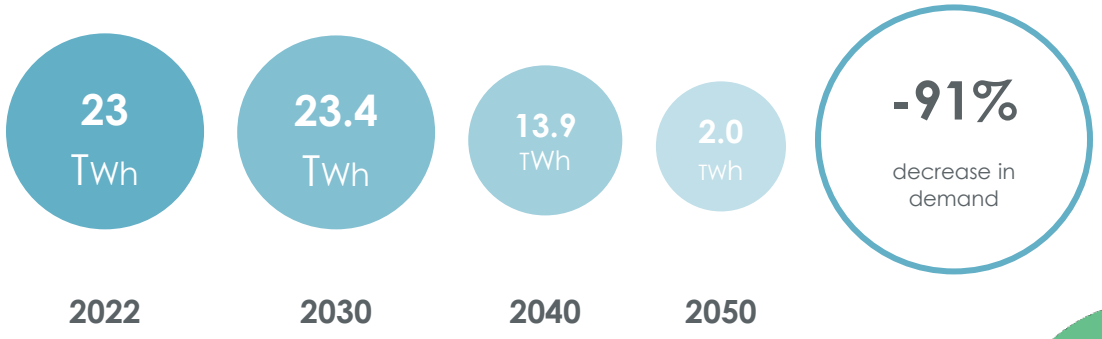
The recommendations of the study are very significant for the further development of the Amber Grid, planning a long-term strategy until 2050.

Amber Grid is also changing on the path of transformation of the energy system. Green hydrogen will be an important fuel and resource in the Lithuanian economy. The decarbonisation of industry will lead to a rapid growth in the demand for hydrogen and a decrease in the demand for natural gas. It is predicted that in 2050 all the methane consumed in Lithuania will consist of biomethane and the demand for hydrogen will increase significantly.

Hydrogen demand perspective until 2050



Perspective for methane-dominated gas demand until 2050



Mission and our obligations

Mission

To develop the system which enables competition and the use of a climate-friendly energy

FOR CUSTOMERS

To ensure competition in the gas market and opportunities to purchase green gas

FOR PRODUCERS/ SUPPLIERS

To transport different gas products in the whole region in a simple and flexible manner

FOR THE SHAREHOLDERS

To act in an efficient manner, consistently develop and adapt our activities for the development of renewable energy sources

FOR SOCIETY

To mitigate climate change and improve the long-term economic competitiveness of Lithuania

FOR EMPLOYEES

To create an immersed and intelligent team living on future energy

Vision and strategic priorities for the year 2030

Vision

Environmentally-friendly, innovative energy company in the integrated European gas network

FOR CUSTOMERS

Increased competition through market integration and transportation of new products: biomethane, mix of hydrogen and methane and, in some places, eventually also pure hydrogen

FOR PRODUCERS/ SUPPLIERS

Creation of a customer-oriented organisation for the gas market players of the region transporting gas in a simple and flexible manner

FOR THE SHAREHOLDERS

Creation of conditions favorable to the integration of renewable energy sources and ensuring of effective property management

FOR SOCIETY

Decreasing the impact of operations to the environment and maintaining a transmission system adapted for decarbonisation of the energy sector

FOR EMPLOYEES

An engaged and progressive team is a center for future energy competences

Value created for the customers

Amber Grid operates in the B2B (business to business) field, our users are energy resource suppliers, heat producers, industrial companies. For this interest group, ensured competition and transparent conditions in the gas market and opportunities to purchase green gas are important.

- We will implement a common European system of guarantees of origin for green gas (including hydrogen), which is useful for companies that want to use ecological fuel produced in Lithuania or another European Union country in their operations.
- We will transport new products: biomethane, hydrogen and methane mixture, and in the longer term - pure hydrogen.
- We will carry out projects connecting hydrogen producers. At a later stage, we will implement technical changes in the transmission and other gas systems, adapting to transport gas according to the new state hydrogen standards.
- After conducting and evaluating the results of the development study of the pure hydrogen transportation corridor in the Baltic region, we will make a decision on the possible route of the hydrogen pipeline.

Value created for the producers/suppliers

The most important thing for energy manufacturers and suppliers is the transportation of various gas products in the whole region and fulfilling the demands of the customers with a quick, simple and flexible transportation system.

- We have implemented a unified customer service standard across the organisation. Responding to customer expectations, we will continue to improve the quality of the services we provide.
- The functioning GIPL connection opened up new opportunities for market participants and increased integration with European countries. In order to achieve even greater integration, we have increased the capacity of the Lithuanian-Latvian gas connection, which allows us to trade even more actively in the market of the Baltic region.
- In order to meet the expectations of our customers, we will implement automated solutions/platforms that allow contractors, landowners and other interested parties to register, submit applications and receive permits or approvals.
- We will make technical changes in transmission and other gas systems, adapting to transport biomethane, a mixture of hydrogen and natural gas.

Value created for the shareholders

The interests of the state are represented by a group of energy enterprises, EPSO-G, which are under the Ministry of Energy. The state seeks to shape a consistent and long-term vision for the energy sector and ensure the smooth implementation of relevant projects. It is important to ensure a sustainable return for the shareholder.

- We are effectively developing the transmission system, establishing risk-based operation, we will use digital solutions/tools for the construction and operation of the transmission system.
- We will remodel gas compressor stations to decarbonise the sector.
- We aim to ensure even more effective and timely management of data flows at the group level, meet customer expectations, and improve the company's internal processes.
- Together with state institutions, we actively participate in the preparation of various studies aimed at the transformation of the energy sector.
- We started by connecting biogas producers. Connection conditions and rates are prepared for new users, and ongoing consultations are ongoing.
- By constantly monitoring our indicators and comparing with companies from other countries, we aim to become one of the leading gas transmission system operators in Europe.
- We are constantly looking for the best solutions for introducing new gas products to the market, actively cooperating in the preparation of legislative amendments.

Value created for the society

We understand society in the broadest sense: it includes the population, the state, nature, global environment. Amber Grid is a part of society; thus, as we seek to transform and decarbonise the national energy production and use, we take care of the impact of our daily operations on the environment and climate change.

- We are consistently implementing the climate change mitigation measures plan.
- We aim that by 2030 we would only use electricity produced from RES.
- We are starting to use non-polluting passenger cars, and in the longer term, also non-polluting special transport.
- We will implement a common European system of guarantees of origin for green gas (including hydrogen), which is useful for companies that want to use ecological fuel produced in Lithuania or another European Union country in their operations.
- We will adapt the Lithuanian gas transmission system to transport the hydrogen mixture. Together with 6 European transmission system operators, we are participating in the development study of the pure hydrogen transport corridor in the Baltic region. Based on its results, a possible pure hydrogen pipeline route will be evaluated.

Value created for the employees

Significant changes (on the national and global levels) are enabled by the work carried out by people who are cooperating and focused, have expertise, are responsible and constantly learning. The professional, competent, immersed employees of Amber Grid who are guided by the values are necessary for the implementation of the strategic objectives of the company and the future of domestic energy.

- We will strive to become a center of competence for new gas, shaping future energy trends, an advanced business model in Lithuania, the Baltic region, and the EU.
- We regularly conduct employee engagement surveys in order to promptly respond to ongoing processes, respond to team expectations, change and improve internal processes, and the motivational system.
- By increasing the competences of employees, we will ensure the necessary education, retraining of employees, and create a learning system that promotes improvement based on advanced and recognised practices.
- We will create motivating, individualised packages of additional benefits (family/health/retirement).

Goals and main performance indicators

	Consumers	Producers/suppliers	Shareholders	Society	Employees
Goals	• To adapt the transmission network to placing of green gas on the market	• To create a customer-oriented organisation • To implement NEIS and other strategic projects identified by the Company on time and with the expected scope	• To ensure a sustainable return for the shareholder • Ensure effective system management and adapt the system to RES integration	• Significantly reduce the impact of activities on the environment • Enable the transformation of the gas sector through the integration of RES	• Create an engaged and progressive organisation • To create an advanced organisation - a future energy competence center
Main performance indicators	• Amount of renewable energy source-gas in the gas system (with the guarantees of origin) - 1,5 TWh. • Number and duration of unplanned outages due to operator responsibility	• Customer satisfaction index, %. • Implementation of NEIS and other strategic projects identified by the Company on time and with the expected scope	• adjusted ROE • adjusted EBITDA • OPEX • RES gas amount in the system (TWh)	• Significantly reduce the impact of activities on the environment • Enable the transformation of the gas sector through the integration of RES	• Employee engagement, % • Recognised experts in new gas are invited to present on this topic at least 2 Lithuanian and international conferences every year. • Employees safety
Results in 2030	• Opportunities have been created to transport hydrogen and gas mixture according to new national and international standards. • Amount of renewable energy source-gas in the gas system (with the guarantees of origin) - 1,5 TWh. • Number and duration of unplanned outages due to operator responsibility - 0	• Customer satisfaction index in 2030 ≥80% • Implemented NEIS* and other strategic projects identified by the Company on time and with 100% of the expected scope. • Increased regional integration with neighboring countries (LV, EE, F, PL)	• the adjusted ROE is not lower than the established by Government of the Republic of Lithuania • adjusted EBITDA not lower than planned • Actual NREC** OPEX / NREC set ≤ 100% • Amount of renewable energy source-gas in the gas system (with the guarantees of origin) - 1,5 TWh.	• Until 2030 reduce the impact on the environment by 2/3 compared to the level of 2019 • Amount of renewable energy source-gas in the gas system (with the guarantees of origin) - 1,5 TWh.	• Employee engagement - 70% • New Gas Competence Center - shaping future energy trends, business model • The number of severe and fatal accidents for both company employees and contractors - 0

**NEIS – National Energy Independence Strategy*
***NREC – National Energy Regulatory Council*

Financial and strategic goals

+230 million EUR

Investments within 7 years in the gas transmission system

By responsibly planning and developing our infrastructure, we will invest in the development of the natural gas system, its adaptation to RES, and modernisation.

+30 million EUR every year EBITDA

+7% ROE

By operating efficiently, consistently developing and adapting our activities to the development of RES, we create a sustainable return for the shareholder.

+1,5 TWh

The amount of green gas in the gas transmission system in 2030

We will contribute to the decarbonisation of business, which will lead to an increase in the demand for hydrogen and RES gas in the market.

≥ 80%

Customer satisfaction index

We apply Customer Service Guidelines to all customer groups, and plan actions to improve customer experience.

Financial and strategic goals

≥ 70%

Employee engagement

An engaged and advanced team is the foundation of the organisation. We work together and grow to create the future of energy.

2/3

Until 2030 to reduce GHG emissions

The company's goal is to consistently reduce its impact on the environment. Every year, we responsibly plan investments and prepare impact reduction plans.

Up to **2** billion EUR

Calculated investments in hydrogen network infrastructure

The construction of a new hydrogen network requires significant investments to ensure the needs of various sectors.

+4 TWh

Transported hydrogen amount by 2030

The developed hydrogen network will significantly increase the demand for hydrogen, especially in the industrial sector, and export will increase.

We are guided by our values

We will develop a system which enables competition and the use of climate-friendly energy until 2030. Amber Grid is changing and changes the energy sector by integrating gas markets, introducing innovations and works towards creation of green energy.

PROFESSIONALISM

We are open and responsible professionals, understand the importance of professional knowledge, practical experience and constant learning to the results and ensuring the continuity business.

COOPERATION

We cooperate in a simple and constructive manner towards our set goals.

PROGRESS

Openness to new operational practices and ideas motivates us to create, learn, and modernise, implement meaningful changes.


With new energy
to a cleaner
future!