

LE 2030 Green | Smart | Global



The purpose of this document – is to present the strategy of Lietuvos Energija UAB group based on ambitious goals related with the growth and development of the group of the companies; however by this document the group has no intention to provide any guarantees of the implementation of the goals or execution of other actions presented in this document; additionally we note that:

- making and implementing of any particular decisions in order to achieve the goals presented in this document (including the scope, time, method of financing and other relevant aspects) will depend on particular external and internal economic, legal and other factors, which could affect making such decisions and their effective implementation oriented towards successful results of group and creating value to all stakeholders;
- operational guidelines of the group presented in this document (including potential projects, development opportunities and alternatives) should not be considered as commitments or any other final decisions or proposals to invest, to enter into transactions or to perform other actions;

- all particular decisions will be made only after the evaluation of all the relevant circumstances and in accordance with the legal requirements and procedures including, if applicable, the duty to obtain necessary authorizations or other approvals from the competent authorities or stakeholders;
- information about all particular decisions, if they must be publicly disclosed, will be disclosed in accordance with the legal requirements governing the disclosure of such information, following the transparency principles and ensuring the provision of necessary, sufficient and comprehensive information to the stakeholders:
- information provided in this document should not be considered as recommendation to invest or any other recommendation related to trade or any other activities in respective markets or as any other intention to influence participants of respective markets or any other stakeholders:
- information provided in this document is based on the circumstances and information known at the moment of the preparation of this

document and is subject to future changes;

- the group is not liable for any interpretations and conclusions drawn or any decisions made by any persons in relation to this document, and therefore is not liable for any losses incurred by these persons;
- the group complies with the principle of legality, therefore any goals, plans, statements, notions and other information provided in this document should not be interpreted contrary to the requirements of the law;
- while performing any actions and making any decisions the group adheres to the requirements of the fair competition, separation of energy activities, transparency in trade of energy products and financial instruments, and other requirements applicable to the activities of the group.

### **CONTENTS**

Board position	4	Analysis of Environmental Factors	61
Vision, Strategic Priorities and Directions	5	Internal Factors	61
Strategic Priority: Sustainable development	9	Brief Introduction of the Group	62
Strategic power generation	10	Principles of Corporate governance	63
Green energy	16	Key Performance Indicators	64
Commercial organisation	22	Key Financial Indicators	65
New energy	28	External Factors	67
Strategic Priority: Quality and efficiency	34	Market Trends and Changes in the Market	68
Strategic Priority: Transparency	38	Compliance with National Energy Independence Strategy	71
Perspective: People and Organisation	40	Analysis of External Factors (PESTEL model)	73
Perspective: Finance	48	SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)	75
Summary	55	Integrated Planning System	77
		Structure of Shareholders	78
		Abbreviations	79

"We believe in a new, ambitious vision of Lietuvos energija – to become a globally competitive energy company that creates value for the country. Our vision is a driving force in everyday work. We will evaluate every important decision: does it create value for our country, does it add to the international competitiveness of the company?"

### Chairman of the board, CEO **Darius Maikštėnas**





"During our new strategic perspective of Lietuvos energija, we will invest in the development of green energy projects in Lithuania as well as abroad. With growing support of investors, we see immense meaning in the implementation of green energy initiatives with the potential of international capital markets while meeting shareholder and investor expectations for stable returns and adding to the global targets of sustainable development."

Member of the Board, Director of Finance and Treasury **Darius Kašauskas** 



"Rapidly changing digital technologies enable us to continuously improve the quality of services delivered to clients. With the help of globally leading innovative solutions, we will assure the highest level of client experience. In response to the client desire to receive different services from "the one hand", we will combine and serve in a fast, simple, and convenient way. We will provide services in Lithuania as well as abroad – adding to the overall growth of the country."

Member of the board, Director of Commerce and Services

Vidmantas Salietis

"Presently, we are on the verge of traditional energy becoming new. People of Lietuvos Energija are not passive observers of these processes, but rather – the initiators and creators of the transformation. We know how to do it, because we are competent, fast learners, empowered and technologically advanced. We think and act globally. While working for the country, we are proud to be creating energy of the future."

Member of the Board, Director of Organisational development **Živilė Skibarkienė** 



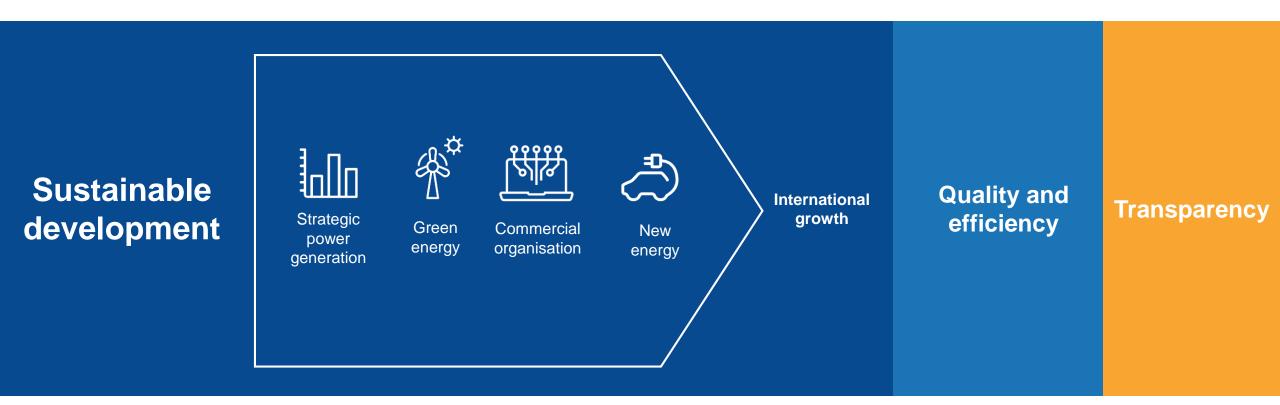


"Continuously improving technologies in areas of renewable energy and energy storage create vast opportunities to use Lietuvos energija potential and experience not only in Lithuania, but also abroad. We will continue to invest in strengthening of Lithuania's energy system as well as new innovative services for our clients."

Member of the Board, Director of Infrastructure and Development **Dominykas Tučkus** 

Sustainable development Quality and efficiency Transparency







**Quality and** Sustainable Transparency development efficiency Quality of Customer Core Stable capital experienc<u>e</u> infrastructure businesses returns

Sustainable development

Quality and efficiency

**Transparency** 



Established international transparency and good governance standard



## Priority Sustainable development

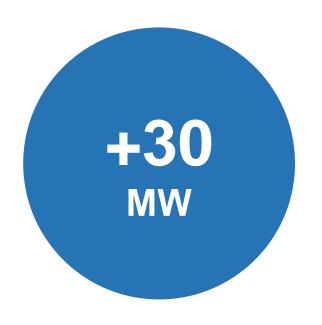


The direction of strategic power generation is to develop or upgrade **strategic** power generation objects as well as **assure** high level **reliability** of currently owned power plants.

The main objective — maintenance and modernization of local reliable power generation and contribution to the successful synchronization of Baltic states with CEN until 2025.

Scope of growth areas — development of currently owned power plants, modernization of owned gas and hydroaccumulation power plants as well as acquisition and development of new power generation capacity.

Key success factors — **speed** and **flexibility** while applying current assets and competencies, **export of competence and know-how** in the liberalized regional market.



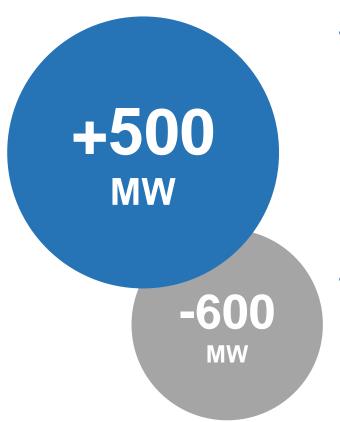
- Participation in power reserve service auctionsto ensure power transmission system operators a reliable access to new fast response power generation capacities.
- Operation and maintenance services for power plants are introduced.



2020

Preparation for the synchronization with CEN; Development of power generation capacities



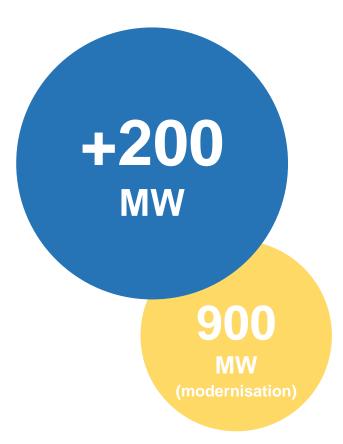


- Active participation in the synchronization with CEN by increasing local reliable power generation capacities:
  - Development of high-tech energy storage capacities in currently owned power plants;
  - Upgrade of power generation capacities in Vilnius by turning them to fast response power reserve capacity;
  - Development of additional pump storage capacity in Kruonis.
- Operation and maintenance services for power plants are introduced in foreign markets.

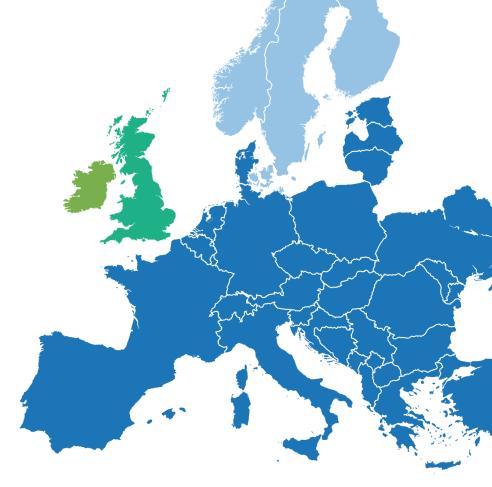


2025

Synchronization with CEN; Preparation for the regional power reserve market



- Modernisation of depreciated power plants:
  - Increase of the flexibility of pump storage capacities;
  - Modernisation of natural gas power plants.
- Active participation in foreign power reserve markets.
- Development or acquisitions of new strategic power generation capacities in the region.



2030

Competitive participation in the regional reserve market



### **Strategic targets**



Power reserve services are provided not only for the local but also for the regional market



First to apply latest battery technologies in the region for largescale energy storage services Development plan of strategic power generation portfolio:





Operation and maintenance services are provided not only within the group, but also to other power generation companies



Using existing infrastructure for construction of new capacities

Installed power, MW MW MW MW

### Financial targets



Investments in power generation facilities in both existing and new production facilities



Additional financial potential of the strategic power generation direction



### Green energy

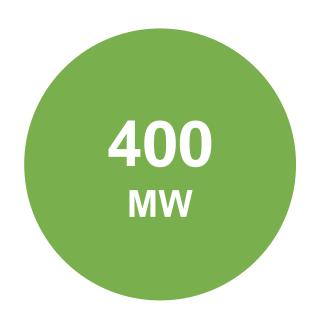
The direction of green energy — development of electricity production capacities of renewables resources: wind, solar, biofuels and waste.

LE 2030 target — half of group's EBITDA from green energy.

Scope of growth areas — sustainable **development** in Lithuania, Baltic sea region as well as Central and Eastern European region by **acquiring** existing power plants and **developing** new projects.

Key success factors — possibilities of synergy of operations and maintenance for consolidated power supply, ability to use acquired management and technological competencies in new markets, integrated solutions with new commercial services.

### **Green energy**



- Target areas for development: onshore wind farms, solar power plants, biofuel and waste co-generation power plants.
- The development is carried out both by acquiring operational power plants and by developing new projects.
- The target region the Baltic States and Poland.
- The accumulation of technological expertise and the development of centre of excellence for green generation development and management.
- Assessment of the development of offshore wind power plants.
- Search for waste and biofuel cogeneration projects in foreign markets.



2020

Baltic countries and Poland

### **Green energy**



- Green power generation portfolio is expanded with offshore wind power plant.
- Regional development is expanded into CEE (Central and Eastern Europe).
- Application of standardized wind and solar power plant development and management model in all regions of operation.
- Integrated solutions with new commercial services.
- Development of waste and biofuel cogeneration projects in foreign markets.
- Evaluation of other large-scale RES development opportunities.



2025
Baltic states + CEE

### **Green energy**



- Developed global competitive business model.
- Both regional and global development is carried out.
- Implementation of other large-scale RES development opportunities.



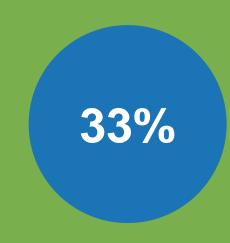
2030
Global market



### **Strategic targets**



Share of green power generation capacity development that will be implemented abroad



This amount of Lithuanian electricity generated from RES will be generated in LE group's RES power plants

### Financial targets

CAPEX up to 2700 mEUR

2018-2030 investments are forecasted to sum up to 2.7 billion EUR

3x Every five years

Planned pace of green energy portfolio development

Installed capacities
3000
MW

1650 MW of wind, 1190 MW of solar and 160 MW of biofuel and waste power generation capacities are planned to be installed by 2030

EBITDA

>300
mEUR

EBITDA of green energy will be up to 1/2 of the group's total.



The direction of the development of a commercial organisation is the **consolidation** of similar activities of LE group companies and the offer of different services to our clients "from one hand".

Target of the direction – increase of energy sales volume **more than 4 times** by 2030.

Steady **expansion** in Central and Eastern Europe, and later also in the regions of South East Europe.

Key success factors are application of leading digital
solutions to ensure **the best customer experience, successful investment** in
brand enhancement, and the
ability to **replicate** successfully
the services provided in
Lithuanian market in foreign
markets.



- Consolidation of electricity and natural gas trading and energy efficiency businesses.
- The development and trade expansion of value added products and services for customers (for example, energy saving, solar power plants, batteries, heating, ventilation and lighting solutions).
- The new commercial organisation will ensure:

Highest level client experience Convenience of getting a broad spectrum of services "from one hand"

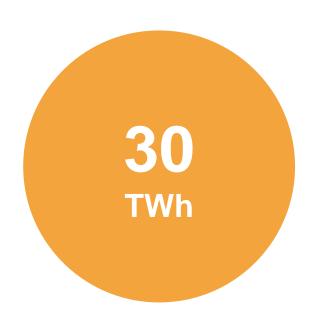
Speed

**Simplicity** 

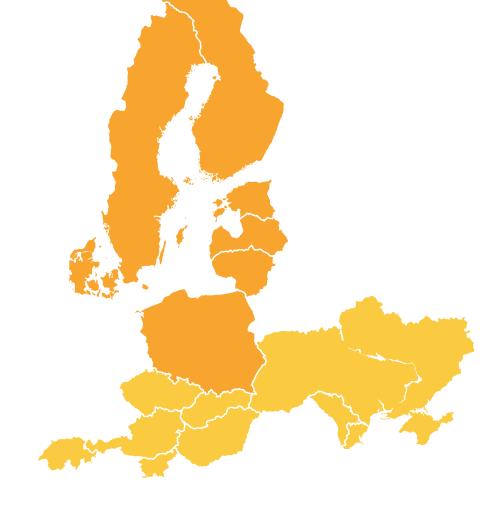


2020

Consolidated commercial organisation;
Baltic sea region



- Ambitious development in CEE
   (Central and Eastern Europe) region:
   secondary companies are being
   established, corporate and client
   portfolios are acquired.
- Establishing and consistently strengthening the international brand. The brand is known not only in the Baltic Sea region, but also in other markets.
- Accumulated knowledge is the most valuable asset of an organisation.
   Various automated data analytics tools are used to create new marketing and sales proposals.

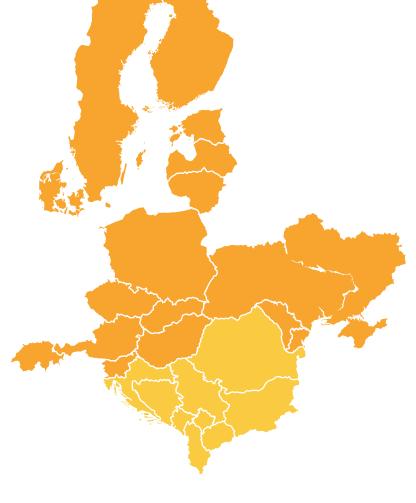


2025

**Baltic sea region + CEE** 



- Further expansion to SEE (South East Europe) region.
- The digitization of service channels is more active than in previous periods, ensuring a convenient and prompt access to services for all customers.
- Productive collaboration with technology companies: developing integrated energy solutions.



2030

Baltic sea region + CEE + SEE

### **Strategic targets**



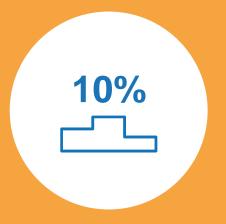
In a commercial organisation, unregulated activities will dominate



Established brand awareness in international markets



All services are accessible digitally



According to customer satisfaction, organisation will be among the top 10% of the best performing companies in similar categories

### **Financial targets**

2X Every 5 years

Sales volumes will double every 5 years

>80%
Outside
Lithuania

Development abroad: 2030 core part of the portfolio will be in foreign markets

EBITDA

up to 80

mEUR

EBITDA for commercial activities will increase by more than 5x



The direction of the development of new energy is the adaptation of **innovative** technologies and investments in new energy businesses with high potential for growth.

The goal is to become the main **competence centre** of new energy in the region and a **leader** in distributed energy **solutions** both in the Baltic Sea region and in other regions.

The range of services provided are **packaged** service solutions including small-scale power generation, **electric vehicle** charging network services, distributed energy **storage** and consumption management.

Key success factors — creation and successful use of collaborative / partnership models with other industries, other utilities and consumer service providers, a high level of application of advanced technology and smart solutions.



- Further active penetration of energy efficiency solutions (ESCO).
- New service solutions to the market:
  - Solutions for micro generation;
  - Solutions for distributed power storage (batteries);
  - Solutions for electric vehicle charging network and its management;
  - Solutions for energy demand response.



2020

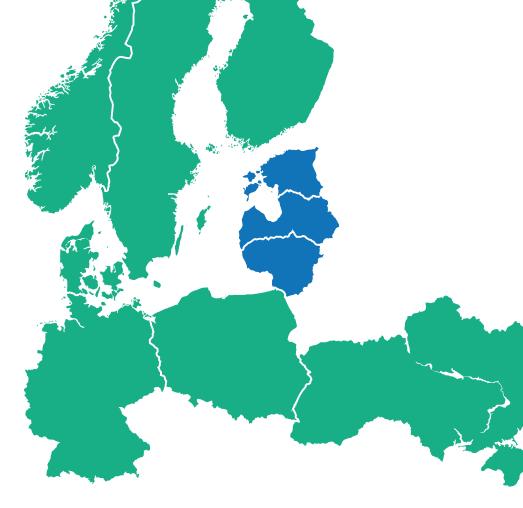
**Baltics** 

EBITDA

up to 30

mEUR

- Bringing start-ups from LE innovation foundation to a commercial level.
- Partnerships with technology companies in creating innovative energy solutions.



2025

**Regional market** 



- Development of own IT platform that would allow to manage big amounts of micro RES generators, batteries and electro mobiles.
- Establishment of global smart energy solutions competence centre.



2030

**Global market** 

### **Strategic targets**



We will seek to become the first adviser for clients turn to when choosing solutions for energy efficiency, electric vehicle charging as well as RES related services.



We will create "Energy-tech HUB"

We will attract worldclass start-ups



65% of the financial result will be brought from participation in global market

### Financial targets

CAPEX Up to 370 mEUR

Investment planned until 2030

EBITDA
Up to 50
mEUR

By 2030 new businesses and activities will generate up to 50 mEUR EBITDA

## Priority — Quality and efficiency



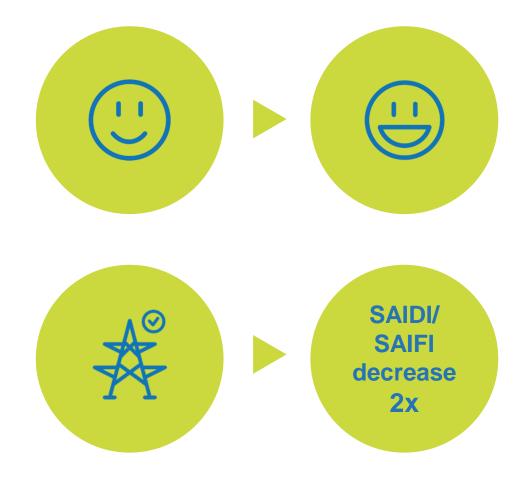
## Quality and efficiency

Main target — to be the energy group which assures the best client experience, price and quality.

Scope of the development — to ensure and constantly increase the **efficiency and quality** of current and future businesses by automation/robotic processes and fostering **operational excellence**.

Key success factors — client oriented organisational culture and effectiveness.

### **Strategic targets**



#### **Client experience:**

- Maintaining the position of the leader in distribution service prices: among the TOP5 EU countries.
- Connection times to the distribution network of new customers are further reduced
- The quality of distribution service provision is steadily increasing: SAIDI / SAIFI indicators in 2030 decrease 2x.
- According to NPS (net promoter score) we are among 10% of industry leaders.

#### **Quality of infrastructure:**

- 100% of network digitalized (smart meter mass roll-out).
- Distribution system monitoring automation solutions are installed to help prevent and resolve faults (predictive maintenance).
- Cabling of electric lines is carried out only where it is technologically and economically rational, giving priority to lines that are depreciated, prone to accident, forested or in populated areas.

## **Strategic targets**



#### **Core businesses:**

- Only core business are carried out.
- Efficient shared service centres.

#### **Efficient use of capital:**

- Stable return of capital.
- Optimal capital structure.
- · Investment credit rating.

Priority — Transparency



## Transparency

The LE Group seeks to become an internationally recognized **example** of responsible, transparent and credible business.

In our work, we continue to follow the principle of **zero tolerance** for the unethical or obscurantist activity.

We will maintain the highest standards of **transparency** with investors and partners.

We will develop and implement complex actions that include internationally recognized and applied standards of transparency and action ethics. We will publicly communicate the implementation of the measures and the results achieved.

We will strive for the principles of transparency and operational ethics by certifying in accordance with the international standard **ISO 37001**.

## Perspective — People and organisation



# People and organisation

We are different and therefore strong.

We think and act **globally.** 

We are **proud** to be creating future energy ourselves.

## People and organisation



- We are different: responsible for the country's energy stability and at the same time eager, client oriented, crazy about technologies, innovation and efficiency.
  - We create value for the country by sharing our diversity, competence, experiences, and knowledge.
  - We see meaning in our work by creating energy of the future, making it easy, invisible, and green.

## People and organisation



- We are one, big united Lietuvos energija team.
- We are one step ahead due to our continuous improvement through rapid learning always and everywhere. Each day we ask each other "how can it be better?"
- Everyone is empowered to act, organisational structures do not limit us when we passionately seek for results, do meaningful work and create innovations.
- We can put all competences to the right places in new organisation.



- We are introducing advanced teamwork methods for creating future energy.
- Our teams are empowered, when speed and flexibility is required.
- Organisational structures don't interfere with the ability to create for our clients.



- We are learning everywhere, always and fast.
  - We develop competences for traditional and new energy in different ways.
  - Progressive and adaptive training system serves as an accelerator for constantly growing organisation and employee personal development.
- We will turn present competences into new. We will attract new ones by being an attractive employer.



- An engaged employee is productive, therefore our modern and technologically advanced setting eases our work and lets us remain motivated and healthy.
- LE person is always at the centre of our focus, employee's experience is important at every stage of personal development.



 Operational excellence has become a part of our everyday doing, and digital transformation of the organisation creates a competitive advantage.

 We are a data driven organisation – we make data based decisions.

## Perspective — Finance



# Financial perspective

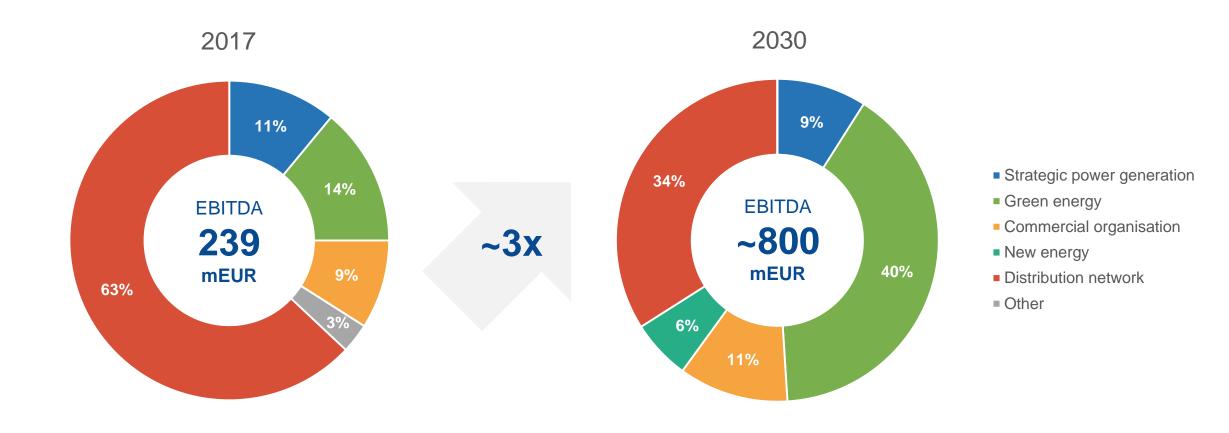
Creation of long-term value for shareholders.

**Efficient** use of group financial capability for international development through the most **competitive** capital market instruments.

**Consistent** implementation of dividend policy.

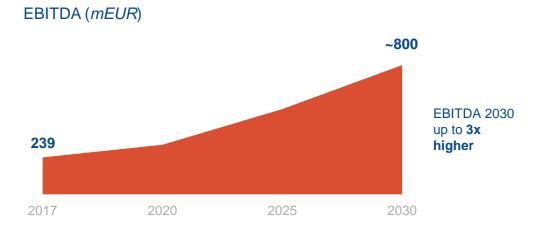
**Safe** credit risk management.

## Financial perspective 2030

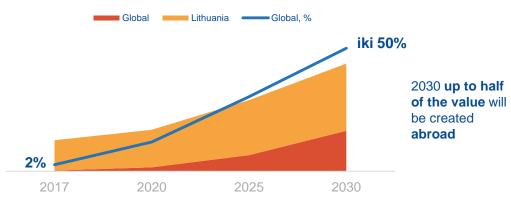




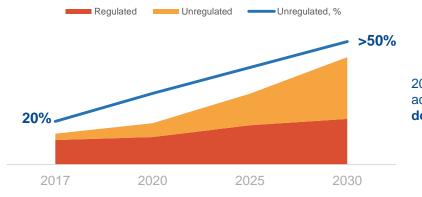
### **EBITDA 2030**





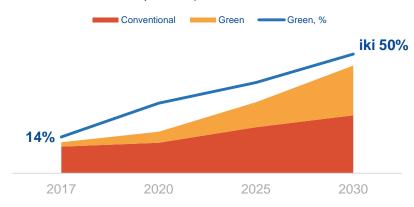


#### Regulated vs. Unregulated (mEUR)



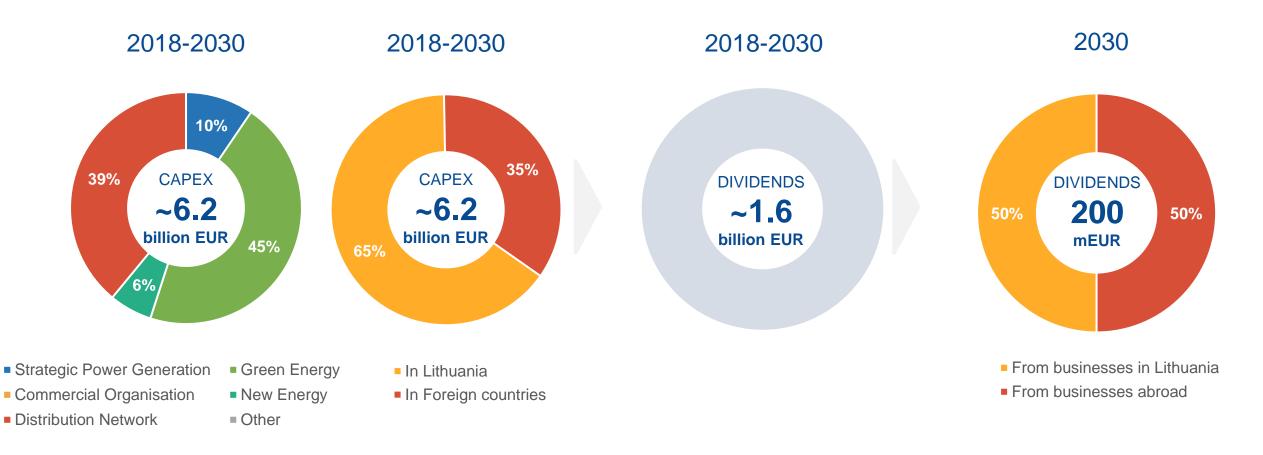
2030 **unregulated** activities will be **dominant** 

#### Žalia vs. Tradicinė (mEUR)



2030 half of the value will be created from green power generation

### Investments and dividends 2030





## Group financial indicator guidelines



## **Investment parameters**





## Summary

### Value for the country

- Best price and quality
- International transparency standard
- Energy industry stimulator
- Stability of strategic power capacities
- 2030 half of **dividends** from abroad





### **Innovations and investments**

- ~ 6 billion euro investment
- 50% of value created from **green** energy
- Wind, solar, innovations, new technologies and business models
- Quality of the distribution network, efficiency and digitalization

### **International growth**

- Up to 50% value in **international** markets
- International talents
- International brand
- Among **10 most advanced** new energy companies



Innovations and investment

Value for the country

GLOBALLY COMPETITIVE ENERGY COMPANY CREATING VALUE FOR THE COUNTRY

International growth



## LE 2030 APPENDIX

# Analysis of environmental factors

## Internal factors

## Brief introduction of the group

Lietuvos Energija Group is a state-controlled group of companies, which is one of the largest in the Baltic States, 100 percent of its shares belong to the Lithuanian government. The Ministry of Finance of the Republic of Lithuania executes rights and duties of the shareholder; in 2013 it approved and in 2017 updated the corporate governance guidelines on which the whole governance of Lietuvos Energija Group is based. The aim of corporate governance is to achieve the synergy effect by combining different activities of the companies and by directing them towards the pursuit of common goals of the group.

#### Core activities

The main activities of the group include power and heat generation and supply, the trade and distribution of electricity, trade in natural gas, its distribution and supply, as well as the maintenance service and development of the energy sector.

The parent company of the group, Lietuvos Energija, UAB, is responsible for the management and coordination of the group's activities and for the increase of its efficiency: it establishes operational guidelines and rules and coordinates the activities in the fields of generation, commerce, finance, law, strategy and development, human resources, risk management, auditing, technology, communication and other fields.

Lietuvos Energija Group implements development projects of strategic importance and contributes to the goals of National Energy Independence Strategy. Lietuvos Energija Group with approximately 4,500 employees controls the most important electricity production capacities in Lithuania - the entire power distribution network covering the whole area of the country making over 120,000 km, and exploits over 8,000 km gas distribution networks providing services to over 1.6 million power consumers and almost 570,000 gas consumers throughout Lithuania. It also has subsidiaries in Latvia, Estonia and Poland. In 2017, the group consisted of 21 secondary companies (including the financial support fund of the group) directly or indirectly controlled by of Lietuvos Energija, UAB.

#### Vision

Globally competitive energy company creating value to the country.

#### Mission

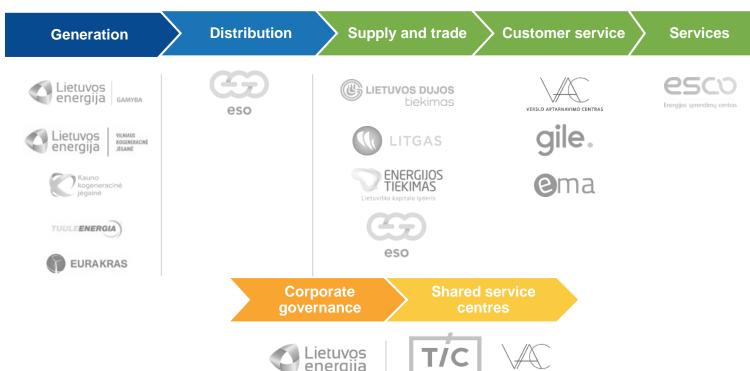
A sustainable increase of value in energy sector, stimulating the development of country's economy and the society.

#### Values

Fulfilment of the mission, aspiration towards the vision and the entire activity of Lietuvos Energija Group is based on the following fundamental values:

responsibility, collaboration, result,

We are responsible, we work in collaboration and we strive for the best result.











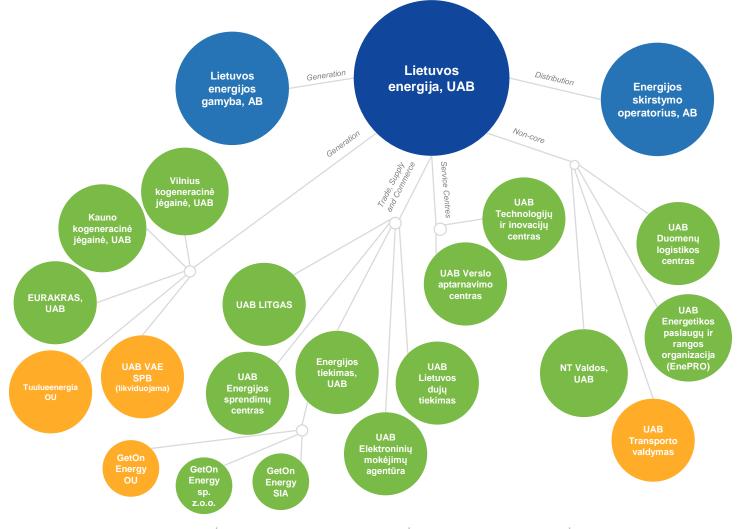
## Principles of corporate governance

The governing bodies of Lietuvos Energija, UAB are the General Meeting of Shareholders and the Management Board, the supervising body is the Supervisory Board. Supervisory Board is a collegial group-level supervising body, elected by the General Meeting of Shareholders for a term of four years.

On the 1<sup>st</sup> of June 2017, the Minister of Finance approved the updated Corporate Governance Guidelines, according to which the Supervisory Board is a statutory collegial supervisory body in accordance with the Articles of Association of the Company, elected by the General Meeting of Shareholders for a four-year period. Supervisory Board of Lietuvos Energija consists of 5 members: 2 members representing the Ministry of Finance and 3 independent members. The chairperson is elected by the Supervisory Board from among its members. The elected chairperson is an independent member of the Supervisory Board. Such a model for the formation of the supervisory board meets the principles of corporate governance and good international practices.

For the effective performance of its functions and duties, the Supervisory Board shall set up committees. The Committees of the Board of Supervisors, according to their field of competence, submit their conclusions, opinions and proposals to the Supervisory Board. The committee must be composed of at least three members, of which at least one member is a member of the Supervisory Board and at least one is an independent member. Committee members are elected for a period of four years.

The Board is a collegial management body as provided in the Company's Articles of Association. The members of the Board are elected and revoked by the Supervisory Board on the proposal of the Appointment and Remuneration Committee for a four-year period. The Board composed of 5 members elects the chairperson of the Board from among its members – the director general of the company. The members of the Board, according to their competence, must ensure the proper performance of the Company's activities / group-level coordination of respective areas.



- The Supervisory Board consists of 5 members (of which 3 are independent)
- The Board consists of 5 members (working in the company)
- The head of the company is the chairperson of the board
- The Supervisory Board (external) consists of 3 members (of which 1 is independent)
- The board consists of members of the company
- The head of the company is the chairperson of the board
- The Board consists of 3 members (including independent members)
- The head of the company is not the chairperson of the board.
- Head of the company
- Boards are not formed



# Key performance indicators

Over the year 2017, 1.28 TWh and 9.22 TWh of electricity was produced and distributed to the customers, while 7.37 TWh of natural gas was distributed through the distribution pipelines.

Electricity		2017	2016	△, +/-	Δ, %
Electricity produced	TWh	1,28	1,49	-0,21	-14,1
Part of electricity produced from renewable energy sources	TWh	0,59	0,49	0,10	21,2
Amount of electricity distributed through medium and low voltage networks, etc.	TWh	9,22	8,98	0,24	2,7
Social or cover supply	TWh	3,22	3,15	0,07	2,3
Distributed to consumers of independent suppliers	TWh	6,00	5,83	0,17	2,9
Quantities of sales on the retail market	TWh	2,12	1,78	-0,34	19,2
Number of newly connected users	in thousands	29,64	29,36	0,28	1,0
Connection terms for newly connected users (average)	c. d.	49	66	-17	-26,5
Indicators of electricity supply quality					
SAIDI, in minutes (with force majeure)	min.	137,83	172,92	-35,09	-20,3
SAIFI, in units (with force majeure)	unit	1,32	1,25	0,07	5,6
Technological costs in the electricity distribution network	%	6,14%	6,49%		-5,5
Gas					
Amount of distributed gas	TWh	7,73	7,39	-0,02	-0,3
The amount of gas sold	TWh	11,47	11,31	0,16	1,4
The amount of gas purchased	TWh	11,88	11,77	1,11	1,0
Amount of purchased liquefied natural gas	TWh	6,35	7,55	-1,20	-15,9
Amount of purchased natural gas	TWh	5,53	4,22	1,31	31,0
Number of newly connected users	in thousands	12,53	5,29	7,24	137,0
Connection terms for newly connected users (average)	c. d.	166	160	6	3,7
Indicators of gas supply quality					
SAIDI, in minutes (with force majeure)	Min.	1,161	0,529	0,63	119,5
SAIFI, in units (with force majeure)	unit	0,007	0,006	0,001	16,7
Technological costs in the natural gas distribution network	%	2,13%	2,25%		-5,1



## **Key financial indicators (1)**

The table on the right provides basic information on the indicators of the companies of Lietuvos Energija Group (audited data for 2017).

Different companies of Lietuvos
Energija Group are in different stages
of activity or situation (for example, in
the stage of investment – investing
only, no income earned). Find out
more about the activities and results
of the companies on the website
www.le.lt.

mEUR		Revenue	OPEX	Net profit	EBITDA (corrected)	Assets	Employees	ROE, %	Investments
LE group	Lietuvos energija	1100,8	132,0	93,5	238,7	2505,1	4513	9,8	253,4
LE	Lietuvos energija	3,5	9,4	105,9	-5,9	1889,3	104	8,0	0,1
ESO	eso	612,3	94,7	77,6	150,9	1277,8	2503	12,6	226,2
LEG	Lietuvos energija <sub>GAMYBA</sub>	149,8	20,0	20,5	53,7	636,3	393	5,8	1,9
ET	ENERGIJOS TIEKIMAS Lietuviško kapitalo lyderis	78,1	2,4	4,9	6,4	50,4	31	17,3	0,9
LDT	LIETUVOS DUJOS tiekimas	239,9	4,2	7,6	14,0	85,6	32	43,7	0,1
LTG	LITGAS	88,1	0,8	-6,0	1,2	42,9	16	-29,7	0,0
EnePRO	ENE	31,2	14,4	-5,4	-4,4	23,0	552	-310,6	0,1
NTV	VALDOS	21,0	12,0	-4,3	9,1	103,1	175	-6,6	6,6
TIC	T/C	14,3	9,4	0,2	2,9	12,3	167	2,7	3,9



## **Key financial indicators (2)**

The table on the right provides basic information on the indicators of the companies of Lietuvos Energija Group (audited data for 2017).

Different companies of Lietuvos
Energija Group are in different stages
of activity or situation (for example, in
the stage of investment – investing
only, no income earned). Find out
more about the activities and results
of the companies on the website
www.le.lt.

mEUR		Revenue	OPEX	Net profit	EBITDA (corrected)	Assets	Employees	ROE, %	Investments
VAC	VERBALS AFFINISHMENT GENTRALS	11,2	10,7	0,4	0,5	3,3	480	50,5	0,1
EMA	<b>e</b> ma	0,3	0,5	-0,2	-0,2	0,7	6	-42,3	0,3
DLC	Data Logistics Center	3,8	2,5	0,4	1,3	5,6	14	9,2	0,0
VAE	VAE Viagno atomic eletrica	0,0	0,2	-0,2	-0,2	0,1	3	-249	1,3
ESCO	<b>esco</b> Energijos sprendimų centras	0,2	0,5	-0,4	-0,4	1,9	11	-64,2	4,8
VKJ	Lietuvos vilniaus kogeneracinė jeannė	0,0	0,5	-0,4	-0,5	33,8	22	-4,0	5,3
KKJ	Kauno kogeneracinė jėgainė	0,0	0,3	-0,3	-0,3	24,0	3	-1,8	0,0
Eurakras	EURAKRAS	5,3	0,7	1,7	4,6	32,3	1	20,2	0,0
Tuuleenergia	TUULEENERGIA	3,5	0,5	0,7	3,0	31,4	0	58,3	0,0

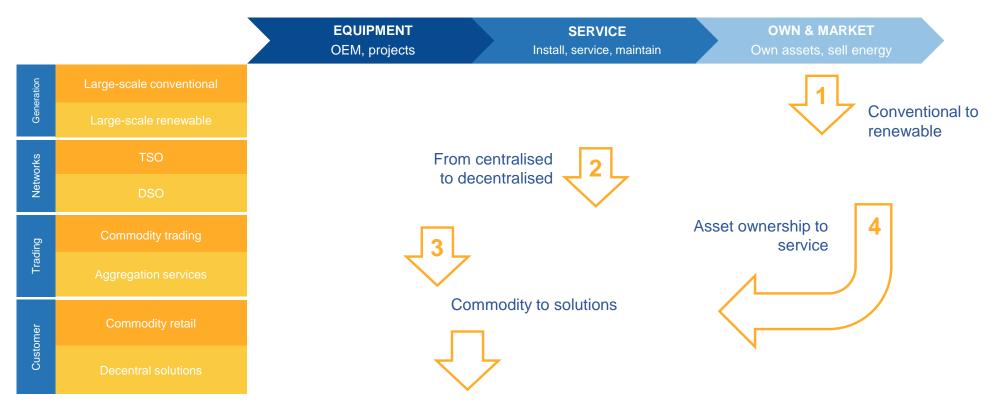


# Analysis of environmental factors

## **External** factors

## Market trends and changes in the market (1)

4 major value shifts reshape European energy markets



Source: visualisation of market trends and changes in the market has been developed by summarising the public information of the comparable companies and other public sources.



## Market trends and changes in the market (2)

Emerging businesses require fundamentally new capabilities



- Orientation towards the customer
- Digital competencies and empowerment
- Adaptation to individual customer needs
- Advanced financing solutions
- Use of partnerships
- Innovations
- Speed and flexibility

Source: visualisation of market trends and changes in the market has been developed by summarising the public information of the comparable companies and other public sources.



## Market trends and changes in the market (3)

Technological progress changes the value structure of energy companies

Traditional utility services	New services
------------------------------	--------------

	Generation and wholesale	Transmission	Distribution	Metering	Retail	Services behind-the-meter	Distributed generation
Revenues for a traditional utility,%	30–40	15–20	40–50	0–10	0–5	0–2	0–2
Drivers of value shift	Lower plant utilization	Network inves regulated re		Smart meter	IT and self-service applications	Smart devices, IT	Distributed generation equipment and financial possibilities
Direction of shift	•	•	•	•	•		•
Projected revenue shares in a traditional energy company, %	20–30	10–15	20–30	5–15	5–10	0–10	15–20

Source: visualisation of market trends and changes in the market has been developed by summarising the public information of the comparable companies and other public sources.



### Compliance with National Energy Independence Strategy (1)



### We will contribute to the goals of energy security by:

- implementing the necessary actions for synchronization with the grid of Continental Europe – further development of Kruonis Pumped Storage Plant (with socio-economic justification and financial prerequisites) and other, if needed;
- ensuring reliable local generation, high level of reliable capacity, efficient provision of system services and reliable infrastructure of the distribution network;
- diversifying the import and international trade of energy resources (electricity, natural gas and liquefied gas);
- developing new / upgrading the existing generating capacities that would increase the volume of local generation in Lithuania.



### We will contribute to the development of renewable energy by:

- developing and exploiting wind, solar, hydro and other renewable energy or complex projects and technologies;
- gathering and sharing experience in implementation, operation and management of the technologies of renewable sources of energy both in Lithuania and abroad;
- developing the distributed, small-scale projects, combining them with the solutions of collection, storage, producing consumers, energy exchanges or other solutions;
- improving network settings by facilitating procedural aspects for the development of distributed generation.

71



### Compliance with National Energy Independence Strategy (2)



### We will contribute to the goals of energy consumption efficiency by:

- developing energy efficiency projects both within the corporate group and providing ESCO services to the public and private sector;
- improving the infrastructure and the network, thus reducing technological losses;
- installing smart network solutions and energy accounting devices, and smart home solutions for customers;
- activating the society and business to use energy in an efficient and economical manner through communicative means;
- implementing other advanced technologies and solutions within the whole energy value chain.



## We will contribute to the development of Lithuania as the centre of energy innovation by:

- creating high added-value competencies enabling both the competitiveness of the companies and the growth of related industries;
- investing in start-ups and innovative ideas in the field of Energy Tech, both through the Lietuvos Energija Group Innovation Fund and other accessible formats;
- collaborating with advanced international companies in the development of smart and advanced products or services;
- sharing our solutions and competences in other countries by "exporting" knowledge, products and services;
- developing the capabilities of data analysis enabling the whole corporate group to become a data-driven organisation (DDO).



## Analysis of external factors (performed according to the PESTAT model) (1)

Factors	Exposure direction*	Means for exposure control
Political factors		
Changing energy policy / its priorities due to political changes	Negative / Positive	<ul> <li>To seek to ensure that important strategic decisions are timely and that on the long run they are established in legal acts or strategic documents;</li> <li>Proactive and rapid response to changed / new opportunities;</li> <li>To communicate actively to all stakeholders and publicly, to ensure continuous, consistent implementation of accepted / agreed solutions.</li> </ul>
The influence of national and international political agreements on the major group projects	Negative / Positive	<ul> <li>To actively participate in discussions, to prepare the necessary materials for decision-makers; to communicate the potential impact of planned solutions to Lietuvos Energija Group;</li> <li>To proactively and periodically inform decision-makers about the group's operational challenges, the progress of projects; if possible, to develop alternative action plans (to activate them in case of unfavourable decisions).</li> </ul>
Economic - financial factors		
Impact of economic development cycles on the changes of energy demand and the results of performance	Negative / Positive	<ul> <li>To regularly update forecasts of electricity and gas demand in Lithuania, the historical dynamics of prices and to integrate them into further planning of activities;</li> <li>To communicate the historical dynamics of prices, the flows and volumes of energy resources, and its causes and trends.</li> </ul>
Growing competition	Negative	<ul> <li>To expand a diversified portfolio of activities by increasing the volume scope of commercial activity;</li> <li>To facilitate unnecessary / excessive regulation of commercial activities;</li> <li>To actively expand the energy trading activities outside Lithuania.</li> <li>To rectify the value chain of Lietuvos Energija Group;</li> <li>To implement the transformation of the organisation towards a digital organisation – the one making intelligent decisions, managing the data, modern and flexible.</li> </ul>
Fluctuations in the prices of the resources, the imported electricity and the gas prices  Social factors	Negative	<ul> <li>To develop, analyse and communicate the dynamics and forecasts of the prices of recourses. To integrate them into long-term plans;</li> <li>Diversification of electricity and gas portfolio in time;</li> <li>To increase the diversification of production capacities both in Lithuania and abroad; to develop the portfolio of renewable energy resources.</li> </ul>
Relatively slow growth in purchasing power of the country's population – high sensitivity to the growth of prices; The formed expectations for falling energy prices;	Negative	<ul> <li>When forming the pricing of services, to take into account the interests of the most vulnerable social groups, to propose energy saving solutions;</li> <li>To proactively, periodically and comprehensibly communicate the causes of price changes, highlighting the factors dependent on the actions of the companies of Lietuvos Energija Group.</li> </ul>

<sup>\*</sup> The influence of a specific factor in respect of the LE group's activities.



## Analysis of external factors (performed according to the PESTAT model) (2)

Factors	Exposure direction*	Means for exposure control
Technological factors		
Depreciation of the existing electricity production capacity	Negative	<ul> <li>To seek to increase the investment into the generating capacity for extending the service life and developing competitive new capacity.</li> </ul>
Decreased gas consumption, i.e. increasing infrastructure costs (EUR / m³ / user)	Negative	<ul> <li>To maintain or promote gas consumption in promising areas: through the quality of services, reliability, complex services (with electricity, energy efficiency, etc.), by optimizing the costs of infrastructure maintenance;</li> <li>To seek long-term regulatory stability and clarity of the pricing components.</li> </ul>
Necessity of digital technologies and complex modern solutions for competitiveness  Sub-optimal and low-automated distribution network	Negative / Positive	<ul> <li>To implement the group's activities of digitization and transformation programs (complex measures), considering them as one of the priority;</li> <li>To seek long-term regulatory stability for continued investment in intelligent network development, data analytics, and other intelligent solutions;</li> <li>To implement globally proven innovative solutions (through partnerships with experienced global market players / innovation model).</li> </ul>
The need for heat production capacity using local fuel and the competition in heat sector	Negative / Positive	<ul> <li>Timely and successful completion of cogeneration plant projects. To select a partner for Vilniaus Kogeneracinė Jėgainė, UAB; to ensure stable and long-term operational prospects;</li> <li>To seek opportunities for the use of existing infrastructure and experience / new acquisitions in Lithuania or in the region.</li> </ul>
Environmental factors		
Stricter environmental requirements, leading to the need for additional investment	Negative/ Positive	<ul> <li>When planning the activities of companies, to assess the implementation of environmental requirements;</li> <li>To consider the environment-friendly means the principle on daily activities;</li> </ul>
Instability in a clear, long-term environmental policy / imbalance in global environmental policy complicates the implementation of long-term solutions.	Negative	<ul> <li>Environmental trends will be taken into account when planning and making long-term solutions;</li> <li>In the investments or the activity, to seek assessment of the potential demand for additional investments for possible changes in environmental requirements.</li> </ul>
Legal factors		
Complex (extremely detailed / overly abstract), changing, and ambiguous legal regulation	Negative	<ul> <li>In the event of regulatory loopholes / uncertainties, seek to proactively clarify the significant aspects with decision makers (by getting explanations, comments, etc.);</li> <li>If possible, to seek to reasonably initiate the adoption or amendment of the legal acts. As well as a long-term stability of the regulation;</li> <li>Regular review of legislative framework, the assessment and the enforcement of legal compliance (personal data, anti-corruption, transparency, purchases, regulation of core business, etc.)</li> </ul>
Insufficient clarity and stability in legislation and regulation / insufficient consistency in both regulated and commercial activities	Negative	<ul> <li>To strive for a stable and clear application of the principles of incentive regulation;</li> <li>To seek a consistent legal support for the internal service centre model;</li> <li>To seek the regulation for treating the commercial activities in the same way as other market participants, especially when operating in several countries.</li> </ul>



## SWOT analysis (strengths, weaknesses opportunities, threats) (1)

Summarizing the implemented analysis of the internal and external environment, it is evident that significant changes are taking place in the market. The weaknesses of the LE Group can be reduced, and the emerging threats can be withstood. This requires exploiting the following strengths obtained, and opportunities offered by the market:

- The strategic importance of the Company, and additionally accessed diversified financial resources, as
  well as practical experience of their use, which make it possible to invest in the new projects and
  solutions. It contributes to the diversification of production and services portfolio and higher maturity, thus
  increasing the return on assets and the financial value of the Group. The EU and other financial support
  should become a prerequisite for investment projects of strategic importance both from the shareholder
  and public perspective
- The expansion and purification of the value chain, which provides the LE Group with a greater competitive advantage in the energy sector and helps to achieve synergies across the value chain. It also allows neutralizing or at least stabilizing of the threat of raw material price growth.
- The knowledge and expertise in the field of electricity and gas trading, which is exploited in relation to the development of the electricity and gas market including the emergence of interconnections, the creation of a common Baltic electric energy derivatives market, and the Baltic market for system services, as well as international gas trading.
- The prerequisites for increasing competitiveness, which can be created, and/or are created by
  development of the new, innovative services and solutions for the market, use of the Innovation Fund
  Platform and projects implemented on the basis of an inter-industrial partnership.
- Continued application and improvement of the company governance and high-transparency principles
  consistent with international best practices for the group, which contributes to increasing the efficiency of
  operations and trust in the Company Group.
- Resistance to the cyber threats to the digital technologies and Group activity depending on these technologies, which is supported by tools based on risk assessment, implementation of cyber-security regulatory requirements, and good global cyber-security practices

#### **Strengths**

the characteristics of the company which help to achieve the set goals, the whole of which gives an advantage over other companies in the sector

#### Weaknesses:

the characteristics of the company which reduce the company's competitive advantage over other companies and hinder it from achieving its objectives

Targeted value chain clearing, large local market share of key activities, and wide and growing portfolio of services; possibility to develop complex services/service packages Insufficiently competitive and low-diversified/decreasing production capacity of the Elektrėnai Complex; long-term uncertainties due to generation demand in Lithuania.

Competitive part of hydroport portfolio (Kaunas HP, Kruonis HPS) is relevant for the whole region; development potential of Kruonis HPS and basic preparedness for development

Unused generation capacity/infrastructure management, and the non-completion of non-core activities leads to the demand for non-optimal resources (human and financial)

Highly specialized and highly skilled staff, experience in developing new activities, projects/services and integration into the group value chain, and experience in large-scale projects and acquisitions

Lack of experience in the international market and in the cross-sectoral partnership both in the development and introduction of new products or services on the market, and also in activities outside Lithuania

Financial position of the group of companies, its stability, and experience in issuing long-term debt bonds and borrowing from international financial institutions

The image of "monopolist", and political vulnerability

The strategic importance of the Company Group at the national level



LE 2030 75

## SWOT analysis (strengths, weaknesses opportunities, threats) (2)

Summarizing the implemented analysis of the internal and external environment, it is evident that significant changes are taking place in the market. The weaknesses of the LE Group can be reduced, and the emerging threats can be withstood. This requires exploiting the following strengths obtained, and opportunities offered by the market:

- The strategic importance of the Company, and additionally accessed diversified financial resources, as
  well as practical experience of their use, which make it possible to invest in the new projects and
  solutions. It contributes to the diversification of production and services portfolio and higher maturity, thus
  increasing the return on assets and the financial value of the Group. The EU and other financial support
  should become a prerequisite for investment projects of strategic importance both from the shareholder
  and public perspective
- The expansion and purification of the value chain, which provides the LE Group with a greater competitive advantage in the energy sector and helps to achieve synergies across the value chain. It also allows neutralizing or at least stabilizing of the threat of raw material price growth.
- The knowledge and expertise in the field of electricity and gas trading, which is exploited in relation to the
  development of the electricity and gas market including the emergence of interconnections, the creation of
  a common Baltic electric energy derivatives market, and the Baltic market for system services, as well as
  international gas trading.
- The prerequisites for increasing competitiveness, which can be created, and/or are created by
  development of the new, innovative services and solutions for the market, use of the Innovation Fund
  Platform and projects implemented on the basis of an inter-industrial partnership.
- Continued application and improvement of the company governance and high-transparency principles
  consistent with international best practices for the group, which contributes to increasing the efficiency of
  operations and trust in the Company Group.
- Resistance to the cyber threats to the digital technologies and Group activity depending on these technologies, which is supported by tools based on risk assessment, implementation of cyber-security regulatory requirements, and good global cyber-security practices

#### Opportunities:

External factors that can contribute to the company's value enhancement

Market development and investment, diversification of production and services, and a longer value chain opening up markets of individual countries. Development of electricity and gas trade (wholesale and retail) through the use of the liquid natural gas (LNG) supplier/partner network

#### Threats:

Probable events that may have a negative impact on the Company's operations

Growing and increasing competition in the field of activities of various Companies of the Group, and decreasing demand for system services. Possible political decisions that limit or distance the development possibilities for the group

Access to various sources of financing (loans, bonds, financial engineering, and other products) by combining them to carry out investments both in Lithuania and abroad, and efficiently financing the development of new services

Insufficient continuity of the National Energy Independence Strategy or its implementation; dependence of activity on political decisions

The need to contribute to the implementation of the National Energy Independence Strategy both synchronizing with the KET and implementing network investments in Lithuania. Partnership with self-government, public utilities sector companies and other companies, and regional projects

Uncertain, changing geopolitical and investment environment of individual countries which poses threats to investment, cybernetic and physical security.

Partnership with other industry companies or financial institutions for the development of complex and cross-sectorial services or products. Creating new solutions through the innovation fund ecosystem

Unfavourable regulatory environment for system services, regulated prices, environmental protection, personal data, purchases, financial services, decision-making, etc. that is changing or developing in particular areas

Targeted growth of energy efficiency competences and the growing demand for energy savings ("negawatts") in the market, which open up the potential for sustainable value creation and systemic solutions across the value chain

Growth/unpredictability of raw material prices for electricity, gas and heat

Efficiency and synergy in the main and servicing activities of the purified value chain operating in Lithuania and abroad

Digital technology plays a crucial role in the transformation into a decentralized energy system. At the same time, the growing use of intelligent devices, more complex interconnected networks and systems become more accessible to cyber threats such as viruses, critical systems disruption attacks, and data leakage cases)



LE 2030 76

## **Integrated planning system**

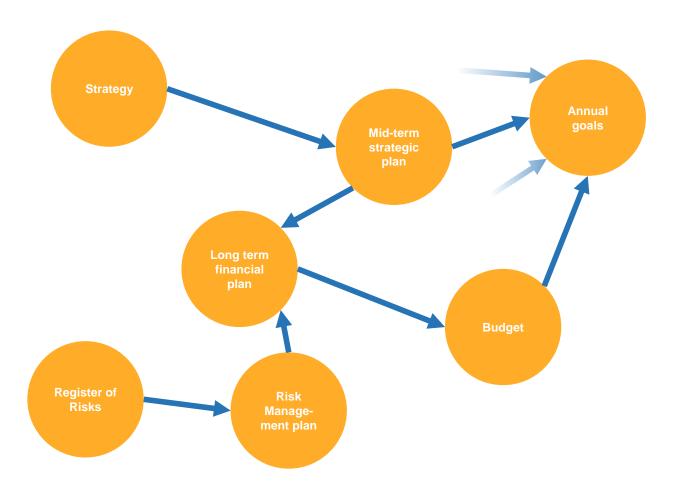
The corporate planning system of the Company Group is regulated by the policy of the Integrated Planning and Monitoring System.

The strategy horizon covers the period of 2018-2030. In order to ensure the achievement of the strategic objectives set out in the LE Group Strategy, an on-going mid-term activity plan is updated every year as well as annual targets for the companies. The activity plan presents a list of planned and on-going measures such as projects and tasks with definite deadlines of work, descriptions of expected results, names of responsible persons. Annual goals include the most important financial, operational or other indicators providing the next year's perspective, and priority projects or programs. The Company's annual objectives are related to the annual personal goals of the Group and Company executives and employees in such a way as to ensure the integrity of objectives and engagement of the whole Company Group in order to achieve common results. The Company Group also develops risk registers and risk management plans that allow management of risks for the entire LE Croup in relation to sustainable value creation.

Companies of the LE Group prepare and update their strategies, and make plans for their implementation in accordance with the Group strategy. Every year, each Company prepares its long-term financial plans and annual budget by the strategic and operational plans. Other planning documents are also prepared if necessary, including the functional area strategies, long-term investment plans, etc. These documents set out the main principles for fulfilling key functions of the Companies as well as the principles and objectives of the major investment programs.

Strategies of the LE Group and its affiliates are regularly reviewed. In the event of changes in the circumstances that influence the structure of the Company Group, the scope of their activities, and have a significant impact on the expected results of their performance, strategic directions and objectives, the strategies are updated.

### Interconnection between Planning Documents



77



## **Structure of shareholders**

Legal person	Shareholders
AB Energijos skirstymo operatorius	LE – 94,98% Minority shareholders– 5,02%
"Lietuvos energijos gamyba", AB	LE - 96,82% Minority shareholders 3,18%
UAB "Lietuvos dujų tiekimas"	LE – 100%
UAB LITGAS	LE – 100%
Energijos tiekimas UAB	LE – 100%
UAB Verslo aptarnavimo centras	LE – 51% ESO – 22,25% LEG – 15% LDT – 3,75% TIC – 3,75% LITGAS – 3,75% VAE – 0,5%
UAB Technologijų ir inovacijų centras	LE - 50,08% ESO - 29 % LEG - 20% VAC - 0,02% LDT - 0,90%
UAB Energetikos paslaugų ir rangos organizacija	LE – 100%
UAB Elektroninių mokėjimų agentūra	LE – 100%

Legal person	Shareholders
UAB Vilniaus kogeneracinė jėgainė	LE – 100%
NT Valdos, UAB	LE – 100%
UAB "VAE SPB"	LE – 100%
UAB Kauno kogeneracinė jėgainė	LE – 51% Fortum Heat Lietuva – 49%
UAB "Eurakras"	LE – 100%
"Tuulueenergia" OÜ	LE – 100%
UAB "Energijos sprendimų centras"	LE – 100%
UAB "Duomenų logistikos centras"	LE – 79,64% Litgrid AB – 20,36%
Lietuvos energija Paramos fondas	LE – 100%



## **Abbreviations**

Abbreviation	Explanation
RES	Renewable energy sources
BSC	Balanced score card
CAPEX	Investments/capital Investments
CEE	Central and Eastern Europe counties
DDO	Data-driven organisation
EBITDA	Earnings before interest rate, taxes, depreciation and amortization
EE	Electric energy
EMA	Elektroninių Mokėjimų Agentūra, UAB
EnePRO	Energetikos Paslaugų ir Rangos Organizacija, UAB
ET	Energijos Tiekimas, UAB
EU	European Union
ESC	Energijos Sprendimų Centras, UAB
ESCO	Energy Service Company
ESO	Energijos Skirstymo Operatorius, AB
FFO	Funds From Operations
GCSI	Global Customer Satisfaction Index
NG	Natural gas
CEN	Continental Europe Network
Kruonis PSP/ KPSP	Kruonis Pumped Storage Power Plant
Kaunas HPP	Kaunas Hydroelectric Power Plant
KKJ	Kauno Kogeneracinė Jėgainė, UAB
LE	Lietuvos Energija, UAB
LE Group	Lietuvos Energija, UAB, the Group of Companies

Abbreviation	Explanation
LEG	Lietuvos Energijos Gamyba, AB
EPC	Elektrénai Power Plant Complex
LITGAS	LITGAS, UAB
GW/MW	Gigawatt/megawatt – unit of measurement of power
TWh/GWh/ MWh	Terawatt-hour/gigawatt-hour/megawatt-hour – unit of measurement of power
OPEX	Operating expenses
PL	Poland
PESTEL	Political, economic, social, technological, environmental, and legal analysis
p. p.	Percentage points
TSO	Transmission System Operator
ROE	Return on equity
ROCE	Return On Capital Employed
SEE	South and South East European countries
LNG	Liquefied Natural Gas
SWOT	Analysis of Strengths, Weaknesses, Threats, Opportunities
System services	Services provided by the TSO that ensure the stability and reliability of the electricity system
HE	Heat energy
TIC	Technologijų ir Inovacijų Centras, UAB
NTV	NT Valdos, UAB
VCHP	Vilnius cogeneration power plant, UAB
PPL	Public Procurement Law
WACC	Weighted average cost of capital



LE 2030 79



LE 2030 Green | Smart | Global

