STATE PROGRESS STRATEGY

Lithuania's Vision for the Future 'Lithuania 2050'

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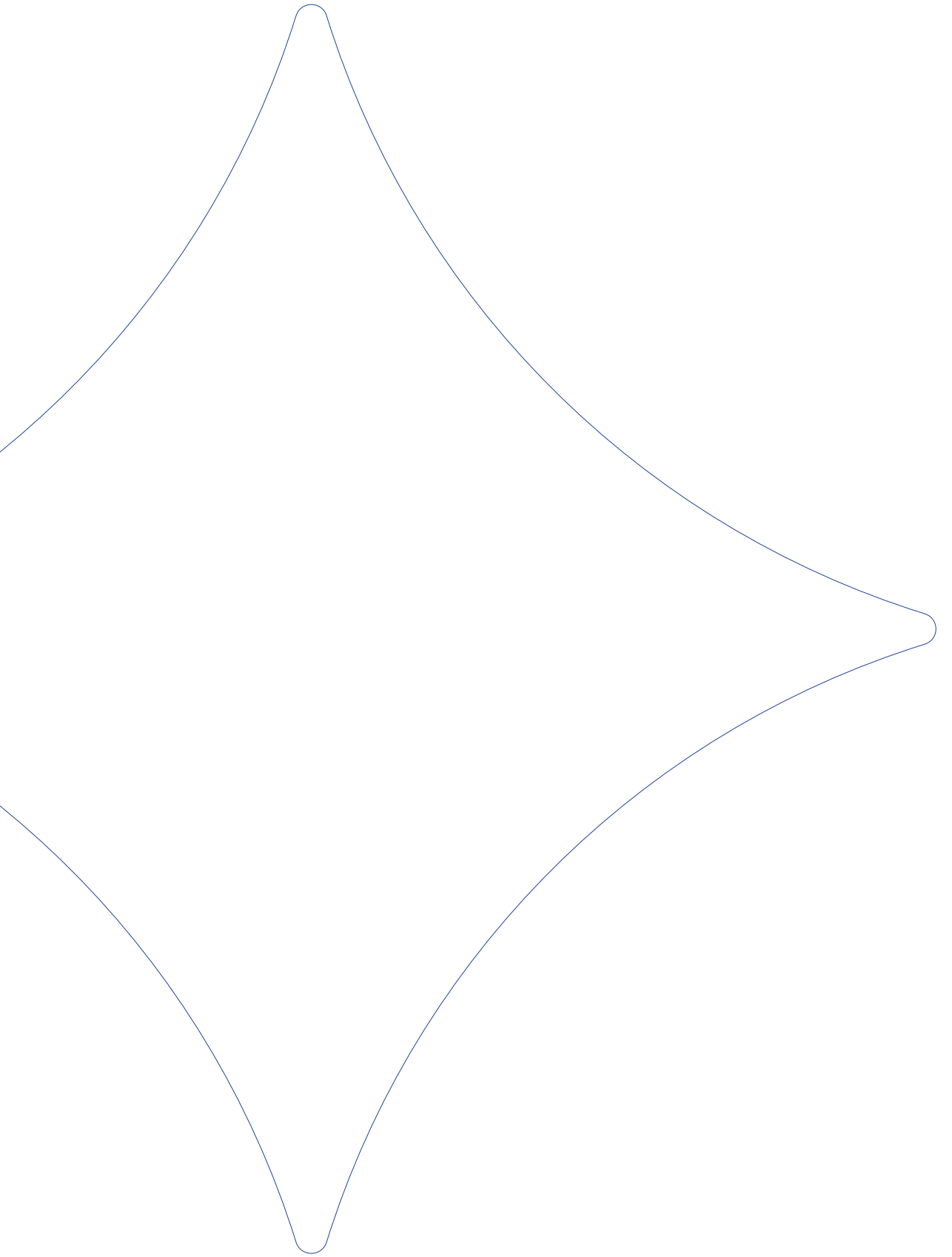

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LITHUANIA'S VISION FOR THE FUTURE 'LITHUANIA 2050'

LIETUVOS RESPUBLIKOS
SEIMAS

2024

Compiled by
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Prepared by
Office of the Committee for the Future
of the Seimas of the Republic of Lithuania

Bibliographic information is available on the portal of the Lithuanian
Integrated Library Information System (LIBIS) at *ibiblioteka.lt*

ISBN 978-609-8143-39-3

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FOREWORD BY THE SPEAKER OF THE SEIMAS

The vision 'Lithuania 2050' is one of the most important undertakings of the Seimas and the Government of the Republic of Lithuania during the 2020-2024 legislative term, charting the direction of development of our State and society for three decades ahead. This document is unique in many respects. It has been drawn up not by politicians and civil servants, but by a large group of co-creators, under the auspices of the State Progress Council, which is made up of representatives of all groups of society. The scenarios and directions for state progress as well as the key values and aspirations have been discussed in the citizens' assembly and in numerous meetings with representatives of the public. I have no doubt that this vision marks a new milestone in the development of Lithuania's political culture and a prelude to full-fledged participatory democracy. The vision focuses much more than previously on the maturity of civil community, social justice, welfare of society, sustainable development and Lithuania's role in the international community. It highlights the things that make human life meaningful and embody the core values of our civilisation. It is a blueprint for a new stage in the development of our State, a vision for the prosperity of the State.

This vision also marks a significant change for the Seimas of the Republic of Lithuania. The Seimas has set up a standing Committee for the Future to prepare and oversee its implementation, thus joining the ranks of parliaments convinced that the rapidly changing world of today requires from the nation's representative body more strategic foresight, a broader perspective and a more integral approach. We hope that upon the adoption of the vision 'Lithuania 2050' by the Seimas of the current legislative term, this work will continue and that the Committee for the Future will help the Seimas of future legislative terms to maintain the balance

between ongoing legislative tasks and the focus on strategic reforms, long-term policy aspirations and the core values of Lithuania and the world.

The vision 'Lithuania 2050' is entering its life as a political document at a challenging time. There is an ongoing armed aggression taking place against the rules-based world order in our country's neighbourhood. Trust in democracy is eroding in various parts of the world. The world's economies are increasingly affected by climate change and the changing age structure of society. New technologies are revolutionising many areas of life. We need to be bold and far-sighted so that Lithuania maintains the growth in prosperity, overcomes the challenges of social justice and demographic change, and fulfils international commitments regarding sustainable development and democracy. The vision 'Lithuania 2050' lays downs foundations for such a open and insightful mindset, while at the same time asking whether we are strong and mature enough to commit to its high ambitions and clear ideals. I believe that our country is like this, with the vision 'Lithuania 2050' pointing not only to a desired future but also to a realistic one.

Viktorija Čmilytė-Nielsen

FOREWORD BY THE PRIME MINISTER

Lithuania's Vision for the Future 'Lithuania 2050' marks a watershed moment for our country, as it explains how we view ourselves not only within the national boundaries, but also globally. It testifies to the maturity of our State, and proves our capacity to look beyond the daily issues and to focus on the long term future of the country.

The Government was tasked by the previous Seimas of the Republic of Lithuania to deliver a new long-term strategy for Lithuania. While given free hand to set the terms of Lithuania's future vision, it chose to use this mandate sparingly. Instead of orchestration, it focused on setting up the conditions for open conversations and collaboration with civic, social, professional, and local communities and groups to discuss their hopes and fears about the future.

When we set out in the quest for a vision for the future in autumn 2021, a premonition of war in Europe was already lingering in the air, as was the growing awareness that the Europe as we knew it, and the world as a whole, would inevitably change. It might appear that it is not politically prudent to worry about what will happen in 30 years when facing the certainty of elections every four years and the uncertainty of which crisis might strike tomorrow. Jean-Claude Juncker, former Prime Minister of Luxembourg and President of the European Commission once observed that politicians know perfectly well what needs to be done, but they do not know how to get re-elected once they have done it.

Caring about re-election is rational, but a short-term public policy that is confined only to one's own backyard is neither fair nor insightful. Fair policies and fair decisions are those that are adopted with future generations in mind. To achieve them, a broad consensus between politicians and the society as to what is best for our country and its citizens is vital.

The new vision for the future of Lithuania emphasises the commitment, stemming from within each individual and community, to protect Lithuania and especially our democratic culture, values, and nature. As committed citizens, we are at the forefront of this vision, ready for anything and everything the future may hold, certain of ourselves, ready to embrace change by creatively seizing the opportunities and solving the never ending challenges. A strong democratic culture and solid education will be the cornerstones of a successful and favourable future for us.

Lithuania's vision for the future is the result of the combined effort of several thousand active Lithuanian citizens, and the text is a synthesis of their contributions. It has been thoroughly reviewed, discussed, and approved by the supreme representative body of our nation – the Seimas. The agendas for change outlined in the vision have good prospects of being implemented, if this is the future that our society remains committed to while holding politicians accountable for its delivery.

Ingrida Šimonytė

SEIMAS OF THE REPUBLIC OF LITHUANIA
RESOLUTION

ON APPROVING THE STATE PROGRESS STRATEGY ‘LITHUANIA’S VISION FOR THE FUTURE ‘LITHUANIA 2050”

23 December 2023 No XIV-2466
Vilnius

Acting pursuant to Article 14(2) of the Law of the Republic of Lithuania on Strategic Governance, the Seimas of the Republic of Lithuania hereby resolves:

ARTICLE 1.

To approve the State Progress Strategy ‘Lithuania’s vision for the future ‘Lithuania 2050” (annexed).

ARTICLE 2.

To repeal Resolution No XI-2015 of the Seimas of the Republic of Lithuania of 15 May 2012 on Approving the State Progress Strategy ‘Lithuania’s Progress Strategy ‘Lithuania 2030”.

ARTICLE 3.

1. To propose that the Government of the Republic of Lithuania have regard to the following when preparing the planning documents for implementation of the State Progress Strategy ‘Lithuania’s vision for the future ‘Lithuania 2050”:

1) Resolution No XIV-732 of the Seimas of the Republic of Lithuania of 7 December 2021 on Future Digital Transformation and Digital Sovereignty in Lithuania;

2) Resolution No XIV-2075 of the Seimas of the Republic of Lithuania of 15 June 2023 on the Future of Lithuania’s Demographic Policy.

2. To propose that the Government, upon the approval of the Resolution of the Seimas of the Republic of Lithuania on Approving the Description of Directions for

Development of Lithuania's Long-term Policy on Science, Technology and Innovation, have regard thereto when preparing the planning documents for implementation of the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050".

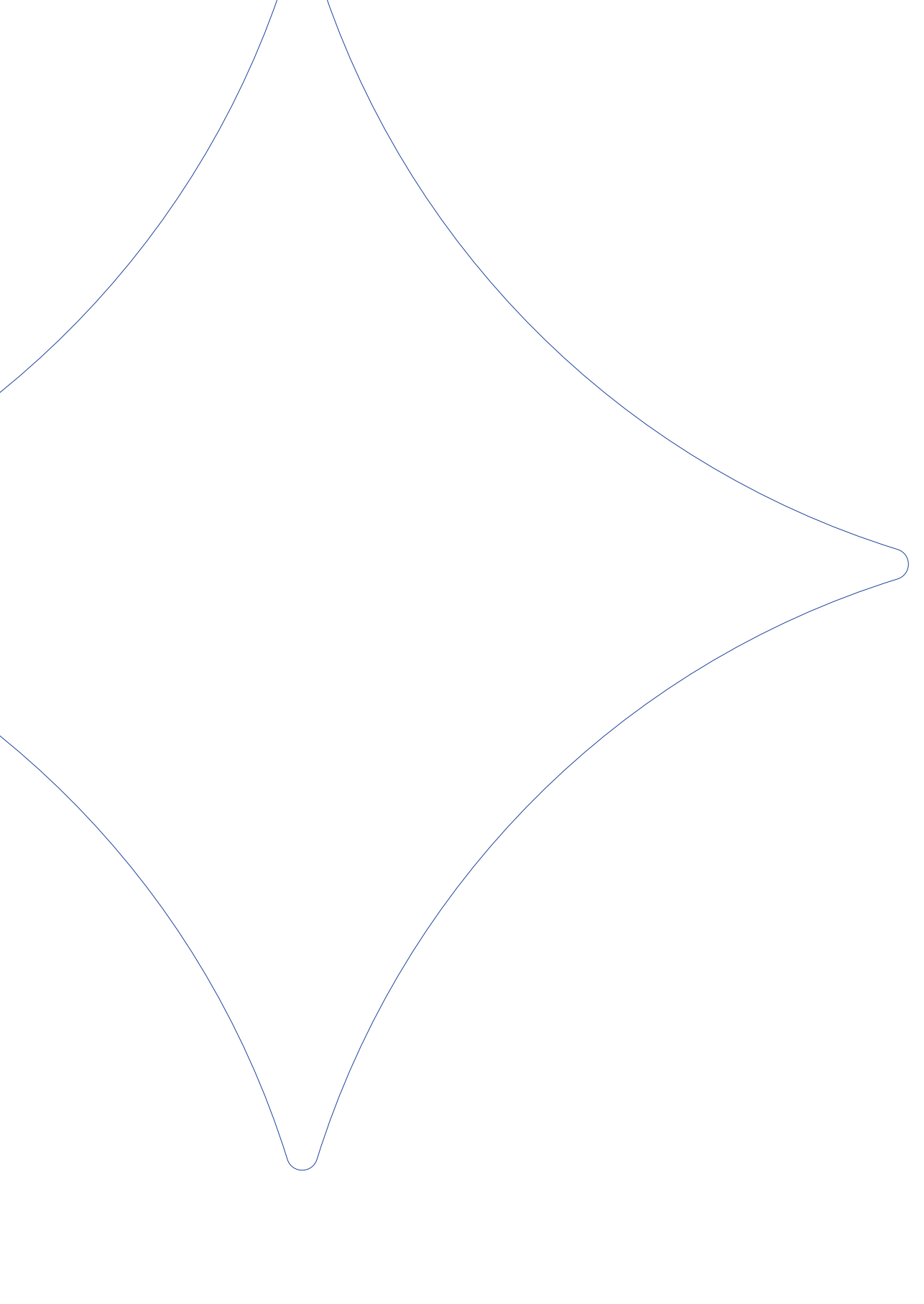
ARTICLE 4.

To propose that political parties initiate a national agreement on the public sector commitments and public funding necessary for the implementation of the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050".

ARTICLE 5.

To propose that the Government, when drawing up the 2026 National Progress Report, update the future foresight and environmental analysis which were relied upon in preparing the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050", comprehensively evaluate the progress made in the first three years of implementation of the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050" and, if deemed necessary, submit a proposal to the Seimas on updating the strategic ambitions of the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050".

SPEAKER OF THE SEIMAS VIKTORIJA ČMILYTĖ-NIELSEN



APPROVED BY
Seimas of the Republic of Lithuania
Resolution No XIV-2466
of 23 December 2023

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LITHUANIA'S VISION FOR THE FUTURE 'LITHUANIA 2050'

Guiding light Lithuania:
the country where I want to live and create.
The country I want to protect

INTRODUCTION BY THE STATE PROGRESS COUNCIL

The State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050" has been drawn up in an effort by the State Progress Council and co-creators to reflect on and outline the development of the State in the coming decades. Its co-creators were representatives of all parliamentary parties, numerous experts, organisations and citizens. The goals and aims set out in this vision for the future of the country go beyond the goals of a single term of government or a political force. The vision covers key issues for the long-term development of the State.

There is a strong tradition of Western European-oriented thinking about the State of Lithuania. The determination to shape the future of one's own state, perceiving it as part of Europe, is already evidenced by the letters of Gediminas. The visions of the future of the State of Lithuania were created and pursued by our first rulers, the thinkers and reformers of the Commonwealth of the Two Nations, the leaders of the national revival, the intellectuals, both men and women, of independent Lithuania, and, later, the Movement of the Struggle for Freedom of Lithuania, the diaspora, and the creators of the Sąjūdis, which brought about the re-establishment of an independent State of Lithuania. Their insights and ideas remain relevant also today. Towards the end of the previous century, Lithuania determined a clear trajectory for its development: we wanted to reintegrate into the community of Western nations by fostering democratic values and institutions, and eventually joining the European Union (hereinafter: the 'EU') and the North Atlantic Treaty Organisation (hereinafter: 'NATO'). This focused endeavour has served as the catalyst for Lithuania's present-day upswing. We are a full-fledged member of the Western democratic community, enjoying the benefits of economic prosperity and security. However, the constantly evolving context of the future makes it necessary to consider where we may go next. What does progress mean for us both as a nation and a political community?

The last attempt to answer this question and rethink the future of the state of Lithuania today was made by Lithuania's Progress Strategy 'Lithuania 2030'. The Strategy was developed more than a decade ago and set the goal of becoming a country that is modern, dynamic and open to the world, as well as a country that fosters its national identity and is an integral part of the Nordic-Baltic region. It

envisaged the main directions for development of the State (smart society, smart governance, and smart economy). Although some of the interim targets for 2020 have not been achieved, clear progress is visible in the country, and 'Lithuania 2030' has given a strong impetus to the state strategic planning system and the development of future-oriented political culture in Lithuania.

At the time, many stakeholders were involved in the development of the vision, but the implementation of the strategy fizzled out over time. There was a lack of strategic thinking culture and discipline, the implementation and monitoring were not sufficiently defined and a larger part of society did not relate to the vision. It has become evident that, in order to further foster societal changes and create conditions for the emergence of a creative, responsible and open-minded personality, the state strategy needs to be reconsidered by limiting the number of priority objectives of the state, reviewing their content and taking into account the significant changes in the external environment.

An accelerated pace of change and increasing uncertainty are among the main reasons which led to rethinking the state strategy. The world is facing accelerating technological changes and their multifaceted impact on economic, social and governance systems, climate change and biodiversity posing an existential crisis for humanity, financial and economic hardships caused by the COVID-19 pandemic, demographic imbalances and other challenges. There's ongoing consideration on how countries should adapt to this, how prevailing economic models and governance systems should change. The picture of the international system is changing: the post- Cold War order is being replaced by the growing power of the Global East and South. In addition, Lithuania is also confronted with other challenges: we face low self-confidence of citizens, low trust in society and state authorities, as well as a rapidly ageing and declining population. In the long run, the sustainability of democracy may be adversely affected by the consequences of the social and economic situation of people: Lithuania has a relatively high number of people living in poverty and social exclusion, high income inequality, and low social capital indicators. The war launched by Russia against Ukraine and other geopolitical tensions have exacerbated the country's future more than ever.

However, the times of transformation not only present us with fresh possibilities, but also ignite our creative faculties, encouraging to create new dreams and giving us the chance to make them come true.

By 2050, we will have journeyed through nearly eight centuries of Lithuanian statehood. The commemoration of King Mindaugas' coronation serves as a significant reminder of how the journey towards sovereignty and personality of the

Lithuania's Vision for the Future

Lithuanian nation and the state began in medieval Europe, a legacy we have been unceasingly upholding to this day. We are proud of the heritage of the Grand Duchy of Lithuania, with its unique history of parliamentarianism, nobility and urban self-government, its period of openness, intellectual independence, and the prosperity and coexistence of different nations. The decades of the nation-state in the early 20th century provided the nation with strength to survive the bitter Soviet era, resist sovietisation and regain freedom through the Singing Revolution, and now leave the years of occupation more and more firmly behind in the historical past. Among other things, in modern times, the development of the idea of statehood is inseparable from the vision of Lithuania as a maritime state, for which a place in state thinking emerged much later. The state of King Mindaugas marks the fundamental status of Lithuania, which is a condition for the possibility of all the ideas of our political community, while the notion of 'going out to sea' (as a metaphorical space of unexpected opportunities) entails that ideas that are ahead of time must be unexpected and thought-provoking. Perhaps those ideas have to rediscover eternal values by avant-garde means, or maybe find new political ideas to unite us for the future. Reflecting on all this inevitably leads to broader reflections on the future goals of our State. The ways to answer these questions will largely depend on what we choose today.

It is clear that any vision has to show what we expect and want from the future. However, the state strategy primarily attempts to reflect on the multiplicity of possible futures, looking for the most politically meaningful opportunities that are unexpected and open up new trajectories for development. Such mindset requires us to monitor the environment and evaluate trends in global and national developments to understand their significance and likely impact. It encourages the development of alternative future scenarios, modelling a range of global changes, trends and local choices. This opens up a horizon of varying future, allowing us to approach a kind of paradox: to prepare for a leap into the unknown, to stretch the boundaries of imagination, or, as our historical experience would teach us, to boldly 'go out to sea'. The new vision for the future of the State presented in this document aims to take exactly such a leap in thinking, putting us on the path to 2050.

The vision for the future of the State took nearly two years to develop. Its essential elements were the analysis of the environment (trends and factors determining change), the construction and deepening of hypothetical scenarios for the future of the State through thematic discussions, as well as meetings and discussions with citizens and co-creators, and the formation of a shared vision and key initiatives. All this took place against the backdrop of the war against Ukraine launched by

Russia in February 2022, a war that forced us to rethink and reassess the importance of many things we seem to take for granted.

When considering the possible futures, two dimensions were chosen, which cover the most relevant, and at the same time the most difficult to predict, directions of change for Lithuania. The first dimension is the system of government of Lithuania and the surrounding countries and the situation of the international system. In the future, we should expect no less politics than at present: the distinction between democracies and autocracies will not only remain important in the context of our political identity and the security of the region, but will also significantly shape international alliances and the conditions and structures of political and economic cooperation. In other words, the political order will continue to be a cornerstone of our future; however, its more specific forms may change depending on how Lithuania and its allies will succeed in defending and consolidating democratic values in the face of ever-growing conflicts. This dimension also includes an internal aspect, namely the quality of democracy.

The second dimension is education. It is clear that education cannot be understood only as a system of general formal education and higher education. It is another key driver of development, permeating a wide range of areas, from the economy to social and political life, and encompassing the advancement of science, the creation of knowledge and innovation, cooperation between universities and business, the need for lifelong learning, culture and tradition, and the development of a well-rounded personality. In the most general sense, education determines what kind of society we will be in the future. The future model of education that can respond to the emerging challenges of technology, ecology, social adaptability and other challenges is not yet clear. Therefore, democracy and education have been chosen as the most accurate framework for future scenarios for 'Lithuania 2050', and their interaction allows to raise fundamental questions about the future we care about. At the same time, these are the two spheres of life that require our utmost continued attention and care, as they will determine the future of the country.

The vision presented below has been formulated in the light of discussions between citizens and experts and their responses to emerging problematic issues. The recurring motive is the concern for a flourishing Lithuania. This brings us back to Aristotle's classical definition of the state which says that the state comes into existence for the sake of life and continues to exist for the sake of good life. So what is a good life for us in 2050? We hope the vision for the future of the State will help us find the directions and possible answers.

CHAPTER I

NAVIGATING THE PATH TO 2050: GLOBAL DEVELOPMENTS AND CHALLENGES FACING LITHUANIA

In 2050, the world and Lithuania will inevitably look different. The future that is constantly being created and re-created does not have and cannot have a concrete form: the present always contains many possible futures. However, the range of possible futures is constrained by the global changes we are already witnessing today, and our efforts to build our own future are limited by the historically formed strengths and weaknesses of our country. Based on a thorough analysis of global trends, the state's current situation and key challenges for the future, the context of Lithuania's development until 2050 is presented below.

Global Trends Shaping the Future

Growing demographic imbalances

The world population is projected to grow from 8 billion to 9.8 billion by 2050. Almost two thirds of this rapid growth will take place on the African continent, while some other regions and countries, such as China, are projected to experience rapid population decline. While Europe's overall population is projected to remain similar to current levels until 2050, the Central and Eastern Europe region is likely to experience rapid depopulation. Lithuania's demographic trends are in line with the trajectory of our wider region. In Lithuania, as in other countries of the region, a relatively low birth rate, high mortality among men of working age and high emigration over the past three decades have led to the formation of the population's age structure that is unfavourable for population growth. The declining proportion of young people and women of reproductive age limits further opportunities for population growth: according to current trends, Lithuania's population is projected to decline to approximately 2.2 million by 2050.

Such a projected decline in Lithuania's population would further distort the age structure of the population, making our society one of the oldest in Europe. Since 2000, the ratio of people aged over 65 to the working age population (aged 15 to 64) has increased by almost a third, from 22% to 32%. This ratio is projected to increase at an accelerating rate in the future and could reach 50% by 2050. This

means one senior citizen for every two people of working age. These demographic trends would pose challenges for Lithuania's economy and the public sector: the social system would be most vulnerable to financial pressure and the number of recipients of benefits would increase. This would affect the country's pension system, with the level of pensions projected to fall, compared to the previous income, from 31.7% in 2019 to 24.7% in 2050.

The ageing population will also pose a serious challenge to the country's health care system. The profile of diseases prevailing in Lithuania will change: cardiovascular diseases, which dominate today, will gradually be replaced by oncological diseases and senile neurodegenerative diseases. Given the relatively short length of healthy life in Lithuania, a larger proportion of the elderly population may also mean a less healthy society. Accordingly, an ageing population will exacerbate the current problem of shortage of health care workers, especially in the nursing sector.

The growing demographic imbalances in Lithuania will create the need to increase the social participation and employment of the elderly. This will require not only better health care for the ageing population but also certain changes in the labour market, social security and education systems.

Negative demographic trends will also lead to re-consideration of the issues of emigration, immigration and re-emigration. Population migration is one of the most difficult demographic processes to predict, responding very rapidly to political and socio-economic changes, crises and uncertainties. In the future, it will also be determined by climate change and geopolitical developments. A long-term and sustainable migration policy is needed to address the issues of still high emigration rates of Lithuanian citizens and the likely growing flows of refugees and immigrants from third countries.

Climate change and the crisis of the planet's ecosystems

Although states and societies around the world are gradually stepping up their efforts to combat climate change and protect the natural environment, as a result of climate change processes already under way, global average temperatures in 2050 are projected to be about 2-2.5 °C higher compared to the mid-19th century. Every year, the world will see more and more extreme natural events and an increasing number of endangered species. In the coming decades, climate change is projected to result in slower global economic growth, increased inequality, decreased food security and increased forced migration. The impact of climate change, biodiversity loss and the crisis of the planet's ecosystems will not be evenly distributed

across countries or within societies: it will be the populations in Africa and South Asia and those most economically vulnerable within countries that will be most at risk.

For Lithuania, this global trend represents both a direct and an indirect challenge. The direct impact of climate change, together with environmental pollution, could adversely affect the condition of Lithuania's inland water bodies and soil, which would be detrimental to the development of the country's agricultural sector, the quality of food grown in Lithuania, and coastal ecosystems. Rising air temperatures and more frequent heat waves will not only be a challenge for cities and infrastructure, but could also result in more and more deaths. On the other hand, a warmer climate and an earlier spring in Lithuania may allow for an earlier start of sowing and increase the country's recreational potential.

While the direct impacts of climate change on Lithuania are difficult to predict, the strategic importance of water will increase in the future, influencing Lithuania's domestic and foreign policy, and the indirect effects of climate change will pose serious challenges to our country. The increasing frequency of extreme natural events, the deterioration of the quality of natural ecosystems and food and water scarcity in the Global South can lead to widespread humanitarian crises and regional conflicts. For these reasons, climate migration is projected to increase significantly: by 2050, more than 3% of the world's population may be forced to leave their homes due to climate change. Given the extremely rapid growth of the African population and the great vulnerability of this continent to climate change, the likelihood of African population migrating to Europe, including Lithuania, will increase considerably. Rising environmental temperatures and changes in natural ecosystems can also change the regional spread of various communicable diseases: outbreaks of new infectious diseases and pandemics are likely.

This encourages the EU and other Western countries to pursue the green transition, i.e. a complex transformation of the economy with a view to achieving climate neutrality by 2050. In order to implement the European Green Deal, EU Member States, including Lithuania, have committed themselves to reforming their energy, industry, transport, construction, waste management, agriculture and forestry sectors, and to changing the prevailing attitudes of the consumer society towards the natural environment and its problems. As energy demand in Europe will continue to grow, the green transition agenda is turning into a major challenge in terms of supplying green energy and the raw materials and infrastructure needed to produce it.

The green transition will also lead to rethinking of globalisation: moving away from polluting energy imports, the creation of new value chains and closer

economic integration within the EU. At the same time, it will interact closely with technological transformation: the improvement of energy production, storage and transmission systems, the development of new synthetic materials and other innovations will become critical to increasing green energy efficiency and reducing resource costs.

Such a complex economic transformation may open up new opportunities for Lithuanian business, however, the abandonment of environmentally damaging economic activities will also mean increasing prices of products and services, which will disproportionately affect the most vulnerable members of society and require an active social policy. Green transition goes beyond the necessary changes in economic, fiscal and regulatory policies. It also implies a social and cultural transformation, namely a rejection of consumer culture and habits. Society will have to overcome the still persisting thinking that nature, though important and valuable, is merely a constant and passive background of life.

Rapid technological advancement

Alongside the green transition, Lithuania and the rest of the world will undergo another – technological – transformation. With the accelerating development of disruptive technologies, such as artificial intelligence or quantum computing, their impact has the potential to radically change people's lifestyles, both in mutual relations and labour markets, as well as economic competitiveness parameters, business models, nature of threats to national and personal security, and governance systems.

Technological developments are also changing the nature of power: in the future, increasingly more political and economic influence will be concentrated in the hands of creators and controllers of technologies, whether private companies or platforms, or states using disruptive technologies. It is important to emphasise that disruptive technology can be developed by small groups of scientists, but it requires the effort of many scientists and substantial public and private investment to develop or transform it into interdisciplinary technology. These changes dictate the necessity for Lithuania to consistently develop its scientific, technological and creative potential, as well as develop the national science, technology and innovation ecosystem.

The evolution of disruptive technologies is not linear, so it is difficult to predict their emergence or impact. Rapid technological development is opening up new ways and methods of learning that can lead to education breakthroughs, but at the same time pose threats to the sustainability of community and may contribute to

widening educational gaps and reducing justice. Education needs to pursue educational objectives that help build the integrity of society and the individual in the face of technological change. Rapid technological developments and the resulting changes in the nature of work pose a challenge for the education system to ensure the continuous updating of competences and skills and the opportunities and adequate capacity for re-training.

Technological advancements are also bringing radical changes in the field of medicine: the possibilities to personalise treatments and medicines, grow artificial organs or cure cancer. The importance of robotics, artificial intelligence, nanomedicine, virtual and augmented reality, telemedicine, biosensors is stressed. However, these changes may widen the health care gap between social groups if the cost of new high-tech medical technologies is too high.

The digitalisation of creative industries and cultural heritage may open up new avenues for the humanities, creative industries and arts, offer new ways of learning about the content and heritage of one's own and other cultures, contribute to the accessibility of culture and the arts to society, and plays an important part in innovation. On the other hand, as the transformation of the media world continues, there is a risk that the dissemination and content of cultural products will be increasingly controlled by global distributors and their platforms, thus there is a growing need for small countries to invest in the dissemination of their own cultures in the digital space and beyond.

Technological progress will also have mixed effects on economic development. For example, automation processes have the potential to significantly enhance business productivity, but at the same time they pose a significant threat to the category of routine tasks and medium-skilled workers. The automation process may mean polarisation of the labour market, with non-routine (and well-paid) high-skilled or low-skilled (and low-paid) jobs dominating the future. According to estimates of the Organisation for Economic Co-operation and Development (hereinafter: the 'OECD'), as many as 63% of jobs in Lithuania could be automated in the future, a threat significantly higher than the OECD average of 45.6%. The average assessment of Lithuania's labour market does not reflect the regional dimension: regions are particularly vulnerable to the risk of automation.

Finally, technological developments will also affect the development of political processes, including international and security policies. The introduction of smart technologies and innovations in governance systems can play a key role in the future in shaping a responsive and inclusive democracy, and transparent policies, strengthening public service delivery systems and decentralising decision-making processes. On the other hand, advanced technologies can also be used for greater

control and monitoring of the public, in order to restrict freedom of expression or even re-educate society. Thus, from an international security perspective, it is foreseeable that, by 2050, the protection of citizens' health and biometric data, the use of robotics and AI technologies in the context of warfare, and the protection of critical connectivity and data management infrastructure will become increasingly important. At the same time, given the crucial impact of technologies on economic competitiveness, the issues of technological development and trade will increasingly become the subject of geopolitical conflicts.

Geopolitical shifts

The global trends discussed above will also change relations between countries and the balance of international power. In the future, the global West will constitute an increasingly smaller portion of the world economy and population as the centre of gravity of international politics will gradually shift towards East Asia and the Global South. Several possible directions for development of the international system can be identified: fragmentation into disconnected and closed power blocs; the re-emergence and consolidation of an open, rule-based international order; simultaneous cooperation and competition among major powers to establish, maintain, and utilise the rules and institutions of the international order; and the consolidation of a hierarchical, international order based on sovereignty and the supremacy of national interests. We are already witnessing the increased importance of the interests and values of the East and the South in global politics, as well as the increasingly pronounced changes in the West's relations with the East and South. The relative power of the global South and East is further strengthened by the resources they have at their disposal for the green transition, in particular by China's dominant position in critical green energy chains and in certain disruptive technology sectors. It is difficult to expect future geopolitical shifts to be simple, smooth and harmonious as some of the Eastern powers are already challenging the institutions and norms of open, multilateral cooperation, while there are divergent views within the Western community as to what the future international system should be like.

The declining relative power of the coalition of Western democracies and the potential divisions within this community represent a very serious challenge for Lithuania. Consolidated at the end of the 20th century, the international order based on law, rules and principles of multilateral cooperation created a favourable environment for strengthening and developing Lithuania's statehood, democratic order, national security and economic welfare. Stability has been provided to this

system by the high power of Western countries upholding democratic values and principles of open economy, and the ambition to become an active member of the Western political community has defined the fundamental orientation of Lithuania's foreign and security policy since the restoration of independence.

In the future, it will be even more important for Lithuania to engage in and support cooperation between Europe and the United States of America (hereinafter: the 'US') in defending and updating a world order grounded in democratic values. Common competitors, notably China, on the one hand, and close economic, scientific, cultural and institutional ties between the US and Europe, on the other hand, will contribute to maintaining transatlantic unity. While Europe will continue to rely on the US nuclear arsenal, it is Europe that will bear an even greater responsibility for the security of the region in the future, as the US may shift its focus to the Indo-Pacific region, leading to a reduced military presence in Europe. However, should the revisionist Russia wage a new war in Europe in the future, the US presence here is likely to increase significantly. In any case, Europe will have to invest more in defence capabilities for its own security. This will require faster decision-making in the EU and, in particular, a rethinking of the rules for decision-making, so that the EU's renewed and efficient institutional architecture would allow Ukraine, Moldova, Georgia and Western Balkan countries to accede to the EU and become its full members by 2050. Therefore, Lithuania needs to have its own vision for the future of the EU, on the basis of which a new EU institutional architecture could be negotiated. Relations between the US and Europe may, at least in the medium term, be aggravated by the crisis of democracy and the rise to power of anti-systemic forces. Finally, transatlantic unity may also be complicated by diverging positions between the EU and the US on climate change management, industrial policy and technology regulation. It will be crucial for Lithuania to understand the interests of its strategic partners on each of these issues so that it can engage constructively in the search for common solutions.

Transatlantic unity will be of particular importance to Lithuania due to the long-term threat posed by Russia to the security of the Baltic region and Europe as a whole. Russia's imperialist ambitions, and in particular its military aggression against Ukraine, will continue to threaten the rule-based world order and the European security architecture. Supporting Ukraine and restoring a just peace in Europe will require long-term and united Western efforts. Lithuania and its allies must increase their resilience to conventional and hybrid threats from Russia and China, prepare for a potential power vacuum in the Global South, and, if necessary, be ready to counter threats emanating from the East. Neighbouring Belarus remains a constant threat as an authoritarian, political and military ally

of Russia and operator of the unsafe Ostrovets nuclear power plant. By 2050, a large unstable zone may emerge to the east of Lithuania, which could be the scene of civil wars, leading to chemical and nuclear non-proliferation, refugees and other issues.

These European security challenges will coexist with qualitatively new dilemmas arising from technological developments. Advances in robotics, artificial intelligence, life sciences and space technologies can significantly expand the field of potential conflicts and change the concept of security. In the face of such unprecedented challenges, it will be important for Lithuania, together with its partners, to shape the security architecture of the future and to continuously invest in its resilience.

Decline of democracy and growing inequality

Since 2001, the number of countries considered to be democracies has been in decline, with more than half of the world's population now living in authoritarian states. The quality of democracy is declining, societies are becoming more polarised, and in many countries there is a growing sense of dissatisfaction among the population with the functioning of democracy, and frustration with the ability of the system to deliver public policy outcomes. In the 1990s, around two-thirds of people in Europe, North America, North-East Asia and Australia were satisfied with democracy in their countries, but this is no longer the case today. In countries where young people have fewer difficulties finding a job, have less debt, have access to housing, and are less likely to face corruption or discrimination in law enforcement or in accessing public services, youth satisfaction with democracy is relatively high. However, in general, there are more disillusioned young people. Lithuania is among the countries where around half of the population are satisfied with the functioning of democracy, and young people in Lithuania are more satisfied with it than older people. Dissatisfaction is attributable to the lack of trust in public authorities and the way democracy works in practice and is capable of responding to people's social expectations.

In general, democracies that do not meet all the criteria of a quality democracy are prone to decline: although the formal democratic institutions and procedures are in place in those countries, a strong civil society has not been formed, strong and responsible political parties are lacking, and respect for the rule of law has not been ensured. Autocratic regimes tend to exploit the weaknesses and openness of democracies by deepening distrust in political institutions, fostering existing divisions in societies, organising hybrid attacks, etc. Russia's war against Ukraine,

launched in 2022, is perhaps the most serious attack on democracy in recent decades. At the same time, other geopolitical conflicts are erupting and deepening.

Governance in an interconnected world has become more complex and multi-layered, as more and more decisions are taken at the international level, decision-making is increasingly influenced by non-state actors, there is a growing interest in participatory and deliberative forms of democracy, the role of the traditional media is diminishing, and the influence of digital platforms, which are at times polarising, is increasing. Faced with information overload, many people are finding it difficult to distinguish facts from fiction. In the face of successive crises (climate, pandemic, economic, energy) and increasing uncertainty about the future, expectations for government as a guarantor of security and stability are rising. Economic difficulties, as shown by earlier waves of democratisation, can lead to disillusionment and social conflict in societies, bringing to power populist forces that offer 'simple' and 'effective' solutions to complex problems. One such problem is diversifying and increasing inequalities.

Although considerable efforts are being made to reduce inequalities and gaps in education and to achieve social justice, geographical and gender inequalities, restrictions on freedom of thought, conscience and religion persist in the world, and in some areas, such as education, labour market and health care, the qualitative divide in society is even widening. Inequalities in the distribution of income and wealth, especially in the digital technologies and financial sectors, are becoming more pronounced worldwide. Poorer countries face a greater risk of failing to cope with the consequences of phenomena such as climate change. The conditions necessary for a society to thrive, namely access to quality education, employment and health care, are still influenced by a person's gender, age, ethnicity, racial identity, social status, place of residence and other circumstances. The COVID-19 pandemic has highlighted and, in many cases, exacerbated inequalities. In Europe, social and energy inequalities are particularly acute in Southern and Eastern Europe. Lithuania is one of the European countries with one of the highest levels of income inequality, and we are also affected by the problem of territorial exclusion.

Scenarios for the future of the State

In order not only to respond quickly to changes, but also to actively shape the future, a long-term vision for Lithuania's future is needed that would inspire to work together. It has been shaped by hypothetical scenarios of state progress, i.e. narratives of imagined possible futures for Lithuania in 2050.They were intended to show how differently the world might change in the future and how changes might

affect established practices. Four scenarios have been constructed between two selected axes. The first axis was the quality of democracy: from a weak democracy and a fragmented, confrontational world to a thriving and resilient democracy in Lithuania and much of the world. The second axis was the state of education in Lithuania: from stagnant to excellent quality education. It was a tool that served as a starting point for the visioning and analytical process. The scenario called 'the North Star' (mature democracy and excellent education) is a sketch of Lithuania we need to strive for by rejecting unacceptable elements. More information on the scenarios, their development and application can be found in the report 'Lithuania 2050: scenarios for the future of the State' (STRATA, 2022) by the Government Strategic Analysis Center (STRATA).

The trends shaping the future reveal a complex context of opportunities and challenges for Lithuania's future development. Each of the changes outlined above will have multiple implications for the development of the Lithuanian society, changes in social exclusion, economic competitiveness of the country, the state of the environment, education and health care systems, national and public security, societal values, and the cultural identity of Lithuania. Alongside the global challenges, the country will also have to overcome weaknesses in the local and regional context, such as lack of trust in democratic institutions, low social capital, lack of cooperation and trust, inflexible governance, inequality and poverty. Strategic public policies, strong institutions and a change-ready society, united by common goals, will inevitably be needed to address the challenges of the future and unlock the opportunities that lie ahead.

Lithuania's experience of transformation and crisis management in recent years gives confidence that the country can successfully manage future changes as well. The relatively small size of Lithuania, the broad consensus on the key principles of our strategic orientation, namely sovereignty, democratic values and Euro-Atlantic integration, and the ability of society to mobilise itself in the face of crises, make it possible to respond swiftly to changes and to adapt flexibly to the new circumstances of the development of the State.

CHAPTER II

ENVISIONING THE FUTURE OF THE STATE

Guiding Light Lithuania: the Country Where I Want to Live and Create. The Country I Want to Protect

Lithuania is defined by the people who create it. State progress is only possible thanks to creative and educated people. Creativity is understood here in a very broad sense, as a universal principle encompassing all spheres of human activity, as the creation of one's own and society's well-being, as the maintenance of tradition and its interpretation, as the conception and implementation of something completely new, and, last but not least, as the creation of order in an unpredictable world. Creativity brings a sense of meaning and fulfilment to a person's life. Creativity requires freedom, as well as mastery and willingness to continuously improve, which is why we emphasise the importance of personal freedom and a well-rounded education. It is the duty and responsibility of every individual to discover their vocation, to educate themselves continuously so that they are free to choose their own path in life and fulfil themselves, to be unafraid of difficulties and to feel that they are living a good and meaningful life, while the duty and responsibility of the state is to create favourable conditions for this to happen.

Maintaining natural ecosystems is also important for our future and well-being, as is the human connection to nature, the preservation of which, under the conditions of technological civilisation, requires increasing efforts. This connection emerged in discussions with the Lithuanian people as one of the essential elements of Lithuanian identity, alongside the state language, common culture and history of Lithuania. Being close to nature is seen as a prerequisite for a good life, complementing people's needs for social and economic security. We see the future of Lithuania as an advanced, innovative country that strikes a balance between the attributes necessary for modern human life, the mastery of the latest technologies, and the preservation of good wildlife habitat. A clean, unpolluted nature is not a given, so one of the cornerstones of our future is to re-establish a proper relationship with it, thus keeping it green and unspoilt. At the same time, it contributes to Lithuania's international commitments to sustainable development, efforts to

restore biodiversity and become a climate-neutral country, resilient to adverse climate change by 2050.

Ultimately, we want to see individuals who are freely committed to their country, their political community and are bound to it. In an increasingly virtual world, human-to-human contact and a sense of belonging to a particular place, its culture and one's community become more important than ever. Lithuania as a community is not only about those present here today, but also those already departed, those yet to come, and also those who, for whatever reason, are now living outside Lithuania. We are linked to them though our history and identity. But there are also many smaller communities, both organised and unorganised, bringing together people with common goals and ideas.

Alongside the values of **preserving identity**, **freedom** and **equality**, **respect for human dignity** and **justice**, which people believe we should be guided by when constructing our future, **community spirit** has emerged as one of the key values.

In this vision of the future, community spirit means interpersonal relations between people based on respect, trust, inclusivity and responsibility, care and mutual commitment. It is manifested in everyday decision-making, in the search for harmony and coexistence, in respecting a person's right to a chosen way of life and opinion, and in building a better future for all. Community spirit also includes responsibility towards future generations: we must pass on to our children and their children the preserved and richer heritage of past generations, an environment that is not depleted, and a world that is safer and better to live in than it is today.

Building on the aspirations to preserve community spirit and identity, and the values of freedom, equality, respect for human dignity and justice, we want Lithuania to become a state where people choose to build their own lives and create a life that they are prepared to defend themselves. Fostering of citizenship and civic education are the foundations of a country's self-development, identity and love of homeland.

The progress of the State in the future will be best reflected in how the people who live there feel about it. Prerequisites for progress are: a dignified and free individual who respects their rights and freedoms, a resilient society in solidarity, and a sovereign state that are rooted in their past and capable to continuously learn, adapt and shape their own future. It is this guiding light that would encourage others to aspire to a more beautiful and meaningful life by its example.

Having implemented its vision for the future in 2050, Lithuania stands as a resilient and prosperous state, whose people are civic-minded and feel that they are living a good and meaningful life:

- **It is recognised as a mature democracy with a strong democratic political culture.** Its citizens have self-confidence, trust each other and their country, have a high tax morale and are actively involved in the common cause of governing and building their country. Its governance is strategic, flexible and efficient, based on the principles of openness, justice and transparency. All citizens have equal opportunities to exercise the political rights and freedoms guaranteed by the Constitution, to participate in the deliberations of public issues, and public policy decisions are taken on the basis of evidence and future insights, taking into account the values of society, respect for the individual and seeking common good.
- **A society of free and responsible individuals: we are educated, resilient, future-ready and able to act together.** Each individual is responsible for and takes care of their comprehensive education and integral development, accompanied by their family, fully supported by the social environment, the community and the State, providing them with the necessary conditions and respecting the rights of every individual. Individuals are able to adapt to a constantly changing environment, are free to choose their path in life, take care of themselves and be attentive to others. It is a country with strong social cohesion where, if necessary, you can rely on your community which is guided by the principles of coexistence and solidarity between generations. The State is committed to the social well-being of society, ensuring equal opportunities and human rights, providing timely assistance to vulnerable groups of society, and the risk of poverty is vanishingly low.
- **It creates and exports world-class knowledge and innovations, occupying key positions in international value chains.** Lithuania is an attractive country for talents because it provides opportunities for meaningful work and a fulfilling life. It's a place where you can create value in different ways, engage in continuous learning, discover new ideas and experiment, feel useful at all ages of life and fulfil your potential. In developing economic activity, Lithuania respects its own environment and that of the planet, as well as its people.
- **It stands as a resilient and influential player of the international system.** Lithuania has the capacity to anticipate, prepare for and withstand various external shocks in an increasingly unpredictable world, and to recover quickly and become stronger. It has the capacity to support the efforts of its partners to develop an international order based on rules and democratic values, and is able to mobilise Western democracies through its leadership and example.

Citizens of Lithuania become co-creators and owners of the foreign policy of the State.

- **It is a country where you can quickly access what human well-being requires.** The whole territory of Lithuania is harmoniously and sustainably developed. Well-connected at home and with the world, with advanced digital infrastructure that allows for easy and quick access to the necessary public and commercial services, participation in the country's cultural, economic and social life, regardless of the place of residence, and communication with the world. The preserved wildlife and biodiversity not only ensure people's right to a healthy, clean and beautiful environment, but have also become a competitive advantage for Lithuania.

Directions for Development of the State to Achieve the Vision

Five key directions for the development of the State, namely strategic ambitions that are closely interlinked, are required for the implementation of the vision for the future of the State. The first direction (changes in democratic culture and governance) defines how our system of governance and public attitudes should change in order to achieve quality democracy in the country. The second direction (changes in education, health and social policy) concentrates on the society of the future, namely the changes needed to ensure that the people of Lithuania are ready for the future, free to choose their own path in life and in solidarity with others. The third direction (changes in economic policy) defines the conditions required for Lithuania to move towards high-value creation, to implement a socially just green transition and to enable everyone in Lithuania to realise their potential. The changes reflected in the fourth direction of development (changes in international policy and security) are needed in order to achieve the resilience of the state. This direction defines the principles of action in the external sphere. The fifth direction (changes in infrastructure and living environment) defines how the living environment and infrastructure should be developed so that people have good living conditions throughout Lithuania and at the same time can feel part of the world.

The changes set out in these strategic ambitions are far from exhaustive in terms of the actions and initiatives the country will need to implement in the future. It focuses primarily on the actions of public authorities and seeks to reflect the key changes needed. Each ambition integrates values, as well as overarching principles of care for the natural environment and development and application of technology and innovation, which have been widely agreed upon during the

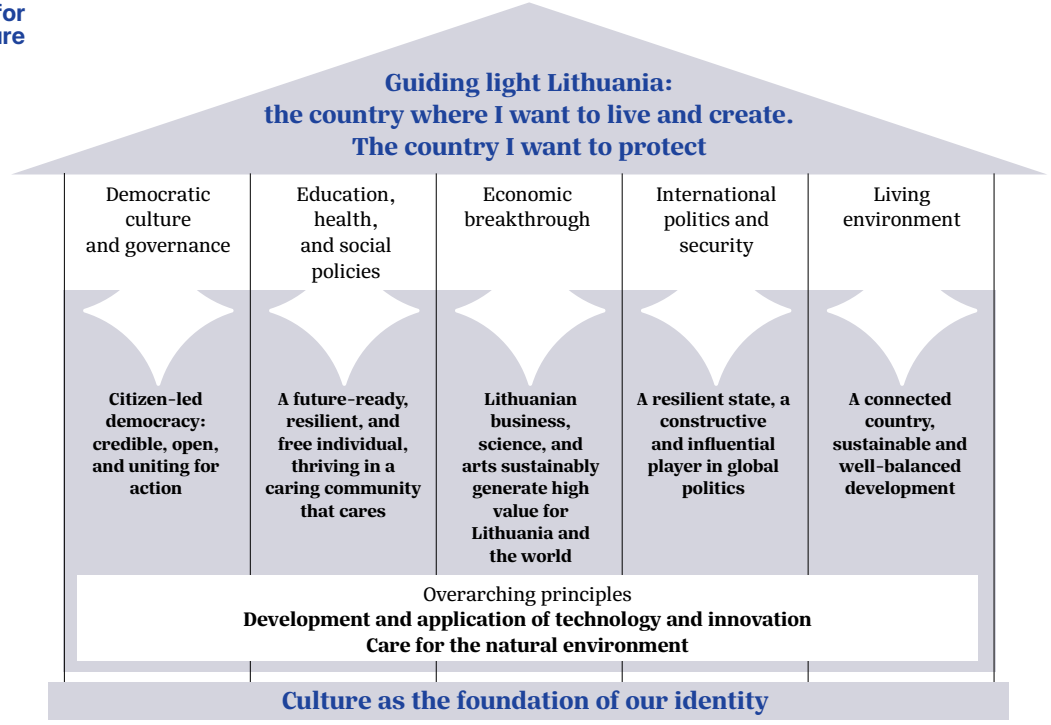


Fig. 1 Vision for the future of the State and directions for development

discussions. The overarching principles seek to shape a coherent and integrated approach and behaviour to an issue that is relevant to many areas of state activity.

The overarching principle of care for the natural environment includes not only working towards climate neutrality and developing resilience to adverse consequences of climate change, but also the protection of biodiversity and an ecocentric approach, characterised by a sustainable human relationship with nature and its preservation for the benefit of future generations. Achieving the fulfilment of the green transition agenda that cuts across many areas of government activity and the Sustainable Development Goals adopted by the United Nations requires effective inter-institutional cooperation and a concerted effort by public institutions, the private sector and civil society.

The overarching principle of development and application of technology and innovation combines both the deployment of high-tech or physical

technologies and social innovations to address societal challenges. Technological development should not be an end in itself or understood narrowly, for example as a mere driver of economic growth. This principle includes a commitment to manage the risks associated with technological change, in particular to the mental and physical health of the population, social relations and social exclusion. The latest technologies already form a fundamental context for all areas of state activity, which we have to take into account and which goes beyond digitalisation.

Placing Culture at the Heart of the Vision

Culture is a fundamental condition for the survival and vitality of the state as a political entity. It is an inherited totality of symbols and meanings that binds us together as a community, created and reconsidered by us, defining a person's relationship with himself, others and the world. It allows people to communicate, put into action and develop their knowledge and approach to life. Culture gives meaning to the world and human existence. In this document it includes Lithuania's tangible and intangible heritage, its culturally meaningful natural heritage, the memory of the nation, the everyday culture of society, its values and practices, science, as well as professional creative work and the new forms of creative expression – our past, present and future.

There is a constant exchange between these cultural expressions. The preserved past and cultural tradition, as well as their relationship with our creative potential unfolding in the present, are the guarantor of society's vitality, the source of its strength and renewal. Knowledge and actualization of our historical tradition and our multifaceted cultural heritage and its roots, is the reference point for critical self-thinking in the face of the present and the stream of history. Culture allows us to rediscover eternal values and, at the same time, to find credible time-tested solutions to today's problems, while everyday experiences, the dissemination of scientific knowledge and cultural interactions allow us to identify and create truly new horizons for the future. Through a distinctive culture, we are recognised in the world, and through it, particularly through the Lithuanian language, we give meaning to ourselves in the present. Culture enables us to change and rethink ourselves through an intense dialogue between past, present and future generations. Ensuring the opportunity for our culture to develop and thrive in a dynamic world is a prerequisite for the implementation of this vision, unleashing the creative powers of society and moving towards a new quality of life.

Lithuania has a lot to lean on: we are a consolidated democracy, a fully-fledged member of the Western democratic community, and we have secured quite broad support for the democratic system from the public, including ethnic communities. The State has formed a reliable layer of professionals, capable of successfully operating in the public, private and non-governmental sectors, well institutionalised systems of strategic planning, legislation and other state governance. Rapid economic growth has made it possible to achieve economic progress in the country and to reduce the level of absolute poverty. Lithuania has several strong, globally recognised universities, international-level research centres focused on technological development and applied research, and favourable conditions for the creation of start-ups. Lithuania is renowned for its arts and sports talents, as well as for its unique centuries-old traditions of ethnic culture and multiculturalism. The country is full of educated, creative and resourceful people. There is a growing awareness of the strategic importance of the culture field for the life of the State.

We are a strong nation that has survived centuries: whenever necessary, we are able to focus on common goals and to flexibly adapt to changing circumstances. They are still like a stormy sea today, but we believe that our journey across the sea to implement this vision, seeing it as a guiding star, can be a success.

CHAPTER III

STRATEGIC AMBITIONS AND THE MAP OF LEVERAGED INITIATIVES

SECTION ONE

Citizen-Led Democracy: Credible, Open, and Uniting for Action

The success of the State of Lithuania in the future will depend largely on the extent to which its governance will be able to adapt and guarantee the results of public policy, as well as on how strong our civil society will be in response to the changing context of the future. In a world of uncertainty and challenges, self-confidence, trust in one another and in institutions of our State is becoming one of our most important existential aspirations. In order to build and restore trust in the State itself and its fellow citizens, Lithuania must realise its nature as a *Republic*: politics must be a common, public concern (in Latin *res publica*). Without this sense of trust and civic communion, the public consensus becomes difficult and its future prospects dim.

To foster trust in the State, it is imperative to reassess the principles of public governance. Furthermore, the evolving landscape of the future necessitates a fresh examination of the role and conduct of public authorities. Primarily, they must continuously enhance societal cohesion, collaboratively navigate uncertainty, and pursue shared goals, spanning economic and social well-being to national defence. Moreover, they should be responsive to citizens' needs and deliver tangible outcomes of public policy through a diverse array of tools. Given the declining population in Lithuania and constrained resources, it is paramount to act with efficacy, flexibility, and agility to adjust to evolving circumstances. It is essential to explore novel and more effective solutions, foster an environment for experimentation, co-creation, and citizen-driven initiatives. Justice must emerge as a central objective and guiding principle, not solely in government and judicial decision-making, but also across public spheres.

Hence, considering the future and aiming to instil trust in the State, reforms in public governance should focus on three key areas:

- ✧ **the strategic, agile and effective governance** associated with a strong self-reliant society and strong state institutions capable of anticipating future changes together with the public, managing responsibility to the public and future generations, setting development priorities properly and implementing them consistently; able to innovate and adapt quickly to changing environments;
- ✧ **governance system openness, transparency, and respect for diversity,** that is openness of the government and its trust in people, the necessity for stakeholders to be involved in public policy decisions from the definition of the public policy problem to the evaluation of the public policy, and the integration of human rights into the decision-making process;
- ✧ **strengthening of the role of culture in the State and the cohesion of communities,** meaning that a flourishing culture is seen as an essential condition for our strong identity and the ability to communicate with each other without which it would not be possible to find consensus on the common good and the foundations for a better community life.

Having implemented its strategic ambition,

Lithuania stands as a strong, independent and self-confident state. The majority of Lithuanian citizens trust state institutions which function flexibly and soundly, have a clear strategy and are innovative. The system of governance of representative democracy in Lithuania is characterised by smooth interaction between the levels of government, the implementation of a strong principle of full-fledged accountability (both horizontal and vertical), the rational distribution of powers and functions as well as the effectiveness of governance structures and processes. When making decisions and shaping relations between the public and the government, the principle of subsidiarity is consistently followed.

The public and other players of the political system are keen to cooperate with each other and with public authorities, they are able to jointly set strategic priorities while the institutions implement them consistently. The political culture of consensus has been formed in the country. Strong and competent institutions rely on a strong society, able to meet its expectations and fulfil its promises. In their daily work, the institutions are guided by the values of respect for human beings, credibility, openness, integrity (protection of public interests, balance between public and private interests), fairness, and the principle of the rule of law.

Lithuania has a well-established rule of law, guaranteeing and defending human rights and administering justice openly, responsibly, professionally and fairly. The system of courts in Lithuania is credible, wise, effective and authoritative.

The civil service is strong and professional, responding to the needs of the population, and its work for the State is respected and valued. In its activities the civil service uses foresight methods, takes decisions on the basis of dialogue with the public, evidence and reliable data analysis, involves various stakeholders in decision-making in order to better understand and respond to public policy expectations. Advanced technologies and data are ethically and legally integrated into decision-making processes. Digital technologies are used for the delivery of public services, which allows for more efficient consumer-oriented services and, in the long term, for attaining digital governance. Emerging technologies are constantly monitored and the changes that they bring, such as artificial intelligence and other innovations, are assessed to serve democracy and human well-being.

A modified culture in the public sector: it is characterised by creativity and the search for new opportunities, a wider-ranging attitude, better mutual cooperation, and interaction with other players. In a changing environment, the objectives and operational processes pursued by public authorities are regularly reviewed to meet the time-frames and public life needs, and to adapt to them in a flexible manner. Innovations are introduced, experiments are carried out and new technologies are used in the sphere of public policy; at the same time, over-regulation, which is no longer fit for purpose, is abandoned and a broader array of public policy instruments is used. Public administration systems and the public are prepared for possible crises and emergencies, as well as for total defence. Discrimination, inequality and violence that divide society have been overcome in Lithuania. Lithuanian society is an inclusive society able to live in diversity and learn from existing differences.

All citizens of Lithuania, irrespective of their age, sex, place of residence, social status, physical possibilities, ethnic origin and other features of their identity, have been given equal opportunities to participate in the consideration of public policy issues from the outset at all stages. Co-creation involving civil society organisations and members of society, social partners and the academic community is used to create and improve the public sector.

There is a relationship of mutual trust and openness between citizens and public authorities. Even the smallest manifestations of corruption are not tolerated in the society and state institutions. Citizens willingly and extensively participate in state governance, while institutions actively seek methods to engage underrepresented groups in public life, with a focus on ethnic communities and the Lithuanian diaspora. The principles of open governance, namely transparency, accountability, involvement of stakeholders, and, where feasible, participatory and deliberative forms of democracy, beginning at the local level, are being developed.

Institutionalised professional public communication is understood as the duty of public authorities to communicate with people, to listen to and respond to the expectations of citizens acting for the common good, to choose audience-oriented communication methods, and to ensure feedback. Information provided by public authorities is easily accessible to people, understandable and trustworthy.

The country has strong and responsible political parties, while the majority of Lithuanian citizens actively exercise their political rights, are involved in state affairs and participate in the activities of non-governmental organisations, communities and volunteering. The introduction of open government principles and co-formulated solutions lead to better quality public policy outcomes. In 2050, most Lithuanian citizens feel the masters of their own country and take an active part in elections and public issues. A strong democratic political culture flourishes.

Conditions have been created in Lithuania for cultural diversity and human creativity to manifest themselves in public life. The cultural potential is being harnessed to develop democratic mindset awareness and humanity, to strengthen social cohesion and to involve various cultural groups in society, to constantly rethink identity and to build the future. From an early age, a person's values, creative competences and need for a professional culture are developed. There is no longer any territorial cultural exclusion in Lithuania. The State has created conditions for people to engage in cultural activities which are understood as a necessary condition for meaningful life.

In implementing this ambition, Lithuania will:

in the area of strategic, flexible and effective governance:

- ✧ review the functioning of its governance system and institutions, strengthen the principles of horizontal and vertical accountability, reduce the centralization of government, enhance the role of the subsidiarity principle, and promote multi-level governance where decisions are made at the appropriate level. Lithuania, in partnership with non-governmental and private sectors, as well as citizens, will determine the functions that they can undertake independently, while establishing the requisite quality standards;
- ✧ ensure the implementation of the green transition, demography and other long-term strategic priorities, the validity of reforms and links with financial resources; base public governance on the principle of responsibility for future generations; develop a foresight ecosystem, expand cooperation between public sector and research institutions, analytical and research centres; strengthen

informed governance, i.e. the systems of *ex ante* and *ex post* evaluations; provide a space for experimenting and testing new ideas, and apply well-founded ideas more widely;

- ✧ strengthen the agility of the public sector, its capacity to innovate and adapt quickly to changing circumstances, so that this feature becomes our competitive advantage; aim to continuously review the context of the future, the objectives pursued, existing legal provisions, established customs, and practices, with a view to updating or eliminating those that no longer meet the needs of life;
- ✧ seek to consistently implement the principle of the rule of law, to ensure justice and human rights, as well as independence, stability and autonomy of the judiciary from any outside influence which is required for the administration of justice; improve services and processes in courts, ensuring their quality, openness to innovations, human orientation of services, strengthen human resources;
- ✧ invest in the country's IT sector and data processing systems to achieve a user-centred, one-stop-shop e-government; standardise public services, taking as a starting point the concept of digital governance, moving towards interoperability and integrated systems; at the same time, while prioritising digital security, continuously monitor emerging digital technologies, ensuring their ethical use in decision-making, their adaptation to individual needs of persons, and get involved in the establishment of a legal framework for the digital environment that upholds respect for human rights;
- ✧ form a professional, strong and competitive civil service; set its expectations and requirements, create attractive working conditions; develop leadership, analytical, data and stakeholder involvement competences, digital skills, innovation capacity, a systems approach and cross-sectoral cooperation in the civil service;
- ✧ apply the requirements of accountability, efficiency of activities and impact/result to the public sector while at the same time giving more freedom and autonomy in the implementation of the objectives; seek that the civil service provides a sense of meaning and a positive motivation; build a public sector culture that is creative, people-oriented, focused on finding new opportunities and more effective solutions;
- ✧ In terms of people's experience as consumers, implement public and administrative services in accordance with the principle of 'government as a service';
- ✧ strengthen capacities to anticipate crises and emergencies, to prepare for and manage them, to repel hybrid attacks and to organise total defence of the State;

in the area of openness, transparency and respect for diversity of the governance system:

- ✧ establish an open, transparent, and professional public communication space that is credible, data- and evidence-based, resistant to disinformation and manipulation, serving the principles of open government and harnessing technological innovation intelligently; apply measures aimed at raising public awareness and responding to the expectations of the public by adapting public communication accordingly;
- ✧ ensure the political rights and freedoms of citizens enshrined in the Constitution, promote active participation of citizens in public policy; strengthen non-governmental organisations, which in turn will contribute to the involvement of the public in governance; create equal opportunities for all citizens to participate in deliberations, taking into account the diversity existing in Lithuania; foster the development of participatory democracy and deliberative democracy, both at the national and local levels, and explore other innovative methods of engaging diverse groups of citizens, including ethnic communities, in decision-making processes, with a particular focus on the younger generation, aiming to generate creative solutions to public policy challenges that are tailored to the local context;
- ✧ encourage and support citizen-led civic initiatives;
- ✧ apply measures to promote respect for Western democratic values, civic spirit and, in all likelihood, the increasing diversity of society; ensure the implementation of human rights by addressing inequalities, discrimination, violence and other problems;

in the area of the role of culture in the State and strengthening links between communities:

- ✧ create conditions to strengthen ties between them, guidelines for trust, cooperation, responsibility and civic participation, develop cultural and creative activities, critically reflect and influence public life;
- ✧ use education as a means to foster civic mindset, promote reflection on societal values, strengthen identity, and cultivate the willingness to relate to the State of Lithuania;
- ✧ strive to ensure that the historical and cultural heritage of Lithuania, which constitutes an integral part of Europe's common cultural heritage and serves as the foundation of public identity, is widely known to citizens, regularly updated, and actively engaged with in the public sphere;

- ✧ in implementing state cultural policy, enact measures to empower citizens to create and cultivate a diverse array of intellectual and cultural expressions, while safeguarding the freedom of creative expression;
- ✧ invest in strengthening the viability of the Lithuanian state language and developing its expression in the modern life of the State, including the digital environment, as well as in learning other languages;
- ✧ strengthen the role of culture as a strategic resource of the State, as well as the link between long-term cultural policy programmes and social, educational, scientific and economic policy programmes;
- ✧ take measures to reduce cultural territorial exclusion in Lithuania, promote the involvement of ethnic communities in the common public and cultural life, foster their culture;
- ✧ consolidate the ongoing debate on the future of the State and the solution of the current challenges.

SECTION TWO

A Future-Ready, Resilient, and Free Individual, Thriving in a Caring Community

The foundation of the future Lithuania is a free, responsible and creative person who feels secure and can rely on his community when needed. People choose to live in Lithuania because they feel good at all stages of their life here.

Today, our society is ageing, the number of the population is decreasing, there is still a great deal of distrust, indifference to public affairs and serious social exclusion in society. At the same time, the importance of knowledge, which encompasses the totality of competencies, skills, and abilities required for understanding, managing, and applying scientific knowledge, increases. Comprehensive education, which is understood not only as academic knowledge, but also as the acquisition and continuous updating of critical thinking, creativity, cooperation and other social emotional competences that are needed for the future, as well as resilience and the ability to take care of oneself and those who need help, becomes particularly important. A forward-thinking individual must prioritise their education, health, and well-being. Simultaneously, the family, community, and the State, working collectively, must create the requisite conditions and ensure equal opportunities for all.

The development of high-quality education, accessible to all, underpins this ambition. The overall mission of education, health and social policy is to strengthen

social capital of the public, to establish a network of social security and to restore the demographic balance of society.

In order to implement this ambition, Lithuania needs to make progress in three key areas:

- **education of a future-ready person capable of creating a meaningful life**, where it is primarily related to education and culture, not limited to the formal education system of Lithuania, and whose purpose is the education and self-education of a well-rounded, cultivated, creative, resilient, emphatic, continuously learning individual who is compassionate towards other members of society and has a healthy self-esteem;
- **the development and provision of prerequisites essential for a secure, healthy, and physically active lifestyle,** with a pledge to afford all segments of society access to public services tailored to their needs; enhancing the overall social welfare standard in the nation founded on the principles of equal opportunities and non-discrimination; engaging non-governmental organisations and other communities in formulating a social security network encompassing the social, health, and education domains;
- **building of demographic resilience and intergenerational solidarity**, including the starting of a family and raising of children in Lithuania, the possibility for the elderly to live an independent life for a longer period of time and to remain socially active, prudent migration and integration policies.

Having implemented its strategic ambition

Education and science are developed as the cornerstone of Lithuania's culture, ensuring continuity, vitality and intellectual independence of this culture and the State based on it. Education, the advancement of which extends beyond the general societal progress, effectively fulfils its role and propels society forward.

Quality education, accessible to all, creates conditions for individuals to develop their personal abilities, establish their cultural identity as citizens of Lithuania, and independently choose a path of life according to their abilities, enabling them to lead meaningful lives at all stages of the age. The established comprehensive and open education system serves the individual: it provides essential academic knowledge, cultural, civic, social, emotional, and political competences, financial, media, health, and environmental literacy skills, fostering independence, responsibility, and collaborative abilities with others. It also cultivates the personal character necessary for democracy and patriotism, as well as the abilities and skills needed to find one's place in a changing world and thrive in it: resilience, healthy

self-esteem, creativity, critical thinking. The foundation for this is laid both in the family and during pre-school education. Consistently fostering critical thinking at all levels of education, society becomes increasingly resilient to disinformation and other forms of informational manipulation.

The general education system is based on personalised learning, where alongside the humanistic and social perspectives, and exact sciences, modern technologies, such as artificial intelligence, are employed. This not only ensures that everyone acquires basic knowledge but also allows each student's unique potential and abilities to flourish. Based on students' academic achievements, Lithuania ranks among the leading EU countries.

Formal and non-formal education programmes not only provide necessary knowledge about the world but also adhere to the principles of multi-intelligence development, nurturing the individual holistically, fostering cultural, creative, cognitive, critical thinking, civic, digital, social, emotional, and healthy lifestyle competences. More emphasis is placed on critical thinking, psychological resilience, media, ecological, and financial literacy. At the same time, the core of knowledge canon is ensured, allowing for the formation of a common cultural identity by integrating the cultures of ethnic communities and providing opportunities for them to flourish.

Lithuania's new generations are educated by the best. Educational sciences have evolved into attractive comprehensive human cognition studies with guaranteed maximum scholarships and attractive career prospects. Various forms of practical learning and mentoring are applied. Additionally, more opportunities are provided to become teachers by attracting motivated individuals from various professions and different backgrounds to work as teachers. Lithuanian teachers are comprehensively educated, continuously learning, independent, strong, and creative personalities, co-creators of the education system, capable of unlocking the potential of each student.

Lithuanian schools become independent, creative, and collaborating communities. They function as small republics open the public, as laboratories for the adoption of experience and the creation of the future, as modern and environmentally friendly multifunctional centres where not only academic but also cultural, artistic, social, and civic life thrives. Here, everyone can feel equally important and heard, fostering a culture of collaboration and respect for diversity, with zero tolerance for discrimination. Starting from solving local problems, students learn to make decisions, to take responsibility for them, to become civically engaged. Schools encourage experimentation, recognising that mistakes are a natural part of the learning process; and embrace new technologies that students not only use,

but are taught to create. All schools in Lithuania are open and adapted to the various individual needs of children, with school spaces easily reconfigured according to community needs, and equipped with learning resources of equal quality.-

The incentive system for teachers ensures equal education throughout the country.

Young people willingly choose higher education in Lithuania because studies and scientific research conducted here compete globally and are adequately funded. Joint study programmes are implemented, where the common practice becomes academic mobility and credit accumulation, with almost no boundaries between knowledge creation, transmission, and application. The learning process is characterised by interdisciplinarity and integrated opportunities of artificial intelligence and other technologies. Emphasis is placed on developing students' creative and analytical skills. Social sciences and humanities play a significant role in higher education, fostering critical thinking and creativity, encouraging the search for solutions to relevant societal issues. High-level interdisciplinary research is conducted in Lithuania, with studies tailored to individual student interests.

People are provided with incentives and opportunities for lifelong learning, discovering and developing personal abilities, acquiring desired and necessary skills, updating and changing qualifications. Learning has become a habit and part of everyday life. There is an effective and comprehensive recognition system for various skills acquired through education or practice. The labour market is adapted for lifelong learning and upskilling.

Lithuania fosters independent and resilient personalities, unafraid to take initiative and responsibility. A formed multi-layered social security network and non-governmental organisations provide assurance that, if necessary, individuals can access social, financial, educational, and health assistance tailored to their needs, including psychological support when needed. All residents have guaranteed rights and opportunities to access services and participate fully in public life. Strong non-governmental organisations and communities enable residents to engage in collective activities and feel needed, thereby increasing the social inclusiveness of various vulnerable groups in society. Lifelong assistance is provided to vulnerable societal groups, ensuring equal opportunities for all and significantly reducing social exclusion.

People take care of their health, living healthily and physically actively, using the well-developed infrastructure and conditions provided for this purpose. Both the overall life expectancy and healthy life expectancy of Lithuania's residents have significantly increased. The well-developed infrastructure for healthy living, coupled with modern technology in a strong health care network, not only prevents many diseases but also effectively treats the existing ones. A holistic approach to

human well-being is reflected in the institutional mechanism where health, social, and education systems work in concert to provide targeted services to individuals. Strengthened sense of social and economic security, psychological resilience of the society, and the established balance between work and leisure translate into significantly improved emotional health of the society.

A comprehensive evidence-based family policy is implemented, encompassing all forms of families and promoting gender equality within the family, allowing for greater flexibility in combining childcare and career, while also increasing housing affordability. The focus is on fostering a strong, economically secure, and cohesive family capable of taking on family responsibilities. This policy, along with ensured social and economic security, contributes to stabilising Lithuania's population and increasing birth rates, with indicators approaching those ensuring demographic renewal.

Improved population health and integrated public services result in an increasing proportion of elderly individuals being capable of living independently and being full-fledged members of society. Increased opportunities to continue one's career during this stage of life are not only a chance for self-realisation, passing on experience, and feeling valued, but also a matter of choice rather than economic necessity. The infrastructure of public services adapted for seniors helps them to actively participate in social life for longer periods.

Lithuania is an attractive country to live in, where talents from other countries willingly settle. Successful integration of immigrants helps address labour shortages, promotes the development of advanced industries, diversifies economic activities, and fosters new trade relations. More and more Lithuanians living abroad are returning to Lithuania. A wise demographic policy stabilises the number of population in the country. Long-term prospects for life and work in Lithuania are provided for arriving workers, while refugees are granted adequate asylum.

Having implemented a coherent and integrated policy, Lithuania in 2050 stands as a state where people feel dignified, independent, free, and socially secure, knowing that their contribution to nation-building is important and valued, and that they will not face challenges alone.

In implementing this ambition, Lithuania will:

in the area of education of a future-ready and independent individual:

- ✧ create conditions for changes in the education system: ensure adequate financing of education through the efforts of the State, business, communities, and families, establish a favourable legal framework for experimenting with

teaching methods at educational institutions and for testing and applying proven practices at a broader scale;

- ✧ improve the quality of pre-school education and ensure its standards in all pre-school education institutions; promptly identify whether a child has individual needs and meet the needs of such children, providing necessary support for education in families;
- ✧ in order to foster the teaching community and stabilise its demographics, invest in teacher training, educational science, didactics, and increase the attractiveness of the teaching profession;
- ✧ orient the education system towards the education of future-ready, resilient, creative individuals who profess democratic values, by laying the foundations for this in early childhood;
- ✧ ensure that the school compensates for the lack of learning opportunities resulting from wealth inequality in families and that each pupil and student completes the general education program having acquired the necessary basic knowledge, with the learning process aimed at revealing the unique potential and abilities of each pupil; transition to individualised and personalised education and gradually intensify it, employing modern technologies, which also contribute to the emergence of new learning platforms; also apply innovative teaching methods that reveal each individual's unique abilities, including experiential education; conditions be provided for all individuals (those facing learning difficulties, having individual educational needs, gifted pupils and students) to learn at their own pace and abilities; alongside traditional, grade-based assessment of pupil achievement, efforts be made to shape pedagogical practices in quality assessment;
- ✧ implement programmes enhancing the international competitiveness of Lithuania's higher education system, promote interdisciplinary and flexible higher education, strengthening components of social sciences, humanities and cultural education in studies, coordinating and integrating them with the disciplines of life and physical sciences, and be open to the intellectual leadership of universities in developing solutions important for societal progress;
- ✧ provide opportunities and incentives for lifelong learning; ensure accessibility of both formal and non-formal education services to all residents, involving non-governmental organisations and considering diverse inclusion needs; to this end, make efforts to bridge the gap between formal and non-formal education, i.e., creating conditions to acquire new knowledge and competences and to recognise and refresh skills;

in the area of developing and ensuring preconditions for a safe, healthy, and physically active life:

- ensure that the organisation and provision of public services adhere to the principle of equal opportunities;
- strengthen public health and create conditions to preserve it, by promoting health literacy, healthy lifestyle habits, environmentally friendly consumption habits, and encouraging individuals to engage in the care of their own and their family's health; ensure necessary conditions for healthy lifestyle and physical activity endeavours, namely, sports infrastructure tailored to the general public and professional athletes, sustainable mobility;
- significantly reduce mortality rates among young and middle-aged individuals from diseases and external causes;
- ensure the effectiveness of the health care system; these efforts will involve a greater focus of the health care system on the individual, a financial review ensuring efficient resource allocation, management changes in health care institutions, empowerment of system personnel, integration of advanced technologies, and overall system preparedness for crises;
- agree on a basic package of quality public services and ensure its provision; provide social services that meet the needs of the population, implementing result-oriented social service models and individualised social services in the community;
- create conditions for health and social security systems to work together and ultimately merge these systems into one;
- enable non-governmental organisations and close collaboration among various public service providers;

in the area of building public demographic resilience and intergenerational solidarity:

- at the government level, address demographic issues and stabilise the population number in Lithuania;
- create favourable conditions for starting families in Lithuania and raising children (increasing accessibility of housing and services for families, paying more attention to large families and families raising children with individual needs, etc.);
- in order to restore demographic balance within society, implement a prudent and effective migration policy, creating conditions for individuals immigrating

to and returning to Lithuania to integrate here, and foster a favourable public attitude towards them;

- ✧ increase the employment and inclusion of elderly people by providing opportunities and incentives to remain in the labour market longer; develop public services that enable individuals to maintain independence for as long as possible and provide support for those who are no longer able to fully care for themselves.

SECTION THREE

Lithuanian Business, Science and Arts Sustainably Generate High Value for Lithuania and the World

In the future, the long-term economic prosperity of Lithuania will be increasingly linked to the extent to which the State is a supportive space for creation and a partner for creators. Empowering and mobilising of Lithuanian creators will be crucial, that is future economic competitiveness and sustainability will depend on the ability to turn knowledge, skills, and technologies into innovations and unique products or services needed by the country and the world. The ability to generate innovative solutions is already essential today not only for competitiveness but also for addressing challenges related to global threats: climate change, ecosystem crisis, rapid technological advancement, growing demographic imbalances, and social inequality. Like the rest of the world, Lithuania will need to shift from an economy based on unlimited growth and consumption to a sustainable and balanced economy of moderation that respects environmental constraints. Lithuania must empower and nurture its working and creative people (value creators) through wise and responsible economic, scientific, innovation, cultural, and social policies, bringing them together for a common goal.

Attention to the primary source of Lithuania's economic strength and sustainability – its creative people – is the foundation of economic policy ambitions. In order to implement this ambition, Lithuania needs to make progress in three key areas:

- ✧ **in the area of fostering of science and innovations, and of gaining a foothold on high-value global markets** – to create scientific knowledge and manage innovations, which form the basis of international value chains;
- ✧ **in the area of responsible and socially and environmentally sustainable economic development** – to take into account the limits of the State and society, and the planet's resources and ensure socially just distribution of public revenues;

- **in the area of diversity of talents, careers, and professions** – to provide a space that appreciates, nurtures, and empowers everyone to discover and utilise their potential.

Having implemented its strategic ambition,

Lithuania is known globally as a competitive and socially responsible country of innovative, knowledge-based, and technology-driven business that contributes to solving global and local problems. Lithuanian business aims for high added value and is capable of creating it, and society recognises this. The advanced education system of the country not only provides necessary competences and skills but also encourages and inspires future value creators in various areas. The integration of principles and methods of creativity, design, socially responsible and sustainable business development, and critical thinking into skill and talent development programmes ensures a large pool of professionals capable of integrating diverse subject competencies and thus identifying innovation opportunities and supply. Favourable opportunities to engage in solving global issues and to innovate or do business in Lithuania maintain local talents and attract talents from around the world, encouraging them to realise their potential here.

An integrated, efficient, and globally competitive science and innovation ecosystem thrives in Lithuania, actively involving both the State and academic, business, cultural, and artistic communities. Its vitality is ensured by mission-based national and European science and innovation development policies, a scientific, creative, and ambitious society, open collaboration among academic institutions, and proactive businesses consistently investing in research and innovation. The Lithuanian science and innovation ecosystem is a vital part of the global science and innovation community, partnering with the strongest universities in the world, corporations, and transatlantic innovation space states. Lithuanian businesses are ready and capable of investing in the latest technologies and innovations and obtaining significant returns from them.

In developing and exporting knowledge and innovations, Lithuania occupies a unique leadership position in strategic international value chains. Having defined priority missions for the development of science and innovation, Lithuania has the capacity to create and export critical technologies and innovations, which serve as the basis for the creation and development of products and services needed worldwide. The state tax and regulatory policies, as well as its high-level expertise in capital management, finance, and law, help attract, nurture, and retain the necessary domestic and foreign capital. In order to strengthen the country's positions in

international value chains, network diplomacy is employed, informally involving individuals and organisations, including Lithuanian honorary consuls and professionals of Lithuanian descent abroad. It enables Lithuanian business and scientific communities to actively participate in international consortia and ambitious future technology development projects and to more easily access disruptive technologies developed in other countries.

Lithuania is sustainably developing a climate neutral economy which is resilient to adverse climate change and which is based on restoration of natural ecosystems and the principles of balanced growth and moderation. The country's producers and consumers adhere to widely accepted and proven principles of responsible resource use and circular economy. The State properly values and carefully utilises the multifaceted benefits provided by nature (ecosystem services). Upon significant strengthening of the energy efficiency of buildings and industrial processes, and upon expanding of public transportation systems, all of Lithuania's energy needs are met by renewable (wind, solar energy, etc.) and alternative green (hydrogen, synthetic fuels, etc.) energy sources. Responsible state policy helps mitigate the social consequences of the green transition. Lithuania respects its own and planet's environment and its own main guarantee of growth – the people of Lithuania.

Many meaningful, sustainable, and well-paid jobs have been created in Lithuania's labour market. Instead of posing a threat to vulnerable workers, automation processes and research and innovation development programmes empower workers and contribute to the sustainable development of the labour market. An active labour market policy is being pursued: an expanded lifelong learning system is organised, and individualised career counselling helps residents find jobs that are most suitable for their health, talents, and expectations at all stages of life. The labour market includes people with various opportunities and needs. Businesses have the competences and capabilities to ensure a comfortable, respectful, and motivating work environment for individuals with different identities and abilities.

Social inequality in the country has been contained. A socially just tax system and effective public services, including accessible education and lifelong learning, ensure equal opportunities and high social mobility. Adequate state budget, business, and community resources, as well as sensitive social protection policies, significantly reduce income inequality and the risk of poverty. Social inequality issues, taking into account the dimension of territorial exclusion, are addressed through targeted intervention measures and by strengthening the economic potential of regions.

Horizontally and vertically, Lithuania thrives as a developed silver economy. Elderly people are active participants in the labour market. Their needs, including

products, services, and innovations, constitute an important part of domestic demand.

A significant portion of the country's economic structure consists of products from the arts and creative industries. Lithuania is known worldwide for its unique culture and its creators.

In implementing this ambition, Lithuania will:

in the area of creation of science and innovations, and of gaining a foothold on high-value global markets:

- develop the country's science, innovation, and skills ecosystems in an integrated way, i.e. nurturing of quality competences, skills (creativity and entrepreneurship) and values, especially ecosystem awareness and responsibility, needed for the future will ensure a high level in terms of transnationality, crucial for innovation, and the ability to adapt to changing social and economic needs;
- in pursuit of greater international competitiveness, consolidate the system of higher education and research centres, aiming to have at least one university capable of successfully competing for world class talents;
- become an open space for experiments and innovations, especially in disruptive technology, and, eventually, the most competitive innovation ecosystem in the region; also develop social innovations, leveraging Lithuania's cultural and creative potential for their development;
- concentrate state resources in sectors with the greatest breakthrough potential in the sectors of science and economy;
- promote foreign direct investment that can contribute to technology, knowledge, and innovation development in Lithuania, aiming for Lithuania to be the most attractive choice in the region for international businesses creating high added value; promote the development of sustainable, reliable, and secure international value chains and business cooperation in managing risks associated with supply chains;
- promptly respond to changes occurring in international value chains, i.e. align the efforts of businesses, science, and state institutions to flexibly capitalise on the opportunities presented by these changes for breakthroughs in advanced economic sectors;
- promote further deepening of the EU Single Market, removal of existing barriers, and promotion of competitiveness; aim for the open and integrated EU

market to be a key instrument in fostering technological and innovation breakthroughs in Europe;

- ✧ strengthen business promotion and innovation development programmes, seeking closer collaboration between the scientific and business communities and greater involvement of the private sector in research and innovation;
- ✧ shape an attractive environment for Lithuanian and global talents, i.e. balancing of regulatory and economic incentive policies to improve conditions for Lithuanian and other citizens to develop their professional activities, establish businesses, families, and lead fulfilling lives;
- ✧ implement an active and wise state migration and integration policy, prioritising the attraction of highly skilled workers;

in the area of responsible, socially, and environmentally sustainable economic development:

- ✧ implement a horizontally and vertically fair and broad tax system that promotes high tax morale; ensure sufficient state budget revenues to manage social inequality at all stages of human life and adequate financial resources to effectively address other challenges to society's progress;
- ✧ adapt the pension system to the increasing employment and activity of the elderly; address the early retirement driven by economic and social factors, ensuring a closer link between pension income and social contributions throughout the individual's life cycle; these changes will be implemented alongside other programmes aimed at strengthening Lithuania's social and health care systems;
- ✧ reinforce responsible consumption and resource utilisation by establishing an appropriate system of tax and non-tax incentives and fostering a culture of responsible consumption based on principles of sustainability; ensure a substantial supply of competitive green energy;
- ✧ integrate principles of ecological sustainability and moderation into programmes of business promotion, industrial growth, and infrastructure development policies; enhance competences and capabilities to reduce resource use in industry; develop a responsible and competitive agriculture and food production sector, promoting the maintenance and development of ecosystems and the restoration of their elements; properly assess and harness the potential of ecosystem services and ensure food security;
- ✧ invest in the development of a silver economy and establish a flexible and progressive regulatory environment for it;

in the area of talents, careers, and professions:

- develop a regulatory environment and infrastructure conducive to the sustainable growth of sectors of social business, arts, and creative industries, and ensure the supply of skills required for these sectors; through targeted measures to promote business, encourage residents to engage in these sectors;
- implement an active and more effective labour market policy focused on social innovations and individualised services and business development, taking into account the needs of various sectors of the country's economy and social groups;
- create conditions for everyone willing to realise their potential here and feel valued as a contributor to the public good.

SECTION FOUR

A Resilient State: a Constructive and Influential Player in Global Politics

Upon re-establishing independence and consolidating itself as a political entity in the international system at the end of the 20th century, Lithuania is once again considering how to ensure security and strengthen its role as a fully-fledged international policy player in the future. Primarily, all this is due to the rising geopolitical tensions among major world powers and the erosion of the international order that recognises the equality of all states. For Lithuania to be a genuine political player means the ability to express its political will and, based on it, shape the international agenda and implement its strategic interests. Due to global climate, technological, and demographic changes, the increasing uncertainty in international politics and the growing number of potential threats will make this task more challenging in the future. At the same time, there is a need for greater resilience of the State to various shocks. Moreover, in order for our State's voice to be heard more clearly and its interests better represented in the interconnected world, it is essential to have closer interaction with various groups of citizens when shaping the state foreign policy.

The comprehensive challenge of being a strong and fully-fledged player in the 21st century international politics serves as a starting point for the strategic ambitions of Lithuania's future vision 'Lithuania 2050' in the areas of international and security policy. This ambition encompasses three key areas for change:

- **in the area of development and implementation of proactive and constructive foreign policy** – Lithuania will pursue a proactive and constructive regional and global policy, aligning principles of leadership, open collaboration,

and solidarity with partners, particularly the EU and NATO, and shaping international agendas on key future issues;

- ✧ **in the area of enhancement of resilience of the State** – Lithuania will strengthen as a resilient state, capable of withstanding internal and external pressures, recovering quickly, and strengthening after unforeseen shocks;
- ✧ **in the area of inclusiveness of foreign policymaking** – Lithuania will enhance inclusiveness of foreign policymaking, thus Lithuanian society will contribute significantly to shaping and implementing the country's international goals. A breakthrough in these directions will enable Lithuania to emerge as a qualitatively new player in global politics: not only a recipient but also a provider of security, not only a member of the Western community but also an active shaper of future international order.

Having implemented its strategic ambition,

Lithuania's position in the international system determines the country's security. Lithuania stands as an active and reliable member of the Euro-Atlantic community, nurturing secure and mutually beneficial relationships with various regional and global partners. Lithuania's membership in an enhanced NATO, participation in a broad coalition of democratic states, and involvement in critical international value chains make it significant to its partners and the world at large, and this status is an inherent source of the country's security. At the same time, Lithuania wisely manages its external dependencies: the State possesses necessary national defence capabilities, is energy independent, and pursues sustainable public finance policies. This allows the State to withstand any shock in the short term and further strengthens partners' commitment to support our country in times of crisis.

Lithuanian citizens demonstrate high psychological resilience and mobilisation capabilities. The country's residents feel they have something worth fighting for and are determined to defend Lithuania's independence, work for its prosperity, and security. The foundation of societal resilience comprises the mutual trust-based relationship between the State and its inhabitants, the sense that the human rights of all residents are consistently upheld, effective functioning of the welfare state, clear and open government communication, and an empowering education system, alongside sustainable economic development foundations. Residents are capable of and knowledgeable about how to behave in various crises and emergencies, how they could best contribute to the country's defence, state security, and welfare through their own efforts. The level of public trust in the country's political leadership, diplomatic service, and armed forces is high.

Lithuania's government has developed comprehensive national crisis and emergency management plans for conventional, hybrid, and cyber attacks, pandemics, extreme natural events, economic crises, irregular migration flows, and critical infrastructure disruptions, and has established strategic analytical capabilities. Plans and capabilities are regularly reviewed and updated. Lithuania ensures reserves of critical resources and can effectively supply them in times of crisis or emergencies, especially to the most vulnerable segments of society, with services always ready to act. A clear institutional structure for crisis and emergency management and the distribution of responsibilities among national authorities, municipalities, businesses, non-governmental organisations, citizens, and international partners guarantee well-functioning leadership at all levels and stages of crisis management. Lithuania learns from crises and emergencies it has experienced. Transitioning from crisis or emergency management to the recovery phase, Lithuania is able to mobilise innovations and public initiatives that help turn crises and emergencies into opportunities for breakthroughs.

Lithuania manages a broad, adequately financed, and well-balanced diplomatic network, further strengthened by network diplomacy at all levels of governance. An effective system of training for civil servants and diplomats ensures the supply of necessary knowledge, competences, and expertise, supported by a viable ecosystem of international analytical centres. A wide and competent diplomatic network, high-ranking representatives of Lithuania in international organisations, effective strategic communication, and public diplomacy for foreign societies help combine the country's hard and soft power into smart power and thus implement the most suitable foreign policy measures for various issues.

Lithuania can purposefully support its partners' efforts to renew and expand the international order based on rules and democratic values, the vitality of the EU and NATO, and by its leadership and example, Lithuania can effectively mobilise the actions of the Western democracies coalition. Lithuania is able to anticipate the development of the global agenda and engage in shaping and implementing it. Consistent pursuit of long-term strategic goals and rapid response to newly emerging issues in international politics are facilitated by effective inter-institutional coordination and regularly updated guiding documents.

Lithuania is able to turn its strengths into real influence and boldly take on the role of a leading state in the most important areas of international politics. One of the fundamental goals of the State is a strong and viable EU, therefore Lithuania proposes ways to increase its global influence and make its operations more effective, ensuring that the voice of all Member States is heard. In its foreign and European policies, Lithuania contributes to positive transformation and democracy

development in the Eastern neighbourhood countries, supports their full integration into the EU, and develops effective, value-added cooperation. A resilient society, an advanced economy, a clean environment, and a strong ethical reputation open up opportunities for Lithuania to pursue an ambitious policy on the development of democratic values, future market regulation, climate change management, and regional security issues.

Lithuania fully understands the values, interests, capabilities, and needs of its partners, formulates its political positions based on the principles of solidarity, subsidiarity, mutual assistance, and collective action. Acting in unison with a broad coalition of like-minded partners, Lithuania purposefully seeks to ensure that the multilateral cooperation system reflects legitimate expectations of world states, meets the needs of the times, and contributes to addressing common challenges to the planet, humanity, and the protection of human rights. Lithuania knows how to leverage global opportunities provided by the initiatives of our strategic partners, among other things, by supporting business, non-governmental organisations, science, and cultural institutions to participate in international consortia, multilateral cooperation programmes, and so on.

Lithuania implements foreign policy based on a broad consensus among political actors, the public, and Lithuanian diaspora. The country is defended by NATO's security umbrella, with approved and effectively functioning defence plans against aggression. Based on value consensus regarding democratic and Euro-Atlantic state orientation, Lithuania's government conducts foreign policy that is heard and understood by the public. Persons taking and implementing decisions are able to clearly link the long-term goals of the state international policy with the interests and expectations of the population, paying particular attention to vulnerable societal groups. The public feels well-informed about Lithuania's implemented policies and supports them.

Developing specific foreign policy programmes and seeking their effective implementation, the national government actively seeks to engage civil society partners: non-governmental organisations or businesses with unique expertise, scientists, communities, and the Lithuanian diaspora. Municipalities and cities in the country actively participate in international cooperation, with the national government providing necessary support for this purpose.

Lithuania operates a strong network diplomacy system, actively collaborating with favourable civil society partners and interested stakeholders in other countries. This is facilitated by an active and well-recognised network of honorary consuls, active business and scientific organisations in the international arena, and the country's diaspora.

In 2050, Lithuania is an indispensable player in the world and in the international system, whose value orientation, state and diplomatic capabilities, and constructive leadership help it form coalitions of like-minded partners and nurture an international order based on democratic values.

In implementing this ambition, Lithuania will:

in the area of development and implementation of a proactive and constructive foreign policy:

- refine and, if necessary, reform the current model of foreign policymaking to create mechanisms that enable different political forces and institutions to regularly discuss foreign policy issues and develop a consistent, long-term, and comprehensive strategy for international action. These changes should be linked to a broader analysis of Lithuania's governance and legal system, aiming for strategic, flexible, and effective public administration;
- ensure adequate financing for the diplomatic service to make diplomatic work attractive, attract and retain capable employees, and ensure that Lithuanian diplomatic missions operate in all key locations for Lithuania;
- strengthen the analytical capabilities of Lithuania's foreign and security policy ecosystem, as well as diplomatic network capabilities; promote the development of analytical centres and their international cooperation. These changes should be implemented while further developing Lithuania's education, science, and innovation ecosystem.
- increase influence in the EU, NATO, the United Nations, and other international organisations, contributing to their effectiveness and implementation of common agendas;
- actively engage in the region, aiming to strengthen and expand the security and democracy space around Lithuania; consistently promote democratic, economic, and ecological transformation in Eastern neighbourhood countries and actively support the full integration of Ukraine and other states in the region into Euro-Atlantic structures;
- where appropriate, establish common diplomatic formats with Baltic, Northern, and Central European countries to more effectively utilise diplomatic resources and have a greater impact on the international system;
- strengthen transatlantic and bilateral strategic partnerships with like-minded countries, cooperation with partners in the Indian and Pacific Ocean regions;

- ✧ seek to maintain an international order based on rules and democratic values, combat the spread of authoritarian regimes worldwide, and economic coercion in interstate relations; actively engage in multilateral formats on key global policy issues, particularly sustainable development and respect for human rights and freedoms;
- ✧ analyse and strengthen development cooperation programmes, viewing them as long-term investments, taking into account environmental and climate change issues as well as state interests;

in the area of enhancement of resilience of the State:

- ✧ establish a comprehensive national defence concept encompassing military and non-military measures, develop Lithuania's state defence plan and familiarise the public with it, envisaging specific programmes for the involvement of various segments of society in the country's defence; foster the will and preparedness of the population to defend the State. These changes must be implemented in conjunction with changes that provide broader opportunities for citizens to engage in cultural and civic life, increase their subjective and economic security, and ensure respect for the human rights, freedoms, and dignity of all country residents;
- ✧ strengthen the crisis and emergency management and prevention system by developing national agendas for energy, digital, economic, climate, environmental, space, and epidemiological security; ensure the implementation of other measures aimed at enhancing state resilience and public security as stipulated in the National Security Strategy;
- ✧ actively promote further strengthening of NATO and European collective defence capabilities; support further integration of EU defence policies, including the development of common defence planning and financing mechanisms;
- ✧ expand host country capabilities; upgrade the country's infrastructure, aiming to ensure greater military mobility and resilience to shocks in critical service delivery, especially in the areas of communication, transportation, data management, and energy;
- ✧ develop comprehensive integration of Lithuania into Western Europe, starting with infrastructure (primarily railways, power connections and systems, but not limited to them) restructuring and final integration into Western European systems, ending with alignment within decision-making institutions;
- ✧ enhance national security by developing sustainable and resilient international value chains; promote the integration of the national defence industry into

international (EU and NATO) defence industry development; actively pursue further deepening of the EU single market to strengthen European economic resilience;

- develop the state cyber security and defence system, enabling Lithuania to achieve and maintain a high level of cyber security;
- implement an enabling and protective economic diplomacy and economic security policy to drive Lithuania's economic breakthrough; promote international cooperation and strategic diversification to reduce strategic dependencies on hostile states, fostering the development of secure and reliable international value chains, the development and strengthening of national and EU industries; ensure the development of sustainability and resilience standards and equal competitive conditions in the multilateral system; promote the development of critical infrastructure connecting Lithuania with key partners;

in the area of inclusiveness of foreign policymaking:

- develop network diplomacy, seeking to strengthen the dialogue of the Ministry of Foreign Affairs of the Republic of Lithuania with various existing and potential players in Lithuanian foreign policy on the principle of mutual benefit, enabling their cooperation and facilitating their participation in the country's foreign policy;
- expand public discourse on various foreign and security policy issues with different societal groups and, where appropriate, establish consultative institutions;
- enhance Lithuania's accessibility in the digital space to make its history and culture better known and understood by the global community;
- strengthen cultural diplomacy.

SECTION FIVE

A Connected Country with Sustainable and Well-Balanced Development

The current status of the living environment in cities and regions no longer meets the needs of people and the principles of sustainable development because Lithuanian society is ageing, demographically decreasing, diversifying, and is likely to become even more diverse in the future. The processes of population ageing and migration pose a serious challenge to rural areas of Lithuania, regions distant from larger centres, and even to major cities. Moreover, some regions face higher risks of poverty and social exclusion. Therefore, there is a need for coherent,

sustainable, and integrated territorial development, encompassing closely interconnected public infrastructure that ensures accessibility to services and enables active participation in economic, social, cultural, and civic activities, regardless of place of residence. By organising and adapting our living environment, we can create conditions for harmonious living in different parts of Lithuania, preserving and nurturing its unique nature, thus turning it into a competitive advantage.

Therefore, looking to the future and aiming to create a favourable environment for human life and its natural surroundings, changes are needed in three key areas:

- **in the area of well-balanced and sustainable territorial development,** to ensure accessibility to quality public and commercial services regardless of location, maintaining the polycentricity of urban systems, with a preference for green infrastructure;
- **in the area of coexistence with nature**, for it to become the basis for moderate and balanced living, part of mentality and a competitive advantage;
- **in the area of good connectivity within the country and with the world**, to enable participation in cultural, economic, social, and civic life, ensuring state security and economic competitiveness.

Having implemented its strategic ambition,

the entire territory of the country is developed in a sustainable and balanced manner, based on integrated territorial development. New and renovated infrastructure is multifunctional, resilient, and sustainable. Investments in infrastructure are guided by the essential needs of specific locations and communities, the requirements of specific societal groups, principles of sustainability, including historical and cultural heritage, and the quality of life for future generations. Collaboration between municipalities and regions allows for the collective use and development of infrastructure, implementation of investment projects, and provision of public services, ensuring the rational use of available resources.

Sustainability and resilience are harmonised with aesthetics in the design of architectural and urban environments. Due to the accelerated pace of renovation and modernisation in recent decades, the majority of buildings are characterised by high energy efficiency, with many Soviet-era multi-apartment buildings and entire residential areas either renovated, demolished, or rebuilt. The successful conversion and regeneration of disused industrial sites has led to the disappearance of empty and derelict industrial buildings in city centres. Once one of the most polluting, the construction sector now operates on the basis of circular economy principles.

The landscape is planned in a way that restores and maintains ecological balance, preserves and creates new green spaces. Compact cities are not only climate-neutral and resilient to adverse climate change but also better suited to people: they combine intensity with diversity in social groups, quality public spaces, diversity of functions and services, and well-developed public transportation. The vitality of cities and other areas is underpinned by strong functional interconnections. Balanced territorial development ensures the well-being of both urban and suburban residents, as well as those in remote areas, including access to quality public services and reduced social, economic, and territorial exclusion, thus avoiding socio-spatial segregation in major cities. Vilnius is a transnational-level urban centre visible throughout Europe, competing with other similar regional cities, and contributing to the well-being of people across the country through the added value it creates.

Due to increased awareness, we have rediscovered our relationship with nature. An ecocentric approach, previously more of a theoretical principle for our society, has now become entrenched in territorial planning and governance, as well as in daily practice. Guided by this approach, people value and nurture various forms of life, and their natural state is only affected when it is necessary to ensure essential needs for a decent life.

Nature conservation is oriented towards quantitative and qualitative changes: the area of effectively functioning protected areas connected by ecological corridors has been expanded; not only individual species are protected, but also the structural composition of ecosystems and natural processes that ensure natural ecosystem dynamics. Ecosystem services are well developed and their condition assessment is among the indicators reflecting the well-being of the country.

Everyone enjoys the right to a healthy, beautiful, and clean environment, with easy access to green spaces. A larger expanse of wilderness is accessible from the city within half an hour. Access to nature helps people maintain good health, rediscover tranquillity, moderation, and balance.

Successful adaptation to climate change, halting the loss of biodiversity, and preserving nature have become Lithuania's competitive advantage – we are one of the greenest zones in Europe, a recreational hub that attracts people not only to relax but also to live there. Easily accessible regions of the country are appealing not only for their natural heritage but also for expanded innovative accommodation services near nature or within it, healthy locally grown food, as well as preserved cultural heritage and modern cultural services.

Based on regional demographic projections, cities, towns, and villages are linked by a common transport system. This strengthens community ties, helps preserve

and develop the country's cultural heritage, which contributes to the creation of cultural, social, and economic value, as well as helps address employment disparities and labour shortages. The development of digital infrastructure throughout the country ensures the fastest internet connection available to all households.

The country has an effective, sustainable, and resident-oriented transportation infrastructure, ensuring integrated, fast, and convenient travel. Interurban and suburban traffic seamlessly integrates into the urban fabric and transportation system. Changed mobility habits have transformed Lithuania's transport pyramid. At the local level, it is based on pedestrians, cyclists, and passengers of public transport the sustainable and effective multi-modal infrastructure of which covers the entire country.

Lithuania has expanded its international connectivity systems (carriage of passengers and goods), ensuring convenient connections with foreign countries, including all major world business centres. Rail and air transportation have also become axes of international transportation.

In implementing this ambition, Lithuania will:

in the area of well-balanced and sustainable territorial development:

- ✧ conduct an inventory of existing public infrastructure and assess its condition and capacity – identify the need for critical infrastructure; develop an action plan for improving and adapting this infrastructure to the various needs of community members, ensuring its financing with the involvement of private sector participants;
- ✧ at an appropriate territorial level, ensure comprehensive development, taking into account local conditions and regional demographic projections; in planning and implementing local development, adhere to principles of climate neutrality, universal design (providing equal opportunity for all people to use infrastructure), and heritage activation, guided by the opinion of the local community (principle of creative placemaking);
- ✧ in order to enable cooperation between municipalities and regions, establish an appropriate regulatory environment, that is create the legal, institutional, and financial conditions necessary for municipalities to collectively provide public services and manage public infrastructure;
- ✧ review the network of institutions providing public services to identify the optimal territorial level, scale, and model for providing public services; expand accordingly an efficient network of public services, involving non-governmental organisations, the private sector, and ensuring accessibility to services;

- ✧ accelerate the renovation, modernisation, and demolition of energy-inefficient multi-apartment buildings by means of renovation of residential areas; promote the use of sustainable materials;
- ✧ in landscape planning, preserve and create green areas and connections between them; ensure that urban development occurs only concurrently with the development of public transport corridors;

in the area of coexistence with nature:

- ✧ undertake conservation of natural resources and nature-based solutions that are both economically efficient and provide environmental, social, and economic benefits; expand the provision of services provided to individuals and society by nature and ecosystems (ecosystem services), enhancing the quality of environmental impact assessment of decisions;
- ✧ implement commitments to zero pollution;
- ✧ establish an ecocentric approach in territorial planning, governance, and other public policy areas;
- ✧ by harmonising the interests of individuals, communities, and the public, expand protected areas that effectively ensure protection, connecting them with ecological corridors;
- ✧ in environmental protection, focus not only on individual species but also on the preservation of natural structures of ecosystems and the natural processes characteristic to them;
- ✧ halt the loss of biodiversity and ensure its protection;
- ✧ based on the Helsinki Convention and coordinating its actions with other Baltic Sea region countries, actively address the issue of Baltic Sea pollution;
- ✧ at the local level, develop and implement solutions for climate change mitigation and adaptation;

in the area of effective connectivity within the country and with the world:

- ✧ reach an agreement on the appropriate level of traffic infrastructure and a long-term desired national transportation model for Lithuania and consistently implement it;
- ✧ develop public transport, adapting it for persons with health problems;
- ✧ develop infrastructure for international connectivity with the EU and third countries, developing multimodal transport and ensuring the integration of international transport with the domestic transport system;

- ✧ in developing transport infrastructure, consider the needs of quality of life, tourism and business promotion, and national defence;
- ✧ develop digital infrastructure nationwide, aiming to reduce social, cultural, and economic disparities and exclusion among regions.

SECTION SIX

Map of Leveraged Initiatives

The map of leveraged initiatives (Annex 2) shows how a change in fulfilment of Lithuania's vision for the future will be created: this map shows how Lithuania will move forward and seek to attain future breakthroughs and prosperity. The map shows the necessary initiatives collected from the five strategic ambition implementation initiatives described above, following the principle that only the initiatives relevant to more than one strategic ambition can become leveraged initiatives. The map shows the progress of the required changes over time and their logical relations.

There are three key elements needed to implement the country's vision for the future:

1) the 'backbone', which stands for our identity, ensuring the resilience of the State;

2) the opportunity to learn and experiment every day, which stands for creating spaces for innovation and experiment, preconditions for a different quality of life;

3) the creation and implementation of new ideas, entering new spaces, which stands for a qualitative transformation of life and its consolidation.

The following are the main leveraged initiatives for the changes that we need to attain over the next decade:

- ✧ transforming public governance;
- ✧ establishing and consolidating total defence;
- ✧ ensuring the economic, energy and cyber security and resilience of the State.

At the same time, a competitive science and innovation system must be strengthened, the development of a socially responsible and environmentally sustainable economy must be implemented, and balanced and sustainable territorial development must be pursued. An integrated policy is to be implemented throughout the period up to 2050 to halt decline of the country's population and to achieve climate neutrality. These changes in the State are underpinned by quality education, strong democratic principles and a culture that is a source of our strength and continuous renewal and a driving force for change.

CHAPTER IV

PUTTING LITHUANIA'S VISION FOR THE FUTURE 'LITHUANIA 2050' INTO ACTION

Implementation of Lithuania's Vision for the Future 'Lithuania 2050' and its Management

Lithuania's vision for the future 'Lithuania 2050' is implemented through the National Progress Plan (hereinafter: the 'NPP'), which is a resource-based strategy with strategic goals and progress targets set for a decade and a financial projection to achieve them. With a view to implementing the progress directions of the vision and its horizontal elements (overarching principles) and to strengthening the vision's foundation, national agendas covering implementation signposts up to 2050 and including an evaluation of the resources needed to achieve them may be developed. National development programmes are prepared to implement the NPP, defining the modalities of and conditions for achieving the progress targets through progress measures and the progress funding needed to implement them. The NPP is developed on the basis of the initiatives of the country's vision for the future and its strategic ambitions, in line with the map of leveraged initiatives and the corresponding national agendas. The Government of the Republic of Lithuania decides on the progress measures and activities of the national development programmes needed to implement the leveraged initiatives and the best way to manage them. An integrated approach to the implementation of Lithuania's vision for the future 'Lithuania 2050' (through the NPP, national development programmes, their progress measures and specific activities and projects) helps mobilise all the necessary resources to attain the required changes, and provides for clear responsibility.

The implementation of Lithuania's vision for the future 'Lithuania 2050' is a continuous dynamic process in which the State (society together with all the participants of the strategic governance system) implements the State's vision for the future and strategic ambitions (directions for development of the State). The implementation of Lithuania's vision for the future 'Lithuania 2050' is coordinated by the Government and overseen by the State Progress Council, which brings together

the forces of state institutions and bodies and the public to analyse, model and design the future development of the State and society, to disseminate the ideas of state progress, and submits proposals to the Seimas and the Government of the Republic of Lithuania on these issues. The State Progress Council also initiates regular public debates, conferences and forums to discuss the future development of the State and society and ideas of progress of the State and their implementation, oversees the implementation of Lithuania's vision for the future 'Lithuania 2050', *inter alia*, by discussing the progress achieved in the implementation of the vision and the NPP, also submits to the Seimas and the Government conclusions, proposals and recommendations on the progress achieved.

The State Progress Council is formed by the Government on the Prime Minister's recommendation, after prior consideration of the composition in the Seimas Committee for the Future. Membership of the State Progress Council is open to figures actively involved in public life, representatives of parliamentary groups and public authorities. The State Progress Council adopts conclusions, proposals and recommendations to the Seimas and the Government at its meetings.

The State Progress Council operates in compliance with the rules of procedure approved by it. The Office of the Government, in cooperation with the Office of the Seimas Committee for the Future, acts as its secretariat. Among other things, the Secretariat of the State Progress Council is responsible for the smooth communication of the implementation of Lithuania's vision for the future 'Lithuania 2050' and for engaging the public in regular open debates on the future of Lithuania. The aim will be to preserve and to expand the community of contributors to the creation of Lithuania's vision for the future. Discussions about the future will continue to take place in various forms in cities and towns across Lithuania in order to engage the public in the implementation of this vision and to develop future literacy.

Key principles underlying the implementation of Lithuania's vision for the future 'Lithuania 2050' are as follows:

- ✧ Principle of openness and inclusivity: the vision is implemented by engaging all stakeholders in decision-making processes and consulting the public, social and economic partners. In line with this principle, the focus is on active engagement of the public in issues relevant to the implementation of the State's vision for the future and strategic ambitions (directions for development of the State), as well as on maintaining regular debates with the public on fostering of the fundamental values necessary for the security and long-term development of the State and on the creation of new ideas.
- ✧ The principle of evaluation of the future: the state's vision for the future builds on foresight. The evaluation of the future and the related development of

possible scenarios are gradually integrated into the development of long-term visions for individual public policy areas.

- ✧ The principle of evaluation of results: the objectives pursued and the results achieved are continuously evaluated in the light of foresight.

The management of the implementation of Lithuania's vision for the future 'Lithuania 2050', namely, the preparation of the NPP implementing it, the oversight of the implementation of the NPP, and the review of state strategies and documents at the strategic and programming level, is the responsibility of a permanent high-level Government delegate (not below the level of Deputy Chancellor of the Government), assisted by the Strategic Management Group of the Office of the Government, as well as the permanent Secretariat of the State Progress Council operating within the Group.

Monitoring and Evaluation of Lithuania's Vision for the Future 'Lithuania 2050'

Monitoring of progress in implementing Lithuania's vision for the future 'Lithuania 2050' is coordinated by the Office of the Government in consultation with the Seimas Committee for the Future.

The success in the implementation of Lithuania's vision for the future 'Lithuania 2050' is evaluated by monitoring and analysing change trends in relation to impact indicators (Annex 1), which reflect the state of society and its changes. These impact indicators are transferred to the NPP by setting intermediate values for their achievement according to the duration of the NPP implementation. The indicators relevant to the progress in the implementation of the strategic ambitions, the cornerstone and the overarching principles of Lithuania's vision for the future 'Lithuania 2050' are included in the NPP and revised (new relevant indicators are added, indicators no longer relevant for monitoring are removed, target values for the indicators are adjusted) each time the NPP is revised and its changes are approved in accordance with the legislation governing the functioning of the strategic governance system. A dashboard of all these indicators is available in the State Data Governance Information System (in Lithuanian 'VDV IS') and published on the Government's website.

In order to identify the state of society and its changes, to increase public self-awareness and to ensure more targeted communication of the Government with the public not only on the issues of Lithuania's vision for the future 'Lithuania 2050', but also on the implementation of the public policy, panel and/or longitudinal studies, such as the Lithuanian Longitudinal Social Survey (in Lithuanian 'LIST'),

and the Fertility and Family Survey, are initiated and conducted on a regular basis starting from 2024.

The implementation of Lithuania's vision for the future 'Lithuania 2050' is comprehensively and regularly evaluated through an interim or final evaluation of the NPP. Evaluation of strategic ambitions or their individual components may also be initiated more frequently in order to evaluate aspects of their implementation that are relevant at the time, such as their effectiveness, usefulness, appropriateness of some of the directions or the need for continuity. Conclusions of these evaluations are included in the annual National Progress Report.

Evaluation reports on the implementation of Lithuania's vision for the future 'Lithuania 2050', namely, the National Progress Report as the main evaluation report and others, are submitted to the State Progress Council, stakeholders and the public. Based on the evaluation results and conclusions, the State Progress Council may recommend to initiate the revision, updating of Lithuania's vision for the future 'Lithuania 2050' or development of a new state vision before the expiry of the (planned) time limits for commencing such development as set out in the Law of the Republic of Lithuania on Strategic Governance.

Reporting on Progress

The State Progress Council shall evaluate the progress envisaged to be achieved in Lithuania's vision for the future 'Lithuania 2050' at least once per year.

Information on the implementation of Lithuania's vision for the future 'Lithuania 2050' is presented annually in the State Progress Report, which is drawn up in accordance with the procedure laid down by the Law of the Republic of Lithuania on Public Sector Reporting and the legal acts implementing it.

The National Progress Report is submitted to the State Progress Council, the Government, and the Seimas and is published on the Government's website with a view to informing the public and engaging the public in the evaluation of the progress achieved.

Institutional Framework for Foresight and its Development

The institutional framework for foresight in Lithuania builds on the Seimas Committee for the Future, divisions of the Office of the Seimas and the Office of the Government, STRATA, the Martynas Mažvydas National Library of Lithuania, universities and other research institutions and centres. This ecosystem is developed and strengthened through the introduction and activation of systemic elements

of anticipatory governance. It is developed in Lithuania as a holistic, integral area of anticipatory governance in order to shift from episodic to systemic reflection on the future, and to make anticipatory governance and the continuous reflection on the future that underpins it an integral part of Lithuanian public governance at all levels. The demand for anticipatory governance is emerging in Lithuania. The practice of Lithuania's vision for the future 'Lithuania 2050', whereby possible scenarios for the State's future, a desirable vision of the progress of the State and directions for development of the State (strategic ambitions) needed to implement it have been formulated at the state level, is expanded to all areas of public policy. Future governance in Lithuania is based on the principles of universality and integrity. Centres of future governance are strengthened in the legislature (by improving the activities of the Seimas Committee for the Future) and in the executive, while the Office of the Government is transformed (evolves) from a legislative administrator to a centre for managing strategic reforms. In order to achieve good networked interaction, a flexible strategic coordination network is developed by searching for common platforms across sectors and fields to address complex and long-term challenges, mobilising appropriate expert and analytical support, exploiting better linkages between state-funded scientific priorities and the future challenges of Lithuanian society, developing specialised analytical and advisory structures as intermediaries between decision-makers and science, and promoting the development of foresight independent of government. The aim is to make the coordination centres and analytical institutions of the Lithuanian future ecosystem an active part of the international ecosystem of anticipatory governance.

Annex 1
to the State Progress Strategy
'Lithuania's vision for the future
'Lithuania 2050"

Impact Indicators of the State Progress Strategy 'Lithuania's Vision for the Future 'Lithuania 2050"

The set of impact indicators of the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050" includes monitoring of strategic ambitions and overarching principles of the State's vision for the future.

The indicators reflecting this vision include: population size, including an explicit quantitative target of population stabilisation by 2050; indicators of qualitative change in the state of life of society (subjective assessment of well-being (happiness and life satisfaction) from the perspective of the population), indicators of the gap to bridge for the dream state, also the indicator of Lithuania's visibility abroad.

The indicators of strategic ambitions measure the following aspects:

- ✧ individual and family resilience, creativity, health, interpersonal relationships and trust;
- ✧ qualitative change of the State as an organisation, measured in terms of public trust in it;
- ✧ transformation of the economy into a high added value economy;
- ✧ Lithuania's role as a global political actor;
- ✧ balanced territorial development.

For the overarching principle of conservation of the natural environment, indicators of resource productivity, ecological reserve/deficit, greenhouse gas emissions and biodiversity are proposed; for the overarching principle of development and application of technology and innovation, an indicator calculated based on the data of the responses to the supplementary topic block "Technology Acceptance" of the Lithuanian Longitudinal Social Survey (LIST) is proposed; for the reflection of culture as the cornerstone of the vision, the indicator of fostering the identity is proposed.

The set of indicators consists of 28 indicators. Several alternative or elaborating indicators are envisaged for some of them. The indicators measure the degree of implementation of target states. Indicators showing the results of interventions

aimed at achieving these states are envisaged in the National Progress Plan and the national development programmes implementing it. In setting ambitions for values of the indicators, reference is made to current values of the indicators of the leading European Union Member States and other countries worldwide.

A large part of the indicators proposed for consideration will be calculated on the basis of data from the planned LIST as well as results of the Fertility and Family Survey. This will allow not only to monitor changes in the values of the indicators, but also to carry out more in-depth studies and analyses in the future in order to establish causal relationships with other variables and to better evaluate the state of Lithuanian society.

When developing the set of indicators, the following sources were relied upon:

- the 2021-2030 National Progress Plan, approved by Resolution No 998 of the Government of the Republic of Lithuania of 9 September 2020 on the Approval of the 2021-2030 National Progress Plan;
- the State Progress Strategy 'Lithuania's Progress Strategy 'Lithuania 2030", approved by Resolution No XI-2015 of the Seimas of the Republic of Lithuania of 15 May 2012 on the Approval of the State Progress Strategy 'Lithuania's Progress Strategy 'Lithuania 2030";
- LIST (the projected Lithuanian Longitudinal Social Survey);
- long-term strategies of other countries (e.g. Estonia and Spain);
- the set of Eurostat's quality of life indicators; the Better Life Index (BLI) developed by the Organisation for Economic Co-operation and Development (OECD), and the Sustainable Development Goals (SDGs) indicators;
- the set of Foresight indicators (European Commission);
- various Lithuanian public policy evaluations and studies.

Table 1. Impact indicators for the State Progress Strategy 'Lithuania's vision for the future 'Lithuania 2050''

No	Indicator name [1]	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
Vision-level indicators							
1.	Population of Lithuania [2]	2.83 million [2022]	–	–	Stabilising the population number, with reference to the mean scenario of the United Nations (UN) projections, which exceeds the 2.3-2.4 million population threshold, and to the restoration of the age structure, providing for population growth beyond 2050-2060.	–	State Data Agency (hereinafter: 'SDA') [3]
2.	2.1. Happiness score (1 to 10-point scale)	6.763 points (Average for 2020-2022)	EU 27 – 6.625 points (Finland – 7.804 points)	11th place in the EU or 20th place out of 137 countries	7.5 points	5th place in the EU or 10th place in the world	UN World Happiness Report, based on data from the Gallup World Poll [4]

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
	Other observed indicators:						
	2.2. Share of the population satisfied with life (very satisfied and somewhat satisfied) (5)	77% (2023)	EU 27 – 83% (Denmark – 98%)	22nd place in the EU	95%	5th place in the EU	LIST (baseline values – Eurobarometer survey) (6)
	2.3. Share of happy population (5)	75% (2020)	–	–	90%	–	LIST (baseline value – Study of the Participation of Population in Culture and Cultural Satisfaction) (7)
3.	Gap to bridge for dream Lithuania 2050 3.1. The current value is calculated by multiplying the population size by the World Happiness Report score for Lithuania and the life expectancy; the gap is calculated by subtracting the current value from the maximum possible value.	Current state – 1.44bn Gap – 1.56bn (2022)	–	–	State of dream Lithuania 2050 – 3bn Lithuania with a population of 3 million has the highest happiness score according to the World Happiness Report (10) and a life expectancy of 100 years	–	SDA, World Happiness Report

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
	3.2. Gap to bridge for the target level of quality of population's life (index)	Index value – 60.4 points Gap – 39.6 points (2019)	–	–	The maximum value of the quality of population's life index is 100 points, when all target values of the individual indicators comprising the index have been achieved.	–	Special study (baseline value – evaluation of the impact of EU funds' investments and other state interventions on the growth of quality of population's life, conducted by ESTEP for the Ministry of Finance of the Republic of Lithuania, 2020) [8]
4.	Recognisability of Lithuania as a leading country abroad	Average evaluation of dimensions of Lithuania's image (1 to 7-point scale): tourism – 4.9; population – 4.5; culture – 4.7; science and innovation – 4.1; investment, immigration – 4.2; governance – 4.2 (2019)	–	–	(Indicator definition and target value will be determined in the review of the National Progress Plan (hereinafter: the 'NPP'))	–	Study of Lithuania's image in foreign countries, performed by the Office of the Government

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
Ambition indicators							
Citizen-led democracy: credible, open, and uniting for action							
5.	Civil Empowerment Index	35.9 points (2022)	–	–	60 points	–	Civil Society Institute [9]
6.	Trust in Lithuanian institutions and organisations [5]: the Seimas of the Republic of Lithuania; courts; local public authorities; the police; the army; the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania; the Central Electoral Commission of the Republic of Lithuania; the health care system; the education system the Seimas – 18%; justice/legal system – 50%;	Share of population who trust:		–	–	Achieving the level of trust in institutions in the Scandinavian countries	LIST (baseline values – Eurobarometer survey) [10]
		EU 27 – 33% (Finland – 68%)					
		EU 27 – 54% (Denmark – 88%)					
		EU 27 – 56% (Denmark – 78%)					
		EU 27 – 70% (Finland – 94%)					
		EU 27 – 71% (Finland – 96%)					
		EU 27 – 76% (Denmark – 91%)					

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
	regional and local public authorities – 54%; the police – 78%; the army – 79%; health and medical sources – 64%; (2023)						
7.	Civil Service Effectiveness Index	0.487 points (2019)	0.516 points (average of 36 countries) (Great Britain – 1 point)	20th place out of 36 countries	0.85 points	5th place	International Civil Service Effectiveness (InciSE) Index [11]
A future-ready, resilient, and free individual, thriving in a caring community							
8.	Subjective health assessment:	62.4% (2022) (Population aged 18 years and over)	–	–	75	–	LIST (baseline value – Institute of Hygiene) [12]
	Share of adults who consider their health to be good and very good [5]	47.9% (2021) (Population aged 16 years and over)	EU 27 – 69%	27th place in the EU	–	Reaching EU average	SDA (Income and Living Conditions Survey) and Eurostat [13]
9.	Standardised mortality rate from external causes (number of cases per 100 000 population)	83.13 (2021)	EU 27 – 46.55 (2020) (Malta – 28.86)	27th place in the EU (2020)	30	Reaching EU average	Institute of Hygiene

No	Indicator name		Baseline value			Target value for 2050		Source
			Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
10.	Average healthy life expectancy:	10.1. Men	55.1 years (2020)	EU 27 – 63.5 years (Sweden – 72.8 years)	26th place in the EU	70 years	Reaching EU average	SDA [14]
		10.2. Women	58.7 years (2020)	EU 27 – 64.5 years (Sweden – 72.7 years)	22nd place in the EU	70 years	Reaching EU average	
11.	11.1. Trust in those you know (5)		87% (2017)	EU 21 – 89% (Denmark – 99.2%)	15th place out of 21 EU Member States	90%	5th place in the EU	LIST(baseline values – European Values Study)
	11.2. Trust in strangers (5)		20% (2017)	EU 21 – 38% (Denmark – 77%)	19th place out of 21 EU Member States	40%	5th place in the EU	
12.	Informal social networks. Share of population who claim they know people they can turn to for help (5)		89% (2020)	Average of 41 countries – 90% (Iceland – 98%)	31st place out of 41 countries	95%	5th place	LIST (baseline value – OECD, Better Life Index) [15]

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
13.	Personal Resilience Indicator (5) (the indicator will be developed and calculated on the basis of LIST data)	-0.081 points (2022)	EU 27 – 0.027 points (Sweden – 0.597 points)	17th place in the EU	0.5 points	5th place	LIST (baseline value – JRC Study, 2022) (16)
14.	Everyday Creativity rate (5) (the indicator will be developed and calculated on the basis of LIST data)	No data available	–	–	–	–	LIST
15.	Persons at risk of poverty or social exclusion	23.5% (2021)	21.7%	21st place in the EU	15%	5th place in the EU	Eurostat (17)
16.	Share of students below level 2 (out of 6) on the PISA test for 15-year-old students Mathematical literacy – 25.6% Physical science literacy – 22.2% (2018)	Reading skills – 24.4%	22.5%	18th place in the EU	Not more than 15% in all areas	Top ten of the EU	
		22.9% 22.3%	19th place in the EU 17th place in the EU				

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
Lithuanian business, science and arts sustainably generate high value for Lithuania and the world							
17.	Share of workers in advanced and moderately advanced technology manufacturing and knowledge-intensive services sectors, compared to the total employed population	14.8% (2021)	19% (2021) (Luxembourg – 26%)	24th place in the EU	30%	5th place in the EU	Eurostat [18]
18.	Lithuania's labour productivity per hour worked in purchasing power standards, compared to the EU average	83.3 (2022, preliminary data)	– (Ireland – 223.6, Luxembourg – 162.2)	19th place in the EU	170	5th place in the EU	Eurostat [19]
19.	19.1. Exports of goods and services as a percentage of GDP	87.6% (2022)	EU 27 – 40.5% (Luxembourg – 211%)	9th place in the EU	150%	5th place in the EU	World Bank [20]
	19.2. *De facto* globalisation of trade (sub-index of KOF Index of Globalization)	85 points (2020)	EU 27 – 69 points (Belgium – 86 points)	2nd place in the EU	90 points	1st place in the EU	*KOF Swiss Economic Institute* [21]

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
A resilient state, a constructive and influential player in global politics							
20.	Soft power	10.7 points (2021)	–	70th place out of 150 countries	25 points	50th place	Baseline value – the sub-index of the Elcano Global Presence index by *Elcano Royal Institute* (22)
21.	Share of population who believe that Lithuania is a safe country to live	69% (2022)	–	–	90%	–	Survey of the population's opinion on public security, conducted by the Ministry of the Interior of the Republic of Lithuania
A connected country with sustainable and well-balanced development							
22.	22.1. Mean deviation of the quality of life index in municipalities, compared to the average of the municipal quality of life index	6 points (2020)	–	–	3 points	–	Ministry of Finance of the Republic of Lithuania

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
	22.2. Persons at risk of poverty or social exclusion – mean deviation in regions, compared to the average regional level of risk of poverty and social exclusion	3.9 percentage points (2021)	–	–	2 percentage points	–	SDA
Indicators of the level of the overarching principles and the cornerstone of the vision							
Conservation of the natural environment							
23.	23.1. Resource productivity	EUR 0.935/kg (2021)	EU 27 – EUR 2.29/kg (Netherlands – EUR 5.6/kg)	23rd place in the EU	EUR 3/kg	Reaching EU average	Eurostat [23]
	23.2. Ecological reserve/deficit (global hectares per person)	-1.2 (hectare/person) (2018)	–	–	Achieving ecological reserve	–	Global Footprint Network [24]
24.	Net greenhouse gas emission reductions compared to 1990	66.8% (2021)	30.4% (2021)	3rd place in the EU	100%	–	European Environment Agency [25]
25.	Farmland birds index (index in 2000 = 100)	46.4 (2021)	64.05	11th place in the EU out of 11 EU Member States	115 compared to 2025 (index in 2025 = 100) [26]	–	OECD [27] Eurostat [28] Lithuanian Ornithological Society [29]

No	Indicator name	Baseline value			Target value for 2050		Source
		Lithuania	EU average, or other countries	Place among other countries	Lithuania	Place among other countries	
				in a better performing group			
Development and application of technology and innovation							
26.	Public acceptance of technology (5) (the specific indicator will be developed and calculated on the basis of LIST data)	No data available	–	–	–	–	Indicator based on data from the additional LIST theme block "Acceptance of technology"
27.	Lithuania's score on the Global Innovation Index	37.3 points (2022)	– (Switzerland – 64.6)	39th place out of 132 countries	55 points	10th place	World Intellectual Property Organization (30)
Cornerstone of the vision: culture is the foundation of our identity							
28.	28.1. Share of the population particularly proud of their citizenship	28.5% (2017)	EU 27 – 46.8% (Portugal – 70.3%)	13th place out of 21 EU Member States	60%	5th place	European Values Study
	28.2. Identification with Lithuania: share of the population who feel closely connected to Lithuania (%) (5)	89.5% (2017)	EU 21 – 91.1% (Slovakia – 96.0%)	16th place out of 21 EU Member States	95%	5th place	LIST (baseline values – European Values Study)

Notes:

(1) Precise definitions of the indicators are provided in the indicator descriptions published on the indicator scoreboard of the State Data Governance Information System (SDG IS).

(2) Monitoring of the indicator of Lithuania's population will be complemented by more detailed quantitative and qualitative demographic indicators (listed below).

(3) Indicators database (Official Statistics Portal).

(4) "Happiness Report".

(5) The indicator will be measured on the basis of the LIST.

(6) "Standard Eurobarometer 98 – Winter 2022-2023".

(7) "Participation of the population in culture and satisfaction with cultural services", Lithuanian Council for Culture, 2020.

(8) Evaluation of the impact of EU funds investments and other state interventions on the growth of the quality of life of the society ¦ 2014-2020 EU funds investments in Lithuania (esinvesticijos.lt).

(9) Civic Empowerment Index (Civil Society Institute).

(10) "Standard Eurobarometer 98 – Winter 2022-2023".

(11) "The International Civil Service Effectiveness (InCiSE) Index Results Report 2019".

(12) Adult Lifestyle Surveillance Survey (indicator dashboard/report).

(13) "Self-Perceived Health by Sex, Age And Income Quintile" (Eurostat).

(14) Indicators database (Official Statistics Portal).

(15) "OECD Better Life Index Lithuania"; "OECD. Stat Better Life Index" (OECD calculations are based on surveys of the Gallup World Poll).

(16) "JRC Technical Report. Measuring and understanding individual resilience the EU".

(17) Statistics | Eurostat (europa.eu).

(18) "Employment in technology and knowledge-intensive sectors at the national level, by sex" (from 2008 onwards, NACE Rev. 2, Eurostat).

(19) "Labour productivity per person employed and hour worked" (EU27_2020=100), Eurostat.

(20) "Exports of Goods and Services (% of GDP) – Lithuania" (The World Bank).

(21) "KOF Globalisation Index".

(22) "Elcano Global Presence Index".

(23) Statistics | Eurostat (europa.eu).

(24) "Global Footprint Network Country Trends (Lithuania) / Global Footprint Network".

(25) https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer.

(26) The value is indicated on the basis of the proposal for a Regulation of the European Parliament and of the Council on nature restoration (Brussels, 22.6.2022, COM(2022) 304 final, 2022/0195(COD)). Upon the adoption of the Regulation, the value may be revised.

(27) Data by country, https://stats.oecd.org/index.aspx?queryid=77269.

(28) EU aggregate data, https://ec.europa.eu/eurostat/databrowser/view/sdg_15_60/default/table.

(29) Lithuania's data: Report on the research study "Determination of the Biodiversity Impact Indicator "Bird Population on Agricultural Land" in 2020-2022 and Assessment of Biodiversity Change", drawn up by the Lithuanian Ornithological Society for the Ministry of Agriculture of the Republic of Lithuania, 2021.

(30) Global Innovation Index 2022.

More detailed quantitative and qualitative demographic indicators complementing the monitoring of the Lithuanian population indicator:

Quantitative indicators (source: State Data Agency):

A. Population growth, natural population growth, migration growth (absolute (thousands), gross (per 1 000 population) and relative (percentage change) annual indicators);
B. Population change in the main age groups (0-14 years, 15-64 years, 65 years and over) (absolute (thousands) and relative (percentage change) annual indicators);
C. Changes in the age structure of the population and ageing: the share of the population (as a percentage of the total population) and its evolution in the main age groups (0-14 years, 15-64 years, 65 years and over);
D. Annual change in the number of women of reproductive age (15-49 years) and in the number of births (absolute (thousands) and relative (percentage change) indicators);
E. Ratio of the population aged over 65 to the working-age population (percentage) and annual change.

Special demographic indicators:

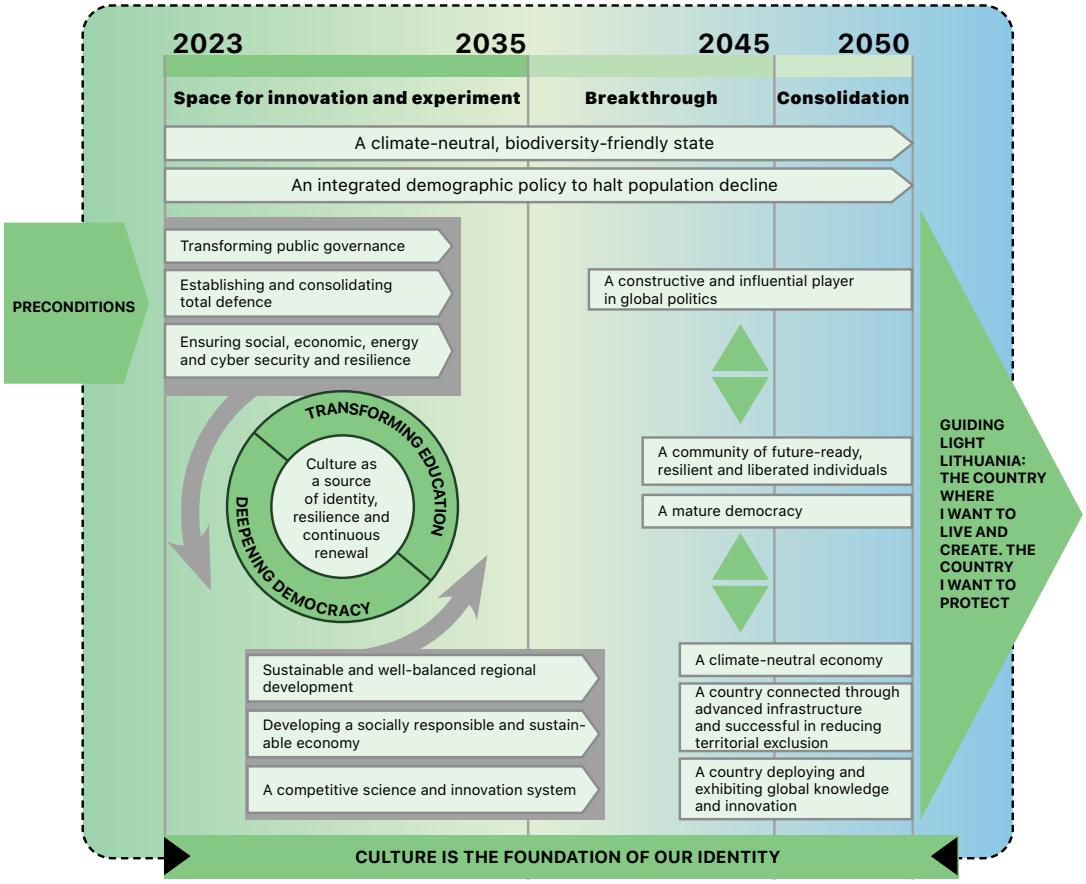
A. Fertility (2 indicators): period-based and cohort cumulative fertility rates;
B. Migration: net migration rate (thousands of population); gross emigration rate (thousands of population); gross immigration rate (thousands of population);
C. Mortality: life expectancy for men and women (at birth and at the age of 65 years); standardised mortality rate for men and women of working age (15-64 years).

Qualitative indicators (source: the forthcoming Fertility and Family Survey):

A. Fertility: desired number of children;
B. Index of gender roles in the family;
C. Index of evaluation of childbearing conditions;
D. Migration intentions.

Annex 2
to the State Progress Strategy
'Lithuania's vision for the future
'Lithuania 2050"

Map of Leveraged Initiatives



SEIMAS OF THE REPUBLIC OF LITHUANIA
RESOLUTION

ON FUTURE DIGITAL TRANSFORMATION AND DIGITAL SOVEREIGNTY IN LITHUANIA

7 December 2021 No XIV-732
Vilnius

The Seimas of the Republic of Lithuania,

emphasising the importance of digital sovereignty to Lithuania as the issue of the modern existence of the country in the future in the context of global changes and global trends,

highlighting that digital sovereignty may help Lithuania to safeguard its national economic and security interests,

taking into account the scope for contributing to the implementation of the Communication COM(2021) 118 of 9 March 2021 from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions entitled '2030 Digital Compass: the European way for the Digital Decade',

underlining that digital literacy is a kind of mindset and approach rather than merely a set of skills encompassing access to technologies and ability for critical assessment and effective action in a constantly changing digital environment,

stressing that the key driving force and objectives of digital transformation are full optimisation of societal experience, promptitude and innovation, as well as creation of new sources of income and data-informed value ecosystems,

acknowledging that digital transformation means not only technological transformation, but also is related to global socio-economic transformations and strategic reforms in key areas of national life and governance against the backdrop of global trends,

noting that digital solutions and new technologies are not an end in themselves but a means of responding to the changing needs of society in a timely manner,

emphasising that consolidation of infrastructure of information resources and information technologies in the national digital space is unique in nature and requires high level digital skills, wide use of digital technologies, and leadership in dealing with risks, threats and challenges to ensure national digital sovereignty,

highlighting that considerable attention must be devoted to the development of semantic infrastructure and its interaction with a multicultural and multilingual context, as well as to the rapid development of infrastructure programmes of semantic technologies and language technologies,

noting that the state must assume new roles in restructuring and modernising regional policy, urban governance, and sustainable development of cultural, creative, human and ecological capital,

confirming its support for science-based development of digital transformation of public administration,

considering the contribution of digital competences, solutions and technologies as a generator of multi-level governance transformations to the development of an inclusive, participatory, open and transparent public sector;

recalling that services based on digital data can offer solutions to the contemporary challenges related to health, demography, mobility, climate and the fourth industrial revolution *Industry 4.0* and contribute to a timely response to societal needs,

stressing that the human factor is essential at all levels of digitalisation and at all stages of digital transformation,

acknowledging that digital transformation is the transition to the new social model *Society 5.0* and digital technologies are an important strategic national resource of the country,

emphasising that the purpose of Lithuania's digital transformation is the transition from *ad hoc* application to consistent development and introduction of digital technologies,

recognising that digital transformation and the fourth industrial revolution *Industry 4.0* inevitably change the future of work,

expressing the understanding that digitisation is not only a separate sector of the economy but also the basis for the national social and economic life as a whole and the place of the country in the global world,

highlighting the need to move towards a digital economy by ensuring scientific, technological and national sovereignty in the digital environment, creating conditions for the innovation economy and prioritising knowledge-intensive services,

expressing concern that, despite the implementation of digitisation policy, the country has no real agenda for the digitisation of the public sector,

noting that smooth, sustainable and efficient consolidation of public infrastructure and information resources is a precondition for enhancing the equivalent efficiency of digitisation of regional, non-governmental and private political, economic and cultural entities and improving synergies, coordination of action, and effectiveness of inter-institutional cooperation,

expressing concern that the consolidation of the national information technology infrastructure fails to progress smoothly due to the lack of human resources and incentives for institutions to participate in this process,

underlining the need to take into account the improvement of data protection systems (including technical, economic and security aspects) throughout the existing and new life cycle of digital technologies as an integral part of the national security system,

noting that the digital future of Lithuania will depend on competences and capabilities to take advantage of the opportunities created by wider diffusion of digital innovations in various sectors of public administration,

expressing strong political positions on key initiatives for future digital transformation and digital sovereignty in Lithuania:

regarding the visionary aspirations in the National Progress Strategy 'Lithuania 2050':

urges the Government of the Republic of Lithuania to develop, alongside the National Progress Strategy 'Lithuania 2050', a national roadmap for the digital Lithuania, which would reflect the national multi-annual strategic guidelines for digital decades, including the current one, securing data sovereignty and operational sovereignty in the European Union (EU) area as well as technological sovereignty in the EU and NATO area, with a focus on the ability of the country's systems and critical infrastructure to continue to operate even in the face of large-scale disruptions or attacks;

regarding a special focus on the digital transformation of education:

calls on the Government to address urgently the challenges related to digital education, modern and integrated digital content, digital skills, and analytics with a view to, by 2025:

1) achieving at least 85% internet use among the Lithuanian population (82% in 2020) and 95% high-speed internet use among enterprises (84.9% in 2020);
2) ensuring basic digital skills for 70% of adults (56% in 2020);

3) achieving the average (13th) place by Lithuania in the European Human Capital Index ranking (19th place in 2019);

4) making that the education content would systematically integrate the development of competences in supercomputing, artificial intelligence, cyber security, high-level digital skills and the use of digital technologies;

5) preparing and implementing educational and/or scientific initiatives and/or programmes necessary for the creation of taxonomy of skills and competences of various data management specialists and/or professional groups by developing areas of data science;

6) focusing efforts and initiating the training of professionals and analysts, who will be able to meet the interests of the state in future, and professionals, who are in demand on the labour market;

regarding the transition to a real-time economy:

proposes that the Government create a digital ecosystem enabling citizens, businesses and the public sector to exchange data in real or near real time, rather than 'digitised documents', and to move towards electronic invoicing, electronic billing, electronic receipts and virtual cash registers by 2025;

regarding prioritisation of digital solutions:

calls on the Government:

1) by 2025, to introduce a one-stop shop by connecting the websites of individual public bodies used for the provision of e-public services and allowing access to all e-services on a single website; when digitising such services, to apply a common model and infrastructure of e-public services by integrating the delivery of multiple public services, ensuring better coordination within and between levels of government and focusing on a comprehensive, user-friendly service based on life events and business life cycle;

2) to reinforce prioritisation of digital solutions following the legal regulation;

3) to base the digitisation and opening up of data on high ethical and security standards;

regarding development of participatory democracy:

calls on the Government:

1) as part of the overall commitment on the future digitisation of the country, to initiate effective public communication and education aimed at the public to highlight the benefits of democratic processes in the digital space, to critically assess the risks involved, and to raise the profile of the tools developed;

2) to increase transparency and engagement of citizens in political life through the deployment of interoperable digital platforms based on open standards and technical specifications, application interfaces and common data models;
3) to achieve that at least 40% of the population participate in e-democracy processes in the digital space by 2025 (20% in 2020);

regarding digitisation in public governance:

calls on the Government to make an immediate inventory of the digitisation process to date, draw up legal acts and develop processes to ensure that the public sector has rapid and widespread access to the data and analytical tools necessary for quality decision-making;

proposes that the Government entrust the implementation of all horizontal digitisation decisions in the country to the Lithuanian Digital Transformation Officer who will provide leadership in the design, deployment, implementation and development of multi-level management of the national information resources, and will regularly report to the Seimas on the digital progress related to the global information resources;

proposes that the Government entrust the Government's Chief Data Officer to oversee the strategic coordination of data science and data management in Lithuania, including areas such as Artificial Intelligence (AI) and Open Data (OD);

calls on the Government to make every effort to ensure appropriate and timely resources for digital transformation in public administration at all levels;

calls on the Government to deliver interoperable, personalised, user-friendly public services at all levels of public administration;

recommends that the Government design the architecture of public information resources in such a way as to ensure exponential growth of the public information resources infrastructure and to address the issues of limited space of data centres, incompatibility of non-interoperable information resources and information technology systems;

regarding an open State:

calls on the Government to achieve by 2025:
1) at least 70% of businesses re-use information from state and municipal institutions and agencies for their commercial activities (56% in 2019);
2) at least 90% of agencies have made an inventory of the data they hold and established a procedure for opening up data (5% in 2016);

proposes to the Government:
1) to ensure the development of a data architecture and infrastructure that meets global standards, taking into account, in concepts for the implementation of

the Data Lake, the different architectural aspects of this formation, such as infrastructure, data storage, data flows, data modelling, data organisation, data processes, metadata management, data security and privacy and data quality;

2) to improve the overall coordination and cooperation between the institutions involved in the consolidation process at horizontal level;

3) to establish the highest level of technical and organisational security measures or other risk-based solutions for copies of critical data;

recommends that the Government:

1) strengthen international cooperation to maximise the benefits of knowledge sharing and coordination of international digitisation processes;

2) assess the potential of open source to reduce the public sector's total cost of ownership, while also increasing its digital autonomy;

regarding a common document on Lithuania's digital future:

undertakes to establish a national agreement on Lithuania's digital policy, expressing the political parties' unity in developing the direction of the national digital initiatives and agreeing on the implementation of a sustainable digitised reality;

regarding parliamentary scrutiny:

undertakes to actively exercise parliamentary scrutiny and carry out assessment of progress in the development of the national digital ecosystem, consolidation of information resources, and information technology infrastructure.

SPEAKER OF THE SEIMAS VIKTORIJA ČMILYTĖ-NIELSEN

SEIMAS OF THE REPUBLIC OF LITHUANIA
RESOLUTION

ON THE FUTURE OF LITHUANIA'S DEMOGRAPHIC POLICY

15 June 2023 No XIV-2075
Vilnius

The Seimas of the Republic of Lithuania,

being convinced that:

1) Lithuania's depopulation, just like the constant threat posed by autocratic Russia, is a long-term and major issue of the country's national security and an existential challenge to the survival of the Lithuanian nation and the State of Lithuania,
2) the population and territory are the most important factors of a state's existence determining social well-being of society, quality of economic and national life and power of the future,
3) the demographic policy is complex and includes the policy of family and birth rate boosting, the policy of development of civic and cultural identity and loyalty ties with one's country, the policy of return of the Lithuanian diaspora and preservation of relations with Lithuania, the policy of attracting foreign students, highly qualified professionals, talents, and other workers to Lithuania and their integration, the policy of healthy lifestyle, extending the span of full life and reducing mortality,

noting that:

1) the drop in birth rates is a global phenomenon characteristic of the most developed countries of the world, it is therefore necessary to take long-term and systematic measures to reduce its negative consequences,
2) Lithuania's population decreased by a quarter, or almost a million inhabitants, between 1992 (the country's population then amounting to 3.7 million)

and 2022, which is more than the current population of Vilnius and Kaunas combined,

3) Lithuania's population is ageing, with health care and social security costs currently shared by a higher relative share of the working age population than the European Union (EU) average, however the ageing rate of Lithuania's population is almost twice as fast as the EU average,

4) the Statistical Office of the European Union (Eurostat) forecasts that, unless there occur major changes, Lithuania's population will amount only to 2.4 million in 2030 and 2 million in 2045,

5) the world is witnessing growing flows of uncontrolled migration linked to political unrest, inequality among countries, as well as huge waves of climate migrants,

expressing concern that:

1) Lithuania is facing a shortage of both highly skilled and less skilled workers, and labour shortages are particularly acute in regions that have been hardest hit by emigration, urbanisation and population ageing;

2) inadequate tax revenues will impair the ability of the Government of the Republic of Lithuania to meet the growing demand for social and health care services and pensions;

3) the country's current demographic policy is inconsistent, lacking a long-term perspective and a global context, and the measures taken to date for the past three decades to contain negative demographic trends are insufficient;

4) there is a lack of a positive vision of the country's demographic development, and even proposals for future demographic management are dominated by pessimistic and realistic views that nothing else can be done and that one has to accept the fact and adapt to life in an increasingly shrinking Lithuania,

seeking to restore the country to its former population by 2050-2060, and *recognising* depopulation as a strategic, long-term issue that requires the constant attention of all public authorities,

expressing a strong political stance on the key aspirations of Lithuania's demographic policy and the future development of society,

urges the Government of the Republic of Lithuania, in the field of family, birth rate and healthy lifestyle policy:

1) to foster a positive attitude of society towards the family as the foundation of society and the state;

2) to improve social services for families with children, with particular emphasis on measures to protect and support the careers of women raising children and to help families unable to bear children;

3) to increase access to housing rental and acquisition for young families;

4) to implement comprehensive family support and birth boosting measures, including:

(a) financial incentives (such as lump-sum and periodic payments, tax reliefs, free or subsidised services and goods for children, housing subsidies);

(b) state support for reconciliation of work and family life (such as maternity, paternity and parental leave, childcare services, flexible forms of employment, gender equality in the workplace);

(c) social changes that support children, parenthood and motherhood in the employment policy, creating a child-friendly environment and ensuring gender equality;

5) to ensure the development and diversification of care and education services for preschoolers aged 0-6 years and to achieve full coverage of the need for nurseries and kindergartens, their accessibility, affordability and the high quality of services;

6) to ensure children's full-time daycare and non-formal education; to create a convenient system of transport services for children based on the principle of cooperation between the public and private sectors and parents, as well as to ensure the provision of additional services for families raising school-age children (such as short-term childcare facilities for preschoolers and younger school-age children in workplaces, educational and cultural institutions, and large shopping centres);

7) to ensure that children, regardless of their social status, have access to secondary and higher education of equal quality, with a commitment by the State to provide sufficient support for children who are unable to access education, including higher education, due to poverty;

8) to develop a healthy lifestyle policy for all age groups, ensuring healthy life expectancy at the level of developed countries;

9) to develop opportunities for older persons to remain active in the labour market and in public life at their own choice;

urges the Government of the Republic of Lithuania, in the field of fostering Lithuanian identity, loyalty and civic awareness:

1) to strengthen civic and cultural education at all levels of the education system, revealing the values and richness of the Lithuanian identity, the advantages and opportunities presented by Lithuania as a country worth building one's life in;

2) to develop studies of social sciences and humanities in higher education institutions, promoting critical reflection on the development of Lithuanian

society, consolidation of the foundations of democracy, and growth of an open, tolerant and humanistic Lithuanian civic identity;

3) to encourage children and youth to choose to study and live in Lithuania;

4) to create, while focusing on the training and retention of talents in Lithuanian higher education and research institutions, a system of incentives for talented youth to choose the fields of science and technology research and technology in which the country lacks competence, by attracting foreign scientists who are needed to develop talents and by combining the studies of talented youth in Lithuania and abroad;

5) to focus, when promoting youth employment, on entrepreneurship, innovation, sharing success stories and socio-economic revival of regions;

urges the Government of the Republic of Lithuania, in the field of the policy of return of the Lithuanian diaspora's members and preservation of their relations with Lithuania:

1) to promote, by expanding the involvement of diplomatic missions of the Republic of Lithuania, education encouraging re-emigration, informing the diaspora about possibilities of entering the labour market of Lithuania, social and health care system, business development and career development;

2) to implement measures to strengthen diaspora ties with Lithuania by promoting the political, economic, social and cultural integration into Lithuanian society of Lithuanian citizens who have left Lithuania, their descendants and stakeholders from other countries;

3) to establish networks of Lithuanian professionals and professionals of Lithuanian descent abroad in countries where they are most numerous, to maintain regular communication with their members, seeking to involve highly skilled professionals and researchers in projects or programmes in Lithuania;

4) to create an attractive financial and fiscal framework with a view to attracting highly skilled Lithuanian-descent professionals and talents from abroad;

5) to significantly improve direct air connectivity with Lithuania;

6) to create a separate programme for the diaspora to enable every person of Lithuanian descent to visit Lithuania and to get to know better its present, history and culture;

7) to encourage Lithuanian scientists who have left abroad for work to return to Lithuania and work in Lithuania;

8) to resolve the issues of legal regulation of dual citizenship in implementing the policy of fostering diaspora ties with Lithuania;

urges the Government of the Republic of Lithuania, in the field of the policy of attracting to Lithuania and integrating foreign students, especially highly skilled professionals, and talents:

1) to improve legal regulation, with a view to facilitating conditions for foreign students to study and to stay in Lithuania for work after graduation;
2) to develop a programme for improving the attractiveness of Lithuania and Lithuanian higher education and research institutions for foreign students, including free Bachelor's degree studies in Lithuanian for students from other countries, actions by Lithuanian public authorities, higher education institutions, diplomatic missions, business, public and non-governmental sector partners intended to better inform foreign students, to improve conditions for studying and living in Lithuania, with a particular focus on attracting foreign students and trainees, their socio-cultural adaptation and involvement in the labour market, and other conditions most favourable for their integration in Lithuania;
3) to encourage Lithuanian higher education institutions to develop high-quality study opportunities for foreign students, to improve the English language skills of teaching staff, and to attract qualified foreign teaching staff to teach in Lithuania;
4) to improve study placement and employment opportunities in Lithuanian enterprises, establishments and organisations for students from other countries, including those studying outside Lithuania, to strengthen their linguistic and cultural integration, and to improve social services;
5) to prepare and implement a programme for addressing the need to attract top-level foreign scientists in priority areas of science and technology where the country lacks scientific and innovative competence (such as robotics, quantum computing, synthetic biology, nanotechnologies, artificial intelligence, etc.) and to propose to develop a financial instrument for this purpose, unconstrained by bureaucratic restrictions and allowing for the award of grants to top-level international scientific leaders in relevant fields who undertake to work with Lithuanian scientific talents;

urges the Government of the Republic of Lithuania, in the field of a flexible policy of attracting highly skilled and medium-skilled workers and workers in shortage occupations (labour immigration) and integrating them, taking into consideration the fact that the State must control the immigration process and that Lithuania has so far been a country receiving mostly Russian-speaking workers from the territory of the former USSR, the fact that attracting third-country workers must not be limited to the Eastern neighbourhood, as it is necessary to maintain

a linguistic and cultural balance in order to avoid the creation of single-language, religion or nationality ghettos, also the need to expand the geography of the workforce entering Lithuania:

1) to draw up and approve a list of countries whose nationals are subject to facilitated labour migration rules, based on the criteria of high added value, friendliness, humanitarian, national security, value, cultural, religious and other criteria, and whose emigrants in Lithuania would not give preference to communication in Russian;
2) to establish, in accordance with a list of countries whose nationals are subject to facilitated labour migration rules as approved by the Government, long-term quotas for immigration to Lithuania and its municipalities (by balancing the size of the quotas according to the following objectives: consistent population growth, solving the issue of labour shortages without turning Lithuania into a country of cheap labour and reducing the role of the Russian language as a *lingua franca*; effective integration of immigrants, without allowing the formation of isolated cultural and religious groups);
3) to actively carry out in the countries included in the list of countries whose nationals are subject to facilitated labour migration rules as approved by the Government an information campaign aimed at attracting the best workers to Lithuania through the relevant employment agencies of those countries, Republic of Lithuania embassies, consulates, honorary consulates, migration service representatives, etc., with a particular focus on attracting highly skilled workers and persons in shortage occupations in Lithuania;
4) to shorten all immigration processes (time limits for the issue of national visas, temporary residence permits, etc.), to waive excessive institutional regulation, taking into consideration the best practices of the EU Member States and neighbouring countries, where the criterion would be the best customer service practices which are faster than in other EU Member States, rather than the service capacities determined by responsible authorities themselves, thus contributing to the creation of a competitive environment; by imposing strict liability for non-compliance with deadlines, bureaucratic delays and poor customer service, while providing for the employer's responsibility for setting requirements for the employee's qualifications (proof of qualifications);
5) to create conditions, wherever possible, for any students and immigrants with higher education and work qualifications to enter Lithuania with close family members;

6) to more actively involve municipalities in the process of reception of immigrants, having regard to the municipalities' needs and commitments regarding integration;

7) to ensure full access to Lithuanian language learning, favourable conditions for getting to know the country, its culture, career and self-employment opportunities, to solve the issues of acculturation and integration of immigrants with the participation of businesses, by providing them with adequate accommodation and social services;

undertakes, in the light of these long-term demographic policy objectives and taking into account the complexity of the issues raised and their importance for the life of the State, to draw up, by 1 October 2023, a national agreement between the political parties of Lithuania on demographic issues, providing for a plan of measures and financing of its implementation, with the coordination of the drawing up of the agreement to be entrusted to the Seimas Committee on Social Affairs and Labour;

proposes that the Government of the Republic of Lithuania:

1) institutionalise the implementation of the demographic policy by appointing an authorised special officer (establishing an office, agency) under the Government who would possess all the necessary powers for inter-institutional empowerment, coordination, preparation of necessary strategies and programmes, coordination with business and trade union representatives with a view to fully and promptly implementing the provisions of this Resolution;

2) assign to this authorised special officer, as a separate matter requiring urgent action, the coordination of preparation and implementation of a programme of measures for integrating newly arrived foreign nationals, in particular Ukrainians, Belarusians and Russians, first and foremost through the provision of these foreign nationals with an opportunity to learn the fundamentals of the Lithuanian language for free;

instructs Seimas committees to supervise the implementation of this Resolution.

SPEAKER OF THE SEIMAS VIKTORIJA ČMILYTĖ-NIELSEN

SEIMAS OF THE REPUBLIC OF LITHUANIA
RESOLUTION

ON APPROVING THE DESCRIPTION OF DIRECTIONS FOR DEVELOPMENT OF LITHUANIA'S LONG-TERM POLICY ON SCIENCE, TECHNOLOGY AND INNOVATION

11 April 2024 No XIV-2538
Vilnius

Acting pursuant to Article 7(2) of the Law of the Republic of Lithuania on Technology and Innovation, the Seimas of the Republic of Lithuania hereby resolves:

ARTICLE 1.

To approve the Description of Directions for Development of Lithuania's Long-term Policy on Science, Technology and Innovation (annexed hereto).

ARTICLE 2.

To repeal Resolution No XII-2654 of the Seimas of the Republic of Lithuania of 27 September 2016 on Approving the Lithuanian Science and Innovation Policy Development Guidelines.

SPEAKER OF THE SEIMAS VIKTORIJA ČMILYTĖ-NIELSEN

APPROVED BY
Resolution No XIV-2538
of the Seimas of the Republic of Lithuania
of 11 April 2024

DESCRIPTION OF DIRECTIONS FOR DEVELOPMENT LITHUANIA'S LONG-TERM POLICY ON SCIENCE, TECHNOLOGY AND INNOVATION

CHAPTER I
GENERAL PROVISIONS

1. Lithuania's long-term policy on science, technology and innovation (hereinafter: 'STI') is an integral part of the State's socio-economic policy necessary to ensure the country's sustainable socio-economic and human development, economic security, and integration into the strategic policy programmes of the European Union (hereinafter: the 'EU').

2. The main objective of the Description of Directions for Development of Lithuania's Long-Term Policy on Science, Technology and Innovation is to develop the most promising directions for STI through integrated multi-annual strategic planning up to 2050, focusing on the development of the country's human capital (talent), scientific and business potential, the transfer of research and innovation outputs to the economy and social policy, their level of integrity, the established competitive advantages, and to recommend following them in implementing the State Progress Strategy 'Lithuania's Vision for the Future 'Lithuania 2050", as approved by Resolution No XIV-2466 of the Seimas of the Republic of Lithuania of 23 December 2023 on Approving the State Progress Strategy 'Lithuania's Vision for the Future 'Lithuania 2050" (hereinafter: the 'Strategy Lithuania 2050'), as well as synergies with EU programmes and support provided to EU policies,

3. The need to update Lithuania's long-term STI policy directions is driven by the changing global environment and its key drivers:

3.1. intensified global competition, new economic and political priorities of the EU, and Lithuania's national development and security challenges;

3.2. increasing technological dependence, changes in the labour market due to automation and artificial intelligence, as well as effects of rapid developments in

the information dissemination and communication environment, which are posing new challenges to Lithuania's political, social and economic development and require innovative political solutions bringing together individuals;

3.3. the impact of the war in Ukraine on all areas of Lithuania's life;

3.4. the need for socio-economic transformation, requiring reforms in many areas of the life of society, public administration, business, culture, education, regional development, labour market and demography;

3.5. delivering on the United Nations Sustainable Development Goals, climate change and Green Deal policy priorities;

3.6. accelerating the digitalisation of all sectors of society and related paradigm shifts.

4. Lithuania's long-term STI policy defines the relationship with:

4.1. major trends in global dynamics determining the general directions of world development and prospects for the future;

4.2. the experience of the EU Member States, their STI policies and programmes in the process of enhancing the integration of knowledge and innovation ecosystems and society into the strategic value chains of research and development and innovation (hereinafter: 'RDI') as well as the efficiency and global competitiveness of Lithuania's economy;

4.3. delivery on the United Nations Sustainable Development Goals by focusing on enhancement of the country's resilience, security and competitiveness, overcoming of global crises and addressing of economic challenges;

4.4. the European Research Area and the Pact for Research and Innovation in Europe are key pillars for the future of the EU's science and innovation policy, while taking into account the EU's science and technology valorisation policy. This policy sees science as a driving force for addressing societal challenges and providing solutions, and gives research, technology and innovation a crucial role in supporting the transition to new forms of inclusive society, knowledge-intensive activities, and social relationships based on digitalisation, sustainability and ecology;

4.5. the new European industrial strategy as the guarantor of the dual (digital and green) transformation of European industry;

4.6. evidence-based policy-making: from state-of-the-art data analysis to innovative decision-making, taking into account the needs and strategic interests of society or the country, balancing transparency of scientific results, availability of open data and adequate protection of intellectual property rights;

4.7. the anthropological dimension, integrating it into the long-term STI policy, emphasising the importance of awareness, self-reflection and ethics

in the context of STI, the radical change in the social structure of society and the transformation of social relations involving the impact of STI on all social institutions. These concepts are becoming critical to ensure that technological progress serves the well-being of society and not only economic growth. Awareness-raising therefore enables society to become aware of the impact of technology on human life and the environment, and self-reflection encourages the critical evaluation and improvement of the application of technology in the light of ethical values. The combined involvement of the humanities, social sciences and the arts can ensure that scientific and technological development is carried out responsibly, based on the principles of humanity and in a manner that promotes cultural and identity development. It is therefore necessary to recognise and strengthen the anthropological dimension in the strategic vision of Lithuanian society, ensuring that technological progress is harmoniously integrated into the human context and contributes to the creation of a knowledge-based society in the global context;

4.8. the valorisation of knowledge, a process based on the creation, dissemination and transfer of knowledge and carried out in all areas of public administration through policy decisions, with a view to achieving innovation abundance, sustainability, the responsible management of intellectual assets, the modernisation of work and workplaces, and the promotion of cooperation between business and academia;

4.9. multi-level organisation, management and implementation of smart specialisation.

5. The following directions for development of Lithuania's long-term STI policy should be distinguished, which will allow for the dissemination of science and innovation across all areas of life by substantially increasing the impact of STI on the country's competitiveness, social progress, business development, modernisation of work, and improvement of the education system based on the principles of global digitalisation and technologisation, sustainability and the Green Deal. The aim is to realise synergies between science, business and social development, to bridge the gap between the goals of industrial growth, inclusive social progress and environmental protection, as well as to facilitate the creation of knowledge and introduction of innovation in the Republic of Lithuania, with a focus being on the interests and well-being of future generations.

CHAPTER II

DIRECTIONS FOR DEVELOPMENT LITHUANIA'S LONG-TERM POLICY ON SCIENCE, TECHNOLOGY AND INNOVATION AND SUBSTANTIATION THEREOF

SECTION ONE

FIRST DIRECTION: TRANSFORMATION OF THE PARADIGM OF LITHUANIA'S EDUCATIONAL SYSTEM INTO THE TRAINING OF KNOWLEDGE CREATORS AND WORKERS (TALENT DEVELOPMENT)

6. Human capital has always been a key resource for Lithuania and a key factor in innovation, and the changes brought about by globalisation call for an innovative educational paradigm that would be effective in the societal transition towards a digital, educated, continuously learning and knowledge-based society capable of creating knowledge and deploying innovation, forming mature knowledge environments, and developing and deploying technologies for people's life, work and business. In the knowledge society, especially in its current stage of development as an innovation society and economy, the enhancement of innovation and the application of technology are directly linked to the factors of production, its organisation and technology knowledge. This enables the creation of mature knowledge environments that use a wide range of information, data, culture and experience resources, especially digital ones, which are creatively applied in work processes to develop new products and services with high added value. 'Knowledge workers' (a term coined by Peter F. Drucker) are becoming the dominant factor, with their education and enrolment being crucial for achieving STI policy objectives and for developing and implementing STI policy instruments. Knowledge is understood not only as the body of knowledge consisting of scientific, experiential, factual, cultural, aesthetic, emotional and other knowledge elements, but also as peculiarities of the structure and interaction of knowledge, the way in which knowledge exists and is used, the application of technological solutions and innovation, the structural form in which knowledge is organised, and the nature and management of communication processes. The knowledge society is built by enrolling knowledge workers in the business and public sectors, by training talent at higher education institutions and by engaging students in high-level RDI activities. Today's knowledge is not merely a separate or single side, aspect or component of society's life. Knowledge is an organic link between, and environment of, the life of individuals and society on the basis of which all forms of social existence evolve.

7. Already during the periods of pre-school, pre-primary, primary, basic and secondary education, it is important to foster children's creativity and joy of discovery, to help them understand their environment and human activities, to help them discover their innate talents and to help them understand how to use them in society.

It is also important for the knowledge society that highly qualified workers are educated also in vocational training centres, and that they are assisted in the acquisition of professional, general and value-based competences.

The paradigm shift in education should therefore be oriented towards the qualitative maturity of knowledge environments, contemporary ways and technologies for the creative and innovative use of knowledge, culture, historical memory, data and other types of knowledge. In the context of the labour market and skills revolution, education, science and skills development systems need to produce continuous learners who are capable not only of becoming productive workers and active citizens, but also of adapting to changing trends in the labour market and societal needs, and need to focus on the development of entrepreneurial and innovation skills through lifelong learning. An STI ecosystem centred on the education of an individual will help attract, develop, strengthen and retain talent in the country.

8. There is a need for a shift in the education content which would entail focusing on the high demand, in the process of establishing deep technology start-ups and developing innovation, for science, technology, engineering and mathematics (STEM) as well as entrepreneurial skills and related competences that are in line with the highest values and principles of research and development.

The principles, forms and technology underpinning the organisational processes of knowledge transfer and application of creative methodologies must meet the requirements of global change and competitiveness, changes in lifestyle and cultural environments, the rapid modernisation of the labour market, the impact of the digitisation of living and working environments, innovative high added-value modelling, and other challenges facing an increasingly digitalised and technologised society.

9. The paradigm shift in education involves all levels of the education and science system, namely, pre-school, pre-primary, primary, basic and secondary education, vocational training and higher education innovation, modernisation and reorganisation. There is a need to train individuals geared as much as possible towards the knowledge society and the needs of the innovation economy. The knowledge society itself implies the need for more educated and technologically literate individuals, especially in view of the impact of technology on workplace robotisation, the consequences of the industrial revolution, and the rapid development of technologies

(artificial intelligence, the Internet of Things, etc.). In this context, only the most scientifically minded, creative and innovative citizens will be able to maintain the country's potential for competitiveness, cultural and socio-economic development.

10. An innovative and efficient education system is the key to the progress of the State.

SECTION TWO

SECOND DIRECTION: PROMOTION OF INNOVATION IN ALL AREAS OF PUBLIC ADMINISTRATION. FUNDING OF STI AS A HORIZONTAL PRIORITY

11. Lithuania is a small country without abundant natural and human resources. This calls for a particularly well-balanced and efficient STI policy and system that maximises the use of available opportunities and financial resources. This requires coherence between priorities for scientific and technological breakthroughs in the country's higher education and research institutions, RDI development in business and regional development. Compared to other EU Member States, the share of gross domestic product (GDP) allocated in Lithuania to science, technology and innovation (STI) is insufficient, and RDI activities are not sufficiently focused on areas where the country is able to be competitive. In order to improve the socio-economic efficiency of RDI, it is necessary to increase and improve the funding of higher education and research, as well as to encourage private investors to invest in STI areas. On the other hand, it is necessary to develop a tax policy and a statistical data analysis system that would be innovator-friendly. In a globalised world, only outstanding innovative solutions can be successful, and Lithuania's STI policy implementers need to find an optimal competitiveness formula to achieve the exploitation of STI potential to the fullest extent possible. Competitiveness is understood as the body of factors enhancing innovation efficiency and societal productivity, which allows to create the greatest possible added value by combining all potential social, economic, cultural, political and other factors and resources and effective forms of their organisation, technological implementation and management.

12. The working group set up by Decision No SV-S-771 of the Board of the Seimas of the Republic of Lithuania of 5 January 2023 on the Working Group for Identifying Directions for Development of Lithuania's Long-Term Policy on Science, Technology and Innovation initiated a study (conduct during February-March 2023) resulting in the development of a success matrix for the country's long-term STI policy, which highlighted the main aspects and levels of organisation of the long-term STI policy component. Four directions for development of long-term STI policy have been identified that could positively influence the viability and survival of the country's society in the modern world:

12.1. information and communication technologies, with emphasis on artificial intelligence and machine learning, quantum technologies, semiconductor chip technologies, nanotechnologies, on which all areas of life and activity depend for progress. They not only open up new opportunities and provide advantages in a wide range of digitalised environments, but also have a major impact on the quality and maturity of knowledge and cultural environments. They are also essential components of ensuring national security;

12.2. new production processes, materials and technologies, essentially being modern technological innovative solutions that increase productivity and replace resource-depleting technologies (the Green Deal), as well as stimulating new forms of socio-economic life;

12.3. health technologies and biotechnologies (life sciences) (vector of the development of the economy and a healthy society), improving individuals' quality of life and ensuring national security;

12.4. educational sciences, in a broad sense, as a scientific discipline which deals with contemporary educational processes, methods, ideas and practices, including culture, and encompasses social and humanistic approaches, cultural ideas and scientific knowledge to develop the capacities and creativity of individuals and communities, to strengthen the country's national and cultural identity, and to foster innovative creative thinking and inventiveness; to encourage humanitarian, cultural and scientific excellence; to promote high added-value business activities and to motivate rational public administration and progressive political decisions; and to foster the development of democracy, patriotism of society and its resilience to external threats.

In substantive terms, these priorities are broadly in line with the general concept of the content of so-called artificial intelligence, biotechnology, nanotechnology, robotics, quantum computing, and incorporate it into other specialised and social and humanities fields. The latter are nowadays inseparable from the development and uptake of technological innovation. These are the ideas of social creation and their technological solutions, social contexts of knowledge that link collective experience, culture, science, creative and aesthetic expressions, lifestyles, data and information resources. All this allows for increasing social inclusion and harnessing collective knowledge to create social well-being, from forms of political governance to innovation in the business and living environment. The Smart Specialisation Strategy (S3) must focus precisely on the continuous development of social creativity, visions and goals for social development and social innovation in the context of digitisation and the development and uptake of green technologies.

13. The criteria for the fields of science and business generating knowledge and innovation and scientific expertise are defined in greater detail. Currently, only three areas in the country meet these criteria:

13.1. biotechnology and health technologies (life sciences);

13.2. lasers and photonics and materials engineering;

13.3. semiconductor electronics and information and communication technologies.

It is currently necessary to strengthen funding of these areas and optimise their performance by integrating them into a modern strategy of the country's STI policy. These areas are a potential source for the development of science and technology centres at national level, they can also act as an intermediary for international technology transfer and deployment, bearing in mind that the national scientific potential is insufficient to meet all the needs of the country. Attention should be paid to the rapidly developing fields of scientific and technological development and advanced manufacturing, which include flexible product development, manufacturing and process control, design technology, optoelectronics, mobility and transport technologies and sustainable energy.

14. Higher education and research institutions also need innovation and modernisation by nurturing talent and developing innovative structures as well as links between RDI and business, public administration and civil society.

15. STI policy must eventually create a national framework that can ensure the involvement of all interested state institutions and scientific and business communities and a long-term data- and foresight-driven agreement on the mechanisms for identifying and deploying the priorities of the Smart Specialisation Strategy (S3), their relationship with major global trends, national and regional strategic priorities, integration into EU research programmes and strategic industrial ecosystems. This requires a strong and inclusive role for the Council for Science, Technology, and Innovation and strategic programme- and evidence-based management, taking into account:

15.1. the involvement and cooperation of relevant state institutions and scientific and business communities;

15.2. expert strategic assessment and foresight of national research programmes and projects, using data and future insight methodologies;

15.3 the regional dimension of the Smart Specialisation Strategy (S3) through the creation of regional innovation valleys, knowledge or science regions;

15.4. strategies and forms of work modernisation, including models for knowledge-intensive work and workplace innovation;

15.5. the development of start-up ecosystems and the growth of mid-cap companies by promoting the development of open innovation.

SECTION THREE

THIRD DIRECTION: IDENTIFICATION AND SUPPORT OF PROJECTS (KNOWLEDGE, TECHNOLOGY PROJECTS) THAT MAKE THE GREATEST CONTRIBUTION TO THE COUNTRY'S PRODUCTIVITY

16. This direction of STI policy must ensure forms of collaboration among science, business, and society that foster business and social structures creating the highest added value and demonstrating the greatest productivity. The key determining factors are the development of knowledge potential and human capital, the expansion of innovative high-productivity sectors and ecosystems, the efficiency of science and business cooperation, the increase in the scale of innovative activities, and engagement in global, EU, and other European advanced science and industry ecosystems (value chains).

17. The knowledge environment and its quality are criteria for determining the innovative and productivity enhancement potential and development prospects of businesses, business structures, ecosystems, and regions. Lithuania lags behind the EU average in terms of the number of knowledge-intensive enterprises and innovation progress. The promotion of innovation within Lithuania's business sector is inconsistent and fragmented, with insufficient measures in the innovation promotion programmes supported by the EU and developed at the national level. Financial support is predominantly directed towards strong, innovation-developing companies or start-ups, and the promotion of business and science collaboration is not sufficiently effective. Business investments in innovation are primarily confined to technological upgrades, but do not extend to the creation and improvement of new products or processes, and do not encompass social innovations, which could broaden the scope of innovation application, including the reduction of business risks and other social factors. There is an insufficient number of national business entities participating in international STI networks. This reduces the opportunities to develop and implement international innovation projects.

18. It is necessary to use STI policy measures to unite innovators from higher education and research institutions, business structures, innovation ecosystems, and regions for joint activities, aiming to implement national science programmes and develop data analytics and evaluation methodologies. These methodologies should not only determine productivity criteria based on business sector revenues but also take into account innovation indicators and potential. They should be grounded in methods of knowledge intensity, qualification, productivity, and the application of financial engineering to objectively evaluate the contribution of innovations to the national economy and society.

19. In order to ensure leadership in knowledge within the higher education and research system, it is necessary to implement measures in higher education and research institutions aimed at strengthening entrepreneurial skills and encouraging students, researchers, and scientists to create innovative enterprises, as well as develop Lithuania's scientific and technological infrastructure for prototyping and pilot production, and finance R&D activities that require such infrastructure.

20. Engagement in international scientific and business ecosystems (value chains) also has a significant impact on the development of high-productivity knowledge, technology, and innovation projects.

SECTION FOUR

FOURTH DIRECTION: CREATION, PROTECTION, TRANSFER, ACQUISITION, AND USE OF INTELLECTUAL PROPERTY

21. An essential prerequisite for the intensive development and use of knowledge environments is the enhancement of the efficiency in the creation, circulation, and implementation of intellectual property. Intellectual property is a measure of the activities carried out by higher education, RDI, and business innovation. The direction of STI policy is to promote the creation of intellectual property, ensure its effective use as a tool for development and improvement by increasing business innovation and competitiveness.

22. The objective of intellectual property is to protect ideas, inspire and organise innovations, promote creativity, enrich knowledge environments, create new knowledge-based jobs (or transform existing ones), develop knowledge-intensive business services and products, and foster innovative processes. Intellectual property is one of the key elements in achieving long-term social, economic, and technological progress in Lithuania, encouraging integration into international STI value creation chains, participating in international RDI networks, RDI projects, and international procurements (such as those of the European Organization for Nuclear Research (CERN), NATO, the European Space Agency, and others). A significant role is played by the promotion and presentation of Lithuania's RDI potential abroad, attracting direct foreign investment into RDI activities.

In addition to the protection of intellectual property, it is essential to focus on the active participation of Lithuanian scientists, researchers, and innovators in international projects to enhance visibility and recognition at the international level. This participation will not only increase awareness of Lithuania's STI potential but also contribute to the country's recognition in international projects and promote collaboration with other countries in developing innovative solutions and sharing best practices. Furthermore, it is important to encourage cooperation between the

business sector and higher education and research institutions, which is crucial for ensuring technological and innovative progress. This will create a favourable environment for knowledge exchange, technology transfer, and joint project development, ultimately enabling Lithuania to remain competitive on the international stage.

23. Social and humanities knowledge is gaining increasing significance in the creation and use of knowledge and innovation. The convergence of society, science, art, and technology is a fundamental aspect in ensuring sustainable national development. This convergence encompasses not only technological advancements and innovations but also a close interaction with social sciences and the humanities. These branches of science provide a comprehensive perspective and understanding of human life, social structures, and cultural contexts, which are essential for creating sustainable and inclusive technologies and policies. Therefore, the convergence of technology, science, art, social, sciences and the humanities is integral to the sustainable development goals of Lithuania and is a critical element of thought that must be incorporated into political strategies and competitiveness plans. It is necessary to promote innovative scientific research, prioritising studies that help address Lithuania's social, economic, historical, cultural, and economic development challenges. Social sciences and the humanities are foundational for shaping Lithuania's cultural environment, the conditions for the circulation and creation of intellectual property, and a creative environment conducive to innovative activities. New social and humanities ideas and contemporary methods of understanding society allow for assessing the state of the country, setting new goals, and improving the quality of decision-making. Modern social and humanities research outlines the strategic trajectories of state and societal development and underpins RDI funding priorities based on their importance to state development. The implementation of STI policy is impossible without incorporating social and humanities knowledge into the innovation system.

24. The creation, transfer, and use of intellectual property depend on the overall innovation environment, which is influenced by the development of social innovations. Social innovations are precisely based on social capital, the economic and managerial significance of which for societal progress became evident only two decades ago, highlighting the cultural, regional, social, social network, values, and norms impact on Lithuania's economic development and civil society's innovation activity. The development and quality of social innovations are the primary prerequisites for enhancing innovation, intellectual output, and intellectual property. In contemporary times, social capital has become the most crucial element for national economic progress and productivity enhancement within community

knowledge environments. Social capital is based on values and is characterised by distinct mobilisation and innovation aspects, closely related to the concept of intellectual capital. It encompasses categories such as lifestyle and quality of life, which dictate work style, management, and organisational methods, as well as economic activity priorities.

25. To increase the productivity of intellectual property creation and use, it is essential to reform the RDI evaluation and funding system, grounding it in international scientific and innovation activity monitoring criteria and corresponding indicators.

SECTION FIVE

FIFTH DIRECTION: STRENGTHENING OF THE ENABLING KNOWLEDGE AND TECHNOLOGY TRANSFER ECOSYSTEM, REGIONAL DEVELOPMENT OF THE KNOWLEDGE ECONOMY

26. Promoting collaboration between research institutions and businesses is one of the evident challenges of current STI policy, where suitable forms and conditions for smooth cooperation and institutional integration of researchers and business engineers into modern innovation economy models have been lacking for many years. With increasing global competition among nations, economic stability and sustainable prosperity can only be expected in states whose policies focus on fostering knowledge-based innovative business and mitigating emerging risks in innovation development, thereby creating a favourable social, legal, and financial environment for business participation in shaping STI policy and advancing the activities of higher education and research institutions, valleys, and technology parks.

To begin strengthening the empowering knowledge and technology transfer ecosystem, the knowledge economy requires not only modern infrastructure but also a horizontal communication environment across all sectors and organisations, facilitating the exchange of knowledge and other resources, their dissemination, and efficient distribution. The outcome of these efforts should create conditions for developing new ideas, technologies, and knowledge, implemented in practice. This constitutes a comprehensive self-organising ecosystem, founded on the coherence of its infrastructure elements' relationships, operation, and accessibility, where each plays a distinct role.

27. The global economy is evolving, and the utilisation of scientific research is considered crucial for enhancing and maintaining a nation's long-term competitive advantage while addressing future economic, environmental, and societal challenges. In Lithuania, policy measures should create incentives for an effective

education system, foster strong universities, research institutes, and science centres, and develop science and technology parks alongside a knowledge-intensive, technology-creating, innovative industry. Currently, these ecosystem components exist in Lithuania; however, due to a lack of coordination in STI policy measures, inconsistent incentives, and uneven funding, they remain too weak and lack sustainable and effective interconnections. The education system, its higher education and research institutions operate inefficiently, there are too few internationally recognised research groups, only a few science parks contribute to the development of high-tech companies, and the contribution of knowledge-intensive industries to the national GDP accounts for only a few percent.

28. It is essential to fundamentally restructure the relationship between science and business, transforming it into an emerging, coordinated network of science, technology, and innovation, functioning as a mechanism for RDI activities that increasingly integrates and synergises the activities of business, science, civil society, and public administration. It is proposed to consider the experience of EU Member States and neighbouring Nordic countries over several decades in creating learning or knowledge regions, applying the regional principles of the Smart Specialisation Strategy (S3), combining the so-called knowledge triangle with elements of social inclusion, social innovation, and, importantly, business development, thus increasing the scale of knowledge-intensive business services and products and creating conditions for global competitiveness.

29. New forms of collaboration between science, business, public administration, and civil society are necessary in the field of STI. The European Research Infrastructure (ERI) plays a crucial role in Lithuania's STI sector by promoting international collaboration and providing Lithuanian scientists and research institutions with access to state-of-the-art research facilities and equipment parks. Participation in the ERI not only grants access to high-quality research infrastructure but also facilitates the establishment of international scientific connections and expands cooperation in research activities, fostering the growth of Lithuania's scientific potential and the development of innovations. This is a significant factor in enhancing Lithuania's contribution to the international science and innovation landscape and in fostering collaboration with other European countries. There is a need to establish a living lab in Lithuania, which integrates specialised STI parks with social life, the scientific, educational, and cultural environment. Equally important is the establishment of industrial technology parks as prototypes of science-business collaboration adjacent to higher education and research institutions, where future leaders, guided by eminent scientists and research teams, can gain experience and skills in applying science and technology, and in creating

and implementing business innovations. Good practices can be drawn from the learning parks-regions operating in EU Member States, which are focused on the development of high-level technological industries.

30. Consequently, the financing of educational establishments and higher education and research institutions should increase, and state-supported industrial transformation programmes to promote entrepreneurship within academic institutions and the development of high-value-added technological start-ups (deep-tech) and special programmes to assist medium-value-added companies in transforming into segments of knowledge-intensive high-value-added enterprises should emerge. It is essential to create incentives for the development of ecosystems operating through public-private partnerships, to encourage innovative companies by granting them a status that highlights their activities. This would lead to a significantly greater demand for the creation and acquisition of intellectual property, expand the segment of high-value-added and knowledge-intensive industries, and highlight the interconnections of the components of a sustainable ecosystem.

SECTION SIX

SIXTH DIRECTION: OPENING AND OPTIMISATION OF THE REGULATORY ENVIRONMENT (PUBLIC PROCUREMENT, REDUCING ADMINISTRATIVE BURDEN IN PROJECT MANAGEMENT, ACCESS TO INVESTMENTS, TAX INCENTIVES, AND MORE)

31. Currently, the STI system remains fragmented, and STI policy is not perceived as a horizontal component that should be integrated into all areas of public administration, thus it is only directed towards the tasks of creating a modern innovation society. The regulatory environment in which the knowledge and technology transfer ecosystem operates can be favourable if laws and policy measures that promote innovation, support public procurement, and reduce the administrative burden and bureaucratic management for project implementers are properly implemented. The most effective ways to achieve this include:

31.1. improving the public procurement system by enabling the application of flexible public procurement procedures that meet the specificities of innovative technologies, ensuring the competitiveness, transparency, and efficiency of ongoing processes;

31.2. regulating project management bureaucracy and introducing an active management culture, taking actions to reduce the administrative burden, simplifying the administration procedures of implemented projects, facilitating the receipt of funding, adopting a proactive approach to the administration of high-risk

projects, monitoring systems, fostering a sense of responsibility, and ensuring faster decision-making;

31.3. properly designing tax incentives to attract and secure investments and to accelerate their growth;

31.4. enhancing a competitive investment climate by attracting, retaining, and expanding sustainable foreign direct investments;

31.5. promoting the deployment of innovative technologies in the public sector to ensure the quality and efficiency of provided services.

CHAPTER III
FINAL PROVISIONS

32. Contemporary progressive STI policy must be perceived as a horizontal policy across all areas of public administration, intrinsically linked to the long-term Strategy Lithuania 2050. This process is crucial not only for the operation of individual sectors but also as an integral part of unifying and coordinating all directions of national policy.

Effective implementation of this policy is essential for the optimal use of knowledge and expert resources in creating a long-term and sustainable science, technology, and innovation policy that reflects the entirety of the State. Achieving this goal requires strong leadership from the Seimas of the Republic of Lithuania, the Government of the Republic of Lithuania, and the Council for Science, Technology, and Innovation in shaping long-term STI policy. This would ensure the adoption of comprehensive solutions that integrate science, technology, and innovation into all areas of national policy.

It is important to implement a horizontal approach that sets priorities and clear responsibilities for institutions, allows for the merging of knowledge from various fields, and creates a unified long-term STI strategy that promotes harmonious progress in science and innovation and the development of high technologies. This assumption of consistency and integration is essential for ensuring a long-term and sustainable STI policy that meets societal needs and strives for long-term sustainability.

In order to improve the formation and implementation of Lithuania's STI policy, it is necessary to:

32.1. establish the development directions of long-term STI policy and their implementation measures as a horizontal priority for the implementation of the Strategy Lithuania 2050;

32.2. strengthen the close cooperation of entities responsible for STI policy to

ensure the consistency of this policy and create favourable conditions for coordination at all levels and for all STI stakeholders, also taking measures to develop a stronger, more coherent, and sustainable architecture for the development of long-term STI policy;

32.3. align various STI measures at the governmental level and implement them in a coordinated manner to achieve the set national priorities and the goals of the Strategy Lithuania 2050;

32.4. harmonise legal acts with the Strategy Lithuania 2050 to ensure the horizontality of STI policy;

32.5. ensure the development of a sustainable and independent evidence-based monitoring and evaluation system for STI policy, establishing the obligation of existing monitoring and evaluation institutions to regularly inform the Seimas and the Government about the results of STI policy monitoring and provide recommendations for its improvement;

32.6. expand the composition of the Council for Science, Technology, and Innovation to include creators of science, innovation, and technology from higher education and research institutions and the business sector, assigning them the functions of forming STI policy and setting priorities for the development of science, technology, and the economy.

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More information on the State Progress Strategy
'Lithuania's Vision for the Future 'Lithuania 2050''

https://lrv.lt/lt/lietuva-2050/

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LITHUANIA'S VISION FOR THE FUTURE 'LITHUANIA 2050'

04 10 2024. Print run: 200 copies
Published by: Office of the Seimas of the Republic of Lithuania
Gedimino pr. 53, LT-01109 Vilnius, Lithuania
Printed by: Petro Ofsetas UAB
Naujoji Riovonių g. 25C, LT-03153 Vilnius, Lithuania