

11–12 FEBRUARY 2026 | RIGA, LATVIA

# NAVIGATING ENERGY PATHWAYS FOR THE BALTIC SEA REGION

UNITING VOICES FOR  
A WELL-BALANCED ENERGY  
STRATEGY

**WORLD  
ENERGY  
COUNCIL** | LATVIA



Klimata un enerģētikas  
ministrija



UNIVERSITY OF  
**LATVIA**

# TABLE OF CONTENTS

## INTRODUCTION

- Message from the chair of the World Energy Council Latvia 4
- Message from the minister of Climate and Energy of Latvia 5
- Message from the rector of the University of Latvia 6
- The Spirit of Collaboration and Shared Responsibility 8
- Presentation of the 27th World Energy Congress in Riyadh 10
- Message from the CEO of “Latvenergo” 12
- The Energy Transition: A Shared Opportunity for the UK and Latvia 14
- Message from the host of the conference 16

## GEOPOLITICAL CONTEXT AND GLOBAL ENERGY PATHWAYS TO ACHIEVE ENHANCED SECURITY AND AFFORDABILITY 17

- Keynote conversation 18

## ENERGY PATHWAYS TO MEET INCREASED ENERGY DEMAND WHILE ENSURING EFFICIENT, RELIABLE, AND AFFORDABLE SOLUTIONS 21

- Managing Reliability through Rapid Change 22
- From Big Consumers to Grid Partners: Powering AI the Right Way 26
- Discussion 30

## FINANCING THE ENERGY STRATEGY AND DELIVERY PATHWAYS FOR OPTIMAL ECONOMIC IMPACT 34

- Powering Europe 35

## COMMUNITY ENGAGEMENT AND ACTIONABLE STEPS TO ACHIEVE ENERGY AFFORDABILITY AND RELIABILITY 45

- From NIMBY to YIMBY 46
- Environmental Solution for Project Development 49
- Discussion 54

## THE WAY FORWARD: WHAT'S NEXT? 58

### ROUNDTABLE DISCUSSION 66

- Q&A WORLD ENERGY FORUM: IKEA and the Future of Energy Solutions 69

<https://navigatingenergy.worldenergycouncil.lv/en>

Image credit: Rūdolfs Liepiņš, Toms Grīnbergs, Dreamstime

On February 11, 2026, the city of Riga hosted the largest energy summit of its kind in the Baltics. The event brought together policymakers, regulators, system operators, industry experts, investors, academics and civil society from over 20 nations, including Latvia, Lithuania, Estonia, the United States, France, Denmark, the Netherlands, Germany, the United Kingdom, Poland, Spain, and Saudi Arabia. With up to 300 participants on site and a global online audience, the discussions made one thing clear: security, affordability and sustainability can no longer be treated separately.

The program addressed the entire energy lifecycle – from global policy shifts to local community engagement. Central to the discussions was the future roadmap for the Baltic region following the historic synchronization of its power systems with the Continental European Network on February 9, 2025.

The conference culminated in the energy ministers of Latvia, Lithuania, and Estonia signing a joint Memorandum of Understanding, pledging deeper cooperation to bolster regional security and sustainability.

The event was organized by the World Energy Council Latvia in collaboration with the Ministry of Climate and Energy and the University of Latvia.



## Message from the chair of the World Energy Council Latvia

Assoc. prof. Olga Bogdanova

More than a century ago, just after the World Energy Council was established, the Latvian Cabinet of Ministers created the World Energy Council Latvian National Committee. It brought together three field ministries and five national organisations, forming a global forum that was politically neutral and professionally driven, and built on trust, mutual support, strong ethical standards, and the exchange of expertise. Today global energy landscape is more complicated than ever. We share the challenge of ensuring secure and affordable energy while accelerating transition toward sustainable future. None of the countries or sectors can do it alone. That's why learning and mutual support is more important than ever. The World Energy Council plays a vital role for taking this supportive role in creating synergies.

This week we also celebrate one year after the Baltic energy system was synchronized with the continental European network. This is an excellent example of how, despite significant technological, financial, and political challenges, we can solve complex issues by working together.

Despite the cold weather and the rigours of winter, today's gathering in Rīga offers a warm haven and welcoming shelter, shaping a productive forum for partners from across Europe and beyond to exchange ideas, share insights, and deepen cooperation. We are highly delighted to welcome our distinguished speakers from 12 countries and guests from 19 countries including Europe, the United States, Arab Emirates and many other countries joining us online. I would like this event to serve as an inspiration for meaningful dialogue and lasting, successful cooperation. Thank you for coming. Thank you for being part of this community and thank you for your dedication to building secure, affordable, and sustainable energy future. Thank you.



**Despite the cold weather and the rigours of winter, today's gathering in Rīga offers a warm haven and welcoming shelter, shaping a productive forum for partners from across Europe and beyond to exchange ideas, share insights, and deepen cooperation.**

## Message from the minister of Climate and Energy of Latvia

Kaspars Melnis

Energy drives the evolution of modernized society. It is the base of our communication, our comfort and the backbone of our transportation systems. To innovate and provide essential service, our entrepreneurs rely on highly stable energy supplies. Reselling sustainable energy at competitive price and the question of energy cost is vital because it is a direct driver of our global competitiveness.

Unfortunately, energy is also used as a weapon of influence and strategical targets. In 2022, Europe faced the threat of an energy crisis. This year, Russia is carrying out terror against the peaceful people of Ukraine, leaving them without electricity and heat, especially vital during this cold winter. Evidently, the Ukrainian army is not such an easy target as energy producing systems. I offer my deepest compassion and wish Ukrainian people strength and resilience.

As for us, our task is to learn from the past and from the current events on the front lines to build an energy system that is resilient to external influence. Is this possible today? Perhaps not instantly. Yet developing our energy sector and reducing dependency is a matter of our national security. Transforming our import system, established over decades, is a monumental task. This must be done for a better and safer tomorrow by creating new forms of cooperation and we are doing it step by step. A prime example is the Baltic region. It was successfully integrated into the European power grid a year ago, having previously operated effectively in so-called island mode and passing all technical tests. Now we know that our system is stable and it can be such in our hands.

Our planet is the home we all share. Building sustainable and secure world requires collaboration and integrity. The World Energy Council provides a perfect platform to turn these goals into reality. I wish you an exciting conference, rich with new ideas and professional connections. Thank you.



**Developing our energy sector and reducing dependency is a matter of our national security. Transforming our import system, established over decades, is a monumental task.**

## Message from the rector of the University of Latvia

Prof. Gundars Bērziņš

Distinguished guests, ministers, and everybody else who likes to talk and think about energy. It is a great honour for the University of Latvia to welcome you here to this timely and important event. You are here in Rīga during the coldest winter in 15 years. This helps us see and understand even better how vital energy is and how important it is to appreciate that it keeps us warm inside our buildings. That's also part of energy resilience. However, this is only a small part of a larger discussion.

At some point, here we are used to this kind of weather and we are always ready for that. Nonetheless, there are other challenges we are not always ready for, and these are the challenges of different new technologies which are evolving. Our grids are not always ready to take the loads, to have access to supply and demand. How can we effectively balance supply and demand in such a complex environment, with energy producers prepared to deliver? The society is not ready for these businesses to be alongside their living spaces. This is a very important question for the society. How do we work together with the renewable energy sector in our society?

From another perspective, there is an industry that requires increasing amounts of energy as it develops, because the future lies in sectors with growing electricity demand. Then comes the role of universities, the very reason, I believe, that you are here. Universities have the ability to think beyond election cycles, which is crucial not only because technological development requires long-term investment, but also because understanding society's perspective on different approaches to energy takes time and reflection. This is not a technological shift that we are in. This is a systemic shift we must manage carefully. Let us discuss this in the upcoming days. I wish you to have fruitful discussions and mutual understanding, so that we can try to make our world a better place for the future. Thank you very much for being here.



**Universities have the ability to think beyond election cycles, which is crucial not only because technological development requires long-term investment, but also because understanding society's perspective on different approaches to energy takes time and reflection.**

# NAVIGATING ENERGY PATHWAYS FOR THE BALTIC SEA REGION





## The spirit of collaboration and shared responsibility

Message from the chair of the World Energy Council Europe

### Agustín Delgado Martín

Chair of the World Energy Council Europe

Mr. Delgado is currently serving as Chief Technology Officer of Iberdrola Group. He also oversees the PERSEO venture capital program, the activities of Iberdrola Innovation Middle East and maintains strategic collaborations with prestigious universities. He is currently chairing CEX Capital and Member of the Board of Directors of the Iberdrola BP Pulse Joint-Venture and Carbon2Nature. He is a member of several international boards and committees, including the World Energy Council, the Future Energy Systems Center at the Massachusetts Institute of Technology (MIT) and Senior Executive member on Future Power Systems at WEF.



**Energy is no longer only an economic or technical issue. It is increasingly strategic, political, and societal.**

**WORLD  
ENERGY  
COUNCIL**

Your Excellencies, distinguished ministers, honoured guests, dear colleagues and friends, it is a great pleasure to join you, even if virtually for this important gathering in Rīga. Let me begin by warmly thanking our Latvian Member Committee for hosting this year's conference 'Navigating energy pathways for the Baltic Sea region'. Latvia is a valued and longstanding member of the World Energy Council community. Part of our European family since the Council's early beginnings more than a century ago. Their continued leadership today reflects what has allowed us to thrive for more than 100 years. Bringing people together, creating a space for dialogue and connecting national priorities with global perspective.

We are living in a world increasingly defined by disruption rather than stability. Geopolitics, climate impacts, technological change, market volatility, and social expectations are reshaping our energy systems faster than ever before. This reality is reflected clearly in the programme you have today. Your opening session, geopolitical context, and global energy pathways to achieve enhanced security and affordability could not be more timely. It recognizes what many of us are experiencing. Geopolitics has become a central driver of energy policy, investment, and market behaviour. In our soon to be released 2026 World Energy Issues Monitor, energy leaders across regions once again

highlighted geopolitical risks, supply security, and market fragmentation among their top uncertainties and concerns. The results confirm what we see on the ground. Energy is no longer only an economic or technical issue. It is increasingly strategic, political, and societal. In this environment, progress no longer follows linear plans. It depends on actionable foresight, flexible policies, and sustained innovative collaboration. It depends on our ability to adapt, to learn, and to work together across borders, sectors, and generations. This is where the World Energy Council plays a unique role. Our enduring resolution remains clear to find ever more effective ways to work together and to enable more and better energy for billions of lives and a healthy planet.

This spirit of collaboration and shared responsibility will be at the heart of the 27th World Energy Congress in Riyadh in October 2026. The World Energy Congress is not simply a conference. It is the kind of global stage that makes energy transitions happen. It is an opportunity for leaders across geographies, sectors, and generations to speak with one another and create practical solutions to build a future of more and better energy for all. Today's programme here in Rīga reflects that same philosophy. Bringing together policy makers, industry leaders, innovators, researchers, and young professionals to explore how we navigate energy

pathways in an increasingly uncertain world.

It is not easy to maintain independence, evidence-based thinking, and constructive dialogue in a context of increasingly politicized and polarizing energy debates. However, this is precisely the reason why the World Energy Council exists. Every country, every region, every community faces different realities, constraints and opportunities. Our strength lies in recognizing this diversity and turning it into collective intelligence. I am confident that today you will address important topics and engage with complex challenges from energy security and affordability to infrastructure, innovation, and sustainability. Always mindful of the growing influence of geopolitics on our decisions and systems, the council brings together very different players. This diversity is not a weakness, it is our greatest strength.

In conclusion, let me thank you once again for being part of this community, for your leadership, your openness, and your commitment to collaboration. I wish you a productive, inspiring, and forward-looking conference and I eagerly anticipate continuing this journey together here in Europe, across our global network and at the World Energy Congress in Riyadh in 2026. Thank you and I wish you a successful event

## Presentation of the 27th World Energy Congress in Riyadh

### Dr. Yassir Alturki

Secretary General of World Energy Council Saudi Arabia

Dr. Y. A. Alturki is Chief Advisor to the Assistant Minister of Electricity Affairs at the Ministry of Energy, Saudi Arabia, with extensive experience in power systems, renewable energy integration, international electrical interconnections, and the development of electricity policies and deregulation. He serves as Secretary of the Saudi Arabia Member Committee of the World Energy Council and participates in several national and international committees. Dr. Alturki previously held senior government and academic leadership roles, including Assistant Deputy Minister, Vice Dean for Academic Affairs at the College of Engineering at King Saud University, Vice Rector for Admission and Registration, and Dean of the College of Applied Sciences at AlMaarefa University. He holds a B.Sc. from King Saud University, an M.Sc. from Oregon State University (USA), and a Ph.D. from the University of Strathclyde (UK), with research expertise in electricity markets, power system analysis and power sector policies and reform.



Excellencies, ministers, distinguished guests, ladies and gentlemen, members of the World Energy Council community, it's a great honor to address you today as we continue our collective preparations for the 27th World Energy Congress which will be convened in Riyadh, Saudi Arabia in April next year.

For more than a century, the World Energy Congress has stood as the premier global platform, bringing together governments, industry leaders, innovators, communities, and experts.

It has consistently enabled strategic dialogue and helped shape the evolution of global energy systems. Today it remains the most influential forum for advancing collective thinking, diverse perspectives and practical pathways toward a secure, sustainable, equitable and inclusive energy future. As we gather with our valued partners, it gives me a great pleasure to extend a formal invitation to you. The member committees of the World Energy

Council have long been active at essential contributions to the Council's work. And this engagement is more important than ever as we confront the profound transformations reshaping the global energy landscape.

The Riyadh 2027 Congress held under the theme "Inspiring transformations, delivering transitions" will provide a comprehensive and forward-looking platform to examine the structural shifts underway across global energy systems. Guided by the vision and ambitions of "Saudi Arabia's vision 2030", the Kingdom is advancing significant efforts across all energy domains including renewable energy, clean hydrogen, digital innovations and efficiency throughout the energy value chain. Riyadh, where heritage, modernity, and ambition converge, will offer an exceptional setting for this important global gathering.

The 2027 Congress will serve as a global platform for showcasing pioneering initiatives, exchanging

expertise, and exploring expanded opportunities for cooperation and investment.

On behalf of the Kingdom of Saudi Arabia and its entire energy ecosystem, it's my privilege to extend a formal and cordial invitation to all of you to participate in the 27th World Energy Congress. Your presence and contributions will be instrumental to the success of this milestone event.

We very much look forward to welcoming you in Riyadh and to working together in shaping the next era of global energy transitions.

Allow me now to present a [brief video](#) capturing the spirit of Riyadh and the vision we are preparing for the 27th World Energy Congress. Thank you.

**WORLD  
ENERGY  
COUNCIL**



**WORLD  
ENERGY  
CONGRESS**

**RIYADH  
2027**  
26-29 APRIL





## The future of energy will be determined by the decisions we make today



**Dr. Mārtiņš Čakste**

Message from the CEO of “Latvenergo” JSC

Mārtiņš Čakste has been the Chairman of the Management Board of Latvenergo AS, Chief Executive Officer (CEO), Member of the Board of Directors at Eurelectric, Vice President of the Latvian National Committee of the World Energy Council since 2021. M. Čakste holds a PhD in Business Administration from Riga Technical University (RTU) (2007) and a Master's degree in Engineering Economics from Rīga Technical university (RTU, 1999). Latvenergo Group is currently working hard to achieve very high and ambitious targets in green energy production, delivering results that are strategically important both for the development of the Latvian state and for energy security.

Currently, the global energy sector is undergoing major turbulence: new technologies are rapidly emerging, climate requirements are changing, and economies are becoming increasingly electrified.

Distinguished guests, esteemed colleagues, ladies and gentlemen,

It is my great pleasure to welcome you to this conference. Today I am representing “Latvenergo” – Latvia’s national power company and one of the largest energy suppliers in the Baltic region. The nearly ninety-year history of this company is closely intertwined with the entire economic and social development of the Latvian state. At the cradle of the country’s electrification stood the founders of the Latvian National Committee of the World Energy Council – bold visionaries who, already in the 1920s, brought Latvia into the global community of energy professionals. Therefore, it is only natural that Latvia’s largest energy company is actively involved in the work of the Latvian National Committee of the World Energy Council. Several years ago, we assumed a much more active role in leading the Latvian branch of the Council. Our aim was to develop a modern and meaningful organization that would professionally inform society about energy-related issues, provide insights into both the practical activities of Latvia’s leading industry companies, and the achievements of our country’s scientists and researchers.

Participation in such a large-scale international organization as the World Energy Council provides us with broad opportunities to establish important international contacts and gain information about current developments in the industry, including trends in global energy markets. Such knowledge is equally important for energy professionals themselves, for leaders of industry companies and institutions, as well as for Latvian lawmakers and the architects of our national economic policy.

A successful example of our initial achievements is the international conferences organized by the Latvian National Committee, which have been held in Riga since 2023. Speaking about participation in WEC congresses, it should be noted that such global forums are the best place to feel the pulse of the world: they clearly highlight the latest trends and challenges faced by energy professionals in different regions, which in turn helps us better forecast and structure our strategy.

The youth competency development program “Future Energy Leaders Latvia,” launched under the auspices of the Latvian National Committee, has already produced its first graduates. Participation in this program provides young professionals with direct communication with leading industry experts, enables active involvement in research and problem-solving within the sector, and allows them to operate not only in a Latvian but also in a regional and global context.

Participants represent various energy companies, ensuring effective knowledge transfer and fostering strong networking. Moreover, young experts are actively engaging in communication, creating podcasts that explain complex energy topics to broader audiences, thereby promoting a more comprehensive public understanding and a positive attitude toward the industry. A particularly relevant and important task is to promote the popularity of STEM education among young people.

Currently, the global energy sector is undergoing major turbulence: new technologies are rapidly emerging, climate requirements are changing, and economies are becoming increasingly electrified. Both in Europe and elsewhere, there is much discussion about the energy transition measures of varying scale aimed at developing a green economy and achieving climate neutrality. At the same time, however, there are voices calling for caution against excessive “greening” of the economy and urging greater focus on balancing different types of energy resources.

Here, it is worth recalling that one of the cornerstones of the World Energy Council is the “energy trilemma”. It emphasizes that the energy system must be viewed holistically there must always be a balance between security, resource availability, and sustainability. None of these aspects should be considered in isolation or prioritized at the expense of the others.

It is clear that climate change is happening, and we must all work together to mitigate its negative impact by greening our economies to ensure the sustainable future of humanity. However, it is equally clear that everything comes at a cost, and that cost must not be excessive or unreasonable for society and industry.

Latvenergo’s operations have always gone hand in hand with sustainability in our approach to the environment, society, and our customers. Promoting sustainable development is our duty as market leaders and as the most valuable company in Latvia to set an example in moving toward more responsible management. At the same time, this is a conviction rooted in the very essence of the company after all, our origins lie in green energy. We know how to operate in a way that satisfies all stakeholders, ensuring that in pursuing business goals, neither nature nor society is harmed.

The production of green electricity is Latvia’s strength. However, we must go a step further by analyzing how we can leverage it to generate maximum added value for our economy.

Thank you.



## The Energy Transition: A Shared Opportunity for the UK and Latvia

Kathy Leach

His Majesty's Ambassador to the Republic of Latvia

Ms Kathy Leach started her role as His Majesty's Ambassador to the Republic of Latvia in August 2025. Previously she was His Majesty's Ambassador to the Republic of Kazakhstan, and Deputy Director, Constitution and Devolution, Europe Directorate in the FCDO. From 2012 to 2015 Kathy served as Ambassador to the Republic of Armenia.

Continued, practical collaboration will help both our countries accelerate delivery, and our mutual goal of a secure, affordable and sustainable European energy system.

**Across Europe, the energy transition has become ever more urgent, as ageing systems are retired, increasing renewables require smart grids and storage, and AI and electrification push demand. Every government now faces the same imperative: build cleaner, more flexible and more resilient systems at speed. The UK has moved early in this transition, anchoring its response in a mission to deliver clean power by 2030. The question facing all of Europe is whether policy and investment can keep pace with the scale of change already underway.**

### The UK's Clean Energy Mission

The UK's Clean Power 2030 framework sets a clear direction: at least 95% clean generation by the end of the decade, with unabated gas used only for security. Detailed delivery plans focus on accelerating renewables, clearing grid bottlenecks, and lowering the cost of capital. Progress, since I first started working on climate policy in 2007, is significant. Then, coal supplied over a third of our electricity, with renewables less than 6%. The policies set in place at that time have led the UK to decarbonise faster than any other G7 economy in the past 20 years. By 2024, renewables generated just over half of UK electricity; wind provided around 29%, and low carbon sources together produced roughly two thirds of supply. UK emissions are 53% below 1990 levels, showing economic growth can align with deep decarbonisation.

Momentum has been reinforced by the latest Contracts for Difference (CfD) auction in January 2026 which secured 8.4 GW of offshore wind. Reforms extending CfD terms to 20 years and simplifying paperwork have reduced financing risk and restored investor confidence.

### Rewiring the System

**Electricity networks** are now the principal constraint on Europe's clean energy rollout. In the UK, the Accelerated Strategic Transmission Investment programme is fast tracking 26 major on-shore projects worth €23 billion. The new National Energy System Operator is introducing whole system planning for the first time across electricity, gas and future hydrogen networks. Alongside grid connection reforms, these steps aim to shorten queues and reduce the amount of electricity that is generated but not used.

**Interconnection** is a second pillar of resilience. Great Britain's 10 GW of interconnector capacity with neighbouring countries acts as a buffer for renewable variability and continental gas price volatility. Planned further expansion reflects the value of sharing surplus clean energy across borders.

### Decarbonising Industry

For heavy industry, the UK is pursuing a cluster approach. The East Coast Cluster and HyNet—planned as the first operational carbon capture and hydrogen hubs—have passed key milestones, with construction beginning in 2025 and initial operations targeted for 2028. These clusters will enable CO<sub>2</sub> transport and storage, provide low carbon hydrogen, and anchor wider regional investment around these off-shore wind and industrial hubs.

### A Long Term Strategy

The UK's wider strategy recognises that a resilient, affordable and low-carbon system must draw on multiple technologies delivered over staggered timelines. Alongside renewables expansion, the government is pursuing a new generation of **nuclear projects**—including large-scale reactors and small modular reactors—to provide base-load low-carbon power through the 2030s and beyond. **Solar** continues to scale rapidly, with streamlined planning and grid reforms enabling deployment across rooftops, brownfield land and co-location with storage. On the demand side, the **Warm**

**Homes Plan** aims to cut energy use through insulation, heat pumps and efficiency upgrades, reducing bills while easing pressure on the electricity system as it decarbonises. Together, these initiatives create a long-term pathway that balances rapid deployment of mature technologies with strategic investment in those new technologies that will anchor the system in the next decades.

### Latvia's Opportunity

Latvia begins from a position of strength. Hydropower provides a stable system backbone, and renewables already exceed 40% of gross final energy consumption. The challenge is operational: scaling wind, modernising the grid, and integrating heat, transport and industry. Wind is the clearest opportunity. Significant onshore and offshore potential has been held back by local acceptance of these projects. UK experience—especially in Scotland—shows that early consultation, transparent siting and community benefit schemes significantly improve their success in gaining community consent. Levy based revenue sharing ensures communities see direct benefits. Grid upgrades and grid flexibility services form a second pathway. Investment in battery storage, modern monitoring tools and congestion reduction measures—combined with streamlined access for companies that can shift or store power to support the grid—mirror UK reforms that have reduced system costs. Latvia's scale makes it well suited to piloting smart grid innovations.

### A Practical UK–Latvia Partnership

UK–Latvia cooperation on energy resilience has deepened. A UK led pan Baltic tabletop exercise in Riga in 2024 tested crisis response and cross-border coordination. This evolved into a regional resilience framework and culminated in the Baltic Energy Resilience Forum in 2025. The UK has since hosted the Baltic TSOs—Elering, Augstsprieguma tīkls and Litgrid—for exchanges with the UK National Energy System Operator on interconnectors, grid balancing, cyber risk, subsea infrastructure and whole system planning.

### Conclusion

The direction of travel is clear. Cleaner systems are more secure, affordable and resilient. The UK's mission-based approach—rapid renewable expansion, grid reform, and industrial decarbonisation—offers lessons for countries shaping their next phase. For Latvia, hydropower stability, well designed wind deployment, targeted grid modernisation and whole system integration offer a credible route to long term competitiveness. Continued, practical collaboration will help both our countries accelerate delivery, and our mutual goal of a secure, affordable and sustainable European energy system.



## The questions that will define Baltic region's energy future

### Dr. Kārlis Baltputnis

Senior researcher at Riga Technical University, Future Energy Leaders Latvia management team

Kārlis Baltputnis is a senior researcher at the Institute of Industrial Electronics, Electrical Engineering and Energy at Riga Technical University. His research is focused on power system modelling and optimization, flexibility for renewable energy integration (e.g. through demand response, energy storage) as well as development of new types of ancillary services markets. He has participated and also currently contributes to a number of research and innovation projects funded by the European Commission, Latvian Council of Science and national energy industry stakeholders. Additionally, Kārlis is a member of the management team of the Future Energy Leaders Latvia program.

Dear ministers, excellencies, distinguished guests, ladies and gentlemen, good morning and welcome to Riga.

My name is Kārlis Baltputnis and I will be your host today. Welcome to “Navigating Energy Pathways for the Baltic Sea Region”, organized by the World Energy Council Latvia, the Ministry of Climate and Energy of Latvia, and the University of Latvia in close collaboration with the World Energy Council's global community.

This event would not have been possible without the generous support of our sponsors: Latvenergo, Electric Power Research Institute, Electric Power Engineers, Konrad Adenauer Foundation, the Nordic Council of Ministers Office in Latvia, SCHWENK, the British Embassy in Riga, and Augstsprieguma tīkls. Thank you.

Today, around 350 policymakers, industry leaders, innovators, regulators, civil society repre-

sentatives, and community voices have gathered here at the University of Latvia House of Science to tackle the questions that will define the region's energy future.

And for those joining us remotely, the conference is being broadcast online across Latvia, Lithuania, Estonia, and beyond through multiple channels. We are equally glad to have you with us.

The Baltic Sea region stands at a remarkable turning point. Just a year ago, the Baltic states synchronized with the continental European power system after disconnecting from the Russian grid — a major milestone for energy sovereignty. But sovereignty alone is not enough. We must now build on it with generation capacity, grid resilience, competitive pricing, and, crucially, the trust and support of the communities in which these projects take shape.

Today's conference is built around five big questions:

What does the geopolitical landscape mean for our energy pathways?

How do we match growing electricity demand with a reliable, affordable supply?

How do we finance a transition that delivers real economic value?

How do we bring communities along as partners rather than bystanders?

And finally, what comes next? What are the concrete plans of the energy ministers in this room?

It should also be noted that this event is an important step on the road to the World Energy Congress in Riyadh next year, where many of today's themes will resonate on the global stage.

# GEOPOLITICAL CONTEXT AND GLOBAL ENERGY PATHWAYS TO ACHIEVE ENHANCED SECURITY AND AFFORDABILITY

**Trends and perspectives for human flourishing  
in the US, the EU and globally**



## CHAIR OF THE SESSION



**Dr. Michael W. Howard**

Chair Emeritus of the World Energy Council

Dr. Michael W. Howard is committed to advancing a sustainable and equitable energy future. With more than 40 years of global leadership in the electric utility industry, he combines deep technical expertise with business insight, emphasizing collaboration, innovation, and entrepreneurship. He served for a decade as CEO of EPRI, a \$500 million global research organization driving innovations in nuclear power, renewable energy, energy storage, and electric vehicles to ensure reliable and affordable electricity. Dr. Howard holds degrees in electrical engineering and business from the University of Tennessee and the University of Pittsburgh and earned a Ph.D. in engineering from the University of Tennessee, where his research focused on artificial intelligence. Today, Dr. Howard is chair emeritus of the World Energy Council and serves on three energy-technology boards and advisory councils, including Carnegie Mellon's Scott Institute. A regular contributor to U.S. National Academies studies on electricity, he was honored with the Distinguished Energy Award and remains active in global energy leadership through the IEEE and the American Nuclear Society.

**Chair of the session Dr. Michael Howard is joined in conversation by Catherine Jereza, Assistant Secretary for the United States Department of Energy, bringing a perspective straight from Washington on how the world's largest economy is navigating its energy future. The opening dialogue on global energy provided insights into enhancing security and affordability across Europe, the United States, and beyond.**

### Catherine Jereza

Assistant Secretary of Energy, U.S. Department of Energy



Catherine (Katie) Jereza was sworn in as Assistant Secretary for the U.S. Department of Energy's Office of Electricity (OE) on October 14, 2025. She leads the Department's research, development and demonstration programs to strengthen and modernize our nation's power grid. She returns to OE in 2025 after serving as OE's Deputy Assistant Secretary for Transmission Permitting and Technical Assistance from 2017-2019. During that time, she led Department efforts to promote the reliability, security and affordability of electricity infrastructure. In between her positions at OE, she served as a Corporate Vice President for the Electric Power Research Institute (EPRI), providing strategic leadership for government and external engagement. Ms. Jereza has more than 30 years of experience in the energy, water, and manufacturing industries, where she led multiple startup, turnaround and major problem-solving initiatives. She also worked as a sales engineer for GE Water and Process Technologies and the Lincoln Electric Company. Ms. Jereza grew up in West Virginia and currently lives in Maryland with her husband. She holds an MBA from the Loyola University Maryland and a Bachelor of Science degree in chemical engineering from the Virginia Polytechnic Institute and State University.

**Dr. Michael Howard (M. H.):** It has been interesting listening to the previous speakers. The one thing that really stands out to me is: energy is fundamental to our basic way of living. It's fundamental to everything that we do.

**Catherine Jereza (C. H.):** First and foremost, I would like to recognize Lithuania, Latvia, and Estonia and your work with Poland on a historic milestone, the one-year anniversary of your exit from BRELL, and your synchronization with the continental European network and full energy independence from Russia.

**M. H.:** There's a poster right out front. It's about the synchronization with Europe. It says, "We did it." And when I came here and I saw that, I thought that exemplifies exactly the Baltic nations and Europe. You did it. That is a tremendous step toward providing not only affordable but secure electricity and you've been focused on this for a couple of decades, and I just want to recognise how proud I am of the team effort that was involved.

**C. H.:** We did it. It really fires me up when I think of these complicated issues because the electricity system is so complex. It's all over the world. It's

the largest man-made machine in the different areas of the country. Being able to work together to figure out the technological issues, it's just amazing that the countries came together. Our Pacific Northwest National Lab was a rock star in supporting that effort. To be truly energy independent from Russia is quite an accomplishment. However, that synchronization is not something that you can just flip like a switch and do. It takes orchestration, planning, and from what I hear, it went off without a hitch. No one noticed that it happened except those that were focused on making it seamless.

**M. H.:** I was giving a talk a couple of weeks ago and trying to explain this synchronization and unless you are steep in the engineering side of this business you don't really grasp the importance of synchronization. What does it mean? So, I was trying to explain it and I said, "Well, these two systems have to come together, and they have to fit just perfectly. Milliseconds really make a big difference, and if it doesn't work work, it's a really bad day. It could be a bad week in fact, but it worked. It's the team effort that I saw throughout the Baltics and the European community and the Department of Energy and the National Labs and many other people who came together to make this work.

.When you think about energy, one thing that stands out for me is not only security, but also affordability. The affordability of energy and the affordability of electricity. So, what are your thoughts there?

**C. H.:** When it comes to affordability, I think there are great pillars to think about, and we use the terms ‘optimize’, ‘stabilize’, and ‘grow’. I believe this builds on the discussions our Secretary of Energy, Chris Wright, held in Greece last November with the leaders of Lithuania, Latvia, and Estonia, during which they committed to advancing affordability and strengthening our security partnerships. . When I say we are going to stabilize, I mean that we must stabilize the system. In the United States, we might have a grid that’s evolved over a hundred years, but we are at a crisis in the US where we have a shortage of energy. We have an aging grid. What we must do is ensure that we have sufficient firm energy resources available to maintain grid stability, along with a robust transmission system capable of delivering that power reliably. The second step is optimization. Once reliability is secured, we must ensure that, as we meet that reliability standard, the system remains affordable at the same time. From there, we can grow and we must grow smartly by building on the firm foundation we have established. These, then, are the three pillars of affordability: stability, optimization, and smart growth.

**M. H.:** Let me emphasize here: Catherine is responsible for the office of electricity in the US. This means that she’s responsible for the grid. She’s responsible for thinking long term about what we can do to ensure reliability and security, and affordability, and so on. That’s a huge responsibility. So, what do you think when you wake up in the morning?

**C. H.:** It’s a great question. I work for President Trump, and I got to work at Trump’s speed. It is an enormous responsibility, because as we all know so well, it’s all about how we live. The first thing that happens, the lights must come on, then you want to go take a hot shower, and then you need power to get to work. To me, my goal is that we can rely on it. It’s just there when we need it 24/7. I think about who do I need to talk to today? What problems do we need to solve? What are the opportunities for tomorrow? Our office has traditionally been about R&D, thinking for the long term, but there’s a huge component of my office now that is about deployment. Where can we deploy advanced grid technologies? Where can we deploy hybrid solutions so that we can improve the economics of the generation? So, it’s also time. What’s my time going to be like today when I wake up in the morning?

**M. H.:** The great thing about this industry is that we are always going to have geopolitical challenges. I mean it doesn’t make any difference where you live or when you live there. It doesn’t make any difference. We’re always going to have it. However, that’s also what makes the energy sector so

special. We have a passion to rise above that by being human and by thinking about how the value of energy, affordable energy and electricity can make this world a better place.

We are training a new generation of young people to step in and carry this work forward. So, when you think about the future and about those who will follow us and you look 20 or 30 years ahead, considering the technology and innovation on the horizon, what developments do you believe will truly make a difference in achieving what we all want: secure, reliable, and affordable electricity? Is there anything in particular that stands out to you?

**C. J.:** Well, I think it’s the people. I think it’s those students that I’m going to get to meet later here at the university. It’s the people that make it work and without that there’s not much hope for success. I have my faith and trust in the people who are going to make it work. From a technology standpoint, the research we were doing is now coming to fruition today. Small modular nuclear reactors are right around the corner. That is going to change everything because it’s firm, it’s 24/7, and it is secure. I also think of other technologies like battery storage. There’s some non-lithium technologies that are also within years reach which can help us with stabilizing the grid even more and improve the economics tremendously. So, I’d say those are the two biggest things that I have my eye on. Then I’d say a third might be in solid state that’s a little further out but that can also create great efficiencies on the affordability.

**M. H.:** Is it possible that we can balance all these things together, reliability, security, affordability, and so on? Or do we need to think about one over the other?

**C. J.:** When it comes to affordability, reliability, and security, I think of affordability first, reliability always, and secure by design. So, in a way, they're all at the same time. Then I also think of energy addition, not subtraction. Energy addition helps to grow the GDP, and it makes all of us stronger and better. It's important for human flourishing which I think is a key focus for the World Energy Council. We've always talked about the humanizing energy element.

**M. H.:** As for me, I think that ability to come together like we're doing here, have a discussion, rise above any geopolitical issue, but think about humanity, think about society and how important this is, and think about the responsibility that we have and we owe to not only everybody here but also to the future generations as a whole. To me that's what's important.

**C. J.:** I want to say I'm here as a partner. The US is here as a partner. We very much are grateful for the partnership with the three great nations that are hosting this today, the University of Latvia and the World Energy Council. Partnership is the key that allows the promise of energy to benefit everyone. So, thank you all for being here.



# ENERGY PATHWAYS TO MEET INCREASED ENERGY DEMAND WHILE ENSURING EFFICIENT, RELIABLE, AND AFFORDABLE SOLUTIONS

- How much electricity does it take to generate, and what does “a good price” mean?
- Needs of the big energy consumers



## CHAIR OF THE SESSION



**Dr. Līga Kurevska**

Ministry of Climate and Energy of the Republic of Latvia

Līga Kurevska has over ten years of experience in the energy sector and currently serves as the State Secretary at the Ministry of Climate and Energy. She holds a PhD from Riga Technical University and a Master's degree in Business Administration from Riga Business School. Throughout her career, Kurevska has worked as the Director of the Energy Department at the Public Utilities Commission and has held other senior leadership roles. She is recognized for her data-driven approach, commitment to process efficiency, and ability to foster high-performing teams. A senior executive with deep sectoral expertise, Kurevska combines strategic insight with hands-on project management experience to drive impactful, system-level improvements in the energy field.



Credit: Dreamstime

## Managing reliability through rapid change

### Dr. Eamonn Lannoye

Director of Research & Development at EPRI Europe



Eamonn Lannoye is Director of Research & Development at EPRI Europe. Based in Dublin, he leads initiatives in Transmission Operations & Planning focused on grid flexibility, reliability, and system planning. His recent work focuses on data center grid integration, artificial intelligence and industry dialogues on lessons from the Iberian system event, turning research into actionable guidance for operators and policymakers. He has a PhD from University College Dublin and an MBA from Imperial College London.

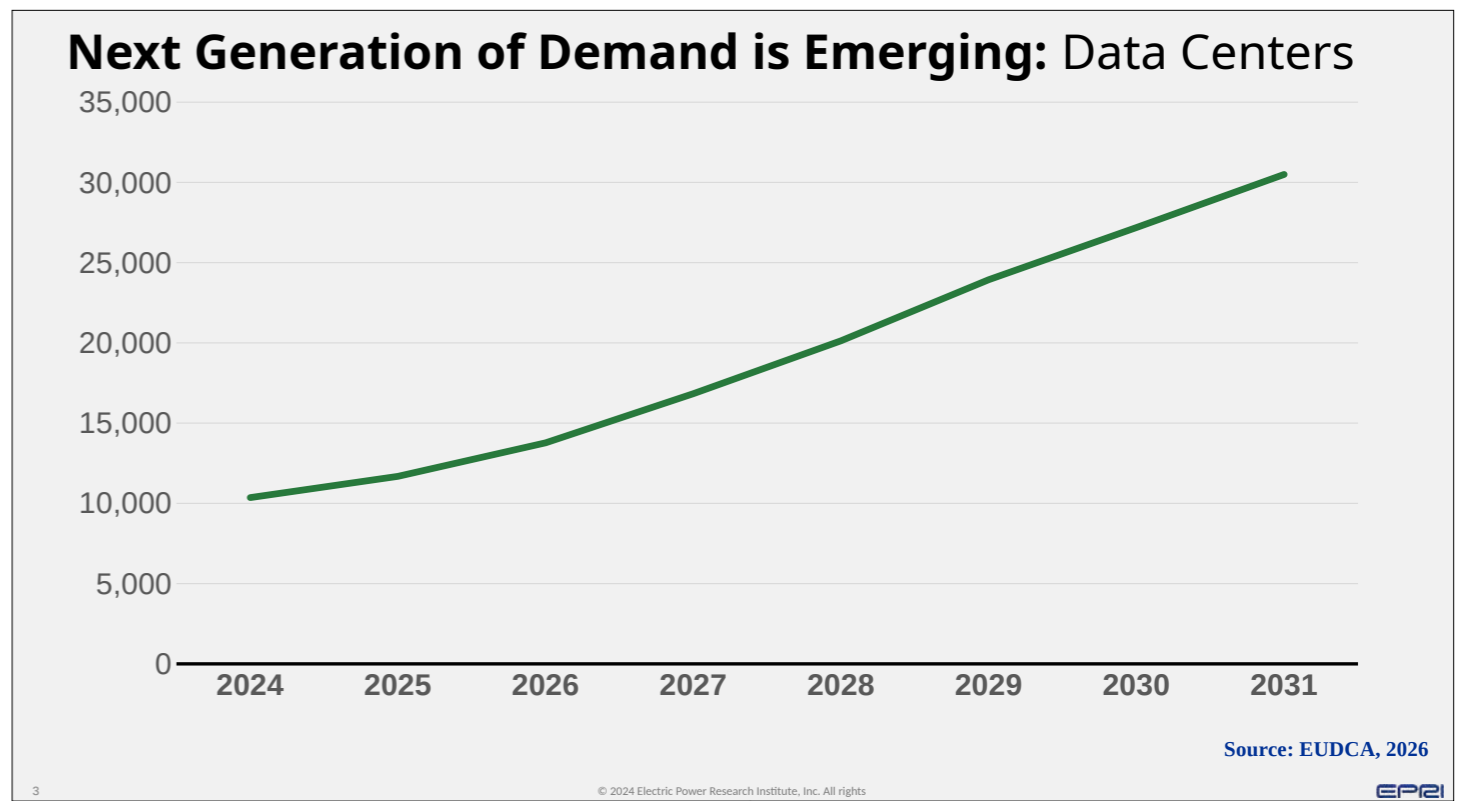
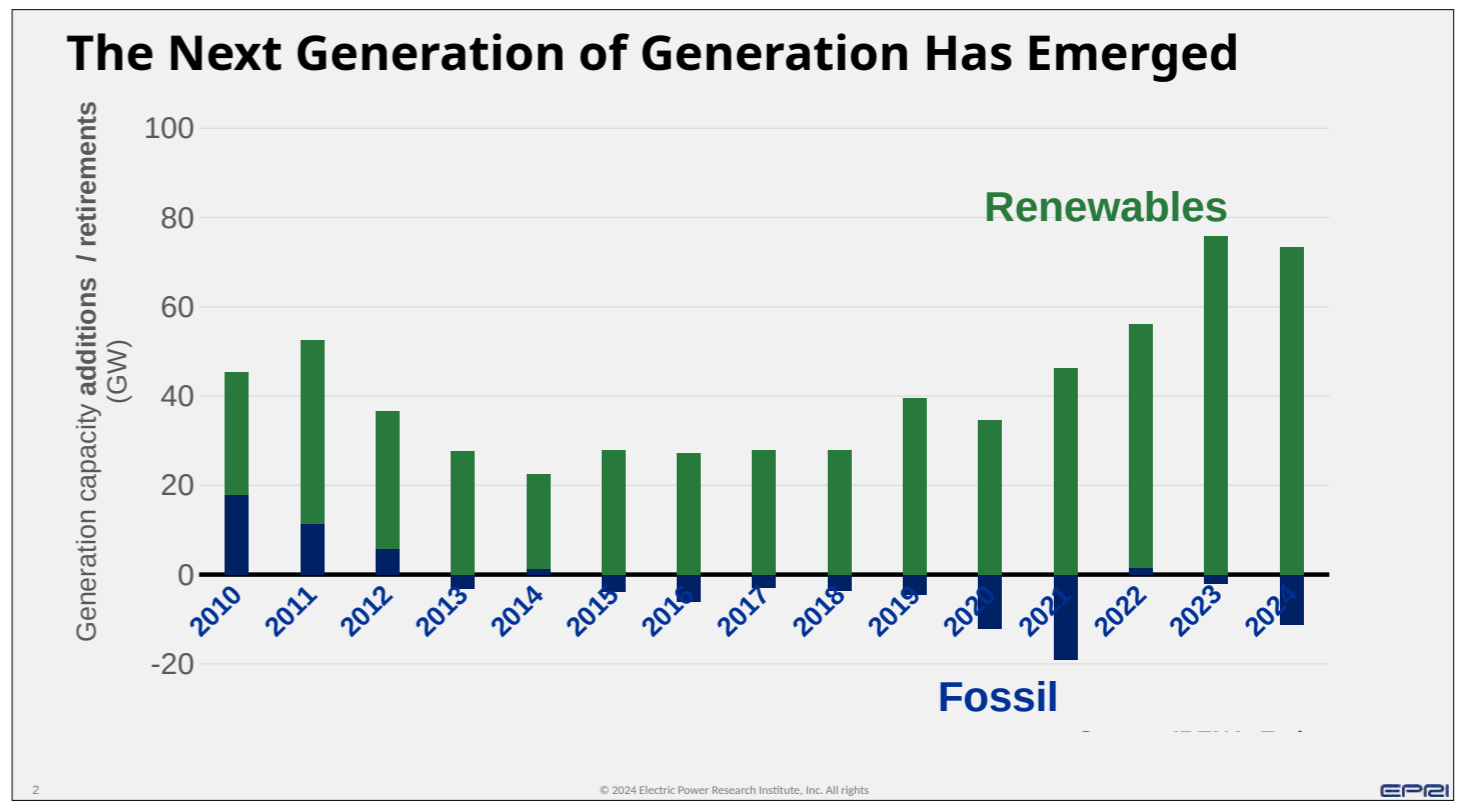
**Be it climate, be it cyber, be it stability and reliability, all those things present challenges for grids under transition. The world is changing, the grids are changing, power systems are changing all around the world.**

I was asked to give a brief overview of how we see the changes and challenges emerging in the grid and in power systems around the world. EPRI is a not-for-profit research institute with staff in five continents. It has been created to share ideas and bring understanding of what the future of electricity looks like. I liked the idea that professor Bērziņš's said in his introduction about people who like to talk and think about energy. EPRI is certainly a place that is obsessed with talking and thinking and shaping the future of energy. What I wanted to do is to give you a quick overview of how the world looks from our perspective to get the conversation going.

Some statistics and charts to begin with.

What you see here are additions and retirements of generation capacity in Europe over the last 14 years. We are currently adding around 60 gigawatts of renewables per year, perhaps even a bit more, most of which is solar, along with about 5 gigawatts of battery storage. We are just about to enter a major phase of fossil plants retirement. So, the new generation of generation has emerged, and it is going to continue to emerge over the next couple of years. 60 gigawatts across Europe are a lot. That rate has to increase if we're to hit the targets that are there across the European Union and the European states.

On the other side, demand is also changing and we have a lot of new demand appearing on power systems across the world. Electric vehicles, heating and cooling. The one that everybody wants to talk about now is data centres and we'll talk about that later today. This is a chart from the European Data Center Association from their 'State of data centres 2026 report' showing IT load in Europe as of 12 gigawatts at the end of last year and moving towards 30 gigawatts in four or five years' time. So that's the addition again of 20 gigawatts of very high utilization factor load once it's up and running equivalent to adding a modern economy to Europe's economy in terms of energy demand. That's a pretty good challenge to think about that. As we advance the grid and the electric systems the challenges are out there to change things that have been in place for a long time and have worked. To change rapidly is a challenge that everybody has acknowledged so far.



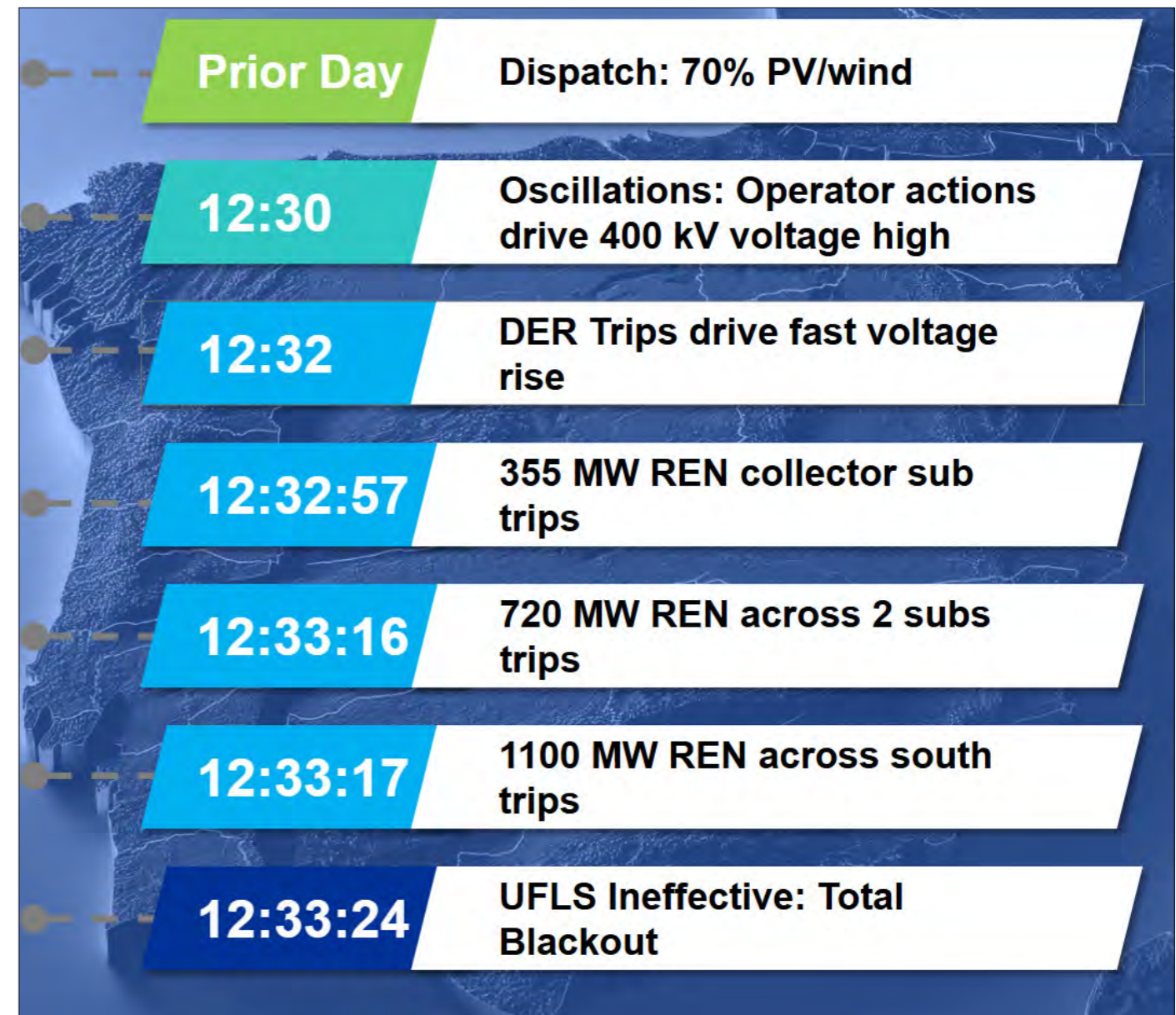
The world is changing, the grids are changing, power systems are changing all around the world. Be it climate, be it cyber, be it stability and reliability, all those things present challenges for grids under transition.

In the last two to three years, we've seen some big events in some of the major economies starting with the California Texas events in 2021, winter storm Elliot on the US East Coast, a very major blackout in Chile, a very major event in Czechia here in Europe. Then the Iberian event of last year in April. I'm sure you've heard about it before.

So, if you take yourself to the 28th of April, what we saw day ahead, was a system that needs to be operated at 70% renewables. This is a common kind of operational regime that power systems across the world will have to do day to day out in a not too distant future, and Spain is amongst a set of grids and countries, and regions that do operate at that level quite regularly. So a high renewables day, medium load.

If you look at the time frame to go from the DER trips to the system blackout, that's just over one and a half minutes. If you look at when the cascade started, that's 27 seconds. So that's a dramatic shift in how the power system operates, and it's exactly where we're heading, towards something much faster and more dynamic as the grids change.

What did the Iberian event tell us around the world that we should take note about? There's a couple of big learning points that can be taken. The first one is about the system defence. How we set our grids up to be able to integrate all these new types of generation, storage, new types of networks, new types of demand with very fast dynamics, means that our approach to protecting the power system and to ensuring that events can be isolated needs to continue to emerge. That requires coordination from the market level all the way down to the design of the assets added to the system.



How risk drivers converged. On April 28th, 2025 a resource dispatch and oscillations drove a complex operating scenario that cascaded into a total blackout within 27 seconds of the first HV network trip.

The second one is about the resource performance. You can ask a power electronics device, a solar plant, a wind plant, a battery plant, anything to do whatever you want it to do. There are a lot of things that all these assets can do. However, how it stays coordinated and aligned with what the grid needs at that time is an ongoing issue. This has been at the heart of blackouts since they began, and it was highlighted again in the context of the Iberian blackout.

The third lesson is that if you want to operate a power system with far more assets on the system, far more devices, it's a complex thing and there are a lot of moving parts. We have existing policies and procedures in all systems to manage the key issues, but what we see is as grids change extremely quickly, those policies and procedures become outdated, and what worked before doesn't work now and most likely in the future. In some cases they can interfere with each other and make it worse. Thus, our policies and procedures need to move at the speed that the system is moving, and that's a constant battle to keep those things aligned.

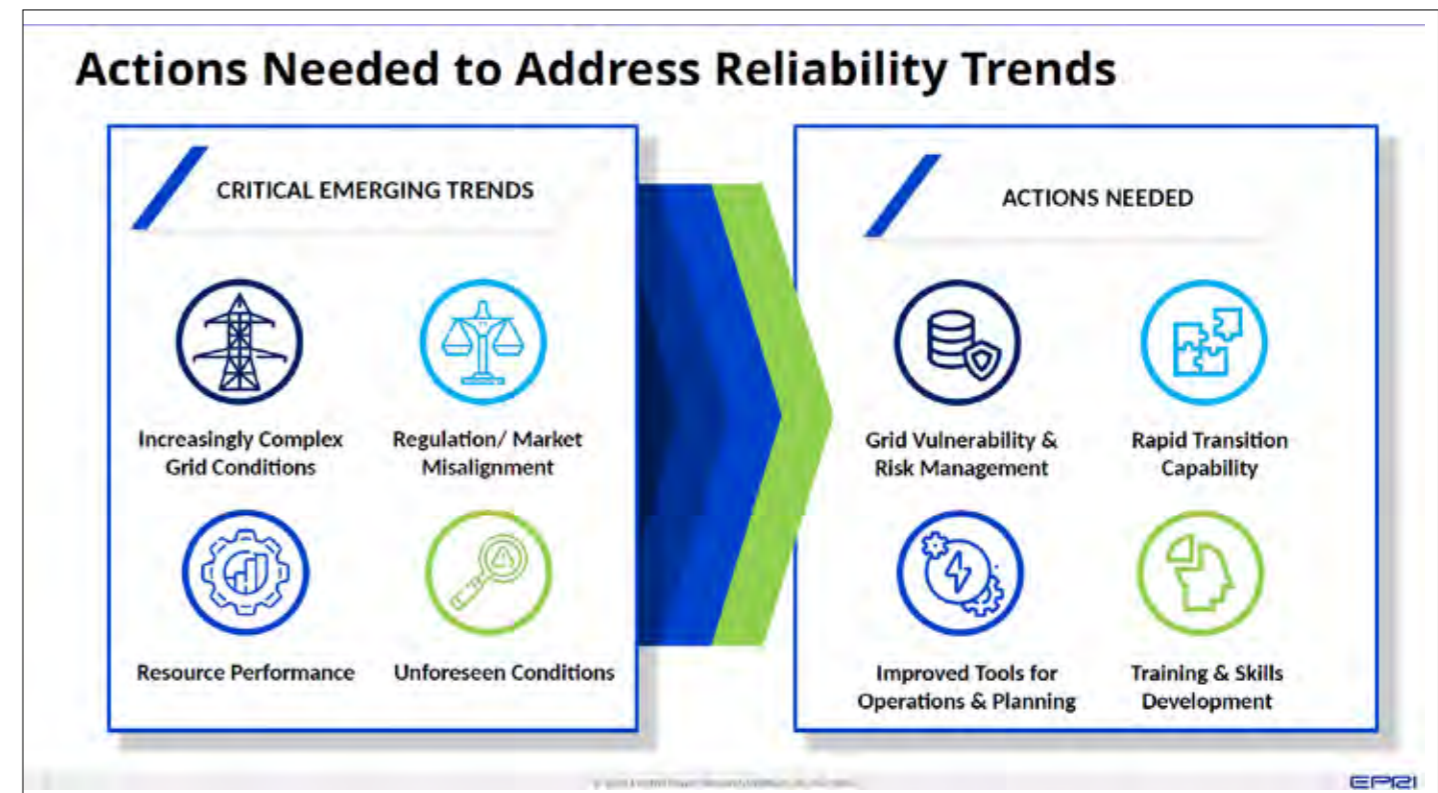
Lastly, it is also about regulation and markets. In many cases we see regulation ahead of the issue, and in some cases, we see regulation that lags an issue. With the speed at which power systems are changing, if these two factors – what is actually happening on the system and the regulatory or market design – fall out of alignment with the physics of the grid, the system becomes vulnerable to a reliability event. This is why we see it becoming such a significant concern. That means complexity and speed are the two names of the game that grids around the world need to address and they need to do that with a new approach.

Systems around the world have been relatively stable in the west and growing in Asia and the Middle East. However, moving from a relatively stable operating paradigm to a high growth paradigm needs to change the engineering mindset. We need AI and we need engineers, and we need engineers that are very good, and universities have an incredible role to play in this. So, we need tools and people to be able to support this massive transition that's underway around the world.



Credit: Wikipedia

Metro stations were closed during the blackout.





Credit: Dreamstime

## From big consumers to grid partners: powering AI the right way

### Dr. Renāte Strazdiņa

National Technology Officer North Europe Multi-Country Cluster at Microsoft



Renate is a seasoned technology leader with over 25 years of experience in the IT industry and management consulting. Currently, she serves as the National Technology Officer for the Central Europe and Central Asia region, where she supports customers in their AI transformation journey. Before joining Microsoft in 2016, Renate was an Executive Director at EY Management Advisory. Since 2021, she has been an independent supervisory board member of Swedbank Latvia. Renate is also an active mentor for women in tech and holds a Doctorate in Engineering from the Faculty of Computer Science and Information Technology at the Riga Technical University, as well as a master's degree in management from the University of Latvia. Additionally, she has a background as a leading researcher at the Riga Technical University Faculty of Computer Science and Information Technology. Over the years, she has served as a board member of the American Chamber of Commerce in Latvia and the Latvian Information and Communications Technology Association.

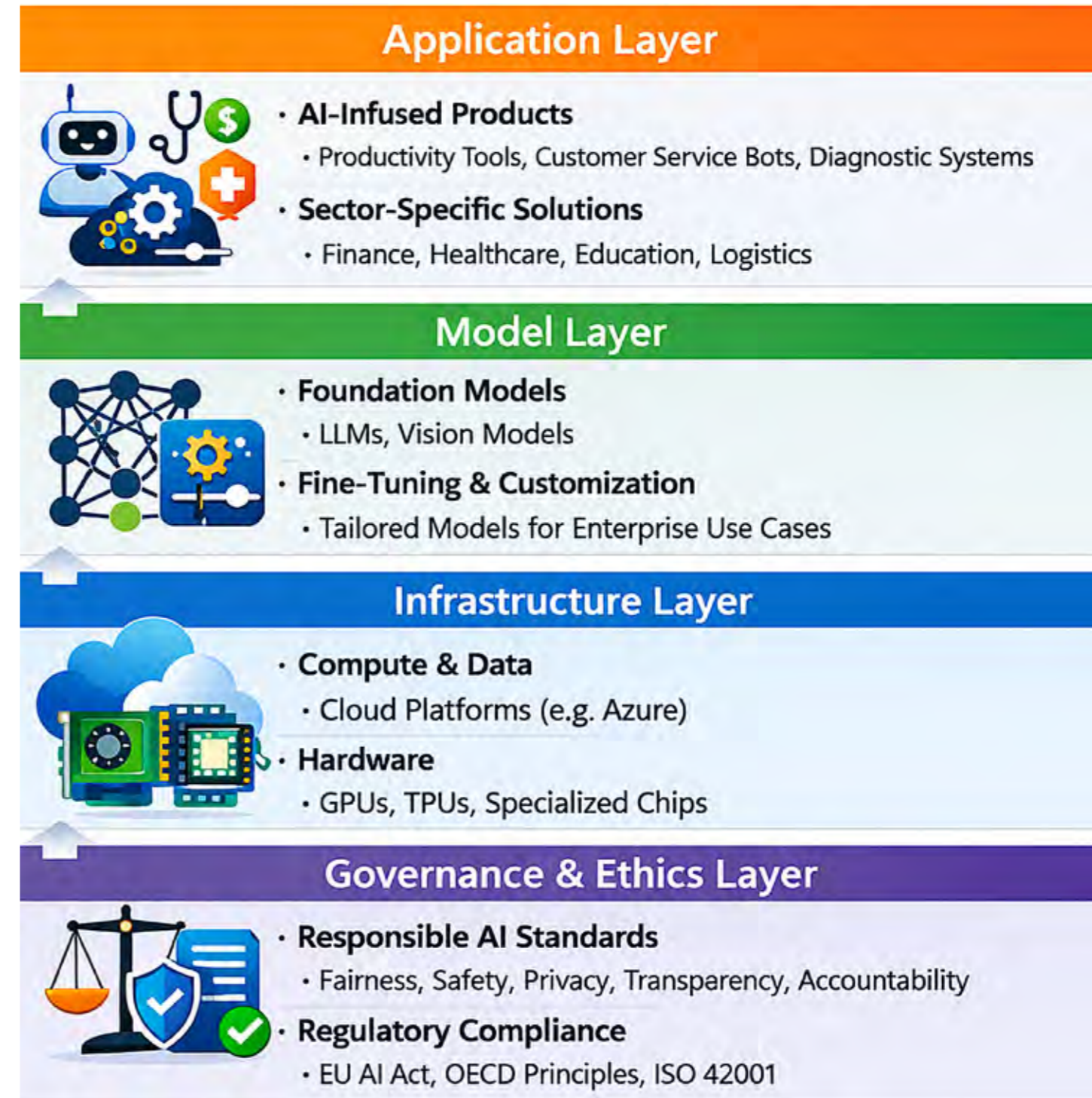
**AI is the fastest spreading technology in the world now. 1.2 billion users in three years, this is unprecedented pace. AI as a technology is very energy consuming.**

We can talk a lot about force industrial revolution and changes that are happening in the world, but when I'm receiving invitations like I received to participate in today's event, then I really understand that real changes are happening because we are looking how to connect the dots among two big industries, and we need to have this dialogue.

I am not from energy industry and I was always keeping myself as far as I can do from this industry. But here I am, and today I will talk about AI and data centres, and how we are relying on all what you are doing here.

I was happy to see that there are complexity and a lot of similar challenges to what I will be talking about just from the perspective of IT industry. AI was already mentioned, and what we see AI is the fastest spreading technology in the world now. 1.2 billion users in three years, this is unprecedented pace. AI as a technology is very energy consuming. So, these are the things that we cannot change, and the latest reports that we have seen also clearly shows that energy infrastructure choices can accelerate AI diffusion, and this is what I will be talking about today. I will start with AI value chain. The reason for this is that AI is not only energy consuming, but it is also a very complex technology with a lot of stakeholders. It brings a lot of value to us but also it also raises a lot of questions that we need to answer together. I will talk about the cloud infrastructure and sustainability. How do we see this from the data centre perspective? The last element will be about what we can do together or what we are already doing together.

Let's start with the AI value chain. On one hand, technology stack that we know that is behind AI is something that is easy to explain. We go from chips to cloud, to model, to applications, but this doesn't fully reflect the complexity of AI ecosystem, and that's why I suggest that we look at this as a value network. So, this is a dynamic system where there are many interdependent stakeholders who are both contributing to and benefiting from AI. On the foundational layer, on the infrastructure layer we see three main elements. These are electricity, connectivity, and computing. This is what we are looking for when we are making decisions about the next data centres and the next infrastructure elements that we will put in place.



AI value chain layers

Of course, as much as those three are very important, and these are more technology related, digital and AI skilled workforce is as important as those three elements. I will not cover this today but for AI it is also important that we have the digital language resources in the respective countries. However, it's just the base level. Then we have the model layer where there are a lot of stakeholders who are working on this and both benefiting from and contributing to this layer. Then, at the application layer, for example, we see breakthroughs in large language models. . This model can be or is supposed to be used in energy industry. So, we will have both. There will be contribution from the infrastructure layer with data and then the results will come back as an app, for example, for the intelligent grid systems. This is how it works. The research shows that the AI diffusion is strong where we have the foundation strong and vice versa.

Let's talk about the cloud infrastructure because this is the substrate for the artificial intelligence. However, the footprint of the data centres and the fibre is not enough. The electricity that is clean, reliable, and available is playing a critical role here. Why is it also important to talk about the electricity that is clean and available? All the hyperscalers, including us, have sustainability commitments, and energy is a central component of those commitments. This is the number one priority because of our commitment that we will be carbon negative by 2030.

What are we doing to achieve this? When we talk about our data centres, there are four main elements to consider. The first one is the IT operational efficiency. This is more on the technology level. Then we are investing into the ID plan efficiency and the data centre infrastructure. The element that is the most interesting most likely for this audience is the energy consumption. Our objective is that 100% of energy needs to come from the renewables. What we are doing to achieve this? First, we are partnering with the energy producers. We are entering into long-term renewable power purchase agreements. This is the standard practice, and this is also how we are adding substantial amount of carbon-free energy to the grid.

To achieve this we are using 24/7 matching systems such as the practice that we now have in Sweden, and we are also continuously investing in AI enabled energy efficiency projects that make our data centres more energy efficient. This is one of the examples that is very close to this region as it is coming from Finland. This is an example where we use green energy in our data centres, and where we also partner with Fortum to reuse waste heat for district heating systems.

The question is: what were the parameters that guided our decision on where to locate the data centre in this case? First of all, it was the availability of green and sustainable energy. The second one was great connectivity. The third for this case was that there was a proximity to district heating system so that we can supply the heat there. Besides, as I mentioned already before, AI and digitally skilled people in the country. So this is the complexity of AI and data centres behind it all, and I think there are no doubts that we are in the beginning of big change, and we believe that AI will be enabled by green and sustainable energy. This will allow us all to benefit both from the technology and AI results, but also create our environment more sustainable.

**Microsoft's sustainability commitments**

- Be carbon negative by 2030, and by 2050, remove all historical carbon since our founding in 1975.
- Be water positive by 2030.
- Be zero waste by 2030.
- Protect more land than we use by 2025.

# Datacenter Innovation in Sustainability



## Advancing Carbon Free Energy

- Microsoft partnering with Constellation Energy to restart Three Mile Island Unit 1, launch Crane Clean Energy Center (CCEC.)
- Adding **835 MW carbon free energy** to the grid through CCEC
- Facility to come online 2028



## Power Harvesting for Energy Efficiency

- Updated data on Microsoft intelligent power harvesting, started in 2019
- As of 2024 data, **recovered ~800MW** of electricity
- Equivalent of EV driving for **2.8 Million miles**



## Innovating for Water Usage Improvement

- Microsoft has **improved Water Use Effectiveness (WUE) by 39%** compared to 2021
- Driven by reduced water wastage, expanding operating temps, and operational audits
- Announced **zero water evaporation** in future datacenter design



## Reducing Carbon in the Built Environment

- Moved from pilot to active implementation of Cross Laminated Timber (CLT) in new data center construction
- Hybrid construction approach with CLT **reduces embodied carbon by 35% vs. conventional steel, 65% reduction vs. precast concrete**

## DISCUSSION

How to meet rapidly growing electricity demand while keeping the lights on and prices competitive?

**CHAIR OF DISCUSSION**  
Dr. LĪGA KUREVSKA

---

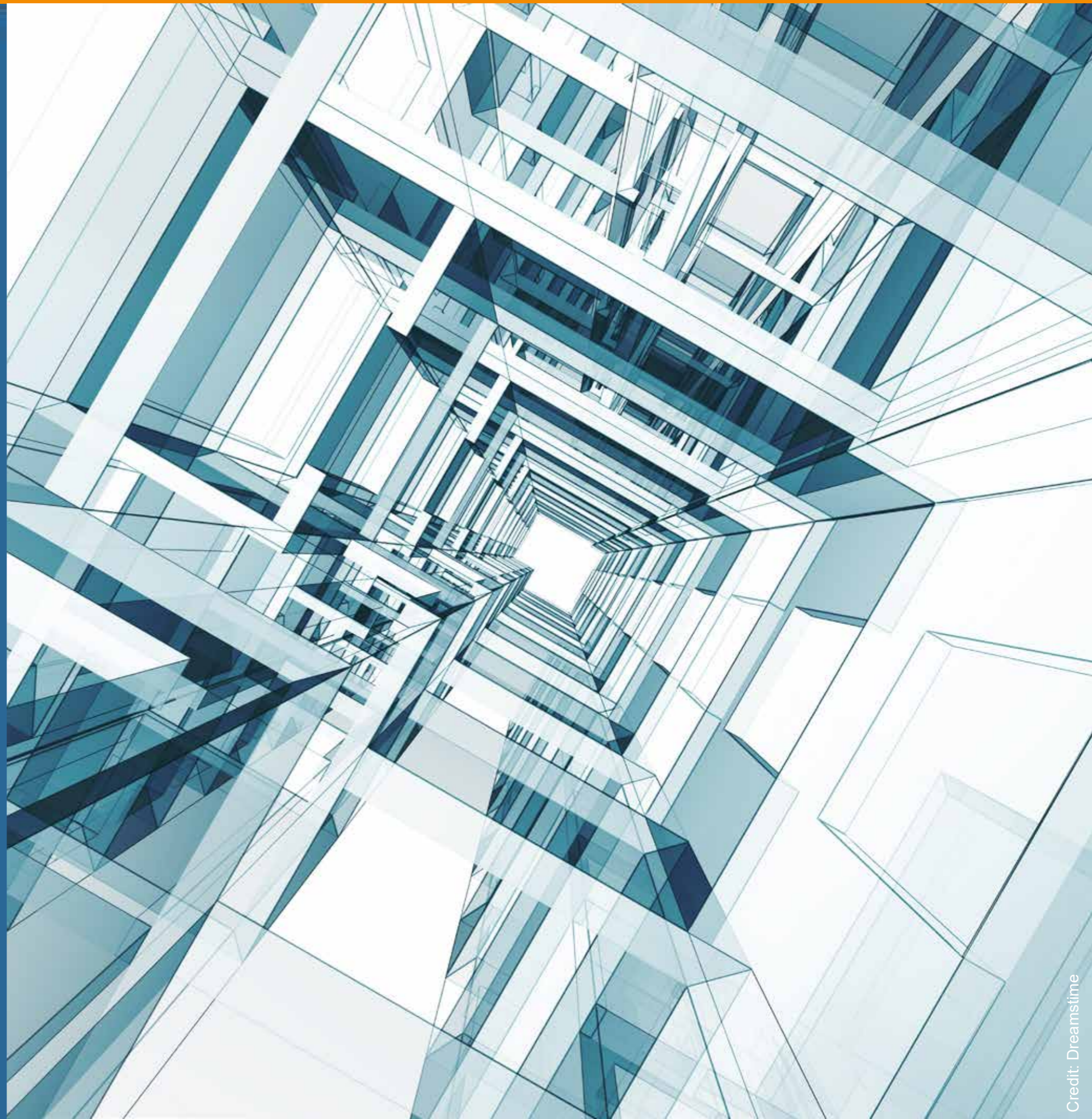
**Dr. MĀRTIŅŠ ČAKSTE**  
CEO of „Latvenergo” JSC

**Dr. EAMONN LANNOYE**  
Director of Research & Development at  
EPRI Europe

**Dr. RENĀTE STRAZDIŅA**  
National Technology Officer North Europe  
Multi-Country Cluster at Microsoft

**FRANCISCO LAVERON SIMAVILLA**  
Head of Energy Policy at Iberdrola

**ANDRUS DURJEKO**  
CEO of Enefit





The discussion, chaired by Dr. Līga Kurevska, brought together system, utility, and technology perspectives to address a shared challenge: meeting rising demand while keeping electricity efficient, reliable, and affordable. One key takeaway: reliability in the transition is no longer just an energy-sector issue. It is increasingly a cross-sector coordination challenge – linking generation, grids, markets, and rapidly growing demand. Addressing this challenge will require closer coordination across sectors, smarter planning, and continued collaboration between policymakers, system operators, and technology providers.



Dr. Līga Kurevska: Demand is accelerating. Grids are changing and reliability expectations aren't decreasing. As energy needs rise and generation portfolios shift, the grid is being asked to do more, to be faster, with less room for error. Today's session is about meeting the challenge honestly, scaling clean power, keeping systems stable, and making sure transition is both fast-paced and seamless.

Dr. Mārtiņš Čakste (Latvenergo) reflected on the first year since the Baltic states synchronized with the Continental European grid: "The first year shows that the system is stable. Despite being tested by many events, it has been managed very well." He also highlighted the growing role of digitalisation and AI in system management, the operational realities of balancing markets, and the increasingly strong case for battery systems to improve resilience while reducing operating costs.

Speaking on the Iberian blackout (April 2025), Francisco Laverón Simavilla (Iberdrola) emphasized that grid operation procedures must keep pace with the realities of high-renewables systems. Voltage control, inertia distribution, protection settings, and grid reinforcement all matter. And decision-making should be guided by the needs of the technical system: „We have to listen to engineers and we have to rely on what they say, and to be prepared because if not then we will have problems again.”



Andrus Durejko (Eesti Energia) underlined the investment challenge ahead – replacing legacy dispatchable capacity and financing new flexible assets at scale – adding: „There are many options; we need to choose the right ones and keep the grid in balance.”

Dr. Renāte Strazdiņa (Microsoft) explained the factors shaping data-center location choices, noting that clean and reliable energy is now a foundational criterion alongside connectivity, latency, business continuity. Another important factor is talent availability: “A digitally and AI-skilled workforce is another critical element, making the overall picture more complex.”

Dr. Eamonn Lannoye (EPRI Europe) shifted the discussion toward system integration, focusing on how market signals and standards could enable large loads, including data centers, to act as system partners rather than just consumers, while acknowledging reliability constraints and exploring flexibility options. Designers therefore need to understand how to incorporate flexibility into their designs and which forms of flexibility will enable grid connection.

# FINANCING THE ENERGY STRATEGY AND DELIVERY PATHWAYS FOR OPTIMAL ECONOMIC IMPACT

- Business case of multiple energy pathways: sectors getting economic benefit
- Bioeconomy, circularity, and productivity enhancement in practice
- Supply-chain disruptions and how to manage them



## CHAIR OF THE SESSION



**Prof. Gundars Bērziņš**

Rector of the University of Latvia

Gundars Bērziņš is rector and professor of the University of Latvia, he has a PhD in Management Sciences (Dr. sc. admin.). He is also a leading researcher at the University of Latvia and a full member of the Latvian Academy of Sciences, as well as Chairman of the Productivity Board of Latvia. Bērziņš started his work at LU in 2000 as a lecturer at the Faculty of Business, Management and Economics (FBME), and in 2003 he also became the executive director of the faculty. Later, from 2008 to 2010, he worked as the director of the Finance and Accounting Department of the LU. In 2010, he became the chancellor of the University of Latvia, but in 2014 he started a successive path to the academic position of professor, which he obtained in 2018. Bērziņš was the dean of LU FBME from 2016 until March 2024. From 2019 to 2021, he was also the chairman of the council of AS "Olainfarm". Gundars Bērziņš has also been an adviser to the President of Latvia and an expert of the Parliament (Saeima).



“Sunly” solar park in Barkava, Latvia.

Credit: Sunly

## Powering Europe

### Paulina Brzezicka

Head of the EIB Group Riga Office

Paulina Brzezicka is the Head of the EIB Group Riga Office, established in 2025. She is a senior European investment and policy leader, working on the intersection of EU strategy, development finance and national economic delivery. Paulina brings nearly two decades of financial sector experience, having worked across the EIB Group’s product range, spanning private equity, corporates, PPPs and advisory. Co-author of access-to-finance studies on EU priority sectors, including circular economy, bioeconomy and hydrogen. Economist by training, Paulina graduated from University College London, Bocconi University and Wirtschaftsuniversität Wien.



**The EIB is not only Europe’s climate bank; it’s also Europe’s innovation bank.**

Thank you for the very nice introduction and thank you so much for the World Energy Council for having me today. It's a really a great pleasure and I am humbled to be speaking today alongside such distinguished panellists. I have a few topics to address. What is Europe's climate bank? What is the European Investment Bank? Who are we? What are the challenges of the green transition? How can we address them, and then how have we address them? I will talk about the examples, and I will talk about what's coming next.

Let me start by saying a few words about Europe's climate bank. But before that let's warm up.

Question to the audience. What do you think? What is the annual energy bill paid by the European Union? Is it 300 billion after China and the US? Is it 350? Or is it 400 billion annually? I know there are a lot of specialists here today. Shall I reveal the answer? Usually in these quizzes the most shocking answer is the correct one. So indeed it's 400 billion. This is the EU paradox. Despite our aggressive transition efforts, the EU remains the world's most expensive energy importer. It is more than 400 billion annually the cost of importing fossil fuels. It is clearly something to talk about.

Now let me introduce the EIB. The European Investment Bank was established by the Treaty of Rome, and we are owned by the EU Member States. We are also governed by the European Member States, and we are here to serve them. It is one of the largest multilateral lenders and borrowers in the world. We raise funds on international capital markets.

Thanks to our shareholders, we have a AAA credit rating which allows us to pass on those favourable conditions to our borrowers. It's a crowding in bank, so we do not compete. We want to crowd in private capital. That's the purpose of our work. We have mobilized over 5 trillion euros in capital since the bank was established in 1958. The bank is based in Luxembourg with more than 4,000 staff, but we have offices all around the world. I am the head of the EIP group Riga office which was just recently established last year. Now we have one dedicated office in each Baltic state.



Public

## EIB AT A GLANCE

**ONE OF THE WORLD'S MAJOR MULTILATERAL LENDERS AND BORROWERS**

- We raise our funds on the international capital markets.
- We pass on favourable borrowing conditions to clients.
- All EU Member States are shareholders and governors.

**OVER €1.5 TRILLION INVESTED SINCE 1958**

- Established by the Treaty of Rome
- More than **14 000 projects** in **over 160 countries**.
- Crowding-in bank: **€4.9 trillion** overall investment supported.

**HEADQUARTERED IN LUXEMBOURG**

- Over **4 200 staff**: finance professionals, engineers, economists and socio-environmental experts.
- **60 offices** around the world.

2024 data 

Public

## A RESPONSIBLE FINANCE PROVIDER



We monitor the environmental and social sustainability of all of our investment projects.



We appraise all human, technological, or natural resources used by the project.



We exclude certain economic activities.



We report greenhouse gas emissions from all projects with a significant impact.



We monitor, report and implement the reduction of our own environmental footprint.



We ensure strong governance, transparency and accountability for ourselves and our counterpart.



The European Investment Bank is also a responsible finance provider. What does it mean? It means that we monitor the environmental and social sustainability of all our investment projects. We monitor ourselves, we monitor our own environmental footprint, our own greenhouse gas emissions and the gas emissions of projects with significant impact. We appraise all aspects of a project, not only the finance element alone but also human, technological, and natural resources that are used in any project. We exclude certain economic activities. Finally, given our reputation that we have to uphold, transparency matters and we look at a strong governance and strong accountability of all of our partners.

Six years ago, the European Investment Bank launched what we call the climate bank roadmap. A road map to becoming the climate bank. This was in 2020. We came out with extremely ambitious goals, one of them being 1 trillion euros of investment mobilized by 2030. Again, huge figures, but it's happening. We are fully on track with this goal, and we have already mobilized 740 billion between 2021 and 2025.

What the bank is focusing on going forward is innovation, security, and simplification in the context of the green transition. Why do we focus on innovation, security and simplification? It's the dual challenge of innovation and investment that must go hand in hand to make the climate transition happen. Innovation is what we need to develop new technologies, and investment is what is needed to replace the existing technologies with clean tech. We have a financing gap of more than 400 billion Euros annually to meet the climate goals. On the innovation side, the technologies that are not yet available will deliver 30% of the emissions reductions that we need to reach our net zero targets. We need to tackle both aspects, both the innovation and the investment aspect to close the gap, strengthen our industrial base, create value jobs and foster resilient supply chains.

I do have some good news as well. Global energy investments are quite large. In 2024, they exceeded three trillion globally. The ratio to fossil fuels is 2 to 1. The world is investing twice as much into clean energy as it is into fossil fuels.



## CLIMATE BANK ROADMAP

- Invest more in projects that simultaneously support the **green transition, environmental sustainability and social development.**
- Prioritise innovation and digitalisation to **cut carbon emissions.**
- More support for **sustainable agriculture, forestry, bioeconomy, green cities, renewable energy, low-carbon transport.**
- Substantially increase efforts on climate change **adaptation.**
- **Support businesses and people** for the climate changes that are happening right now.

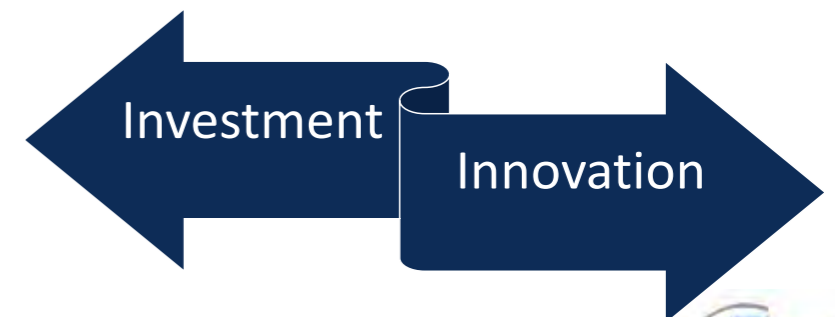


## Mind the gap: the “two Is”

Dual challenge of the energy transition:

- A gap of €406 billion remains to be filled annually in order to meet the EU's 2030 climate goals → **Investment**
- Technologies not available on the market deliver 35% of the emissions reductions needed in 2050 to reach net zero. → **Innovation**

**Even more challenging, investment and innovation must occur in parallel**




Just a few years ago that was the opposite. So, we have already made a shift. The same ratio in Europe is 10 to 1. For every one Euro invested into fossil fuels in the European Union, we actually invest 10 Euros in clean energy. As a result the money is really going where our mouth is. However, the bottle is still half empty. It's good news, but it's also not so good news. The half empty bit is that we still have 400 billion of an investment gap annually in the European Union alone to meet our 2030 climate goals. Talking about bottles, there is another bottle that is still half empty. It is the widening innovation gap. Here in the European Union, we have a vibrant R&D scene. We have a long-standing tradition of research and development, scientific excellence, technological breakthroughs, and the public and private investment is supporting the R&D system. However, we have a huge scaleup gap. The problem is not in terms of developing ideas. We have the ideas. The problem is scaling them up. Despite the strong foundation that we have, European firms are only investing half as much as their US counterparts into R&D when expressed as a percentage of GDP. The Draghi report estimated this gap at 270 billion per year.

When we compare Europe and the US in terms of venture capital, the gap only for venture capital is 80 billion annually and then it continues widening as we move on to further growth stages. The challenge is really not the invention alone but the ability to scale the invention.

And how can we do that? To address a dual challenge, we need a dual approach. Typically risk investors are not patient and patient investors are risk averse. What we need is a player that combines patient investment with risk appetite, and this is where entities like the European Investment Bank come in. Our role is to support both emerging and mature projects and, indeed, we are supporting, we are a patient investor. That means that we provide patient capital with long maturities and long tenors. We wait for a return. It is not a fast-food type investment. We can sit it out and wait for the returns to come. I have a lot of numbers here and the numbers are huge but let's just say last year alone 60% of EIB's investment went into the green energy transition and we are talking about 100 billion annually. So, the money is really going where our mouth is.

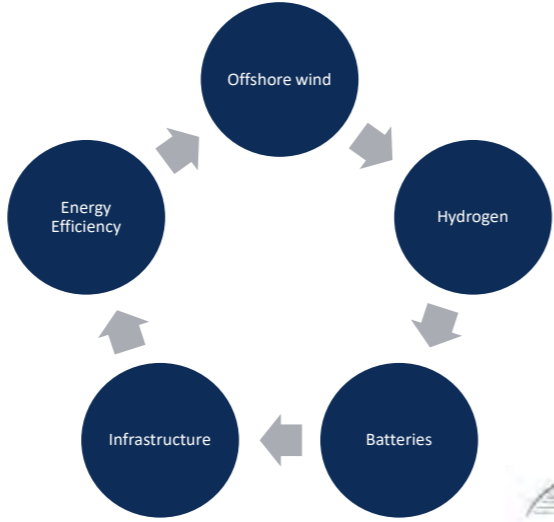

On the other hand, we are not only supporting these huge infrastructure projects and solar plants and wind farms. We are also supporting innovation. This is the risk appetite that I was talking about before. The EIB is not only Europe's climate bank; it's also Europe's innovation bank. We are the biggest venture debt provider, for example, in Europe. We have a financial product for every need, and I know that this may look very crowded but what I'm trying to show is that across a company's growth cycle from inception and seed stage, all the way to full financial maturity, there is dedicated European Investment Bank group product that will serve its purpose. We are talking about the European Investment Bank group. That includes the European Investment Fund which is the biggest venture capital and private equity investor in Europe investing in equity. We also provide guarantees. We provide loans to banks that then pass on those loans to SMEs (small and medium-sized enterprises). We provide project finance, corporate loans and public sector sovereign loans. We are really covering everything there is to cover across the banking spectrum.



Public

### Risk and patient capital: role of the EIB

- EIB support spans across different sectors and the whole value chain

In terms of innovation, we have launched the biggest ever programme for financing innovation in Europe and we are going to invest seventy billion Euros specifically into European innovation by 2027

We have spoken about innovation, we have spoken about investment, what about the security? Obviously, the security has not been forgotten. When the REPowerEU initiative was announced, the EIB also did not stand still. We supported the goals with 30 billion in additional financing that was later increased to 45 billion to be invested until 2027. This is about our security and competitiveness. This money is going into real projects that reduce Europe's dependency on fossil fuels from Russia, making the European economy stronger and more resilient.

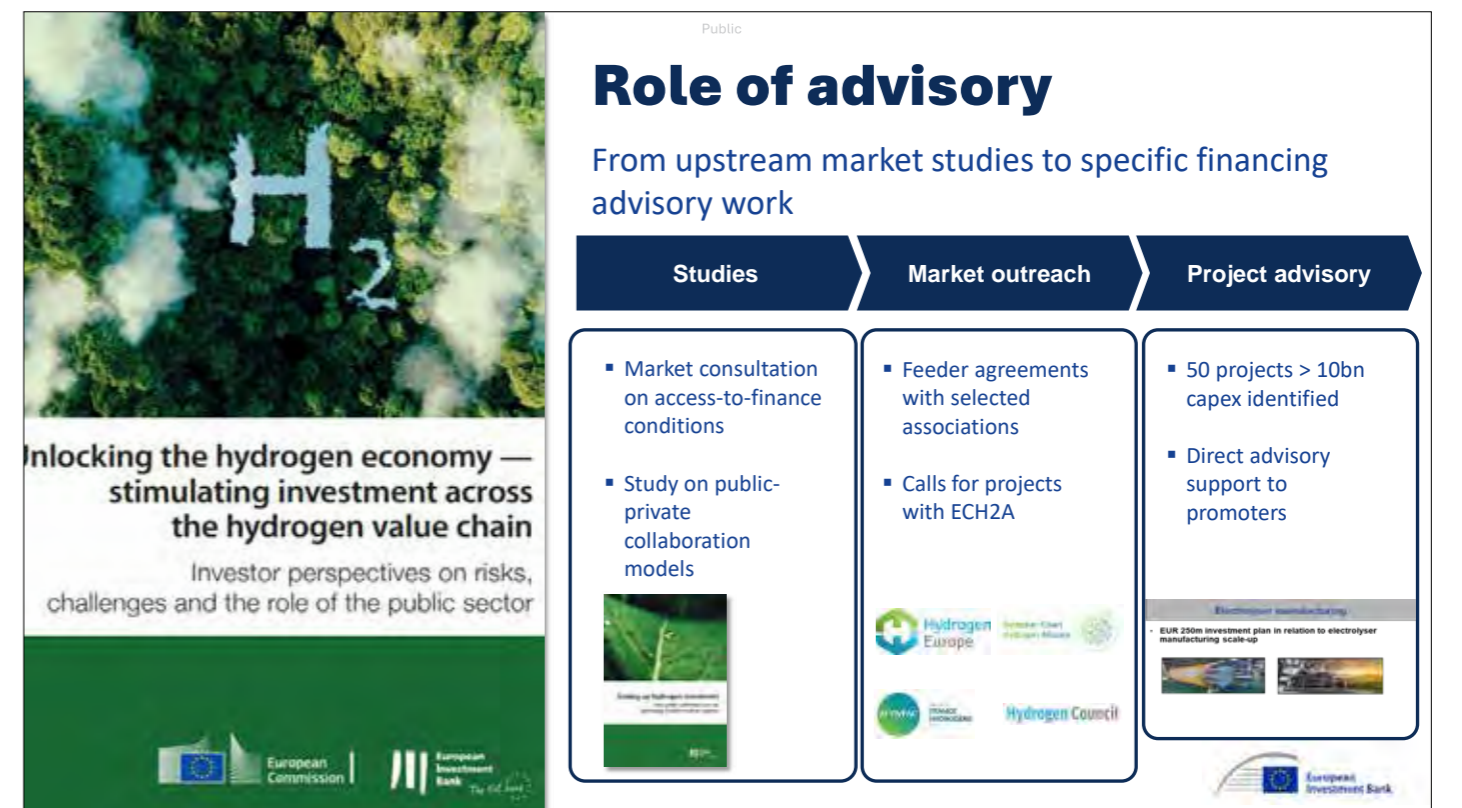
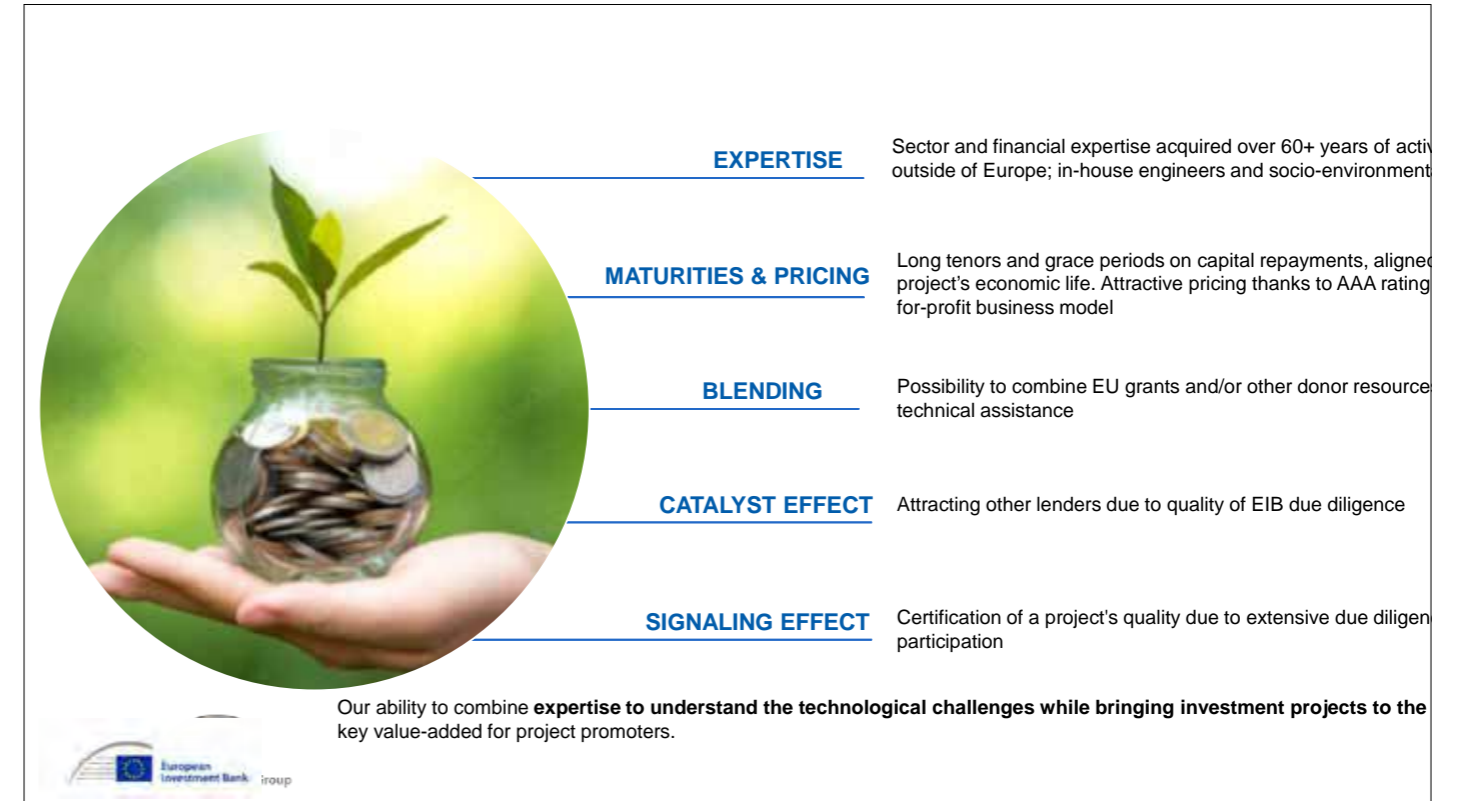
We are powering Europe.

So, we've spoken about the 100 billion, 60% of it went into green projects. I have heard a lot of people talking about the business case. Where is the business case? For us, the business case is clear, it has not changed. The political realities are shifting, we are focusing on the security and the competitiveness, but we remain committed to being Europe's climate bank and energy revolution in Europe is already in full swing and we are continuing to build on our strands.

The EIB can help you do that if you are part of the green energy revolution. The EIB has a lot of products that can help you and partnering with the bank is not only about money. It's about the signalling effect and the reputation. It's about the extremely deep diligence that we do and it's also about working with us over time. We provide advisory services to our clients. We don't only provide the money. We are supporting the system from bottom up.

This is a report that I had the pleasure of contributing to about unlocking the hydrogen economy. It was written around six years ago, already before the EIB had made a single investment into hydrogen. We sat down, we looked at the market. What can be done? How do we unlock the investments in this new emerging thematic? So, we created a dedicated advisory programme that identified the hydrogen champions in Europe. we teamed up together with the Clean Hydrogen Alliance and we supported them.

I'm happy to say that the EIB has now also already financed over 1 billion directly into hydrogen projects. This is what we do. We look at the markets and then we work with the project promoters on designing creative solutions to the challenges.



What do we do in Latvia? We have been active in Latvia since 1994 and last year was the record year following the opening of the office. 380 million euros were invested in Latvia last year and the lion share of that went to sustainable energy and the green transition. We have three big transactions that are benefiting everyone. We provided a 200 million loan to “Latvenergo” to upgrade the existing energy distribution network. We helped “Rīgas ūdens” to upgrade its water supply network, to also align it with environmental standards and improve its climate resilience. Moreover, we teamed up with “Sunly” by providing a 45 million loan to build solar parks in Latvia that will produce clean electricity for up to 180,000 households to be powered, and that was without the government subsidies.

I have a lot of projects I can mention. As I said, it’s 60% of our business. Most projects that the EIB finance are connected to the green transition. To give you a few examples. There are the usual players such as wind farms, but we have also some more interesting points. For example, last year we financed in Castilla-La Mancha a green hydrogen production plant in Spain. If anybody wonders whether financing for hydrogen exists, it does. We financed the high voltage direct current link connecting Ireland and France and we have all sorts of other similar projects. You probably have heard about the large offshore wind farms in Poland. Last year we provided only 1.7 billion to offshore wind energy projects in Poland alone, backing the biggest wind farm in Europe. Furthermore, in Lithuania, we backed the largest Baltic onshore wind farm with a 100 million loan.

What is next? We have a new strategic orientation. Just a few months ago, we came up with a concept to consolidate our role as the climate bank to make sure that whatever we do is aligned with our security goals and with our competitiveness goals, as well as radically simplifying the process in between. We are focusing on scaling up clean energy supply, boosting efficiency, and making sure that the European Union is competitive and decarbonized.

The most important point I want to leave you with today is that private investment is the name of the game. A decade ago, about 60% of the investments into renewables and into green energy were coming from the private sector. Today it’s about 50/50. The public sector is doing more, but we need to mobilize more private sector investment to make sure that we bring this unified strength with multilateral borrower lenders such as the EIB together with private investors.

What we have learned from investing in key sectors over recent years is that what truly works is public sector support in the early stages of project development through grants, feed-in tariffs, and other instruments. The role of the public sector at these initial stages is critical in absorbing risk. As we move forward, as the investment size increases we need to mobilize more private sector capital.



**Financing energy transition**

**Private sector mobilization is the name of the game**

- The scale is too big for the public sector to face alone
- Yet yearly growth of private capital has been much slower (4.8%) than public finance (9.1%).

**Lessons learnt from successful mobilization in few sectors (wind, solar and now batteries)**

- Large initial public sector support (investment grants, feed-in-tariffs-, etc.)
- Role of public banks at early stages to absorb technological risks, increasingly combined with private financiers.
- Smart regulations gradually incorporating market me

Public

European Investment Bank

## DISCUSSION

How do we finance the energy transition in a way that delivers real economic value and not just green labels?

**CHAIR OF DISCUSSION**  
Prof. GUNDARS BĒRZIŅŠ

**ALDA OZOLA**  
Vice President, Council of European Energy Regulators

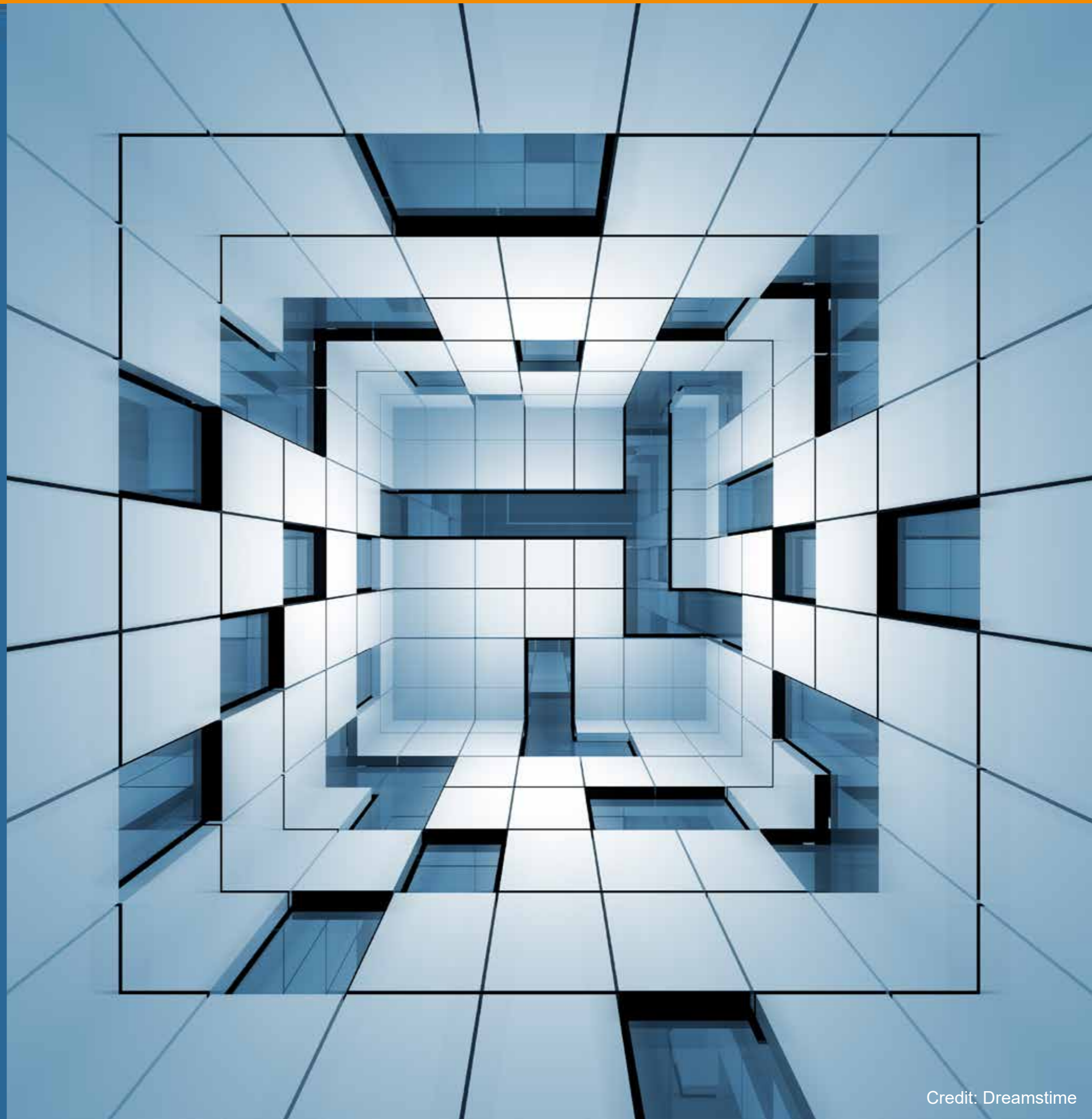
**HALA N. BALLOUZ**  
Founder, Board Chair, & Chief Vision Officer of Electric Power Engineers, Inc.

**MIHAILS KOZLOVS**  
Member of European Court of Auditors

**KIM STRENGMAN**  
Renewable Energy Portfolio Development Manager Ingka Investments (IKEA)

**STEFAN KAPFERER**  
CEO of 50Hertz

**PAULINA BRZEZICKA**  
Head of European Investment Bank Group Office in Latvia



This discussion convened leading experts from finance, regulation, transmission system operations, renewable energy investment, engineering, and EU oversight. It highlighted that financing energy transition extends beyond capital availability, requiring alignment across governance, infrastructure, innovation, and markets to achieve measurable economic and societal impact.

- Renewable generation is becoming increasingly cost-competitive – but true system affordability depends on parallel investments in grids, flexibility solutions, and cross-border infrastructure.
- Grid modernization and expansion are at the heart of the transition. Tariff-based recovery alone is insufficient; public funding and EU-level coordination remain essential.
- Persistent price differences across Member States underscore the need for stronger cross-border interconnections and better-coordinated infrastructure planning – especially in the Baltic Sea region.
- Europe excels in innovation – but scaling technologies remains a key challenge. Bridging the innovation-investment gap will be essential to securing long-term competitiveness.
- Key bottlenecks in the coming years include policy stability, regulatory predictability, the availability of skilled labour, supply chain resilience, and consumer engagement.



**Prof. Gundars Bērziņš, rector of the University of Latvia:**  
“Nobody notices engineers as long as the electricity works – but everyone notices their bills at the end of the month. And that’s what we’re going to discuss today: how technical solutions are developed, and how they connect with financial realities – the need to grow businesses, expand grids, and attract investment. There are many different needs and perspectives to consider.”



Mihails Kozlovs (European Court of Auditors): “Electricity price differentials among Member States are still significant. This highlights the need for more cross-border projects and additional interconnectors. We already have some good examples, including in the Baltics, such as the synchronization project. We need more initiatives like this. Too often, cross-border projects are underfunded, while national priorities tend to favor local investments. In my view, this represents a missed opportunity to use EU budget resources more effectively.”

Hala N. Ballouz (Electric Power Engineers): “The answer is to think outside the box – not to focus on understanding that regulators always lag behind technology, which is evolving very quickly. Instead we need to rethink how we do things. The role of the regulator should be to enable engineering, finance, and economics to work together to identify holistic system-level solutions rather than project-by-project fixes. These solutions should emphasize flexibility and efficiency so that we can achieve low costs. Only then we can keep up with the rapid pace of change.”

Alda Ozola (CEER): “From a regulatory perspective, our primary objective is to ensure that cost structures are appropriately reflected in tariffs. Regulatory stability is a key priority, as it provides the predictability that both utilities and investors need. While regulatory processes may sometimes appear slow, this often reflects the need for careful and well-considered decision-making. In doing so, we take into account the broader political and economic context—including affordability for consumers, the long-term sustainability of utilities, and the integration of new and innovative technologies into the market.”



Paulina Brzezicka (EIB): “I am often asked whether it is worthwhile to invest in the green transition. My answer is yes – absolutely. Take Spain as an example. Back in 2019, wholesale electricity prices there were among the highest in the European Union, at around €70 per megawatt-hour. Since then, Spain has made significant investments in renewable energy, and prices have come down – to roughly €60 per megawatt-hour today, which is now among the lowest in the EU. So Spain is a clear case in point: the transition to green energy can also be a transition to lower costs for consumers.”

Stefan Kapferer (50Hertz): “It is clear that each additional kilowatt-hour generated from renewables is typically the cheapest way to produce electricity. However, we must also keep in mind that additional investments are needed to ensure system stability. We need greater flexibility in the system, which is why we are seeing increased investment in battery storage. In many countries, backup capacity is also required, and this must be financed as well. On top of that, significant investment in grid infrastructure is essential. So while renewable generation itself may be cheaper, it comes with higher overall system costs due to these additional requirements.”

Kim Stregman (IKEA): “Regulatory stability is indeed very important. Price volatility – especially sharp drops – does not support investment in renewable energy. That is why stable, forward-looking regulation, rather than short-term shifts, is crucial, as it plays a key role in de-risking projects. We also place great value on maintaining close dialogue on these issues. As mentioned, regulators must consider multiple perspectives, and it is important to incorporate a business viewpoint while balancing other interests. We appreciate the opportunity to be part of these discussions and to help move things forward together.”

CHAIR OF THE SESSION



**Assoc. prof. Jurijs Spiridonovs**

RISEBA University associate professor

Jurijs Spiridonovs, PhD in economics, is a Latvian-British professional with more than 20 years of regional and international experience, currently an adviser to the Board of Directors at the European Bank of Reconstruction and Development, an associate professor at RISEBA University, and a former member of the Administrative Board of the European Agency for Cooperation of Energy Regulators, former under-secretary of state for the Ministry of Economic Affairs and for the Ministry of Environment. He is an expert in strategy, organisational transformation, and environmental, energy, and finance policy. His professional career included work with supervisory councils for companies, ministries, international organisations, universities, NGOs, and private companies in Latvia and Europe.

# COMMUNITY ENGAGEMENT AND ACTIONABLE STEPS TO ACHIEVE ENERGY AFFORDABILITY AND RELIABILITY

- Local communities: why are they against? Not in My Back Yard solutions
- The role of municipalities and their capacity
- Is there a gap between policy planning and local action?
- The role of „glue” in energy trilemma





Credit: Dreamstime

## From NIMBY to YIMBY



### Nina Hvid Enevoldsen

Director of the Nordic Council of Ministers' Office in Latvia

With long experience from the Danish Diplomatic Corps and public service in Denmark and Europe, combined with a solid background from the private sector and the EU Commission, Nina Hvid Enevoldsen is today heading the Nordic Council of Ministers' Office in Latvia. Coming from the Danish Embassy in Warsaw as Director of Trade, Ms Enevoldsen joined the Nordic Council of Ministers' Office in Latvia in September 2025. She holds a degree of Master of Law specialised in commercial, corporate and intellectual property right law combined with additional education in both leadership and psychology.

**When residents are given the opportunity to hold partial ownership, their interests naturally align with the project in the long term.**

Good afternoon, ladies and gentlemen. It's a pleasure being here today as we discuss community engagement and steps towards energy security and affordability. I speak on behalf of the Nordic Council of Ministers representing eight Nordic countries and governments, an institution that has been in Latvia and in the Baltic states for 35 years. When our office was established in 1991, the Nordic countries supported Latvia in strengthening democratic governance and independence. Today, our cooperation has matured into a partnership of equals, especially in the field of energy security and renewable development. This shift reflects a simple truth. In a time defined by fast moving geopolitical realignments and rising uncertainty, the push towards cleaner energy takes on a new meaning. It's no longer an environmental priority, but a very important strategic element for how Europe remains independent with the right to live in a free democracy.

Across the Baltic region diversification of energy sources reduces vulnerability to geopolitical unfair and unjust pressure, global price shocks, and climate impacts. Therefore, I can also assure you that the Nordic-Baltic collaboration has never been more needed than today and it has never been stronger than today. Latvia's hydropower, wind potential across the country, and offshore bioenergy in rural municipalities, and decentralized solar can be a very balanced energy mix system if we build it together with the local communities and it is grounded in public trust. So why does community support matter? Local acceptance is the cornerstone as an enabler of a quicker and smoother energy transformation. Projects that secure early and broad communication engagement face fewer delays, carry lower legal and political risks, and tend to operate more smoothly once they are built. We often label opposition as NIMBY, as in "not in my backyard". This label hides the real issues. People are not against new energy projects, including renewable energy plans. They are against feeling excluded, against uncertainty, and against bearing the cost while others take the benefit. Concerns around land use, noise, visible impact, priority values or environmental disturbance are legitimate. Moreover, the most important concern is lack of democratic engagement. Decisions are taken elsewhere, however, the impact is felt

words about the principle that defines the Nordic way of building strong and successful community engagement. I would like to stress that we are not perfect, and we have had many uphill struggles as well. It's a difficult path to truth. Early transparency engagements: communities are brought in from the very beginning, not One of the clearest examples is Denmark's community-owned offshore wind model, the Middelgrunden cooperative. Often cited worldwide as a blueprint for how shared ownership can be built on trust, strengthen social acceptance, and accelerate the transition to renewable energy. The Middelgrunden offshore wind project in Copenhagen showed how shared ownership can ease public concern around visible renewable infrastructure. Half of the wind farm was owned by citizen shareholders, given thousands of residents a direct share in the project and helping build acceptance for a large offshore installation close to the city. Clear communication and early engagement were central to the process. Public tours, open information, and transparent planning help address questions about location, noise, and visible impact. As a result, the Middelgrunden became a well-supported urban project and an early example of how community involvement could enable renewable development in a constrained urban setting.

While the Middelgrunden shows how shared ownership can support renewable energy project outside urban areas, Copenhill illustrates a different urban approach by integrating essential energy infrastructure directly into the city in a way that is both functional and publicly accessible. Built to replace an older waste-to-energy plant, Copenhill possesses municipality waste and supplies heat and electricity to tens of thousands of households making it a central part of Copenhagen's decarbonization strategy. Its design demonstrates how large energy facilities can fit organically into dense urban environments. The building combines industrial operations with a public space featuring a rooftop ski slope, hiking paths, and climbing walls. Besides the urban example set by CopenHill, Ånstadblåheia in the northern Norway offers a landscape-based example of long-term cooperation with the local community. The wind farm outside Sortland consists of 14 turbines built in an area with strong and steady wind conditions.



Copenhill illustrates a different urban approach by integrating essential energy infrastructure directly into the city. Credit: Max Mestour and Amelie Louys.

From the start, the project relied heavily on local contractors, giving companies in the region a significant beneficial construction advantage and experience with large scale international projects. This local involvement helped build trust and earned the confidence of the local community. Since operations began, the wind farm has continued to work closely with the residents through annual community funds and support programmes. Applications for fundings are viewed locally to reflect the priorities set by the community and recent allocations have supported everything from renovating of a community centre to equipment for sport clubs and youth activities. This project shows how consistent engagement and visible local benefits can help large energy projects coexist with nearby communities.

To conclude, getting local community on board is not a one-off communication task. It's a business choice. It's a business model. The Nordic shows that when developers share benefit, power, and information, when they listen and adapt, cooperation becomes possible. It is particularly valuable in a world where stable, homegrown energy matters more than ever.

The Baltic Sea region and Europe stand at a decisive moment. If we fail to act, the environmental, economic, and geopolitical consequences will be far more severe than the short-term impact of new infrastructure. The success of this transition will depend not only on where we build, but how we build it. If communities are engaged early, if municipalities are empowered and its benefits and risks are shared fairly, acceptance follows.

As we strengthen the Nordic Baltic Energy Partnership, the message is clear: resilient energy systems depend on communities that stand firmly behind such initiatives, projects and programmes.



Credit: Dreamstime

## Environmental solutions for project development

### Jörg-Andreas Krüger

President of Nature and Biodiversity Conservation Union

Jörg-Andreas Krüger, president of NABU (The Nature And Biodiversity Conservation Union) – Germany’s oldest and largest environmental association. With more than 960,000 members and 70,000 active volunteers, NABU works tirelessly to protect species, habitats and climate, at home and worldwide. NABU is the German partner of BirdLife International. Jörg-Andreas Krüger is an experienced leader in nature conservation and environmental policy with over 25 years of expertise in biodiversity, ecological footprint management, and sustainable development. He had different strategic leadership roles at major environmental organizations, including NABU and WWF Germany. Furthermore, he has a strong background in landscape architecture and long-standing commitment to conservation since early youth.



**At the regional level we sit together and say: let’s identify, let’s find the places and the areas where the conflicts are small. You can’t find an area without any conflicts, that’s clear, but let’s find those where the conflicts are small.**

Thank you for the friendly introduction. My name is Jörg-Andreas Krueger, I'm the president of the Nature and Biodiversity Conservation Union from Germany and I have been invited to share our experience with renewable energy and its growth in Germany over the past 30 years.

My organisation is quite old. It was founded in 1899. At first it was volunteer-driven. We have a structure of 77,000 volunteers in 2,000 local groups. That means we are quite involved in the discussions around, especially about wind farms and solar parks in Germany. For the last 30 years, we have always had the goal of making renewable energy as nature compatible as possible.

We have to accept that a wind farm or a solar park will always have some impact on nature, and possibly on local communities as well. There should be no illusion about that. We simply have to acknowledge it. From our experience, starting a discussion by saying, "It's not so bad," is the worst possible approach. Instead, we must be honest: if we want to address climate change and build a better future, change is necessary. The real question is how we minimise the impact and make it as limited and responsible as possible. In Germany we have been quite successful with that. We have now 28,700 windmills and around 40,000 hectares of solar parks, which sounds a lot, but that means that at the moment we have just 1% of the area covered by wind farms and 0.1% covered by solar parks, and the government has the goal to double both of the areas. So, we will have to continue this discussion in the near future. We have thousands of wind parks with a lot of bad cases in the past, especially at the beginning of building up wind farms. We have seen a lot of wind farms with a negative impact on the protected areas, on birds such as raptors and storks, and sometimes on bats too. On the other hand, we have seen very good examples of projects that were well planned and developed in close cooperation and co-design with local communities. Moreover, we have also had some very problematic projects, where poor planning and a lack of cooperation have led to hundreds of lawsuits. In such situations, progress becomes almost impossible. That is the real risk with renewable energy development: when projects are pursued without the local region or even against it, they are likely to fail.

Let's start with an overview about the different causes for the local opposition. On one side we have the environmental risks and that is the part we are as an NGO focusing most on. You have the potential destruction or degradation of habitats and flyways. You have the collision of birds, insects, bats, and others. Besides, you have the questions of noise, the concrete and the soil, and other things. For all the aforementioned topics, we have tons of studies now and tons of mitigation measures. So, you could do only the environmental things in a rather scientific way of discussion. On the other hand, you have the discussions coming up from the local population. These are sometimes general and they don't believe in the human impact on climate change. Then you have the people who are frustrated about other decisions of the government. They don't believe in things coming from Berlin or from the state capital. Then you have all these questions with regards to "Is the value of my house changing?" "Do I hear noise at night?" These are questions which you can answer in a very good way. However, then there is the one we are talking a lot about. You have these reasons and causes where we often say that's just NIMBY, not in my backyard.



I think, it's worth to look a little bit more into the details there as well. For sure, you have some rural fantasies and things which people have in their mind, on one hand, but we shouldn't underestimate that we have a lot of rural regions where the local population has a very strong emotional binding to their homeland for generations. They grew up there, their grandparents grew up there and every change there is really a big change for their whole family and for everything what is important to them in their life. So I always say this is about much more than simply dismissing people as NIMBYs who are against everything. We need to look more carefully at how we address their concerns. It is possible to find compromises and, from our point of view, the low hanging fruit is good spatial planning.

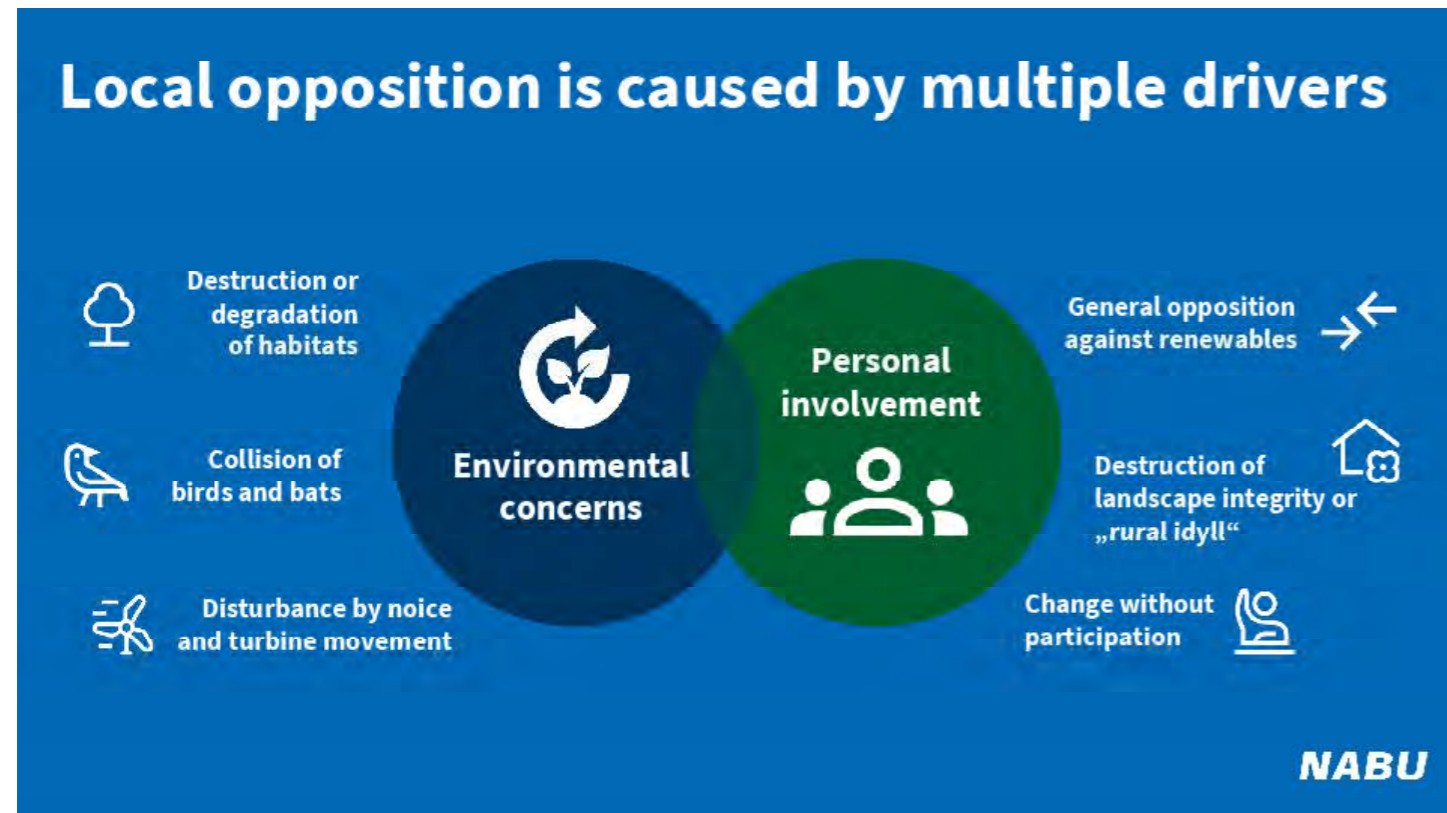
That means that at the regional level we sit together and say: let's identify, let's find the places and the areas where the conflicts are small. You can't find an area without any conflicts, that's clear, but let's find those where the conflicts are small.

Then the second point is that you have to be very transparent about everything. When you combine transparency with careful planning, you can achieve good progress. A good example is Schleswig-Holstein, the German state in the north between the Baltic and the North Sea. There, they managed to build up to 3,000 wind mills within ten to twelve years without a single environmental lawsuit. They had discussions about the spatial planning process. and they always managed to find a compromise. So, that was really a good progress then, and 3,000 turbines in ten to twelve years is really something important for the transition of the energy system.

When talking about small conflicts and the link between the regional level and the local level, it's important to return to the NIMBY or non-NIMBY reasons to the opposition.

It's always important to accept that we have come here and we want to change all the things which you are used to. Therefore, let's be open about that and we will accept that you are against this and that you are a little bit angry about that and that you have a lot of questions. Let's find a model where we sit together and where you can ask your questions and where we can give you the answers. Let's make it clear that it's completely acceptable to be sceptical at the beginning.

In these local discussions it is important that you have the driving forces of the social system included. You have to have the mayor or the members of the local county parliament, or a good representative of the wind farms. You have to have them there. Besides, it's not about you having some officials coming and explaining things. You have to have people who take leadership roles and say that they have to do it. Trust me, this is the way forward. Whenever we don't have this leadership or the change agents in the room, the discussions become very hard and tough, and they will definitely take longer. In these discussions – and I've participated in dozens of them – the atmosphere can be intense. Most likely, you will be booed out, but it's important to try to get at least 70 to 80% of the people to think about all the things what you were talking about.



# Formats of conflict resolution

Respectful communication create opportunities



**Roundtables & written agreements**



**Stakeholder dialogues**



**Joint realization of compensation measures**

**NABU**

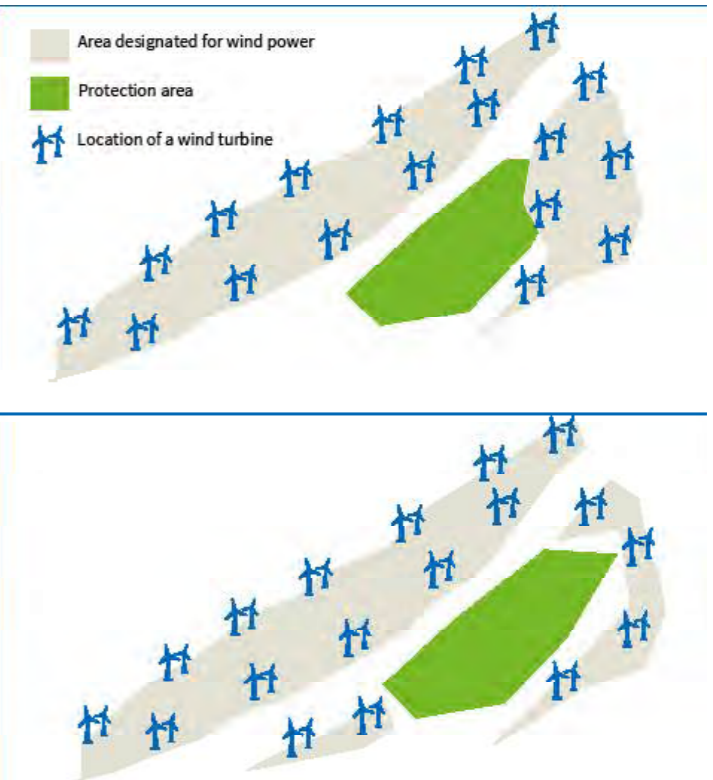
You will not reach a 100% agreement but you have to have at least 70 or 80% of people who say “yes, it is maybe a good idea, I don’t like the change but under the circumstances it is important that we do something”. In this case, your democracy at the local level is stable, then the mayor is not in danger to lose the next election, then you will not end up with hundreds of court cases and that is the goal which we all have to have. The transparency and openness also mean that you have to co-design. Sometimes it’s enough to change the area and the location of one single wind turbine, as in away from the village. For example, to put it on the other side of the wind park in order to get a better agreement.

From the basic principles and fundamentals, we can move on to the instruments we use. As I said, these roundtables and written agreements at the regional level can be a very successful and powerful instrument. We have many states in Germany where NABU and other environmental NOS’s together with the wind company associations and the local governments and the state governments have a written contract at the end. We agree on the criteria for how we identify the areas. We agree on the target, for example, we want to have 2.2% of the area in Lower Saxony. Or we agree on specific measures to protect designated areas, birds, and other wildlife. This helps create a very positive effect on the environment at the local community level. In the stakeholder dialogues it’s important to really get input from the outside. In Germany, we build up a competence centre at the national level for nature conservation and the renewable energy where you can call and ask for advice. They delegate you scientists to join you’re the stakeholder dialogue in the public and the local village. They can provide advice or give you hints to facilitate the conversation. It’s important to have good facilitators for such a local dialogue. It can be the next step in the Baltic States to create such competence centres to facilitate the discussions.

The last point is dedicated to people who have a deep link to the landscape. Invite them to help with the compensation. Very often you build a wind farm and then say that you have to reforest an area or have to build up something. Invite them and make it a public event.

## Basics of nature-friendly renewables

- Good spatial planning
- Transparency & Openness
- Effective protection measures



Let people feel that they can contribute directly to shaping the future of their landscape, something that makes them proud, supports discussions about the wind farm, and also assists the mayor in managing the community.. Think about not only the co-design but also the co-implementation of the tasks.

The last slide in the presentation is about the key messages. Start with the communication at the earliest point in time. Be reliable and be transparent. Be reliable when you say that you have to have this farm with this amount of energy. You can’t come back half a year later with the doubled amount of energy. Use the pool of experience, invite all the people from the regions to take care of their landscape, and collect all the information about the planning process of the project.

## DISCUSSION

Why do people resist energy and industrial projects – and, more importantly, what approaches are effective in building mutual support?

### CHAIR OF DISCUSSION

Assoc. prof. JURIJS SPIRIDONOVŠ

---

### BURKHARD V. KIENITZ

Chief Operating Officer Processes of E.ON SE

### JÖRG-ANDREAS KRÜGER

President of Nature and Biodiversity Conservation Union (NABU)

### LIN O'GRADY

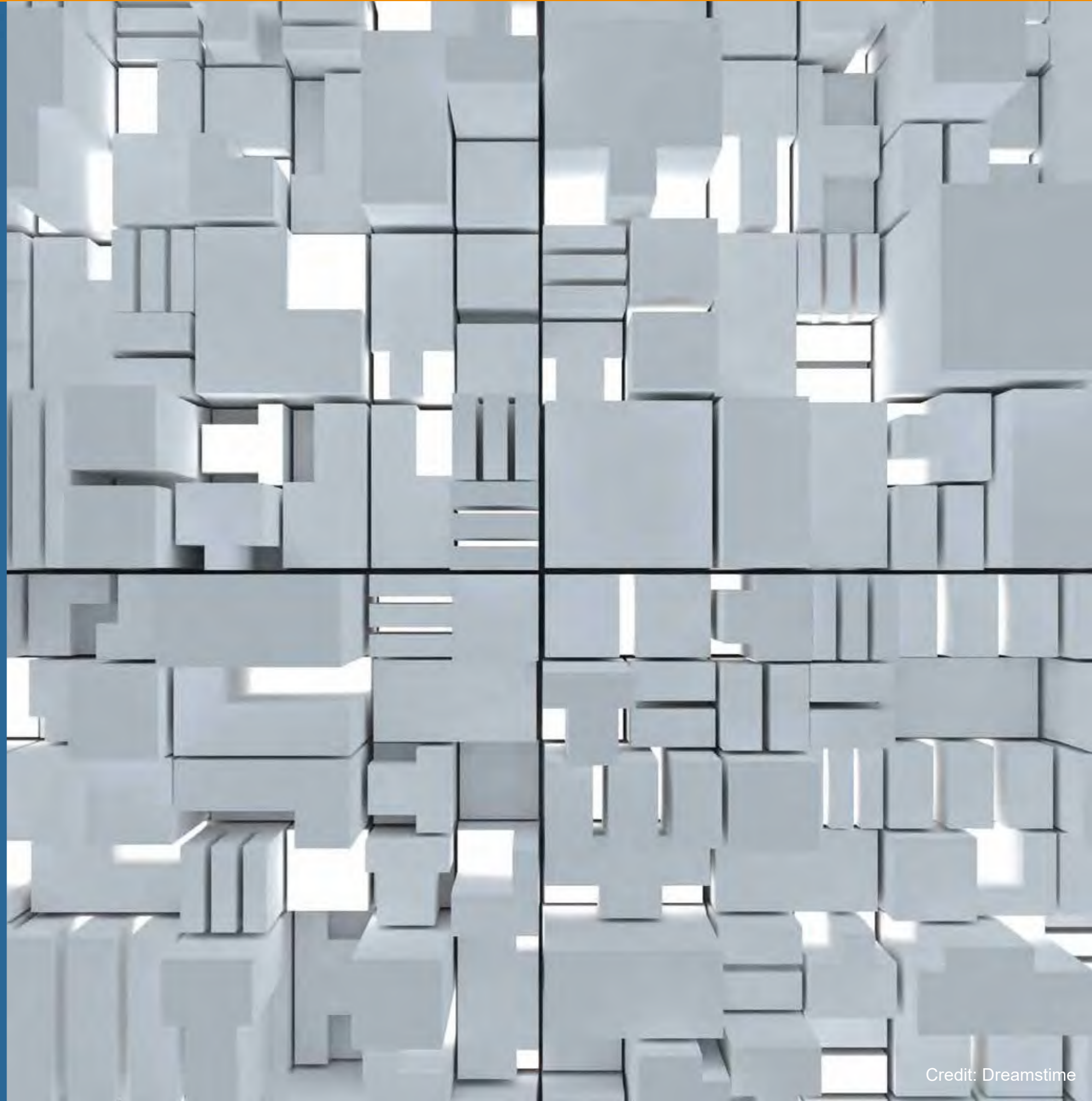
Associate Director, Green Cities, EBRD

### MOGENS HAGELSKÆR

Head of Renewable Energy at Andel

### REINHOLD SCHNEIDER

SCHWENK Latvia Chairman of the Management Board, CEO



The discussion brought together leaders from academia, industry, finance and environmental organizations. It highlighted that a successful energy transition in Europe depends not only on technology and investment, but also on public acceptance and trust. Participants stressed the importance of transparent planning, early community engagement, and stable regulatory frameworks. Stronger cooperation between developers, municipalities, and financial institutions is essential, as is balancing renewable expansion with biodiversity protection. A key takeaway was clear: projects developed with communities face fewer delays and deliver greater long-term value. Ensuring affordability and reliability ultimately requires collaboration, clear communication, and fair sharing of benefits.





Assoc. prof. Jurijs Spiridonovs (RISEBA): “We may also need to create incentives that encourage cooperation among people, as this can help enable the kinds of processes we are aiming for. At the same time, this presents a challenge for policymakers. Supporting communities and democratic participation does not guarantee that the outcome will align with political expectations. In fact, if you genuinely empower communities, you must also accept that they may reach conclusions that differ from what was originally intended. This is an inherent part of democratic processes.”

Burkhard v. Kienitz (E.ON): “It is absolutely crucial for project developers to communicate clearly, act reliably, and be transparent. But the same applies to politicians. We are all voters, and we give politicians a mandate. Over the past decade, that mandate has been clear: to advance the energy transition, address climate change, and move toward decarbonization. If we elect governments on that basis, then we also need local and regional politicians to follow through – to take responsibility, communicate openly, and provide leadership. However, if a local politician says, “Yes, we support 100% renewable energy but not in our region,” then it is no surprise that we end up with “not in my backyard” discussions.”

Jörg-Andreas Krüger (NABU): “We have seen significant progress in wind energy technology. Early wind turbines typically had capacities of around 750 kilowatts, whereas today we are talking about 5 to 6 megawatts per turbine, with much greater hub heights. This increase in size and efficiency means that we can generate more electricity with fewer turbines and less land use. As a result, the overall ecological footprint per unit of energy produced is lower. In the past, there were frequent concerns about impacts on bird populations. With modern turbines being much taller, many bird species tend to fly below or outside the main rotor zone. While some species are still at risk and must be carefully considered, the overall impact is now more targeted and, in many cases, reduced.”



Lin O'Grady (EBRD): We are a regional bank operating across several regions, with the Baltics being a particularly important one. Within this context, I lead a program called Green Cities, which focuses on investing in urban development. Through this program, we take a holistic approach to assessing a city's needs. We work closely with municipalities to develop what is known as a Green City Action Plan. This plan evaluates key sectors such as water, transport, waste, and energy, and identifies priority projects for investment.

Mogens Hagelskær (Andel): "That's one important angle: having fact-based conversations rather than relying on rumors or assumptions. The second point is trust and open dialogue. Will there be shadows from wind turbines? Yes, of course. Will there be noise? Yes. There is no doubt about that. But can we manage these impacts? Yes, we can—if we address them openly and honestly. And that leads me to the third point: listening. We need to genuinely listen to what communities are telling us. If we, as developers, fail to do that, it will come back to us like a boomerang. Listening must translate into action. It should influence how we design our projects, how we plan layouts, and how we engage from the earliest stages."

Reinhold Schneider (SCHWENK): "I believe that building a strong local network in Latvia is essential. This includes neighbors, local communities, and local politicians. It is important to actively engage with this network: to be a good neighbor, to explain what you are doing and why, and to communicate openly and transparently. At the same time, we should make better use of semi-formal networks, including NGOs, which are often well connected and communicate actively among themselves. If used effectively, this approach can also support governments in building broader public acceptance. So for me, network-building is not just helpful—it is a critical element of making the energy transition work."

## DISCUSSION

### THE WAY FORWARD: WHAT'S NEXT?

- **Voice of policy planning**
- **What are the plans of the Ministries**
- **Where is the need for the regional solutions**

#### CHAIR OF THE DISCUSSION

Assoc. prof. **OLGA BOGDANOVA**

#### **KASPARS MELNIS**

Minister of Climate and Energy of the Republic of Latvia

#### **ANDRES SUTT**

Minister of Energy and for Environment  
of the Republic of Estonia

#### **ŽYGIMANTAS VAIČIŪNAS**

Minister of Energy of the Republic of Lithuania



#### CHAIR OF THE SESSION



#### **Assoc. prof. Olga Bogdanova**

Chair of the World Energy Council Latvia

Since 2005, Olga Bogdanova has been working for the governmental sector. Her current position at the Ministry of Climate and Energy of Latvia is Deputy State Secretary for International Affairs and Climate Policy. Olga Bogdanova is the president of World Energy Council Member Committee Latvia. She is a Chair of the Supervisory board of the Power Transmission System operator of Latvia AS "Augstsprieguma tīkls" holding the controlling stock of the Latvian gas transmission and storage system operator. She is a member of the Studies Committee at the World Energy Council, an alumni of the World energy Council Future Energy Leadership Program (2018-2022), and an active expert at the World Energy Council. Olga Bogdanova has a Doctor Degree in Economics. She is an Associate Professor at the University of Latvia, Faculty of Business Management and Economics and an expert of the Latvian Scientific Council in economics. Dr.oec. Bogdanova is co-author of 4 scientific monographs and author of more than 40 scientific publications focused on the challenges in the energy field, regional cooperation issues and economic development.

The high-level discussion outlined a clear trajectory for Baltic energy policy toward 2030, with installed capacity projected to nearly double. The ministers reaffirmed a stable technology mix centered on wind, solar, and storage, while recognizing small modular reactors as a potential longer-term option beyond the mid-2030s.

Security considerations featured prominently, with consensus that synchronization has strengthened resilience, but that further efforts are required to protect critical infrastructure, enhance cybersecurity, and reduce exposure to high-risk dependencies across fuels, components, and supply chains.

Affordability and investment dynamics were also highlighted as a shared concern. Persistently low or negative electricity prices during summer periods are weakening investment incentives, underscoring the importance of storage in supporting price stability and system flexibility.

Finally, the discussion conveyed a strong political commitment to deeper regional coordination. The signing of a joint memorandum by the energy ministers of Latvia, Estonia, and Lithuania marks a concrete step toward the development and implementation of a shared regional electricity strategy.



Assoc. prof. **Olga Bogdanova** (World Energy Council Latvia): “What renewable generation capacities do we have in 2026, and what are the plans for 2030? It is clear that the largest figures for planned installed capacity belong to Lithuania, with onshore wind power expected to increase by around 70 %. Latvia, on the other hand, is lagging behind in wind capacity but is taking the lead in battery storage deployment. Taken together, the Baltic states plan to increase total installed capacity from 9.8 GW today to 19 GW by 2030 – a substantial jump. The next step is to examine each country’s specific plans, understand how these targets will be achieved, and identify which technologies will drive this transition.”



### INSTALLED & PLANNED CAPACITY

	☀️		🌬️		🔋	
	IAN. 2026	TARGET 2030	IAN. 2026	TARGET 2030	IAN. 2026	TARGET 2030
<b>LT</b>	3346 MW	4100 MW	2647 MW	4500 MW	428 MW	1500 MW
<b>LV</b>	1296 MW	1200-1500 MW	133MW	1200-1500 MW	109 MW	2255* MW
<b>EE</b>	1148 MW	1500 MW	694 MW	1340 MW	27 MW	1000 MW

\*Based on TSO estimations, not set in national strategy



Žygimantas Vaičiūnas (Minister of Energy of Lithuania): „The classical definition of energy security usually focuses on three main aspects: security of supply, sustainable development, and competitiveness. Today, however, I believe we need to place critical energy infrastructure at the center of that triangle. We must focus on cybersecurity and ensure robust control over our systems – just as we maintain control over our national grid and dispatching networks, we also need to extend that level of control to smaller-scale systems. Protecting these critical assets is essential for both reliability and resilience in the modern energy landscape.”

Andres Sutt (Minister of Energy and for Environment of Estonia): „I think it’s fair to say that the world around us has become much more hostile since Russia launched its full-scale war in Ukraine. What we need now is a clear focus on resilience and security, and this is where we are investing significant time and resources. It’s also crucial that we do this jointly – it’s not just a single country’s effort, but a European project. Securing undersea connections in the Gulf of Finland, for example, is a shared responsibility between Estonia and Finland, involving not only the energy sector, but also defense forces, various authorities, and the support of our allies.”

Kaspars Melnis (Minister of Climate and Energy of Latvia): „I would emphasize that we must look beyond a single sector. Policymakers and developers should consider how projects affect other sectors, and seek cross-sector cooperation to maximize benefits. At the end of the day, the most important measure is the impact on society – on people’s daily lives. Whether it’s the energy sector, transport, or other infrastructure, improvements should be coordinated to deliver the greatest overall benefit. My suggestion is to take a wider perspective: design projects that provide simultaneous local and societal benefits, and ensure there is clear communication about the expected impacts for everyone affected.”

The conference culminated in the Baltic ministers signing a joint Memorandum of Understanding (MoU), pledging deeper cooperation to bolster regional security and sustainability. The signing of the MoU by minister Kaspars Melnis (Latvia), minister Andres Sutt (Estonia), and minister Žygimantas Vaičiūnas (Lithuania) solidified their commitment to greater transparency and the synchronization of long-term national strategies.

Key goals include regional coordination by harmonizing national energy policies across Latvia, Estonia, and Lithuania to create a more integrated and efficient regional energy market, while accelerating the deployment of renewable energy – particularly offshore wind in the Baltic Sea, alongside solar and other clean technologies – to reduce greenhouse gas emissions and dependence on energy imports.

The Memorandum outlines five key areas of cooperation:

**- Coordination of energy strategies**

- exchange of information on natural energy strategies, including long-term objectives towards 2050;
- discussion of strategic assumptions, scenarios, and policy priorities;
- identification of areas where greater regional coherence may bring added value.

**- Energy system planning and market development:**

- dialogue on electricity and gas market developments in the Baltic region;
- exchange of views on security of supply, adequacy, flexibility, balancing and regional investment needs;
- sharing best practices on regulatory and market-based solutions supporting secure and affordable energy supply.



- **Renewable energy, system integration and decarbonization:**
  - exchange of experience on the development and integration of renewable energy sources;
  - cooperation on addressing system integration challenges, including grid development, flexibility, storage, and demand response;
  - discussion of regional infrastructure needs supporting renewable energy deployment;
  - exchange of views on regional infrastructure development for green hydrogen, and CO<sup>2</sup> capture and transport value chains, where relevant.
- **Analytical cooperation:**
  - exchange of analytical approaches, modelling practices, and assessments related to energy system development;
  - sharing non-confidential studies and data relevant for strategic planning.
- **Cooperation on the protection and resilience of critical energy infrastructure:**
  - closely cooperate in protecting and strengthening the resilience of critical energy infrastructure, both onshore and offshore;
  - exchange views and best practices on prevention, detection, response, and recovery in relation to incidents affecting energy infrastructure;
  - enhance coordination on addressing physical, cyber, and hybrid threats to energy systems, in line with existing Baltic and international cooperation frameworks;
  - support joint efforts to improve preparedness, monitoring, and repair capabilities.





Ministry of  
Climate and Energy  
Republic of Latvia

# CERTIFICATE OF APPRECIATION

World Energy Council Latvia

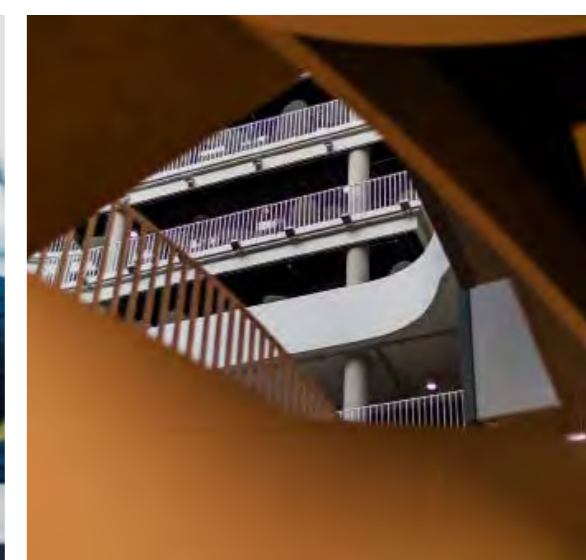
---

In recognition of contribution to successful cooperation and to the development of energy policy, promoting the security, competitiveness, and sustainability of the energy sector

A handwritten signature in black ink, appearing to read 'K. Melnis'.

*Minister of Climate and Energy of the Republic of Latvia*  
*Kaspars Melnis*

# NAVIGATING ENERGY PATHWAYS FOR THE BALTIC SEA REGION



# ROUNDTABLE DISCUSSION



On February 12, more than 30 energy experts from the World Energy Council community, representing Belgium, Denmark, Estonia, Finland, France, Germany, Latvia, the Netherlands, Poland, Romania, Spain, Sweden, Turkey, the United Kingdom, and the United States, participated in a roundtable discussion on recent developments in energy policy.

Uniting insights from our diverse perspectives, our roundtable of energy professionals underscores these crucial focal points:

## 1. **Cross-Sector Collaboration**

Bringing together government officials, industry leaders, researchers, and community representatives to build shared solutions.

## 2. **Actionable Insights**

Moving beyond discussion to develop practical, implementable strategies for the Baltic Sea region's energy future.

## 3. **Regional Impact**

Addressing the unique challenges and opportunities facing the Baltic Sea region in the global energy transition.

These consensus-driven points reflect our commitment to a more resilient, equitable, and sustainable energy future.

ROUNDTABLE DISCUSSION



# ROUNDTABLE DISCUSSION



## IKEA and the future of energy solutions

Meet Kim Strengman, Head of the Renewable Energy Development at Ingka Investments, in an exclusive interview with Future Energy Leaders Latvia



**Kim Strengman**

Renewable Energy Portfolio Development  
Manager Ingka Investments (IKEA)

Kim Strengman is a highly experienced professional in the renewable energy sector, with over a decade of global project experience. Driven by a strong commitment to creating a better world and combating climate change, Kim has dedicated their career to improving and increasing renewable energy production assets. Currently, Kim serves as the Head of Renewable Energy Development at Ingka Investments. In this role, they lead initiatives to develop and invest in new renewable energy projects, significantly contributing to the expansion of renewable energy sources and the reduction of global CO<sub>2</sub> emissions.



**– How would you describe IKEA’s sustainability philosophy? What is at its core – cost efficiency, climate impact reduction, innovation, or long-term competitiveness?**

At the heart of IKEA there is a simple and beautiful vision: to create a better everyday life for the many people. We have embedded that in our way of operating: better homes, better lives, better planet, better company. As a global business operating in 31 countries, Ingka Group is committed to the Paris Agreement and to contribute to limiting the global temperature rise to 1.5°C. In November 2023, the company strengthened its climate targets in alignment with the Science Based Targets initiative (SBTi) Corporate Net-Zero Standard. The targets were approved by SBTi in April 2024 and include a commitment to reduce absolute greenhouse gas emissions from the value chain by at least 50% by FY30 (compared to FY16 baseline) and reach net zero emissions by 2050, without relying on carbon offsets to meet these absolute reduction targets. Although the sustainability philosophy at its core is climate impact reduction, we do believe this automatically translates into more efficiency, innovation and long-term competitiveness. We’re “futureproofing our business” through clean energy, circular design, and responsible sourcing.

**– How are sustainability principles embedded into your business model and everyday decision-making?**

The sustainability principles are embedded into the overall IKEA business agenda. Some examples are:

- Circular design principles are embedded into Democratic Design (IKEA’s product philosophy), requiring products to be designed for reuse, repair, refurbishment, and recycling.
- Directly investing in wood and have as a requirement for our suppliers to use FSC-certified recycled wood.
- Directly investing in renewable energy.

In practice, this means sustainability is part of core operations, design, sourcing, investment, and performance management. We don’t do carbon pricing but we focus on carbon emission reduction.

**– What are the key goals and indicators you use to measure progress in sustainability?**

IKEA uses a set of time-bound, science-based goals and associated KPIs, some examples are:

- Climate / emissions goals & indicators
- Halve absolute GHG emissions from the value chain by FY30 vs FY16.
- Net zero by FY50, with at least 90% reduction in absolute emissions vs FY16; residual emissions neutralised through carbon removals within their own value chain.
- Annual reporting of total climate footprint (e.g. 21.3 million tonnes CO<sub>2</sub>e in FY24, 28% below FY16).
- Specific targets, such as 80% reduction of absolute production emissions by FY30 vs FY16 and 70% reduction in relative emissions from product transport by FY30 vs FY17.
- Circularity & materials.
- Designing all products with circular capabilities.
- Increasing share of recycled and renewable content in products to at least 90%.

We report against our FY16 baseline and this is audited annually.

**– How does IKEA justify sustainability as a business value? What are the main arguments that convince shareholders and leadership?**

The simple answer is that we believe that it’s good business to be in good business! We are driven by our core values. We don’t have shareholders or external stakeholders, This means we can drive on our core value and sustainability initiatives without being distracted by shareholders who might have different drivers. Sustainability is embedded in our vision and is top of the business value.

**– Can you provide examples where sustainable solutions have helped reduce costs or improve operational efficiency?**

We invest in renewable energy, in wind and solar (49 wind farms, 26 solar parks) which allows us to generate more renewable energy than we consume globally. Ideally, this shifts energy from a pure cost to a revenue-generating asset and hedges against energy price volatility. In practice this is more difficult as our renewable energy assets are not directly linked to our retail and supply activities, so we still have to sell and buy at market price. We are working on linking this more closely and in some countries like Romania we’re already doing this. However, the true value is that we invest in the availability of green electricity in the markets where we consume electricity and have renewable energy available at lowest cost of electricity.

For our circular investments it can be clearer. When resources are scarce, we have a supply of responsible and stable and predictable sourcing end cost. It's often more local, so following local trends. The holy grail is Democratic design IKEA, circular character of products. In essence, the less (raw) materials or the most optimal way to use those materials will reduce cost and will lead to operational efficiency. Anecdote: "I was at an IKEA store last week. In the toilet there is a poster explaining why there is only cold water coming from the tap to wash your hands: it's more sustainable and if you wash with soap the effect will be the same. A customer 'corrected' 'more sustainable' with a pen to 'cheaper'. Yes, of course it is also cheaper,

*but that doesn't mean it isn't also more sustainable and better for the planet. In the end, if we save costs with sustainability measures, we can reduce the price of the furniture, which will benefit this customer. He benefits in both ways; we take care of the planet while trying to offer him furniture at lowest cost possible."*

**– What financial benefits have you observed from investing in renewable energy, CO<sub>2</sub> reduction initiatives, or circular economy practices?**

By investing in wind and solar, we produce more renewable energy than they consume, and by having full operational control ourselves over this profit

duction we effectively turn energy from a cost into profit. At the same time, we reported in FY24 a reduction of the climate footprint by approx 23% vs FY16 while the business continues to grow.

**– What are the main areas where IKEA focuses on reducing CO<sub>2</sub> emissions — production, logistics, supply chain, retail?**

Our focus spans the full value chain: materials (nearly 50% of footprint), production (targeting 80% reduction by FY30), transport and logistics footprint, down 26% since FY17), retail operations, and product end-of-life (targeting 30% reduction by FY30). The supply chain has the largest impact and is also the area where we can have most influence. When we have full control of the supply, we can make the most impact. If we're dependent on external suppliers, it is more challenging.

**– What specific actions does IKEA take to ensure CO<sub>2</sub> capture or emissions compensation?**

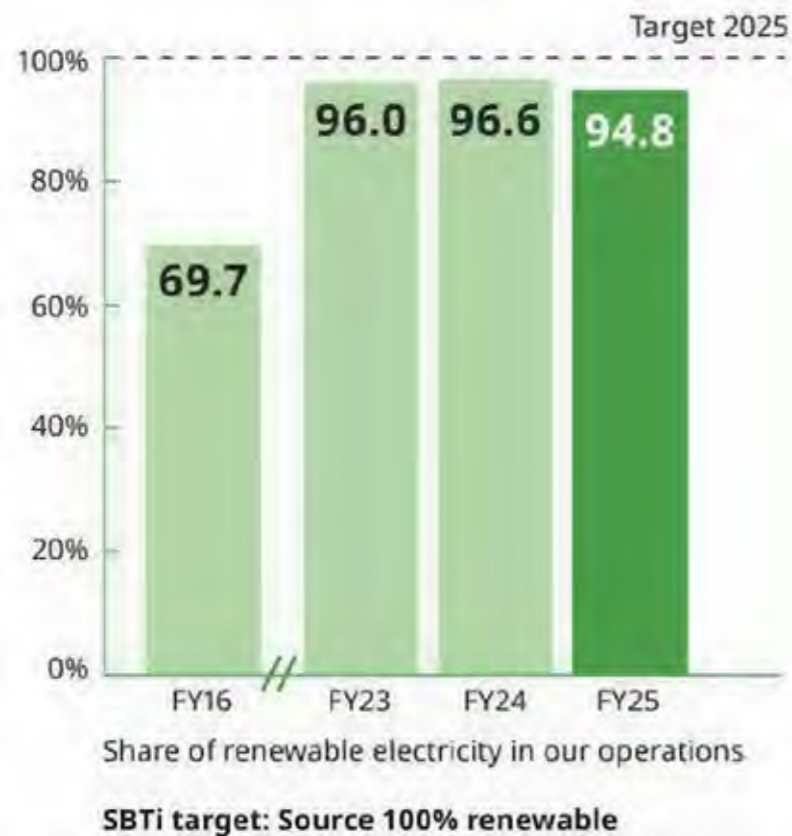
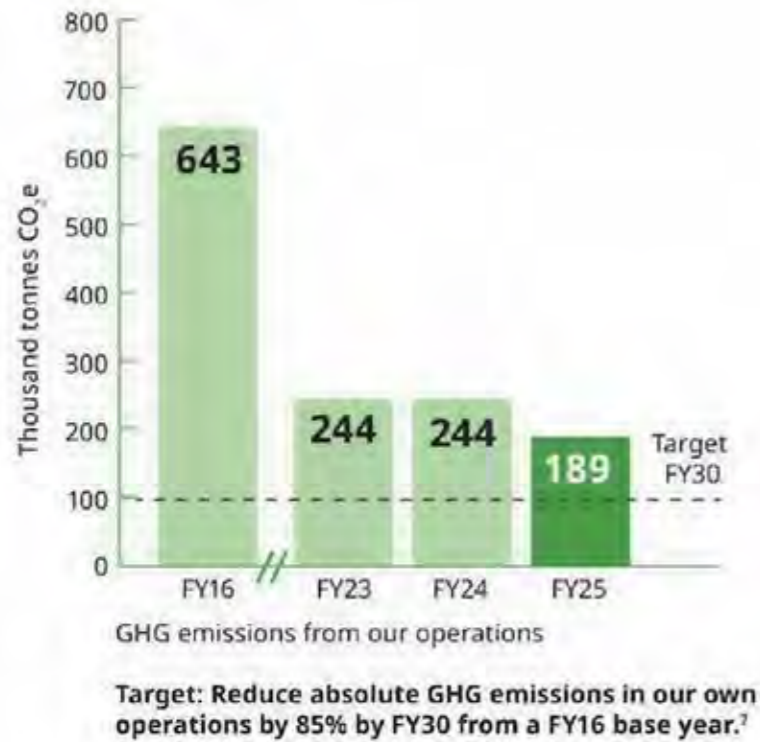
We aim to reduce the emission, and we use forest management as agricultural sinks. Wood can store CO<sub>2</sub> and is therefore a valuable asset to the CO<sub>2</sub> capture story. On top of that we want to use 100% renewable energy. (5% of footprint, down 26% since FY17), retail operations, and product end-of-life (targeting 30% reduction by FY30).

The supply chain has the largest impact and is also the area where we can have most influence. When we have full control of the supply, we can make the most impact. If we're dependent on external suppliers, it is more challenging.



Ingka Group unveils hybrid power park in Portugal, unlocking 233 GWh

Credit: Ingka Group



**– What specific actions does IKEA take to ensure CO<sub>2</sub> capture or emissions compensation?**

We aim to reduce the emission, and we use forest management as agricultural sinks. Wood can store CO<sub>2</sub> and is therefore a valuable asset to the CO<sub>2</sub> capture story. On top of that we want to use 100% renewable energy.

**– How do you monitor emissions across the full value chain? Which tools or methodologies do you use?**

IKEA uses a value-chain climate footprint approach and aligns with the Science Based Targets initiative (SBTi) Net-Zero Standard. IKEA publishes annual Sustainability and Climate Reports with a full climate footprint.

**– What is IKEA’s roadmap toward climate neutrality, and which milestones are most critical?**

IKEA’s “Net Zero and Beyond” roadmap targets: halving absolute emissions by FY30 (vs. FY16), 90% reduction by FY50, and net-zero by FY50. Critical milestones: 100% renewable energy by FY30, 50% material emissions cut, zero-emission transport by 2040, and decoupling growth from emissions. We started off with our self-imposed 2020 targets where we stated that we wanted to produce as much electricity as we consumed on global scale and we managed to achieve that. The next step is meeting our 2030 Paris Agreement commitment.

**– Given IKEA’s substantial use of wood, how do you ensure that this resource is sourced and managed sustainably?**

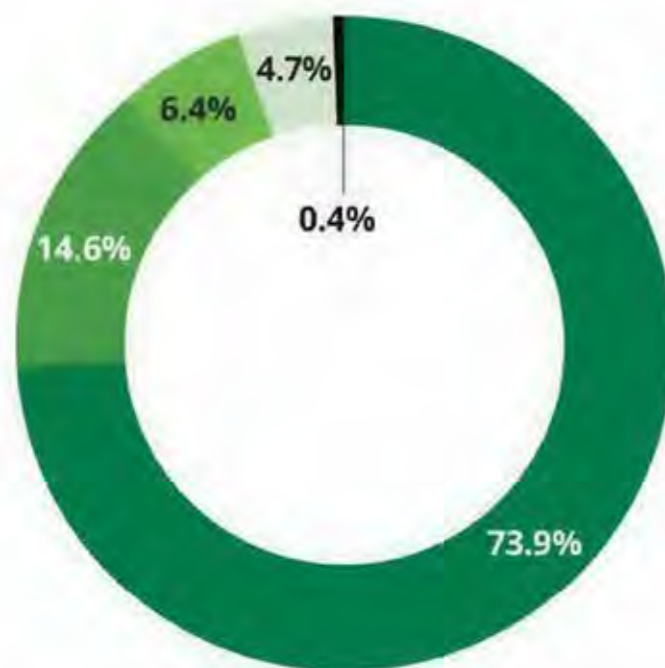
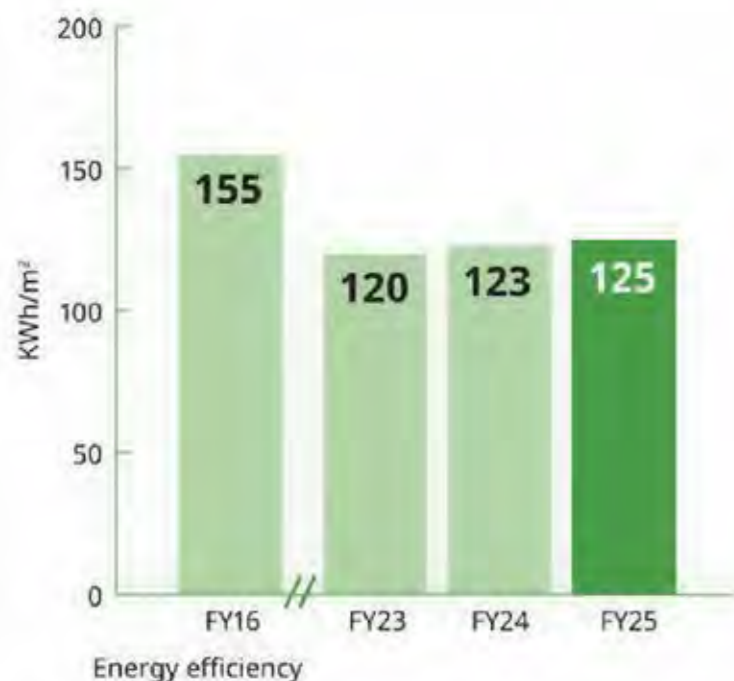
Wood is one of IKEA’s most used raw-material and we have a dedication to source only deforestation-free woods. Owning our own forest, we can actively manage the non-deforestation. We harvest less than the growth. If we gain 7 m<sup>3</sup>, we only harvest 5 m<sup>3</sup>.

Our sustainable wood sourcing is enforced through mandatory certification/recycling, strict exclusion criteria, traceability, and active forest-management partnerships.

**– Which sustainable forestry practices are implemented internally, and which through suppliers?**

Internally we take a 5% EBITDA cut which we use to meet and exceed sustainability targets. It differs per country on how this is implemented in practice. However, it mainly has to do with test and demonstrate climate- and biodiversity-smart forestry. In Latvia, we have a pilot project in our own forestland to explore innovative forest management that enhances climate resilience and biodiversity. We have high standards of responsible management of owned forests and strict procurement policies. For suppliers we have mandatory FSC certification or recycled wood use, training programs, third-party verification, and new IWAY requirements addressing environmental aspects of agriculture.

Credit: Ingka Group Annual Summary and Sustainability Report FY25



Energy consumption and mix

- Purchased or acquired electricity, heat, steam and cooling from renewable sources
- Fossil sources
- Self-generated non-fuel renewable energy
- Fuel consumption from renewable sources
- Nuclear sources

**– How central is the use of FSC/PEFC-certified wood to your long-term strategy?**

FSC is in combination with our own requirements very central — 97% of all wood (products and packaging) is FSC-certified or recycled. This ensures forest regeneration, biodiversity protection, and credible carbon storage claims, making it fundamental to the climate strategy. We don't use PEFC.

Certification is central to our long term strategy, which certification can change and will depend, but we will always use independent certification.

**– Can you share examples where sustainable forest management has contributed to CO<sub>2</sub> footprint reduction?**

Soil carbon sequestration is crucial. By applying sustainable forest management where we try continuous forest cover and growth, such as selective logging, rather than clear-cutting, helps maintain and increase soil organic carbon. Plus, by creating diverse ecosystems it will lead to healthier soils which have greater capacity for carbon storage. An important part of forest management is maximizing the soil's capacity to act as a long-term carbon sink. Also, we harvest less than the annual growth, wood stores CO<sub>2</sub> so we increase CO<sub>2</sub> storage after we purchase the forest. On our harvesting we apply the following; what we legally are allowed to do, plus the FSC and Natura 2000 requirements and on top of that we apply our own 0% deforestation rule and 20% area for additional environmental improvements. If we have abandoned agricultural land, we aim to use that for forestry as well (300 hectares additional so far).

**– To what extent does IKEA operate as an energy producer, and how does this support your sustainability goals?**

We are operating as a medium-sized renewable energy production company on a global scale, producing electricity for our retail operations, for the IKEA value chain and also beyond.

Ingka Group today owns and operates 49 wind farms across 17 countries and 26 solar parks in nine countries, producing more than 5 TWh of electricity annually. We are committed to invest €7.5 billion to renewable energy investments by 2030 to increase our generation capacity to 13,5 TWh.

In some countries we're acting also as a supplier so we can supply our generation directly to our retail and industry. We aim to match our production with our consumption, if we can't match, we don't know if our consumption is carbon neutral. Even though we have a significant portfolio of production to match our consumption, our emissions went up last year because we couldn't fully match our consumption with RE100 required certificates. Hence the additional investment goal.

**– What renewable energy technologies (solar, wind, biomass) are currently used across the IKEA ecosystem?**

Wind & solar. We are also working on co-located batteries, but with the main purpose of contributing to solving the grid connection issues and be better able to match with our consumption profile.

Credit: Ingka Group Annual Summary and Sustainability Report

**– How have these investments impacted your overall energy costs?**

It hasn't directly impacted our overall energy cost. The benefits are indirect and with a long-term goal. By directly investing in renewable energy production we change the dependency of the energy transition. We actively contribute to creating lowest cost of energy availability. Indirectly you could say there is a sort of electricity price hedging as we profited from high prices as producers which we could compensate with high cost for Ingka Group. However, this is not something we report against.

**– How does IKEA see its role in driving future energy solutions and accelerating their adoption?**

We try to do our best and working on leadership approach and in 3 countries we're far in this where we are directly selling to our customers and having full control from source to end customer.

**– How does IKEA view its responsibility in educating the public on sustainability and climate issues?**

It's core to our mission of creating a better everyday life – empowering customers to live sus-

tainably through affordable solutions, transparent impact data, and inspiration toward healthy, sustainable lifestyles.

**– Which projects have had the greatest impact in inspiring the public or industry professionals?**

Because we invest in forestry and renewables, we are able to also do some projects which hopefully push the industry, benefit (local) communities and inspiring professionals.

In Latvia we recently acquired 16 000 hec for our forestry portfolio which we will manage with all above mentioned responsible forestry management. This will result in additional CO<sub>2</sub> reductions. With our renewable energy investment, we're actively contributing to the additionality of available renewable energy, because we also invest in early-stage developments. By investing in forestry and renewables, we're also able to contribute to local community and needs. In New Zealand we contribute to a school for indigenous people, which is great for that community. In Latvia we're building shelters for home violence victims. But it can also be indirectly, we're very diligent about for example soil conditions and when we invest we try to make sure the land is cleaned up, so there doesn't stay for example garbage cover-ups which can pollute

the river. We're also very proud of our Women in Forestry program in Romania where we actively work to interest more women to work in the forestry sector, which is at the moment highly male driven. It's great to be able to inspire young women in potential career paths. People who work in forestry are passionate about nature and take care of it. In our company this is the same for our people working in circular and renewables, we care about the planet and are all making investments in projects of which we'll think will contribute to the better life of the many people.

**– Which future projects in Latvia or the Baltic region will demonstrate how sustainability can create both economic and climate value?**

Our 153,000 hec forestry acquisition (now a total of 145,000 hec) and our wind developments will contribute to CO<sub>2</sub> reduction and will contribute to energy independence.

**We extend our sincere gratitude to all participants for their valuable contributions to the success of the event. Your high-quality presentations, insightful dialogue, and inquisitive engagement were instrumental in fostering a productive knowledge exchange platform.**

## City tour: Riga Castle

Riga Castle is one of Latvia's greatest medieval castles. Its foundation stone was laid on 15 June 1330. The castle is an important part of Latvia's historical and cultural heritage – an architectural monument of national importance.

Riga Castle is located on the banks of River Daugava in Riga, the capital of Latvia. The original Castle was a three-floor building which enclosed a rectangular courtyard and had four rectangular towers in its corners. After the Castle was demolished in 1484 it was rebuilt with two towers replaced by round towers following the latest developments of military technologies. The Castle experienced vast development during 17th century when it was almost constantly under construction. In 1682 Arsenal was attached to the castle, it was torn down about one hundred years later, in 1783 to build a court/house. After the city came under the Russian Empire in the early 18th century, the castle housed the administration and courts of the Riga Governorate (which included most of present Latvia and Estonia) and served as residence of Governors General.

Since 1922 the castle became residence of the President of Latvia. Sometime in the 1930s, some renovation work was done by architect Eižens Laube. The Latvian government declared the castle its residence in 1938. Today it is the official residence of the President of Latvia as well as home to several museums.



Credit: Dreamstime

NAVIGATING ENERGY PATHWAYS FOR THE BALTIC SEA REGION



## City tour: Main building of the Parliament of Latvia (Saeima)

The main building now occupied by the Saeima was constructed between 1863 and 1867 for the needs of the Livonian Knight-hood according to the design made by Robert Pflug, a Baltic-German architect, and Jānis Baumanis, the first academically educated Latvian architect.

Both the exterior and interior of the building were designed in the style known as Eclecticism. Features of the Renaissance style appear in the outward shape of the building and the main function room where Livonian Landtag meetings and celebrations were held. The style of Louis XVI inspired the design of the interior of the Yellow Room, and the Gothic style influenced the layout of the Dining Room. Those were considered to be among the most impressive public building interiors in Riga.

On 17 October 1921, the building was maliciously set on fire, and as a result the main function room, which had been used as the Assembly Hall, burnt down. It was restored according to the design of architect Eižens Laube and adapted to the needs of the parliament of the Republic of Latvia. Minor changes were also introduced in other function rooms.



Credit: Dreamstime

NAVIGATING ENERGY PATHWAYS FOR THE BALTIC SEA REGION





# POWERED BY:



UNIVERSITY OF  
LATVIA



Klimata un enerģētikas  
ministrija

