Artificial Intelligence in the Baltic Sea Region

Workshop Insights & Recommendations

EU Strategy for the Baltic Sea Region Annual Forum 2025

Working Group on AI & Finance

Baltic Sea Region Youth Forum (CBSS)

Workshop Co-Leaders:

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Executive Summary

This document synthesizes insights from the AI workshop conducted at the 2025 EU Strategy for the Baltic Sea Region Annual Forum. As co-leaders of the Working Group on AI & Finance for the Baltic Sea Region Youth Forum (part of the Council of the Baltic Sea States), we facilitated discussions across three sustainability dimensions: ecological, social, and economic.

Participants from across the BSR identified concrete pathways for scaling renewable energy in AI infrastructure, boosting AI literacy across demographics, and developing financial instruments to support AI deployment in less developed regions. The recommendations emphasize practical implementation, speed of deployment, and the BSR's unique geographic and institutional advantages in the global AI landscape.

Contents

1 Ecological Sustainability

1.1 Core Question

How can we ensure and scale the use of renewable energy in AI infrastructures?

1.2 Strategic Planning

- Improve planning for data centers (D.C.), such as placing them next to power plants
- Encourage dialogue between AI companies and power plants

1.3 Energy Efficiency & Reuse

- Utilize the heat generated by data centers
- Implement energy storage solutions (e.g., storing energy at night to use during the day)
- Increase the efficiency of AI algorithms to use less energy and achieve more results
- Use the “proper” AI for the “appropriate” complexity of the question to avoid energy waste

1.4 Regulation & Monitoring

- Implement EU, national, and regional regulations to promote the use of green energy sources for AI data centers
- Develop a monitoring system to track and report emissions and energy consumption from data centers
- Mandate the recovery and reuse of heating and cooling systems

1.5 Incentives & Awareness

- States should subsidize the installation of solar panels and thermal storage to ensure scalable renewable energy use
- Run communication campaigns comparing information about renewable energy use
- Create an “Energy use” meter visible on-screen
- Develop a “Warming screen” that shows monthly AI energy consumption in relatable terms (e.g., “This AI used enough energy this month to power __ houses for __ years”)

1.6 Taxes & Consumer Choice

- Add a tax to “AI appliances” to let consumers choose between AI and non-AI products, informing them of the impact

1.7 Materials & Research

- Fund long-term research and development of new sustainable materials and solutions, on a country-by-country basis
- Be conscious of where and when you build an AI data center
- Standardize and structure the data on energy use

2 Social Sustainability

2.1 Core Question

How can we boost AI literacy across all ages and education groups?

2.2 Targeted Education

2.2.1 Young People

- Include AI in the school curriculum (used sustainably). Emphasize source criticism and the dangers of social media
- Offer courses and workshops

2.2.2 Working People

- Provide free professional resources for everyday AI use
- Teach them to be source-critical and use their own intelligence, not just rely on AI

2.2.3 Senior Citizens

- Run multimedia awareness campaigns (e.g., during TV primetime)
- Offer support through public libraries, associations, and NGOs

2.3 Public Access & Debate

- Ensure free and public access to AI literacy programs, being mindful of language and cultural differences
- Hold public debates about the risks and chances of AI, including input from both experts and citizens

2.4 Broader Principles

- Promote lifelong learning with the understanding that one will never fully grasp everything
- Start AI education as early as kindergarten, but remain critical of resource and energy use
- Ultimately, ask: How can we boost our human intelligence?

2.5 Verification & Misinformation

2.5.1 Content Authentication

- Find new ways to verify AI-generated content (photos, videos) and prove the correctness of facts
- Address ethical problems like deep fakes, fake news, pornography, and propaganda
- Develop (automatic) labels or watermarks to identify AI content and determine which institutions are responsible for this labeling

2.5.2 Combating Misuse by Humans

- Promote critical thinking to recognize AI “hallucinations”
- Teach source-checking and fact-checking, especially for youth and seniors
- Consider using “trusted AI” to verify AI-generated content

2.5.3 Combating Misuse by AI

- Implement regulations for data collection and ensure AI use is transparent to the user

2.6 Supervision & Regulation

- Review GDPR and its relation to defense and security
- Ensure privacy and data access are monitored with active user consent
- Validate information and check sources
- Ensure ethical development with no exploitation of people
- Build trust through transparency in how AI is created
- Consider developing public AI (rather than private) to increase trustworthiness, while still ensuring competitiveness
- Forbid spreading fake information? Probably not feasible. A better approach may be high taxes and economic control of tech monopolies
- AI models need diverse, responsible boards and supervision by citizen groups
- Make government organizations responsible for the programs they use

3 Economic Sustainability

3.1 Core Question

What financial instruments could support AI infrastructure in less developed Baltic Sea Region (BSR) regions?

3.2 Funding Models

- Create a macroregional “Baltic VC (Venture Capital) fund” or a Public-Private Partnership (PPP) model to realize bigger projects
- This fund could combine public funds, venture debt funds, private equity, and scale-up funds
- Use rolling funds (reinvestment into new start-ups)
- Offer tax deductions on investor exits when they reinvest in European AI ecosystems

3.3 Policy & Frameworks

- Develop a dedicated EU cohesion policy or national/BSR framework
- Leverage the EDIH (European Digital Innovation Hubs) network

3.4 Standards & Data

- Establish the same AI standards and regulations across the region
- Create common and ethical data standards and ensure data availability in the BSR

3.5 Regional Infrastructure

- Foster cooperation between universities, businesses, technicians, and politics (e.g., Aalto University)
- Create regulatory sandboxes and accelerators
- Develop a shared “library” or database for information, research, and assets involved in projects (e.g., Estonia/Finland sustainable solutions) and present emerging AI usage clearly

3.6 Attracting Investors

- Identify investors and their needs (e.g., ecology, sustainability, social growth)
- Prepare investment proposals based on these values
- Build trust by informing investors of progress and using current investors as ambassadors
- Use European rights and laws (especially on personal data) as a selling point compared to the US/China

- Publish success stories to showcase growth potential
- Focus on quality, not quantity
- Provide economic incentives and follow up on new projects

4 Strategic Recommendations: Maintaining Global Competitiveness

The BSR's AI competitiveness depends on addressing several structural challenges. The following recommendations emerge from comparing regional capabilities with developments in the United States and China.

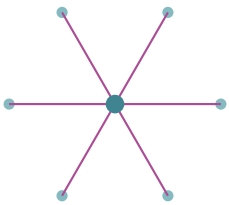
4.1 Energy Infrastructure

- Rapidly expand energy capacity and infrastructure to reduce energy prices
- Current energy costs in parts of Europe limit the economic viability of large-scale AI training
- The BSR benefits from access to renewable baseload capacity (Nordic hydropower, potential nuclear capacity in Finland and Poland)
- Energy abundance creates competitive advantage; energy scarcity creates dependency

4.2 Data Center Infrastructure

- Build massive data centers at scale to support compute-intensive AI development
- The BSR possesses unique geographic advantages through partners like Iceland and northern Norway:
  - Cold climates reduce cooling costs by 30-40%
  - Iceland offers geothermal baseload energy at significantly lower costs than European averages
  - Political stability, rule of law, and existing fiber connectivity to continental Europe
- These regions are positioned to become European hubs for AI infrastructure
- Streamlined permitting processes could accelerate deployment timelines

4.3 Business Environment



Integrated EU Business

- Create a more pro-business and pro-innovation environment by:
  - Cutting taxes to competitive rates in the global AI and technology sector
  - Reducing bureaucratic complexity in business registration and operation
  - Creating a universal European business entity enabling one registration and tax filing for EU-wide operations
  - Better enabling private investment by adjusting restrictions on pension fund allocation to venture and growth capital
- Current fragmentation across 27 member states creates friction compared to unified jurisdictions

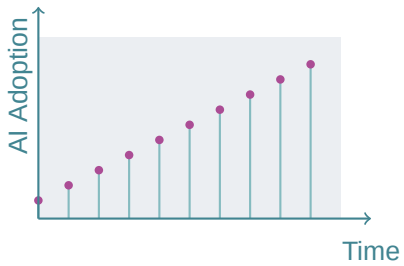
4.4 Capital Formation

- Consider a European VC fund focused on competitive returns rather than development objectives
- A European equivalent to Project Stargate (the recent $500B US private investment commitment):
  - Government role focused on infrastructure enablement
  - Private capital leading with public capital de-risking infrastructure investments
  - Rapid deployment timelines from announcement to implementation
- Scale requirement: $100-200B committed over 5 years for compute infrastructure
- Potential funding sources: private equity, sovereign wealth funds (e.g., Norway's GPFG), insurance capital

4.5 Skilled Immigration

- Make skilled immigration easier with significantly reduced processing times
- Consider an EU-wide technology visa enabling work authorization across the union with a single application
- BSR universities (KTH Stockholm, Aalto University, TU Munich, Technical University of Denmark) produce exceptional technical talent
- Competitive immigration frameworks help retain graduates who might otherwise seek opportunities elsewhere

4.6 Technology Adoption



- Generally embrace AI and technology as drivers of productivity and economic growth
- Shift from viewing AI primarily through a risk management lens toward recognizing opportunity
- The BSR’s advantages include high-trust societies, strong technical education, and digital infrastructure
- Speed of deployment increasingly determines competitive position

Conclusion

The workshop revealed strong alignment on opportunities and challenges facing the BSR in AI development:

1. **Ecological sustainability** benefits from transparent energy consumption reporting, efficiency improvements, and strategic infrastructure placement. The region's renewable energy resources provide natural advantages.
2. **Social sustainability** depends on accessible AI literacy programs across all demographics, robust verification systems for AI-generated content, and maintaining critical thinking alongside technological adoption.
3. **Economic competitiveness** requires capital formation mechanisms, reduced friction in cross-border operations, and leveraging the BSR's technical talent and institutional strengths.

The Baltic Sea Region possesses significant advantages: high digital literacy, strong technical universities, geographic assets for data center deployment (particularly Iceland and northern Norway), and established governance frameworks. Success depends on execution speed and the region's ability to capitalize on these advantages in an increasingly competitive global landscape.

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