Innovative Technologies for Sustainable Mobility and Energy Efficiency in Rural Contexts

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Where are we?

Who are we?

- **BETI** - Baltic Education Technology Institute
- Founded in 2003 (22 years of experience)
- **Founders** – professionals who have been working in ICT and education technologies for more than 15 years.
- Cooperation with NADE

WE ARE INTERESTED, WE ARE RESEARCHING, WE ARE MAKING

- Digital Media
- Adult Education
- Mentoring
- Digital Literacy
- Entrepreneurship
- Sustainable Development

- ICT
- Women And Technology
- Scientific Conferences And Seminars
- Education Of Students
- Communities
- Agriculture

- Quality Assurance
- Science Research
- STEAM
- Educational Technologies
- Socially Vulnerable Groups
- Visual Communication

National and European initiatives

- Framework
- Eureka
- Socrates
- Leonardo da Vinci
- Phare
- UNESCO
- Erasmus +
- Etc.

BETi
Baltic
Education
Technology
Institute

Your reliable partner in
IT science and practice

OBJECTIVES

1

To implement and support teaching and learning based on information telecommunication technologies (hereinafter - ITT) for sustainable education, scientific, social and economic development policy in Lithuania through scientific, methodological and practical activities

2

To seek to create conditions for democratic, accessible and independent education for all citizens of society by implementing the paradigm of lifelong learning, developing distance learning initiatives, creating an educational, methodological, consulting and information support system
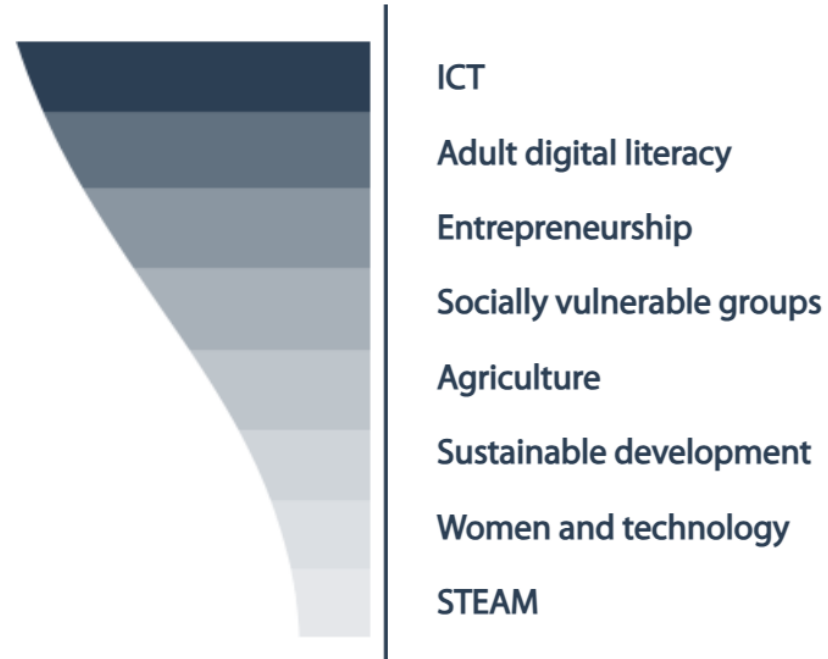
3

To strive for the development, distribution and widest possible application of modern information telecommunication systems and other modern technologies in the fields of activity of the Institute

4

To promote information technology-based project and process management in collaboration with organizations and individuals to ensure the efficiency of their operations and the quality of services provided

BETI team together

ICT

Adult digital literacy

Entrepreneurship

Socially vulnerable groups

Agriculture

Sustainable development

Women and technology

STEAM

67 PROJECTS

Projects

BETI & Sustainability

- People-centered sustainability solutions

- Empowering change through learning

- Supporting EU Green Deal and local resilience

Education

Innovation

Inclusion

Sustainable Transformation in Kaunas

Actions Implemented	Focus Area
85 Solaris electric trolleybuses	Public Transport Modernization
Sustainable Urban Mobility Plan (SUMP)	Integrated Urban Mobility
50% energy savings in schools	Energy Efficiency in Buildings
Planned solar panels on 69 schools	Renewable Energy Transition

Modernizing Public Transport with Solaris Trollino

- 85 Solaris Trollino 12 electric trolleybuses

- Advanced tech: electric steering even without traction power

- Quieter streets, more passenger comfort

- More energy-efficient and operationally reliable

Solaris Trollino 12 electric trolleybus in Kaunas – clean, quiet, and efficient (source)

SUMP: A Vision for Smart, Active, and Safe Mobility

Integrated system: walking, cycling, public transport

Goals:

- **Bike use**: 4% → 8%
- **Walking**: maintain 10%
- **Vision Zero by 2030**: zero traffic deaths

EU SUMP Award Finalist (8th Edition)

Supporting Active Mobility with Urban Redesign

- Upgraded bike lanes across city

- Safer pedestrian routes

- Public bike-sharing system launched

- Integrated into long-term city planning

Upgraded pedestrian and cycling routes to support safe and active mobility (source)

Greener Schools, Smarter Energy Use

Kaunas has cut energy use in public buildings by up to 50% through smart renovations that improve comfort and sustainability.

School building before energy efficiency upgrades ([source](#))

Renovated school building ([source](#))

Investing in Renewable Energy

- Rooftop solar panels planned for 69 educational buildings

- Goal: power schools with clean energy

- Added value: sustainability education for students

- Status: planning and partial implementation underway

Solar panels on school rooftops to generate clean energy (source)

Collaborative Innovation for Lasting Impact

- Inclusive engagement from the start
- Use of digital platforms to bridge distances
- Tailored capacity-building initiatives
- Ongoing evaluation and adaptation
- Cross-sector partnerships (gov, NGOs, schools, business)

Real-World Practice – DigiBoost & TRAVEL

DigiBoost

- Identified barriers to digital entrepreneurship in rural areas

- Collaborated with municipalities, schools, and NGOs

- Built trust and shared ownership

TRAVEL

- Virtual platform for students, educators, and policymakers

- Cross-country cooperation on sustainability education

- Fostered common understanding & shared goals

What Makes Collaboration Work

- Start with Inclusive Needs Assessments
- Use Digital Tools to Maintain Communication
- Offer Tailored Training & Support
- Facilitate Cross-Sector Partnerships
- Monitor, Reflect, and Adapt

From Voices to Vision – Co-Creating Mobility Solutions

"We begin not with solutions, but with questions. In schools, rural halls, and town squares, BETI invites citizens — especially youth — to map their realities, voice challenges, and imagine greener futures. These community-led insights reshape policies, making mobility not just efficient, but fair and human."

Youth mentorship workshop in Girona, Spain

Local Actions, European Values

From local to European:

Local story → Digital sharing → Intercultural exchange → Policy awareness → European identity

Empowering Local Action Through Tailored Capacity Building

Future-Focused Training for Inclusive Mobility

- **Green Entrepreneurship**
  Building businesses that support climate goals

- **Smart Mobility Tools**
  Training in mobility apps, route planners, sensors

- **Data for Decision-Making**
  Understanding how to collect & use mobility data

- **Gender & Inclusion in Transport**
  Designing systems for everyone, not just the majority

- **Policy Advocacy Skills**
  How to engage in local mobility policymaking

- **Accessible Planning for All**
  Workshops tailored to rural residents, elderly, people with disabilities

Measuring What Matters – Our Evaluation Approach

Knowledge & Skills

- Pre/post assessments
- Self-reported confidence
- Example: DigiBoost, Digit2Me

Engagement & Feedback

- Surveys, interactive tools
- Focus groups & stakeholder reflection
- Adjusted strategy in real time

Community Ownership

- Who's involved? (youth, women, rural actors)
- How diverse? (cross-sector participation)
- Are participants acting as changemakers?

Thank you for your attention!