

Seminar

«Projects development towards green transformation of economy and sustainable solutions for forests, forest sector and behind»

Wed, 23.04.25, 09:00 – 12:30, Room 17.107

Part A.*The New European Bauhaus initiative (NEB) vs. Sustainability Goals*



Bauhaus Museum Dessau© picture alliance / imageBROKER

Participants – students' group 1

Discussion Questions for Students

1. Can we consider NEB as a necessary action or maybe it's a modern useless trend?
2. How can we balance the benefits of timber construction with the need to preserve forest ecosystems?
3. What forestry policies are needed to ensure NEB projects don't cause long-term ecological harm?
4. Should NEB prioritize local wood sourcing over innovation and scale?
5. How can designers integrate life cycle analysis (LCA) into wooden building projects?
6. Is there a trade-off between the beauty and biophilia of wood and its true sustainability?

Form of the seminar conducting – round table within the frameworks of which each student of the group should choose one question (it is possible to formulate absolutely new question that will be related to the main topic of the seminar) and to express some thoughts regarding this issue (present your opinion; identify pros and cons).

Students of the group 2 and 3 should listen carefully students' arguments and ask questions to students of the group 1.

Information for the preparing to seminar

Pro-Wood Argument (NEB-aligned)

Wood is often presented as the ideal material for sustainable building:

- **Renewable resource** (if sourced responsibly)
- **Carbon sink** – trees absorb CO₂ during growth, and wood stores it over the product's lifetime
- **Low embodied energy** compared to concrete or steel
- Allows for **prefabrication, lightweight structures, and biophilic design**

NEB embraces wood for its natural beauty, tactile quality, and link to local traditions.

The Contradictions & Challenges

1. Deforestation & Overexploitation

- Increased demand for timber may lead to **overharvesting**, especially in poorly regulated regions.
- Even in Europe, pressure on forests may **outpace natural regeneration** if not managed carefully.

2. Biodiversity Loss

- Monoculture plantations (to supply construction-grade timber) can degrade ecosystems.
- Clearcutting practices harm **soil health**, water cycles, and **biodiversity**.

3. Carbon Accounting Issues

- If forests are logged faster than they regrow, their **carbon sink capacity is lost**.
- **Transport emissions** of timber products (especially exotic hardwoods or cross-laminated timber from far away) can undermine sustainability benefits.

4. Waste and End-of-Life Concerns

- Many wood products (glued-laminated, treated, coated) are **hard to recycle** and may release toxins when incinerated.
- Lack of circular infrastructure for large-scale wood waste management.

The New European Bauhaus (NEB) is a creative and interdisciplinary initiative launched by the European Commission in 2020. It's inspired by the spirit of the original Bauhaus movement from the early 20th century, but it's very much focused on modern challenges—especially sustainability, inclusion, and aesthetics.

The Main Goal

To bring the European Green Deal closer to people's everyday lives by combining:

- Sustainability
- Aesthetics (design, beauty)
- Inclusion (accessibility, affordability, participation)

What it tries to do

The NEB wants to rethink the way we live and build, from homes and cities to lifestyles. It's about designing spaces, materials, and processes that:

- Respect the environment (climate-neutral and circular)
- Are socially inclusive
- Look and feel good (aesthetic and culturally rich)

Who's involved?

It's an open movement involving:

- Architects, designers, and artists
- Engineers and scientists
- Policymakers and students
- Citizens and community groups

Key Themes

- Reconnecting with nature
- Regaining a sense of belonging
- Prioritizing the places and people that need it most
- Fostering long-term, life-cycle thinking in the industrial ecosystem

Why it matters

It encourages transformative projects all over Europe—like renovating buildings sustainably, using bio-based materials, and empowering communities through inclusive design. It's a cultural and environmental shift, not just technical change

Think of renovating a neighbourhood in a way that:

- Uses eco-friendly materials
- Makes public spaces more welcoming and artistic
- Ensures it's accessible to people with disabilities or limited income

Some additional questions in this regard:

1. Sustainability vs. Aesthetics – Can They Truly Coexist?

- Does sustainable design limit or enhance creative expression?
- How can we create eco-friendly products that are also emotionally and visually appealing?
- Can traditional craftsmanship contribute to modern sustainability goals?

2. Rethinking Public and Educational Spaces

- How should campuses, schools, and public areas be redesigned in light of NEB values?
- What does a “beautiful” and “inclusive” learning space look like?
- How can wood and natural materials improve mental well-being in such environments?

3. Inclusion in Design – Who Are We Designing For?

- How do we ensure furniture and spaces are truly **universal** and **accessible**?
- How do we engage underrepresented groups in co-design?
- Can design fight social inequality?

4. The Role of Traditional Knowledge in Future Design

- What can we learn from **traditional woodworking** or **vernacular architecture**?
- How can NEB help **bridge the gap between tradition and innovation**?

5. Circular Design and Materials

- How can furniture be designed for **disassembly, repair, and reuse**?
- What role do **local materials** (like regional wood species) play in a sustainable future?
- How does NEB support bio-based and renewable materials?

6. Education and Skills for the NEB Generation

- How should design and engineering education evolve to reflect NEB principles?
- How can universities foster interdisciplinary collaboration in practice?
- Should students be graded on creativity, sustainability, and social impact?

7. International Collaboration & Cultural Exchange

- How can cross-border projects reflect NEB’s idea of “aesthetic sustainability” across cultures?
- Can NEB projects become a “soft power” tool for Europe?

8. Barriers and Opportunities in Implementing NEB

- What are the **real-life challenges** of implementing NEB values (e.g., cost, policy, mindset)?
- How can local governments and universities become incubators of NEB ideas?

Online References for NEB & Wood Construction vs. Sustainability

New European Bauhaus – Official Sources

1. New European Bauhaus Initiative (Official EU site): <https://new-european-bauhaus.europa.eu>
2. NEB Compass (Design guidelines): <https://op.europa.eu/en/publication-detail/-/publication/e3dd0f56-3196-11ed-9c68-01aa75ed71a1>
3. NEB Lab: https://new-european-bauhaus.europa.eu/get-involved/neb-lab_en

Wood Construction & Forest Sustainability 4. Forest Europe – State of Europe’s Forests Report (2020): <https://foresteurope.org/publication/state-of-europes-forests-2020/> 5. FAO: Sustainable Wood for a Sustainable World: <http://www.fao.org/forestry/sustainable-wood/en/> 6. European Environment Agency (EEA): Forests in Europe: <https://www.eea.europa.eu/themes/landuse/forests>

Architecture & Timber Construction 7. Wood for Good: <https://woodforgood.com> 8. Timber Architecture with a Future – ETH Zurich: <https://ita.arch.ethz.ch> 9. ArchDaily – Timber Architecture Tag: <https://www.archdaily.com/tag/wood>

BAUHAUS_Sustainability_Report_2023.

https://www.bauhaus.se/media/pdf/BAUHAUS_Sustainability_Report_2023.pdf

Sustainability Tools & Carbon Impact 10. One Click LCA: <https://www.oneclicklca.com> 11. Circular Economy in Construction – Ellen MacArthur Foundation: <https://ellenmacarthurfoundation.org/topics/buildings/overview> 12. FSC International: <https://fsc.org/en>

Videos & Media 13. "What is the New European Bauhaus?" (EU Commission): <https://www.youtube.com/watch?v=Hz0e4esjAZI>

14. "The Case for Building Wooden Skyscrapers" (BBC REEL): <https://www.bbc.com/reel/video/p07dw3mj/the-case-for-wooden-skyscrapers>

15. "Why Wood? The Climate Case for Timber Buildings" (Arup): <https://www.youtube.com/watch?v=qABe3TPgvhI>

Examples of the possible ways for the Reconciling of the Contradiction

- Promote **certified wood** (FSC, PEFC) and **traceability** in supply chains.
- Encourage **adaptive reuse** of existing wood materials.
- Invest in **forest regeneration programs** parallel to urban development.
- Use **LCA tools** to measure real impacts of wooden construction.
- Support **hybrid materials**: combining wood with recycled metal, hempcrete, or earth.

Part B. *Traditional Education vs. Education for Sustainable Development (ESD)*



Participants – Students’ Group 2

Students in Group 2 will lead the discussion, each selecting a question (or formulating a new one) related to the main topic. They will present their opinions while analyzing the **advantages and drawbacks** of traditional education versus sustainable education models.

Students in **Groups 1 and 3** will carefully listen, evaluate arguments, and ask follow-up questions to Group 2 participants.

Discussion Questions for Students

1. Is traditional education outdated, or does it still have essential advantages?
2. How does Education for Sustainable Development (ESD) prepare students for future global challenges?
3. Should universities prioritize sustainability-focused education over traditional subjects?
4. Does traditional education foster creativity and innovation, or does ESD encourage more interdisciplinary thinking?
5. How can educators balance established curricula with sustainability-focused learning?
6. What are the key differences in assessment between traditional education and ESD?

Form of Seminar Conducting:

- Round Table Discussion: Each student in Group 2 selects one of the above questions (or formulates a new one related to the topic).
- They express their perspectives by identifying pros and cons of each approach.
- Students in Groups 1 and 3 act as listeners and questioners, analyzing the arguments presented and asking clarifying or challenging questions.

Information for Preparing for the Seminar

Traditional Education Model

Traditional education is often structured around:

- Subject-focused learning (math, science, literature, etc.)
- Standardized assessments (exams and grading systems)
- Teacher-centered instruction (students receive knowledge rather than co-create it)
- Rigid curricula** that emphasize factual knowledge over application

Pros:

- ✓ Strong foundational knowledge across disciplines
- ✓ Standardized methods allow for comparison and benchmarking
- ✓ Encourages mastery of specific subjects

Cons:

- ✗ Limited flexibility for interdisciplinary learning
- ✗ Often does not prioritize sustainability, critical thinking, or real-world application
- ✗ Focuses on short-term knowledge retention rather than long-term impact

Education for Sustainable Development (ESD) Model

Education for Sustainable Development emphasizes:

- Interdisciplinary and problem-solving learning
- Real-world applications in environmental, economic, and social sustainability
- Student-centered education with participatory methods
- Focus on holistic and life-cycle thinking

Pros:

- ✓ Encourages critical thinking, collaboration, and innovation
- ✓ Teaches practical skills relevant to sustainability challenges
- ✓ Fosters a deeper understanding of environmental and social responsibility

Cons:

- ✗ Harder to standardize assessment methods
- ✗ Requires curriculum reform, which can be difficult to implement
- ✗ Some traditional subjects may be deprioritized

Key Themes and Comparisons

Learning Style: Structured, teacher-centered | Flexible, student-driven |
Focus: Factual knowledge | Problem-solving & sustainability |
Assessment: Standardized exams | Holistic evaluation, projects |
Real-world Application: Limited | Integrated into learning |
Interdisciplinary Thinking: Mostly single-subject focus | Encourages cross-disciplinary connections |

Here are some recommended readings to help prepare for the seminar on Traditional Education vs. Education for Sustainable Development (ESD):

1. Education for Sustainable Development:

A UNESCO publication providing guidance on integrating sustainability into education. <https://unesdoc.unesco.org/ark:/48223/pf0000216383>

2. Bridging the Gap: Traditional vs. Modern Education.-

<https://www.intechopen.com/chapters/88847> – A study exploring the transition from traditional to modern education and its impact on learning.

3. Education for Sustainable Development Goals: Learning Objectives. -

<https://www.unesco.org/en/articles/education-sustainable-development-goals-learning-objectives> – A UNESCO document outlining how education can support sustainability goals.

4. Y. Tunytsya, I. Soloviy, and V. Lavnyy. The Methodological and Didactic Aspects of Comprehensive Greening of Educational Process Towards Sustainable University, *Journal of Sustainability Perspectives*, vol. 1, pp. 446-452, Aug. 2021. <https://doi.org/10.14710/jsp.2021.12038>

5. [Learning to change the world! What is Education for Sustainable Development?](#)

6. [Education for Sustainable Development – A University's Contribution](#)

Some Additional Questions for Deeper Exploration:

1. How can traditional education evolve to incorporate sustainability principles?
2. What role does technology play in promoting sustainable education?
3. Should students be graded on creativity and sustainability rather than just knowledge retention?
4. How can public policy support a transition toward ESD at the universities?
5. Does ESD better prepare students for future careers than traditional education?