

## NBS EduWORLD - Project Education Learning Unit Template - DRAFT

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### Learning Unit (LU) Planning Template - High Level Overview

Name of Learning Unit (LU) Topic		Policy and Governance Frameworks for NBS in Europe					
NBS Context (e.g. urban rural, coastal)	NBS keywords <b>complete checklist at the end of the document</b>	Other Keywords (topics other than NBS) <b>add in Other below</b>	Linked or complementary concepts to NBS (to assist curriculum integration)	Prior learner knowledge of NBS (high, moderate, low/none)	Prior instructor knowledge/ skills/ competences of NBS or equivalent	Key EU NBS resources used (for instructor preparation) include link	Type of LU - lecture, workshop, field trip/site visit
any				moderate	moderate		Lecture
Target academic subject / discipline / professional area or group	Target learners/ groups [age range of learners] if applicable	Min/ Max # of learners (if applicable)	Sector (e.g, professional, higher education, community)	Prerequisites required of learners if applicable (education)	EQF (European Qualifications Framework) level (or Irish NFQ) indicative only	Time for LU (aim is 50 minutes per learning unit)	Course delivery format (e.g. in-person, hybrid, online)
Sustainability, social sciences, political science.	undergraduate higher education	n/a	higher education		EQF 6 - Irish NFQ 7/8 Ordinary/Hd	50 minutes	Online
Overall Purpose	Appraise the recent European policy and governance frameworks for NBS and their implications for NBS development in European cities, rural settings and coastal communities.						
LU Summary (2-3 sentences)	Europe has demonstrated its support and leadership in NBS implementation. The development of NBS on the continent is supported by European policy and governance frameworks. This module presents these frameworks in the context of various European projects focused on NBS in urban, rural and coastal communities. The focus on GreenComp - The European Green Competency Framework and the recent EU Nature Restoration Law (2024) and a policy on NBS and Nature Positive Economy will be highlighted. EU projects that offer insights into policy development and frameworks for NBS implementation will also be highlighted and interrogated during this Learning Unit.						
Learning Outcome 1	Present and debate how European policy and governance frameworks support the development of NBS and consider the implications with the absence of such frameworks.						
Learning Outcome 2	Assess the value of various European policy frameworks in urban, rural and coastal communities						
Learning Outcome 3	Argue for robust European governance frameworks to support NBS development.						
Learning Outcome 4	Explore how these policy and governance frameworks can be applied in a learner's own context or knowledge of NBS (e.g. as a member of a community, as a planner or in another stakeholder group).						

## Activities and Elements of Learning

*Aim that each learning unit include at least 4 activities for an interactive learning experience*

Time (duration of activity)	Aims - linked to NBS concepts or topics)	Link to Learning Outcome	Learning Activity [PPT Slide # - if applicable]	Teacher action/activity (Learner action/activity)	Confirmation of learner's learning (assessment of learning)	Link to online NBS resources (and/or academic resources with DOI as relevant)	Offline resources and materials (e.g. post-its,)
00:00 (10 minutes)	Introduce NBS and connections to EU policy and governance	1	Teacher presents NBS concept and highlights EU policies/laws	Teacher presents NBS and governance/policy frameworks ASK: How can these frameworks encourage NBS? What is good? What might be missing?	Learners open to ask questions on Frameworks and open a discussion on the positive and negative aspects of these governance/policy frameworks to develop NBS? What is good? What might be missing?	<a href="#">European Commission – Nature Restoration Law F</a>	
00:10:00 (20 minutes)	Interrogate the value of policy/governance frameworks in urban, rural and coastal contexts	2,3	Break-out groups - SWOT analysis	Teacher explains break-out room activity (15 minutes) SWOT analysis - where small groups interrogate the frameworks in the context of rural, urban or coastal settings (each group picks one context). Question for the break-out groups: How does/could this framework support urban/rural/coastal NBS?	Learners work in small groups for 15 minutes to discuss either urban/rural/coastal NBS context and governance/policies as presented. Present the Strengths/Opportunities and Weaknesses/Threats (as part of a SWOT analysis) to the full class.		Break-out rooms; Small groups - white boards/flip chart and markers

00:30 (15 minutes)	Further discussion on NBS frameworks and the student's own personal context	4	Think, Pair and Share activity - 1- Reflect on own 2- Pair with a fellow student to discuss (small break-out room) and Share (full class)	Teacher explains activity Think, Pair Share - Think: 3 minutes on How is NBS governance/policy important in my own personal/professional context or field of academic study? Pair - Breakout groups of 2 people to discuss (5 minutes) Share with group - 5 minutes	Learners participate in the Think-Pair Share activity		
00:45(5 minutes)	Final thoughts on NBS and policy frameworks	1, 2, 3	Final reflection on NBS and policy	Teacher asks: what's missing? Does there need to be a policy framework on curriculum development on teaching NBS? What else would help to highlight NBS? Who needs to hear about the importance of these policies/NBS	Learners consider the stakeholders that need to hear about policies and governance frameworks. Learners consider how to integrate learning about NBS into educational curriculum as a policy development		

NBS- Application of Curriculum, Trends and Skills

Curriculum integration (how it may connect to curriculum)	
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<p><u>Teaching &amp; Learning Trends employed</u></p> <p><b>Highlight all that apply</b></p> <p>(Source)</p>	<p><b>Project-based learning:</b> e.g., students work in groups on a research project on greenhouses and the greenhouse effect, alternatives to waste management or investigate what are the views of their peers on climate change.</p>	<p><b>Peer learning:</b> e.g., students work in groups, evaluate the work of their peers, or develop assessment questions to assess peers.</p>	<p><b>Problem-based Learning:</b> e.g., students are introduced to a problem and challenged to find a solution together based on the information provided to them.</p>	<p><b>Student-centred learning:</b> the learning scenarios are not based on classical instruction by the teacher, but they are expected to actively engage students in the lessons.</p>	
<p>21st Century Skills</p> <p><b>Highlight all that apply</b></p> <p>(Source)*</p>	<p><b>Creativity:</b> e.g., students think of various solutions for promoting a better lifestyle in their communities or encourage greener solutions to their schools' issues.</p>	<p><b>Information/Media literacy:</b> students explore examples of NBS, research similar solutions in other communities.</p>	<p><b>Collaboration:</b> e.g., students work in groups and engage in task division to produce outputs.</p>	<p><b>Critical thinking:</b> e.g., students learn that a debate on deforestation or climate change does not consist of two opposing camps only but involves many stakeholders with different perspectives.</p>	<p><b>Communication:</b> e.g., students present their work to the whole class and learn to put forth strong arguments based on facts.</p>

\*Gras-Velázquez, À., Mulvik, I. B., Campodonio, A., Nada, C. & Pocze, B. (2020) *Nature-Based Solutions in education - Validation report, European Commission, August 2020* [accessed on 25/03/2024 <https://files.eun.org/NBS/NBS-pilot-validation-report-final.pdf> ] p.8.

<p>GreenComp - European Sustainability Competency Framework <b><u>Highlight all that apply</u></b></p> <p>(Source) 1- Embodying Sustainability Values and 2 - Embracing Complexity in Sustainability (see pp.13-14)</p>	<p><b>1.1 Valuing Sustainability:</b> To reflect on personal values; identify and explain how values vary among people and over time, while critically evaluating how they align with sustainability values</p>	<p><b>1.2 Support Fairness:</b> To support equity and justice for current and future generations and learn from previous generations for sustainability</p>	<p><b>1.3 Promoting Nature:</b> To acknowledge that humans are part of nature; and to respect the needs and rights of other species and of nature itself in order to restore and regenerate healthy and resilient ecosystems</p>	<p><b>2.1 Systems Thinking:</b> To approach a sustainability problem from all sides; to consider time, space and context in order to understand how elements interact within and between systems.</p>	<p><b>2.2 Critical Thinking:</b> To assess information and arguments, identify assumptions, challenge the status quo, and reflect on how personal, social and cultural backgrounds influence thinking and conclusions.</p>	<p><b>2.3 Problem Solving:</b> To formulate current or potential challenges as a sustainability problem in terms of difficulty, people involved, time and geographical scope, in order to identify suitable approaches to anticipating and preventing problems, and to mitigating and adapting to already existing problems</p>
<p>GreenComp - European Sustainability Competency Framework <b><u>Highlight all that apply</u></b></p> <p>(Source) 3- Envisioning sustainable futures and 4 - Acting for Sustainability (see pp.13-14)</p>	<p><b>3.1 Futures Literacy:</b> To envision alternative sustainable futures by imagining and developing alternative scenarios and identifying the steps needed to achieve a preferred sustainable future.</p>	<p><b>3.2 Adaptability:</b> To manage transitions and challenges in complex sustainability situations and make decisions related to the future in the face of uncertainty, ambiguity and risk. generations and learn from previous generations for sustainability</p>	<p><b>3.3 Exploratory Thinking:</b> To adopt a relational way of thinking by exploring and linking different disciplines, using creativity and experimentation with novel ideas or methods.</p>	<p><b>4.1 Political Agency:</b> To navigate the political system, identify political responsibility and accountability for unsustainable behaviour, and demand effective policies for sustainability.</p>	<p><b>4.2 Collective Action:</b> To act for change in collaboration with others.</p>	<p><b>4.3 Individual Initiative:</b> To identify own potential for sustainability and to actively contribute to improving prospects for the community and the planet</p>

Author and organisation to credit when using the LU	Centre for Social Innovation - Trinity Business School, Trinity College Dublin
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**NBS Keywords Checklist (tick here below)**

	<i>Forest Preservation</i>
	<i>Forest Restoration</i>
	<i>Forest enhanced management for woodfuel harvest</i>
	<i>Forest Production</i>
	<i>Grassland Preservation</i>
	<i>Grassland Restoration</i>
	<i>Grassland grazing management</i>
	<i>Coastal Preservation</i>
	<i>Coastal Restoration</i>
	<i>Coastal maintenance of slope vegetation</i>
	<i>Maintenance of coastal, floodplain and riverine vegetation</i>
	<i>Agroforestry</i>
	<i>Reduce tillage and carbon restoration practices</i>
	<i>Agricultural intensification</i>
	<i>Urban forests and green spaces</i>
	<i>Urban green roofs</i>
x	Climate-change adaptation and mitigation
	Sustainable cities/ sustainable communities
	Re-naturing cities/ re-naturing communities
	Urban regeneration
	Coastal resilience

Teacher Resources (If 'Notes' are used in the related PowerPoint presentation please indicate here)	Learner Resources (e.g. academic articles or links) for advanced reading or review (citation in individual cells)
	Green Comp: <a href="https://joint-research.eu">https://joint-research.eu</a>
	<a href="#">EU Nature Restoration Law</a> - E
	<a href="#">EU Web page: Nature Needs Y</a>
	The Vital Role of NBS for a Nat

	Multi-functional watershed management
x	Enhancing the insurance value of ecosystems
	Sustainability of the use of matter and energy
x	Sustainable development
x	Innovating with nature
	Biodiversity
	Nature-based enterprises
	Nature-based entrepreneurship
	NBS and new business and investment models
x	Citizen participation, stakeholder/community consultation
	Disaster risk reduction
	Risk management and resilience
x	NBS policy development and implementation
	NBS research
	Green infrastructure
	Green finance / sustainable finance
	Ecosystem services and ecosystem-based approaches
x	Rural municipal/local authority/government planning
x	Coastal municipal/local authority/government planning
x	Urban municipal/local authority/government planning
	Improving well-being and quality of life
	NBS and new business and investment models
	NBS and CCAM (Connected, Cooperative and Automated Mobility)
	Other 1: (Please specify)
	Other 2: (Please specify)
	Other 3: (Please specify)

Keywords Source 1: United Nations Environment Programme (2020). *The Economics of Nature-based Solutions: Current Status and Future Priorities*. United Nations Environment Programme Nairobi., p.5. (keywords above in italics)

Keywords Source 2: Faivre N, Fritz M, Freitas T, de Boissezon B, Vandewoestijne S. (2017)'Nature-Based Solutions in the EU: Innovating with nature to address social, economic and environmental challenges.' *Environ Res.* 2017 Nov;159:509-518. doi: 10.1016/j.envres.2017.08.032. Epub 2017 Sep 8. PMID: 28886502.

Keywords Source 3: European Commission (2015). *Towards an EU Research and Innovation policy agenda for Nature-Based Solutions & Re-Naturing Cities: Final Report of the Horizon 2020 Expert Group on 'Nature-Based Solutions and Re-Naturing Cities' Full Version*. Luxembourg: Publications Office.





[actsheet: EU Nature Restoration Law- https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law\\_en](https://environment.ec.europa.eu/topics/nature-and-biodiversity/nature-restoration-law_en) <https://ec.europa.eu/commission/presscorn>







European Commission (2022) Factsheet on EU Nature Restoration Law <https://ec.europa.eu/commission/presscorner/api/files/attachment/872899/Factsheet%20on%20Nature>





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