

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

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

<b>Name of Learning Unit (LU) Topic</b>		Business models for Nature-based Enterprises: PART I BUSINESS MODELS & VALUE PROPOSITION					
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	NbE		Professional development	low	Low		Lecture
Target academic subject /	Target learners/ groups [age range of	Min/ Max # of learners	Sector (e.g, professional, higher	Prerequisites required of learners if	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-
<b>Business Sustainability</b>	<b>Professional</b>	<b>n/a</b>	<b>Professional</b>	<b>None</b>	EQF 6 - Irish NFQ 7/8 Ordinary/H	50 minutes	Online
Purpose	To learn about business models for Nature-based Enterprises, analyse and apply these in practice						
LU Summary (2-3 sentences)	Like any business, nature-based enterprises need to have a business model to survive and thrive. In this lesson, nature-based enterprises are introduced to the concept of business models and the business model canvas as a tool for strategic management and planning. Different business model tools are introduced for different types of businesses. Participants will reflect and analyse which business model canvas is most appropriate to apply to their business. They will apply learning directly to their own business context considering value propositions, key activities and resources, governance models, and beneficiary and customer perspectives.						
Learning Outcome 1	Understand what a business model is and how the business model for a nature-based enterprise may be different from that of other businesses.						
Learning Outcome 2	Understand the different types of business model tools appropriate for different types of business.						
Learning Outcome 3	Apply this knowledge in identifying the business model tool most useful for your business.						
Learning Outcome 4	Use this tool to start creating your own business model - in this learning unit (Part I) we focus on analysing your value proposition and activities. In the next learning unit (Part II), we evaluate different options for generating revenue and investigate different cost structures.						

LU designer resources for writing learning outcomes (click Learning Outcomes - Using Taxonomies tab or pyramid [here](#))

## 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,)
00:10 (10 min)	Understand business model and different types of	1,2	#3-9	Present context for LU , key concepts and examples	Followed by activity confirming learner's learning	See resources below.	
00:20 (10 minutes)	Identify the difference between customers and beneficiaries and apply in	3	#10	Activity: Group or Paired activity applying concepts to learner's own context.	#10 Interactive activity applying learning to participants own business or business idea	See resources below.	Break-out room function (online)
00:35 (15 minutes)	Explain business model canvas elements in	1,2	#11-19	Explanation of different elements using practical	Examples followed by learning activity to confirm learning	See resources 5-6 below	
00:45 (10 minutes)	Building your Business model- Fill out the right and left hand	4	#20	Activity: Group or Paired activity applying concepts to	#20 Activity applying learning to concept of learners own business or business idea	See resources 5-6 below	Break-out room function
00:50 (5 minutes)	Reflect on lessons learned	4	#18-19	Presentation and invitation for further engagement	Reflections added in chat / oepn discussion		Chat function

### NBS- Application of Curriculum, Trends and Skills

Curriculum integration (how it may connect to curriculum)	
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<p>Teaching &amp; Learning Trends employed</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)**

x	Forest Preservation
x	Forest Restoration
	Forest enhanced management for woodfuel harvest
	Forest Production
	Grassland Preservation
	Grassland Restoration
	Grassland grazing management
x	Coastal Preservation
x	Coastal Restoration
	Coastal maintenance of slope vegetation
	Maintenance of coastal, floodplain and riverine vegetation
x	Agroforestry
x	Reduce tillage and carbon restoration practices
	Agricultural intensification
	Urban forests and green spaces
x	Urban green roofs
x	Climate-change adaptation and mitigation
x	Sustainable cities/ sustainable communities
x	Re-naturing cities/ re-naturing communities
	Urban regeneration
x	Coastal resilience
	Multi-functional watershed management
	Enhancing the insurance value of ecosystems
	Sustainability of the use of matter and energy
x	Sustainable development
x	Innovating with nature
x	Biodiversity

(If 'Notes' are used in the related PowerPoint presentation)	Resources (e.g. academic articles or
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[MAGRETTA, J. 2002. Why business models matter.](#)  
 Osterwalder, A., Pigneur, Y., & Tucci, C. (2005). Clarif  
[Website: https://www.strategyzer.com/library/the-bus](https://www.strategyzer.com/library/the-bus)  
 Ries, Eric. *The lean startup: How today's entreprene*  
 Guidebook explaining how to apply the NBS BMC to  
 NBE academic paper applying NBS BMC to two case

x	Nature-based enterprises	
x	Nature-based entrepreneurship	
	NBS and new business and investment models	
x	Citizen participation, stakeholder/community consultation	
x	Disaster risk reduction	
x	Risk management and resilience	
x	NBS policy development and implementation	
x	NBS research	
x	Green infrastructure	
	Green finance / sustainable finance	
x	Ecosystem services and ecosystem-based approaches	
	Rural municipal/local authority/government planning	
	Coastal municipal/local authority/government planning	
	Urban municipal/local authority/government planning	
x	Improving well-being and quality of life	
x	NBS and new business and investment models	
	NBS and CCAM (Connected, Cooperative and Automated Mobility)	
	Other 1: (Please specify)	Restorative Ecology
	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.

























