#### Scope of the Session: NBS in different scales

The scope of this Session is to collect information about the NBS infrastructure focusing on buildings at district and city level. Specifically, the case studies should be highlighted, emphasizing in the advantages and barriers resulting from the development of NBS. It should also be made clear how the NBS affected the human health and wellbeing and the global working potential. This session will focus on green-blue infrastructure and new materials for NBS. Three discussion exercises will be performed.



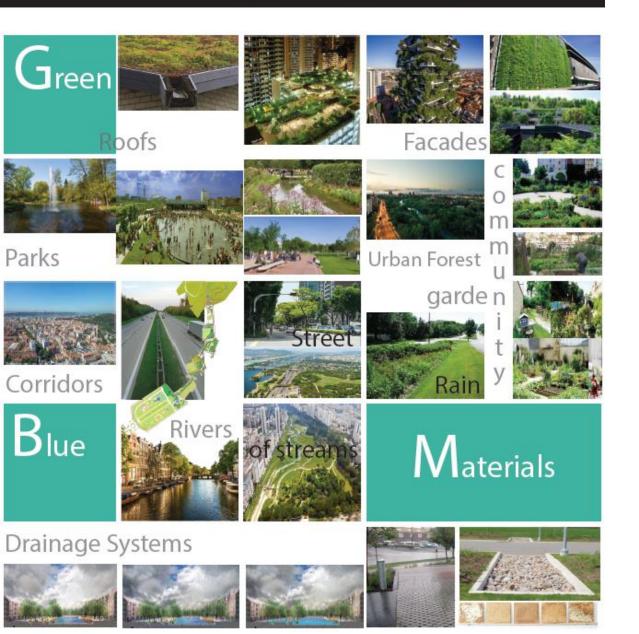




## Agenda

	Presentation by Anna Levonmaa, Landscape Architect, UNALAB, Tampere City	
10:10-10:25	Planning Department	
	Hiedanranta future city as NBS platform.	
10:25-10:40	Presentation by Maria Rosario Chan, Sustainable Development, Senior Manager,	
	Lafarge Holcim	
	NBS case study examples at district and city level.	
10:40-10:55	Presentation by Dr. Christian Artelt, Senior Manager Sustainable Construction,	
	ECTP	
	Concrete solutions for NBS in buildings, infrastructure, districts and at city level.	
10:55-11:10	Exercise 1: Brainstorm innovative NBS techniques for sustainable urbanization in	
	building, district & city level	
11:10-11:25	Exercise 2: Assessment of Innovation Potential and Market Impact	
11:25-11:40	Exercise 3: EC policy and R&I priorities	

# $N_{ature} B_{ased} S_{olutions}$



Green Roofs Green Walls-Green Facades Private Gardens Green Corridors-Street plants & Trees Urban farms, allotments or community gardens Urban Forests–Woodlands-Parks

Rivers or streams, including re-meandering, reopening-Blue corridors Sustainable Urban Drainage Systems-Permeable Pavements

Bio-waste based Growing Materials, including mycelium

#### **Exercise 1: Brainstorm innovative NBS techniques for sustainable urbanization**

Green Infrastructure						
NBS	Environmental Goods & Services	Impact of NBS:				
IND 3		High	Medium	Low		
E.g.	Air Quality					
Green Roofs Green Walls-Green Facades	Reduced Energy Needs					
Private Gardens	Urban Heat Island Reduction					
Green Corridors-Street plants & Trees Urban farms, allotments or community gardens	Public Health & Well Being					
Urban Forests–Woodlands-Parks	Economic Opportunities					
	Blue Infrastructure	-	<u> </u>			
	Environmental	Impact of NBS:				
NBS	Goods & Services	High	Medium	Low		
E.g.	Reduced Energy Needs					
	Urban Heat Island Reduction					
Rivers or streams, including re-meandering, re-opening- Blue corridors	Public Health & Well Being					
Sustainable Urban Drainage Systems-Permeable Pavements	Economic Opportunities					
	Materials					
	Environmental		Impact of NBS:			
NBS	Goods & Services	High	Medium	Low		
E.g.	Reduced Energy Needs					
Bio-waste based Growing Materials, including mycelium	Urban Heat Island Reduction					
	Public Health & Well Being					
	Economic Opportunities					

### **Exercise 2: Assessment of Innovation Potential and Market Impact**

	Technology Readiness Level (standard design and build, not yet widely used, unproven)				
		Standard Practice	Needs wider testing	Proof-of-Concept Needed	
Scale of Potential Impact (financial, geographical, disruption)	Global, mainstream, multiple benefits etc.				
	European, common practice, etc.				
	Local, Regional, targeted, etc.				

## Exercise 3: EC policy and R&I priorities

Policy barriers to mainstreaming				
Standard Practice	Needs wider testing			
R&I opportunities to accelerate h	igh impact, low-readiness techniques			
Needs wider testing	Proof-of-Concept Needed			