WATERWORKS 2017 RDI FUNDED PROJECTS BOOKLET

Project: To Ally Technology, Nature and Society for integrated urban water management

Acronym: ATENAS

Outcomes and expected impact:

- 1. Reports (8) summarizing subsequent steps in barrier overcoming, co-design, planning for and implementation of NBS, translated into short brochures for local communities use.
- 2. The model of biophysical context of each demo site and model-based overview of critical biophysical conditions for NBS implementation in demo-sites (maps of local hot-spot areas for special management purposes and NBS, technologies, ecosystem engineering implementations;
- 3. Provision of a free plugin of the Model for "NBS suitability" to help in the decision process
- 4. Five peer reviewed publications summarizing outcomes of workpackages;
- 5. Established local multi-stakeholder platforms / learning alliances (in each demo site), and identified local project leaders or activists for beyond project collaboration and dissemination of NBS knowledge;
- 6. Project presentation at conferences (3);
- 7. Locally co-designed projects of NBS, with overview of co-benefits and life-cost estimation, and demo site plans serving for NBS replication and upscaling as education tool serving beyond project lifespan;
- 8. Educational / dissemination events in each demo site presenting outcomes of the projects and know-how on NBS applied in Europe
- 9. NBS cook book guideline on how to co-design and design small NBS, implement them and plan for upscaling for reaching the synergistic effect;

List of deliverables expected:

- D.1.1.Report on critical factors and indicators in NBS planning, implementation, maintenance
- D.1.2 Factsheets on barriers and ways to overcome them
- D.2.1 Report describing implementation and results of the "Model for NBS suitability" in the form of decision maps
- D.2.2 Report describing design, implementation, construction phases and monitoring strategy of performances for the new build NBS
- D.2.3 GIS plugin achievement allowing to run the model for NBS suitability mapping
- D.3.1 The NBS "cookbook"
- D.4.1 Report on SMART visions in demo sites

i D.4.2 i iliai i Ebolt oli ubstallik bossibilitiEs aliu tulliulative ellett ol ivbs ili uellio sites	D.4.2 Final report o	n upscaling possibilities and	cumulative effect of NBS in demo sites
---	----------------------	-------------------------------	--

- D.5.1 Presentations and discussions on project outcomes in the events organised by the project or the stakeholders, connecting particularly to companies and universities
- D.5.2. Report on stakeholder assessments of project outcomes
- D.5.3. Long-term plan to use project results in cities, companies and research networks (ALTER-Net, PEER; EurAqua, ESP, LTER-Europe etc.)

Expected research results to communicate and disseminate (in very general terms)	Target groups for communication and dissemination activities:
1. The ways to overcome societal, cultural, legal and organizational barriers to NBS implementations	City decision-makers, citizens, NGOs
2. NBS "cookbook"	City decision-makers, citizens, NGOs, SMEs, academics
3. Process of building the society of practice and local leaderships	NGOs, citizens
4. Contextual model for NBS implementation and upscaling in urban areas	Academics, decision makers
Experiments / Case studies (if any): location, type of experiments:	
1. The Lodka catchment, the City of Lodz, Poland: ATeNaS will support an analysis of options for increased water storage and infiltration in urban commons through participatory design and implementation of demonstrative NBS as community building action. It will help to promote idea of stormwater retention, to link citizens with SMEs and	
decision makers, to establish community of practice and strengthen local leaderships. 2. The Yzeron river, Lyon, France : The Lyon demonstration site will analyze the self-purification capacity of the territory's rivers, lists the NBSs, develops partnership with	
stakeholders for the construction of three new NBS to amplify the self-purification capacity of small rivers, produces an educational video of this device from the design to the	
functional evaluation with stakeholders, contributes to the rehabilitation of a NBS dedicated to the treatment of runoff urban area. $ \frac{1}{2} \int_{-\infty}^{\infty} \frac{1}{2} \left(\frac{1}{2} \int_{-\infty}^{\infty} \frac$	
3. The City of Vantaa and Helsinki Region, Finland: ATeNaS will develop tools that will help to analyse the impacts of land use changes, apply of green area factor, model surface flows and find acceptable targets for different areas. The project will examine the reception and	

maintenance of recently implemented stormwater retention measures, gathers data on the experiences of their benefits, promotes collaborative action for the restoration of rivers and brooks, and will analyze opportunities and challenges in mainstreaming NBS. The application of bio-filtration in the treatment of runoff waters will be supported by developing ways to include it in street planning practices. Based on existing experiences, the project will enhance local participation in NBS development through co-design approaches, applying experiences from urban activism, and helping to maintain continuous monitoring and feedback systems.

Water Policy context / project contribution to policies (National, European, International – UN SDGs):

- 1. ATeNaS wants to capitalize on knowledge on NBS and NBS related innovation funded nationally and internationally within RDI framework, and make it accessible to non-professionals;
- 2. ATeNaS builds upon established long-term collaboration among stakeholders and embeds its actions in local needs and investments aimed at meeting EU regulations (WFD, Nitrogen, Habitat), international commitments COP21, SDG, and EU strategies cohesion policy. It contributes to national strategies of sustainable development and climate adaptation.
- 3. Tested measures and means in the field of implementation, analysis of boundary conditions for NBS in cities, attracting of citizen attention and knowledge sharing, as well as models developed within ATeNaS will be effectively promoted as outcomes of Water JPI and European Research Area.
- 4. Combining measures for improving quantity and quality of water in urban areas with development of green infrastructure and multifunctional spaces, in collaborative, participatory way, makes water resources more accessible to all city inhabitants, promote social inclusion, healthy lifestyle, and also contribute to lowering carbon and water footprint, as NBS promote low impact and self-regulating measures. All those corresponds with SDGs 3, 11, 13 and 14, and the COP21 Paris Agreement 27.