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## **Call for Abstracts**

As part of the Presidency of the Estonian Republic of the Council of the European Union, a flagship conference "**Nature-based Solutions: From Innovation to Common-use (NBS2017)**" will be organized by the Ministry of the Environment of Estonia and the University of Tallinn. The conference will be held in **Tallinn from 24 to 26 October 2017**.

The conference will address nature-targeted innovation actions involving all societal actors. It will host leading scientists, policymakers and entrepreneurs from around the world who will share their experience on how nature-based innovation and eco-innovative technologies can be implemented in many areas of life.

The conference will cover policy and financing as well as innovative solutions close to or already on the market to give inspiration and show what can be done. The conference aims to strengthen synergies among various recent initiatives and programs related to NBS launched by the European Commission and by the EU Member States.

# The call for abstracts is open until July 14 and the registration for the conference will be opened in August 2017.

The NBS 2017 conference Program Board **welcomes your abstracts for oral presentations, and posters** for the parallel sessions which will address five specific themes:

- Blue-green infrastructure in smart cities
- Integrated water management through natural systems
- ICT as a supporting tool for nature based solutions and ecosystems
- Ecological restoration through eco-innovation
- Nature-based solutions in circular economy.

Contributions are welcome from practitioners, policy advisers and scientists, and collaborations of groups. We hope to get a broad representation of related issues and solutions from across Europe.

The presentation abstracts are limited to **300 words** (the title, authors and institutions are excluded from the word limit). All abstracts must be submitted in English.

Abstracts are to be e-mailed to <u>abstractnbs@tlu.ee</u>, as an e-mail text without attachments, one abstract per e-mail, using the subject line: NBS Abstract Submission 2017.

In the e-mail the full abstract title, author names and affiliations, contact information for the presenting author, abstract text and preferences should be included.

**Preferences:** Talk/ Poster; presentation day (October 25 policy & governance / October 26 practice, research & innovation); session preference (1–5).

For more information, visit the conference website www.tlu.ee/en/nbs.

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REPUBLIC OF ESTONIA MINISTRY OF THE ENVIRONMENT

## Main parallel session topics for the NBS 2017 conference

### 1. Blue-green infrastructure in smart cities

Currently, 73% of Europe's population lives in cities and this is increasing. Because of this, there is a high need for sustainable urbanization. Smart cities aim at using digital technologies to achieve better public services for citizens, better use of resources and less impact on the environment. To make cities more sustainable, these technologies can be used in combination with nature-based solutions to increase the resilience of cities and the wellbeing of its citizens even further. With this topic, we intend to direct attention on ICT's environmental, social aspects, and potential links with sustainability-driven visions, which are often intentionally using ecosystem services in addition to grey infrastructure solutions. We intend to highlight ways in which blue-green infrastructure can complement smart cities in the near future.

#### 2. Integrated water management through natural systems

The commonly used water treatment solutions pose many challenges, among them the high demand for energy and the low success rate in removing some problematic pollutants. In addition to that, many urban areas offer very little resilience to flooding and high rainfall events sometimes with the current water treatment systems failing entirely. Many researchers are looking towards natural water treatment systems for answers to these issues and have been successful in many cases. With this topic, we intend to focus on the different technological aspects of natural systems used for water management.

#### 3. ICT as a supporting tool for nature based solutions and ecosystems

Information and Communications Technology (ICT) solutions such as Geographic Information Systems (GIS) environmental data analysis or mobile phone apps for the monitoring, planning and better management of natural systems can have a strong supporting effect on the development of NBS. There is a lot of environmental data available and through the right analysis, it can help inspire, develop and maintain NBS. ICT could also help measure the environmental impact of NBS compared to "traditional solutions", thus supporting their implementation. In addition to this, ICT can play an important role in raising general awareness of NBS through citizen science projects and community led urban development.

#### 4. Ecological restoration through eco-innovation

Innovative solutions have spurred on human development from the very beginning. Unfortunately, this development has had many negative aspects on the environment. With this topic, we want to highlight ways in which innovative NBS can help us achieve human development highlighting opportunities on achieving a more sustainable development. This can include using micro-organisms to help utilize nutrients in soil to restore ecosystems, plants that aid bioremediation or pheromones as pest deterrents to name a few. The focus on this topic is on the ecological restoration of natural ecosystems through natural methods. Demonstration of multiple benefits of NBS solutions is expected (e.g. in addition to economic aspects also social benefits should be introduced).

#### 5. Nature-Based Solutions in circular economy

Natural resources and solutions are the long-term basis of the circular economy, but this would need to be reflected in closing the loop of the entire value chain. Main contributions of NBS to circular economy might be to demonstrate use cases of systemic resource-efficient and cost-effective approaches. A second effect is the lower impact on biodiversity due to lesser resource use. As nature operates in circular, closed loops, there is a lot to learn from it for industrial ecology and urban systems. This means NBS can be an important inspiration for the development of circular economy. With this topic, we intend to highlight ways NBS can make consumption patterns more sustainable such as using organic waste in green infrastructure projects and replacing chemical intensive processes that create difficult-to-use waste with more natural processes. NBS could also help land-reuse projects and thus limit urban sprawl.