



**Nexus cluster workshop:
Methods, tools and data for policy support on the Nexus**

29 October 2019

Location: EASME, Covent Garden Building, COV2 00/SDR2, Place Rogier 16, Brussels

The purpose of this workshop is to showcase the achievements from research projects in defining the resource nexus, including the development of methods as well as the use of tools and available data. The projects address several policy domains including sectoral policies (e.g. energy, climate, environmental and agricultural), as well as cross-sectoral policies (e.g. resource efficiency, circular economy). In addition, knowledge gaps are made explicit and we seek for interaction with different Commission Services.

The workshop is co-organized by the Executive Agency for SMEs (EASME), the H2020 projects DAFNE and SIM4NEXUS, UNU-FLORES and the Nexus Project Cluster (<http://www.nexuscluster.eu/>), and brings together EU-funded projects related to the resource nexus as well as other (non-EU funded) related initiatives with the objective to stimulate peer-to-peer and science-to-policy discussions on how to get the most out of nexus research for the benefit of society and policy-making. See also the first newsbulletin: https://www.wecr.wur.nl/PublicatieWebImages/other/NexusProjectCluster_Newsbulletin_1.pdf

AGENDA

08:30 – 09:30 Registration

09:30 – 9:45 SESSION 1: WELCOME AND SCENE SETTING

Welcome: Patrik Kolar (EASME, Head of Department – LIFE and H2020 Energy, Environment, Resources)

Floor Brouwer (Wageningen Research) (SIM4NEXUS) - The nexus project cluster, scene setting of the workshop

9:45 – 10:45 SESSION 2: THE NEXUS IN POLICY SUPPORT

Session chair: Jasminko Novak (DAFNE)

Projects from the Cluster to present their experience in policy support. What are the main principles of the nexus? What are its features? How is the nexus research used in policy support? Synergies between the nexus sectors are searched for. Contributions are invited from the Nexus Project Cluster to share their key policy messages, and the session seeks for improvements to convey messages for policy support. A panel will be organised with representatives from the European Commission to share their feedback.

Introductions from project/organisation:

- Roger Cremades (Climate Service Center Germany) (CLISWELN) - Advancing the provision of Climate Services for drought-related decision making, by using the

water-energy-land nexus to integrate the cross-sectoral links of drought-risk management.

- Kirsty Blackstock (James Hutton Institute, UK) (MAGIC) - Sharing societal metabolism insights with European Policymakers: uncomfortable encounters and learning for all.
- Andrea Castelletti (Politecnico di Milano, Italy) (DAFNE): A decision-analytics framework for water-energy-food nexus analysis for policy making.
- Jochen Wendel (European Institute for Energy Research (EIFER), Karlsruhe, Germany) (Creating Interfaces): Citizen participation via citizen science in the food-water-energy nexus in 3 cities on the water.
- Dolores Rey (Cranfield University) (NEXT-AG) – Towards coordinated water-energy-food-environment (WEFE) policies to promote sustainable agricultural development in Andean countries.

Discussion with representatives from the European Commission DGs.

10.45 – 11.15 COFFEE BREAK

11.15 – 11.45 SESSION 3: DATA SHARING

Session chair: Chrysi Laspidou (SIM4NEXUS)

The ICT4WATER Cluster launched an Action Group on Data Sharing, and SIM4NEXUS is leading this group. Focus is on data sharing, with the open access release of multi-sector data to add value to improved decision-making. The Action Group seeks for more examples of sharing multi-sector data from multidisciplinary research actions and targets for a community of practices to add value from data sharing towards improved decision-making. The Nexus Project Cluster could contribute to this.

Introductions from:

- Chrysi Laspidou (University of Thessaly, Greece) (SIM4NEXUS): Multi-sectoral data and importance of naming conventions, progress in release of data in open access.
- Eunice Pereira Ramos (KTH Royal Institute of Technology, Sweden) (CLEWS): The experience of data access and availability in CLEWs assessments built over the years will be shared: barriers and challenges, as well as opportunities, are identified, and recommendations to a way forward presented.

Feedback by EASME

11.45 – 12.30 SESSION 4 - THE NEXUS IN HORIZON EUROPE

Session chair: EASME

The General Secretariat of the Council of the European Union published a Proposal for a Decision of the Council on establishing the specific programme implementing Horizon Europe – the Framework Programme for Research and Innovation. The Nexus Project Cluster has introduced an internal consultation on the Proposal. Given the relevance of Horizon Europe, we considered it useful to collect and make a number of Nexus-relevant comments on the Proposal for Horizon Europe. The Comments have been brought together by the Nexus Project Cluster. See also:

<https://www.sim4nexus.eu/userfiles/Deliverables/Response%20to%200Horizon%20Europe.pdf>

Missions and cross-sectoral clusters as proposed in Horizon Europe per definition call for a nexus approach and may profit from the lessons learned by nexus research. The session will discuss lessons learned and knowledge gaps from the current nexus research and promising areas for future research.

Introductions from:

- Floor Brouwer (Wageningen Research, the Netherlands) (SIM4NEXUS) – introducing the response from the Nexus Project Cluster.
- Maria Witmer (PBL Netherlands Environmental Assessment Agency, SIM4NEXUS): Nexus concept and the link between policy recommendations and missions in Horizon Europe.
- Lydia Vamvakeridou (KWR Watercycle Research Institute, NextGen): The Nexus concept to support policy areas like the circular economy.

Feedback by the European Commission (DG RTD)

12.30 – 13.30 LUNCH

13.30 – 14.45 SESSION 5 – METHODS AND TOOLS IN THE NEXUS

Session chair: Chrysi Laspidou (SIM4NEXUS)

The session will present some innovative methods and tools to address the nexus for policy support. Projects from the Nexus Cluster are invited to present their research methods (including available tools) for policy support (10 minutes for each project).

Project/organisation:

- Reinaldo Penailillo (Deltares, the Netherlands) - Integration of sectoral models and tools for Nexus system analysis and decision making.
- Kirsty Blackstock (James Hutton Institute, UK) (MAGIC) – Quantitative story-telling and visualisation tools for a more robust understanding of the nexus.
- Jasminko Novak (European Institute for Participatory Media, Germany) (DAFNE) - Multi-perspective visualization tools for water-energy-food nexus analysis in multi-stakeholder dialogues
- Tamara Avellán (UNU-FLORES) – Multi-method inter-disciplinary approach to provide sustainable solutions to Nexus problems
- Lydia Vamvakeridou-Lyroudia (KWR, The Netherlands) (NEXTGEN) – Linking Circular Economy and the Nexus for the next generation of water services.
- Mehdi Khoury (University of Exeter, UK) (SIM4NEXUS) – Serious Games for nexus-compliant practices

14.45 – 15.15 Coffee break

15.15 – 16.00 SESSION 6 – Nexus Academy and Actions

Session lead: Floor Brouwer (SIM4NEXUS)

Different nexus projects are keen to organise training on the Nexus (e.g. summer school, webinars, e-learning, training on methods and tools for policy support). What are the most promising interdisciplinary approaches? Organise training on the nexus for public policy makers (e.g. EC staff, national ministries). Could the Nexus Project Cluster align-up to the SDG Agenda? Is there potential to develop MOOCs (Massive Open Online Courses) on the Sustainable Development Goals? SIM4NEXUS and Nexus Dialogue Programme to introduce.

Project/organisation:

- Lydia Vamvakeridou-Lyroudia (University of Exeter, UK/KWR Watercycle Research Institute, the Netherlands) (SIM4NEXUS) – Training of the future decision-makers (e.g. students) and training of policy makers and business sector.
- Phoebe Koundouri (ICRE8 International Research Center and Athens University of Economics and Business) (DAFNE) - The education element of the sustainability transition: Training in SDGs implementation.

- Chrysi Lapidou (University of Thessaly, Greece) (SIM4NEXUS): A Water-Energy-Food-Ecosystem Nexus publication developed by the European Commission's Joint Research Centre (JRC), the Union for the Mediterranean (UfM) and the Global Water Partnership for the Mediterranean (GWP-Med) (Nexus Atlas).

16.00 – 16.30 SESSION 7 – Wrap-up and closure

Session lead: EASME

Session leads to present the key messages from the workshop, emerging knowledge gaps and improved nexus research for policy support. Conclusions of the workshop and follow-up by the Nexus Project Cluster.



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