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Successful policies in a nexus context

Trond Selnes (WECR), Maria Witmer (PBL), Robert Oakes (UNU)

Brussels, 16 May 2019

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#EUGreenWeek
13–17 MAY 2019

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 689150 SIM4NEXUS

Scope of the session

- How do we successfully develop and implement policy in a nexus context?
- How can a Nexus approach contribute to successful policy implementation?
- Policy coherence within water-land-energy-food-climate (WLEFC) nexus, and between other policies and nexus.

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Outline

- Horizontal and vertical policy coherence at EU and MS scale
- Regulatory gaps, ambiguities, inconsistencies
- Tailor-made nexus solutions and success stories
- Recommendations to improve nexus governance
- Discussion

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Successful policies in a nexus context concern the whole policy cycle

Political will, organisation & process, knowledge & awareness

- Policy goals of all sectors in the nexus (water, energy, land-use, food, agriculture, climate), implementation pathways, instruments and means defined transparently, maximising synergy between policies and instruments and managing conflicts and trade-offs at bio-physical, socio-economic, and governance level. Prevent, mitigate, compensate. ***Coherent policy output.***
- Process: fair and transparent, equally respects interests of all sectors involved. ***Coherent policy process.***
- Decisions made well-informed about the relations between the sectors in the nexus. ***Science based.***

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Vertical & horizontal coherence

- EU and national policy objectives are often horizontally coherent. The problems usually come with the implementation.
- Some investigated EU policy goals have conflicts with nearly all other goals in the WLEFC-nexus. These conflicts are only partly addressed in the current and proposed EU policies.
- Synergies between WLEFC policies are not always addressed and utilized. Waste of opportunities.
- Implementation of the UNFCCC Paris agreement on climate change gets more attention than the multi-sectoral Sustainable Development Goals. This unilateral focus may cause unwanted trade-offs on water, land and food production.

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Water-land-energy-food-climate nexus 'nodes'

- Synergy: good practices in water and land management (restoration of soils, prevention of soil erosion and reforestation, restoration of natural courses of rivers and infiltration capacity of soils) are 1) nature-based solutions to combat flooding and drought; 2) synergistic with climate change mitigation and adaptation and 3) support agriculture. Czech Republic, Slovakia, Germany, Andalusia, and South-West England.
- Synergy: increasing energy and water efficiency, resource efficiency in the agro-food chain, reduction in the use of water and energy are fundamental measures that serve all sectors within the nexus, synergistic with climate change mitigation and adaptation. Greece, Latvia, Andalusia, Sardinia.

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Synergy or conflict depends on implementation

- Ambiguous: Agriculture has potential for environmental public services and positive interaction with water, land, nature, energy and climate. Internal conflicts exist between economic and environmental agricultural objectives. Latvia, Andalusia, South-West England, Czech Republic, Slovakia and Germany.
- Ambiguous: Water supply and management of flooding and drought have positive effects within the nexus, but water supply may increase energy demand and cause rebound effects. Andalusia, Sardinia and Greece.
  Nature-based solutions more synergistic with land management and climate change mitigation than technical solutions (canals, artificial reservoirs, pumps, ...). Czech Republic and Slovakia.

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Synergy or conflict depends on implementation

- Ambiguous: Renewables.
  - Hydropower: negative effects on ecological water quality and land availability. But: delivers low-carbon energy and water reservoirs serve as water buffers in case of drought. Sardinia.
  - First-generation biofuel: negative trade-off with production of energy crops, stimulated by EU & MS renewable energy policy. Large-scale monoculture changes the agricultural landscape, regional hydrology and local climate. Czech Republic, Slovakia and Germany.
  - Biomass: production in forests conflicts with biodiversity goals. Sweden, Latvia.

- Conflict: Competition for water and land. The Netherlands, Czech Republic, Germany, Latvia and the Upper-Rhine basin in Germany and France, Sardinia, Greece, Andalucia.

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Vertical incoherence: coherent EU policies no guarantee for implementation

- Incoherent EU & national policies hamper lower scale implementation;
- Lower scale measures insufficient nexus-aware to achieve targets set at higher scale;
- Lower scale policies have more ambitious goals and find little support at higher scale;
- Lack of manpower, funding and knowledge for nexus approach in MS;
- Lack of power to influence nexus-aware decisions - national versus regional scale, affects also the implementation of EU policies.

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Regulatory gaps, ambiguities and inconsistencies: main messages

- How regulatory ambiguities, gaps and inconsistencies work in practice depends on the priority actually given to a policy
- Ambiguity serves the dominant discourse
- Lack of priority for environmental and conservational values leads to regulatory gaps, ambiguities and inconsistencies
- Strong bias towards agricultural production and technical water solutions leaves gaps in land-use (soil issues and biodiversity).

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Regulatory gaps, ambiguities and inconsistencies: examples

- Sweden: CAP Environmental Quality Objectives: low priority in reality (just on paper) & little impact: few resources, sector bound, unclear division of responsibilities.
- Azerbaijan: Inconsistency: Agricultural production increases water use while water regulations reduces water use
- Andalusia: ambiguity due to the number of laws & specific regulations of the WLEFC-Nexus
- Czech Republic: regulatory freedom of stringency of the CAP Good Agricultural and Environmental Conditions (GAECs) is causing unsustainable agricultural practices
- Netherlands: ambiguity on the usage of biomass (unclear sustainability criteria; waste vs. resource)

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Regulatory gaps, ambiguities and inconsistencies: lessons for the EU

- Regulation should address ways of encouraging cross-sectoral and transboundary policy & collaboration: support joint economic gains, solve unaddressed trade-offs
- Multi-sector & multi-level initiatives to clarify legal definitions and regulatory interpretation
- Alignment of climate action and SDGs important but also a matter of awareness & priority
- Joint explorations of common cross-sectoral interests vs. competing claims may support better regulation (less details, more mandatory?)
- Institutional infrastructure for common interests and shared goals: tool to improve regulation of the monitoring (reflexive monitoring)

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15 Critical elements for successful Nexus policy

- A strong **scientific baseline**
- Scenario building to **prepare for uncertainties**
- Political and social **will to change**
- **Public awareness**
- Common understanding and **shared vision**
- **Legitimacy** of actors
- **Guidelines** and measurable **targets**
- **Monitoring**
- Plan for **adaptability**
- **Involve stakeholders** in every aspect of the project
- Dynamic **knowledge sharing** and capacity building
- Fair **distribution of costs and benefits**
- **Ownership** increases engagement and sustainability
- Appropriate **scale**
- Long term **support**

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Sardinia recognition of success

- The Sardinian case study has contributed to the Sardinian Regional Strategy for Adaptation to Climate Change (SRACC).
- The case study was able to provide models and data on the interactions of water, land, food, energy and climate sectors.
- The SRACC was thereby able to produce new knowledge on the hydrogeological structure and risks of the territory, the agricultural and forestry sectors, the inland water sector with implications of water governances for multiple sectors, such as agriculture, domestic and tourism at the municipality level.
- As a result of the work, it has been possible to develop new networks of stakeholder engagement and interaction.

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Success criteria & tailor-made solutions

- South-West Water: collaboration on a joint understanding of Nexus-challenges and better interaction & risk management.

Result: OFWAT recognition

- Regional Living Lab Latvia Zemgale Region: joint process, local community engagement, establish a cultural match, increased sense of ownership, prevent conflicts.

Result: shared holistic plan

- Transboundary French-German Collaboration: Upper Rhine Conference agenda building facility.

Result: recognition of complexity and uncertainty

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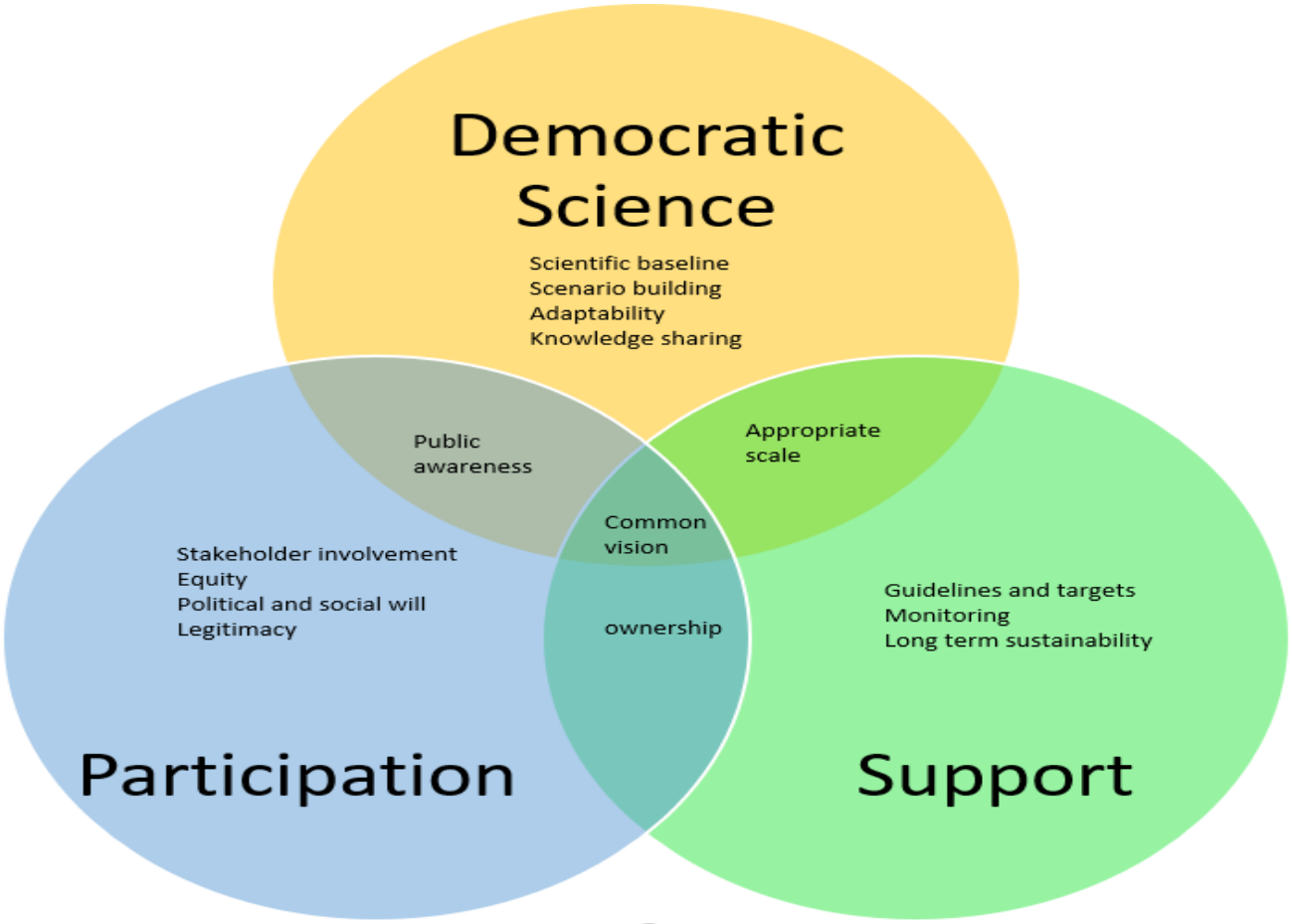
Lessons applicable to EU

The interrelated nature of policy design and implementation



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Main Messages

- Success in nexus policy-making has many dimensions and is multi scale. It concerns the whole policy cycle, including legislation and implementation. Create more nexus-awareness across whole cycle.
- Successful nexus policy-making and implementation depend on political will, mindset, incentives, knowledge management and careful organisation of the process.
- Climate change paradigm drives current policy agenda, SDGs seem subordinate. Nexus approach can facilitate a more integrated water, land, energy & food transition for the climate policy.
- Most frequently mentioned enabling factors for successful cross-sector cooperation: ***Trust & commitment, common goals, perspectives & interests.*** These factors cannot be taken for granted in cross-sectoral cooperation. They demand a profound and continuous attention.
- Serious game: to facilitate a more nexus oriented policy making process and implementation; stimulates a mutual understanding & awareness

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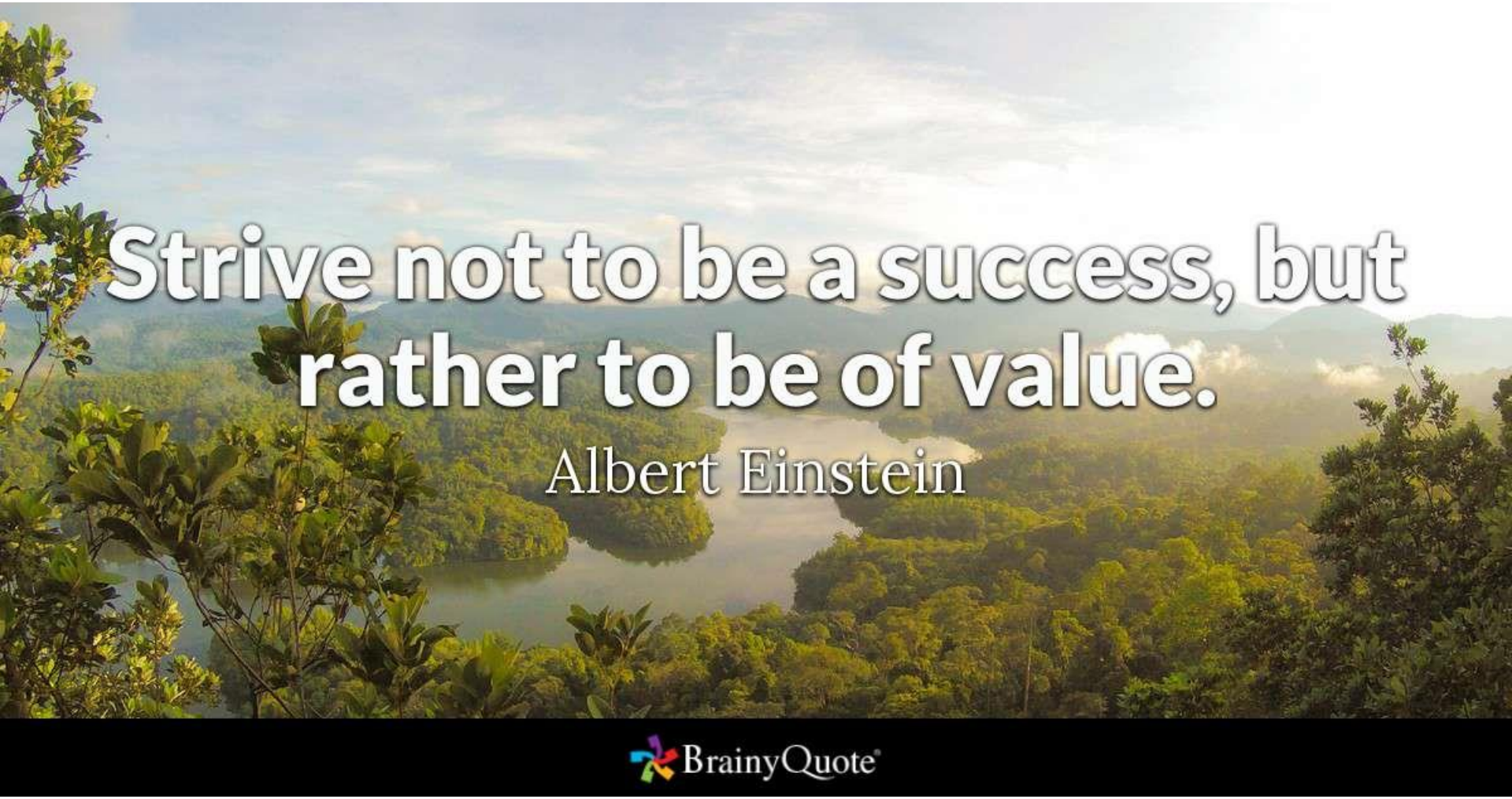

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Discussion Points

- **'Breaking the silos'** was leading for the departing Commission. Has a nexus approach become the norm in (environmental) policy-making? What is needed in the fields of politics, organisation and policy-making process, knowledge and awareness, to improve a nexus approach? What ideas and proposals could inspire the new Commission?
- **Balance** between feasibility and nexus scope: when is a nexus approach 'good enough'?
- **Nexus assessments:** Do we need a 'nexus assessment' at the start of a new policy-making process, or are current integrated assessments sufficient?
- **Learning:** How can the MS and the EC learn from nexus problems during implementation to improve the policy-making? How can learning be key to monitoring and evaluation of policy and then serve a better nexus compliance? Current policy evaluations do not seem to evaluate the process, nor the nexus scope.

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Thanks for your attention!

For further information please consult
www.sim4nexus.eu,
follow us at @SIM4NEXUS
Trond.Selnes@selneswur.nl

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