

LEAP RE Stakeholders Forum

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Open source Nexus modelling tools for Planning sustainable Energy Transition in Africa



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Overview

Introducing the ONEPlanET Project:

- ONEPlanET: - “Optimising Energy Planning and Management through the Water-Energy-Food Nexus”
- A collaborative initiative aimed at addressing the critical challenges related to sustainable energy and resource management in Africa.

Key Partners:

The project brings together a consortium of 11 multidisciplinary partners, including both public institutions and private entities, spanning across 9 countries (5 in Europe and 4 in Africa):

- RINA (Coordinator); Ecowas Centre for Renewable Energy and Energy Efficiency (ECREEE); Afrilabs; University of KwaZulu Natal; Strathmore University; University of Genoa; IHE Delft; Three O'clock; Fundacion Cartif; University of Valladolid and Stockholm Environment Institute

Project Objectives:

- Empowerment: ONEPlanET aims to empower African policy makers, research institutions, investors, and citizens with the knowledge and tools necessary to increase clean energy generation while reducing inequalities and cultural/socio-economic gaps.
- Capacity Building: The project will co-design and test a toolkit, integrating Water-Energy-Food (WEF) nexus models and capacity-building materials.



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Capacity Building and Nexus Modelling:

- Capacity Building Approach:
 - Informing: The project focuses on increasing awareness about the WEF Nexus, its implications, benefits, and trade-offs. This includes creating a web platform, awareness campaigns, hackathons, and a serious game.
 - Learning: Capacity-building materials and knowledge exchange activities will be provided to policy makers, academia, and investors, including an online accelerator, knowledge exchange program, and a network of experts.
- Co-Design Methodologies: Emphasise the importance of engaging with users and stakeholders throughout the toolkit development process. Mention the use of user research, co-creation, and validation.

Key Breakthrough:

- Highlight the innovative approach of co-designing the model and interfaces with real users within the African river basins, ensuring the toolkit targets real needs and challenges.



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ONEPlanET aims to empower African policy makers, research & academia, investors, and citizens with the necessary tools and know-how to increase clean energy generation and sustainable use of resources while reducing inequalities and cultural/socio-economic gaps.

Toolkit Development: User engagement and co-design methodologies are at the core of building the ONEPlanET Toolkit. Users demand user-friendly and easy-to-use tools that support decision-making across sectors. Building the toolkit with local community knowledge allows us to design a user experience tailored to the real problems and challenges faced by policy makers, academia, research, investors, and citizens.

Addressing User Needs: The toolkit development process includes:

1. User research in each basin to map current problems related to energy-related decisions.
2. Stakeholder engagement activities, combining online and offline methods such as interviews, world cafes, and surveys.
3. Co-creation of the user experience and capacity building materials based on the main pain points of policy makers, utilities, and investors.
4. Creation and testing of models, user interfaces, and training materials with ongoing feedback loops.
5. Final validation through real feedback from policy makers, academia, research, investors, and citizens.

Local Engagement: Engagement with users in the three ONEPlanET local communities begins from the project's inception. Periodic local communication actions, workshops, and events will foster collaboration and understanding of local needs.



	WP Title	WP Lead	
WP 1	Socio-economic and policy baseline assessment within a Nexus approach	Strathmore	
WP 2	Definition of a Nexus common modelling framework	ECREEE	
WP 3	Nexus model building and development	UVa	
WP 4	Nexus model testing and validation	UKZN	
WP 5	Capacity building, engagement and training	3 O'Clock	
WP 6	Communication, Dissemination and awareness creation	AfriLabs	
WP 7	Project Management	RINA-C	



Thank you!



Do you have any questions?

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