

Is climate change adaptation all about water?



International conference | 25-26 April 2023 | Brussels

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Co-funded by
the European Union



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What does it take to upscale Water-Energy-Food Nexus solutions?



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26 April 2023

Implemented by

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für Internationale
Zusammenarbeit (GIZ) GmbH

Challenges to WEF Nexus solutions



Silo mentality of public and private sector organizations

Inadequate financing schemes for implementation at scale of WEF Nexus

Lack of adequate capacities to regulate, develop and manage integrated projects

Lack of viable and scalable business models

Business models for WEF Nexus solutions



With the objective to **identify and analyse the most promising WEF nexus solutions and related business models for MENA and Niger Basin regions**, a market analysis was carried out with a focus on **sectors able to attract private sector investment** and scale developers' solutions and initiatives.

Agrivoltaic technologies



Solar irrigation systems



Productive uses of energy

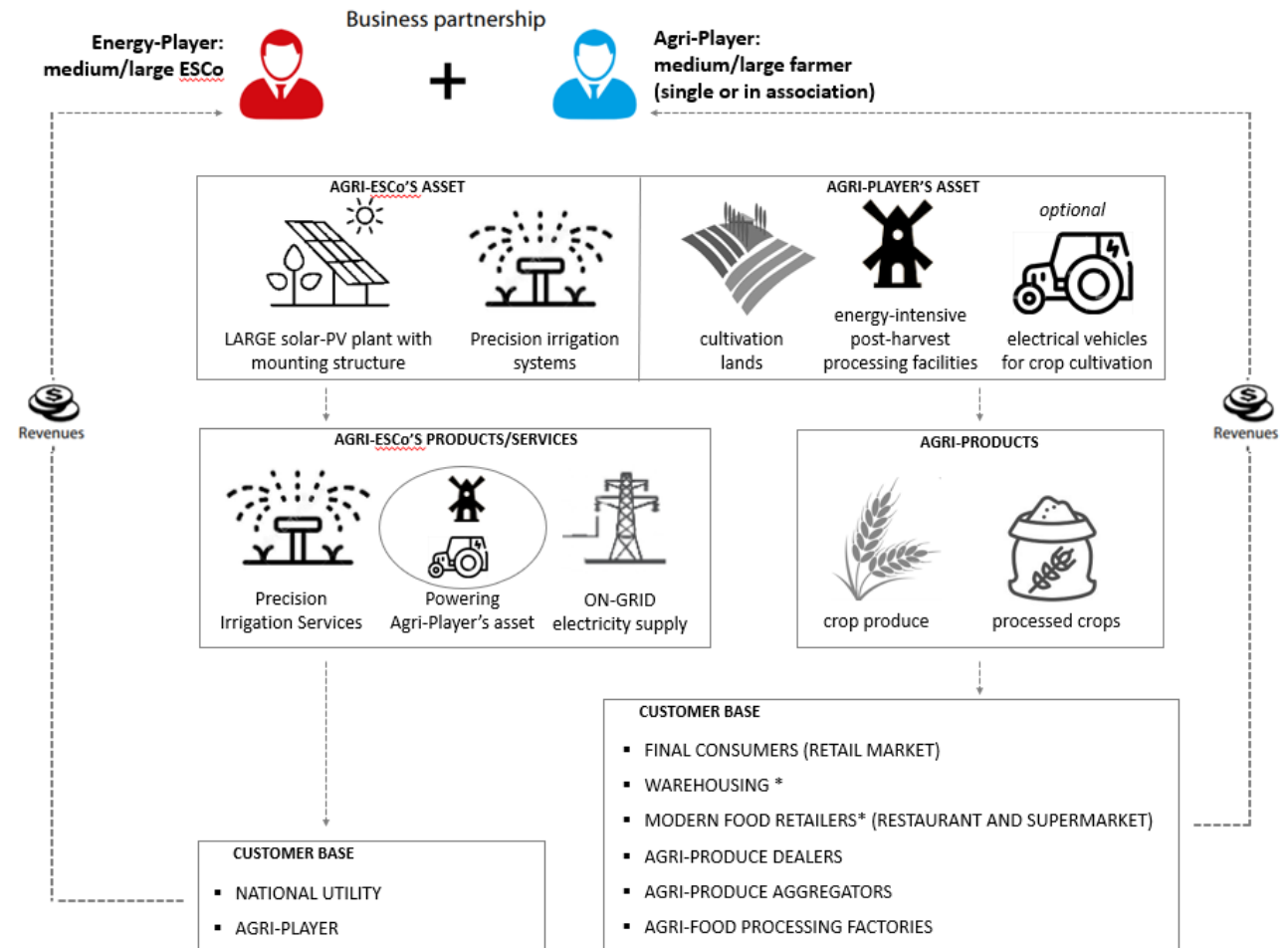


PV shading for horticulture



AGRI-ENERGY SERVICE COMPANY

- Agri-Energy Service Company (Agri-ESCo) who delivers a turnkey Agri-PV solution (full package of energy and precision irrigation services) for efficient agri-food production and processing.
- The Agri-ESCo inputs the extra electricity generated to the national grid and manages Agri-PV assets for a given period by adopting a Build-Own-Transfer (BOT) model, even if other options could be explored. The business model is suitable for medium-large Agri-ESCos and farmers (single or in associations).



Integrated Greenhouse – Nexus Farm Initiative Egypt

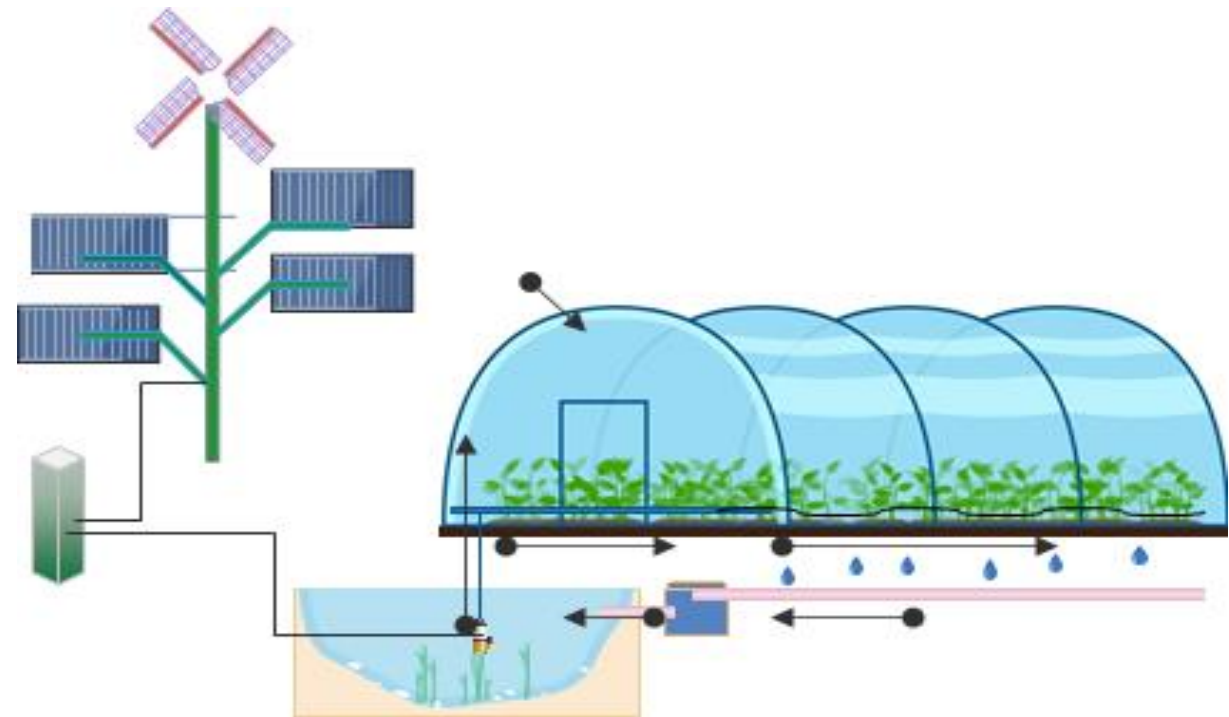


Figure 1: Schematic overview of the solar powered greenhouse with fishpond, growing area for seedlings, a solar panel tree and a charging station for phones and testing equipment.

Recommendations



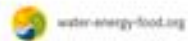
Provide more **evidence-based arguments** of Nexus approach

Concerted policy/governmental actions to promote technologies

Develop more projects at **scale**; consider different **business models**

Develop WEF-specific teams and capacities within financing mechanisms, and development organisations

Develop **end-user-driven** financing products; support **business development** of technology suppliers



Thank you for your attention.



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