



A 1st of 3 thematic workshops/webinars focusing on:

Water-Energy-Food Nexus

22 June 2020 from 10:00 to ± 12:30

Later in 2020, 2 supplemental workshop/webinars on:

WASH: water, sanitation and hygiene

Transport, mobility and water infrastructure

... Today

- WEF Nexus webinar objectives & program -

- Virtual welcome, presentation of objectives & participating structures;
- Presentation of the Nexus Belgium Project;
- Short history & definition of WEF Nexus;
- Presentations of participants;
- GLZ presentation on their Nexus Strategy (\pm 11h00);
- Brainstorming & discussions.



... Objectives

- WEF Nexus webinar -

- Identify, present & connect Belgian WEF Nexus actors;
- Discuss the state of the art of WEF Nexus;
(definitions, policies, action plans, governance, financing, limits, ...)
- Conduct a SWOT analysis on (Belgian) WEF Nexus activities.



... Participating structures

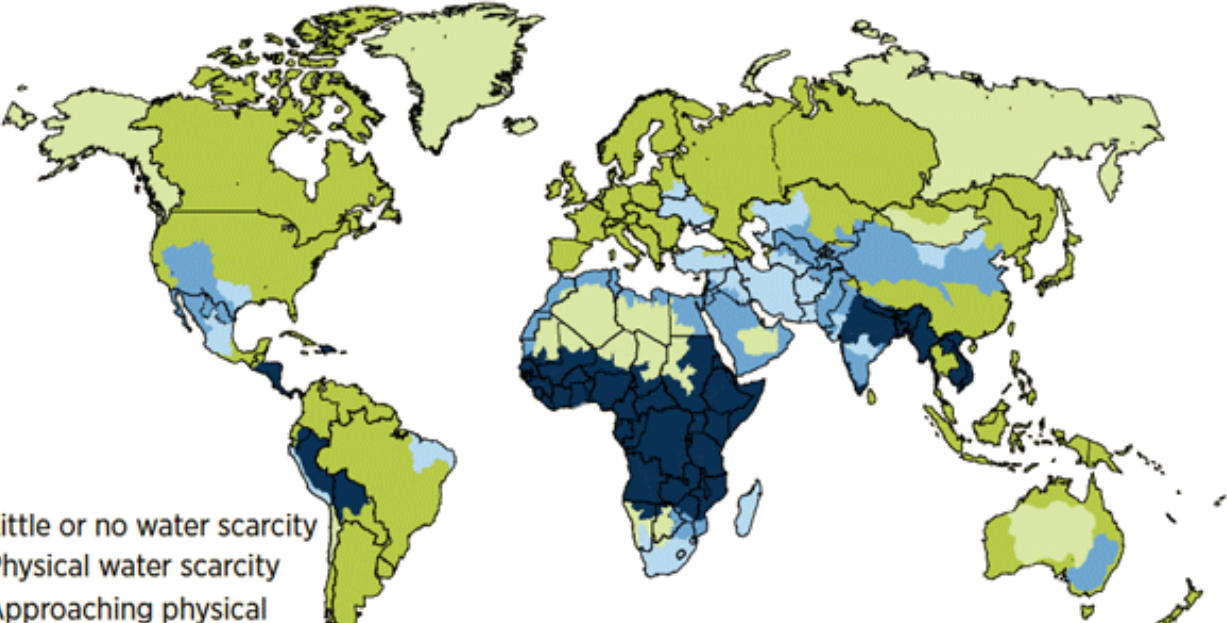
- WEF Nexus webinar -

NGO	Private sector	Public agency	Research Institution
Caritas International	Antea Group	AWEX	CEBEDEAU
CEMREST	BOSAQ	ENABEL	KULeuven
Eclosio	CO2logic	European Union	Royal Belgian Institute for Natural Sciences-CEBioS
Iles de Paix	John Cockerill	Flanders Department of Foreign Affairs	UCLouvain
Jappaleh Foundation	METAPHORA	FOD Buitenlandse Zaken, Handel & Ontwikkelingssamenwerking	ULB
Join For Water	SHER Ingénieurs-Conseils	FPS Foreign Affairs - Development Cooperation	ULiège
OVO Ondernemers Voor Ondernemers	Watafrik	Ministry of Foreign Affairs (FPS, DGD, Results service)	University of Fada N'Gourma
King Baudouin Foundation	Water Circle	SPW Département Environnement et Eau	Moulay Ismail University of Meknes
ULB-Cooperation			
Vrijwilliger Ondernemers voor Ondernemers			

1 Colliding worlds

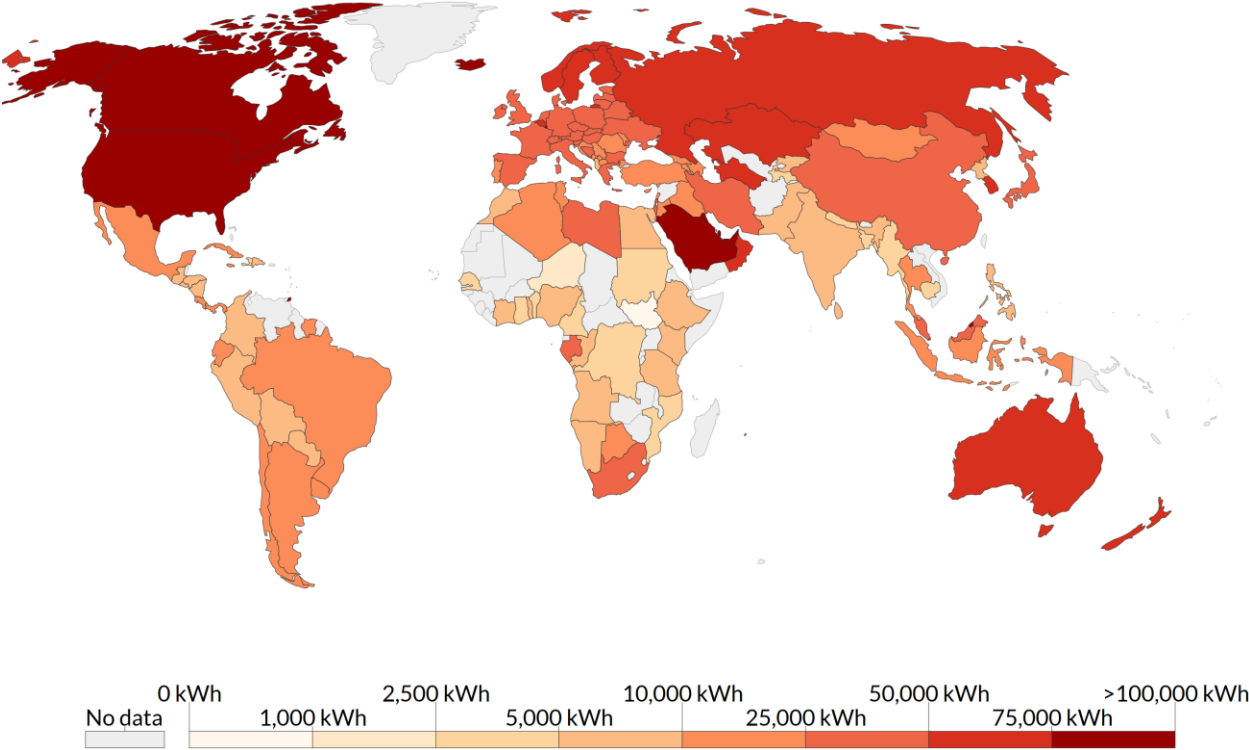
- water & energy -

Physical and economic water scarcity



(source: United Nations, 2017)

Energy use per capita (kWh/year)

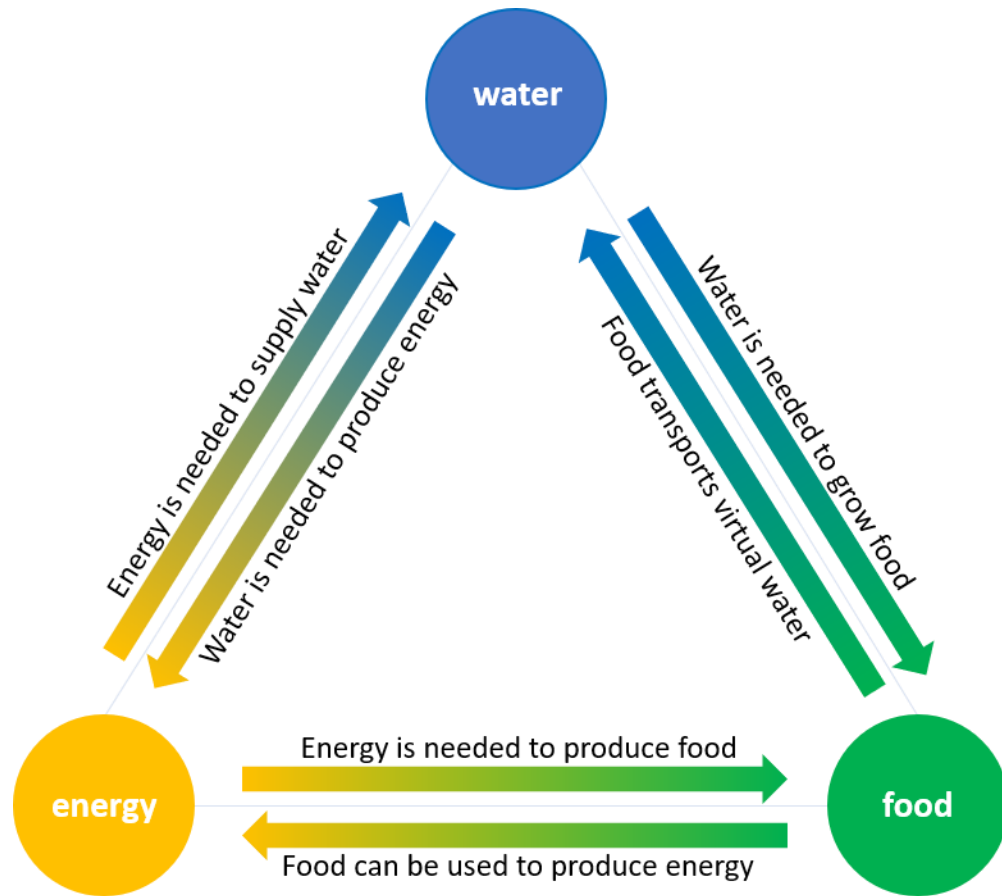


(source: International Energy Agency, 2015)



2 Water-Energy-Food

- interlinkages -



(based on: UNECE, 2018)

Increasing demand between resources

Food: 70% of global freshwater

Food: 30% of global energy

Water demand increase of 55% by 2050

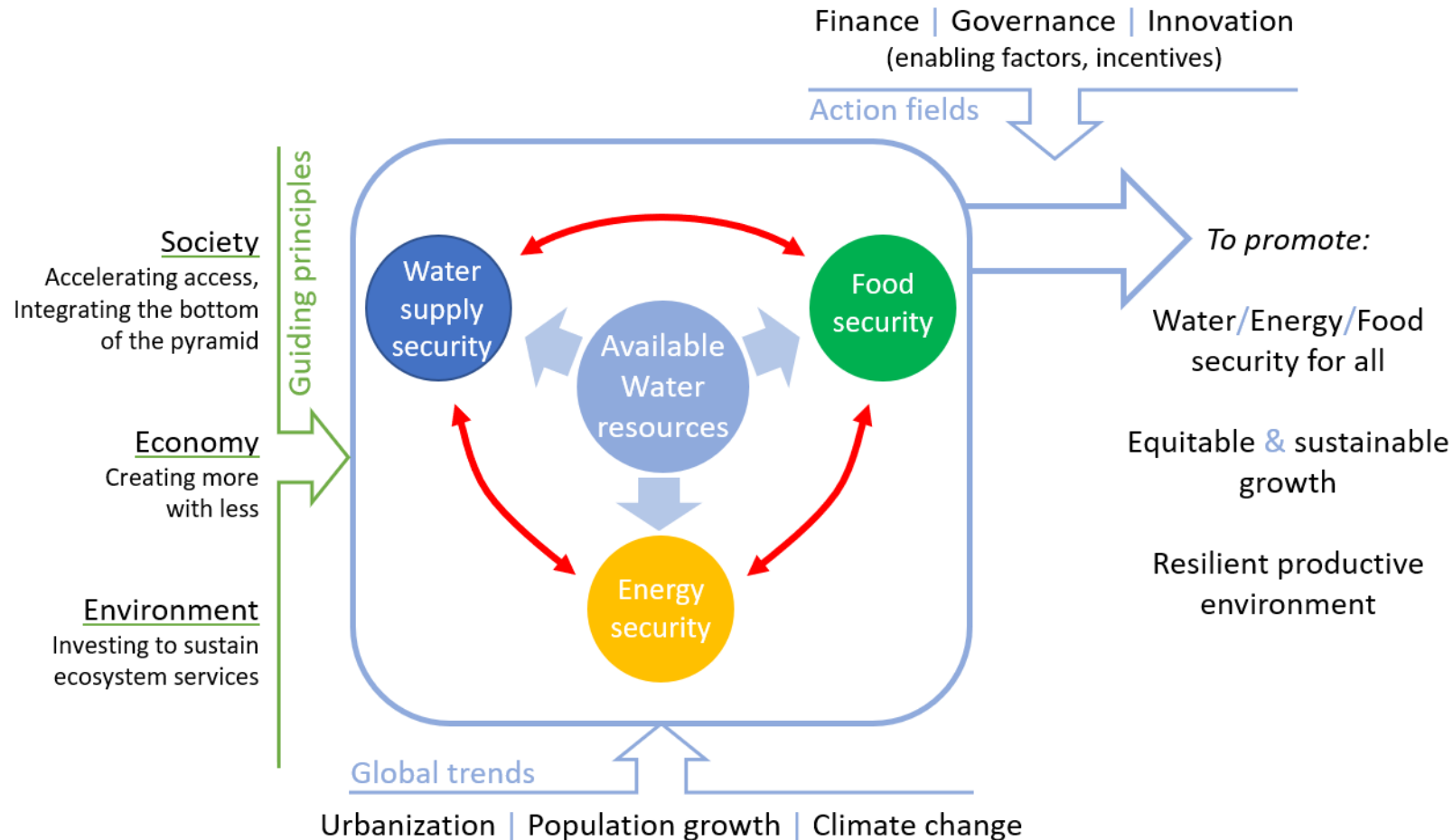
Energy demand increase of 70% by 2035



Opportunities and synergies
for increasing total
resource use efficiency

3 Bonn 2011

- birth of WEF Nexus -

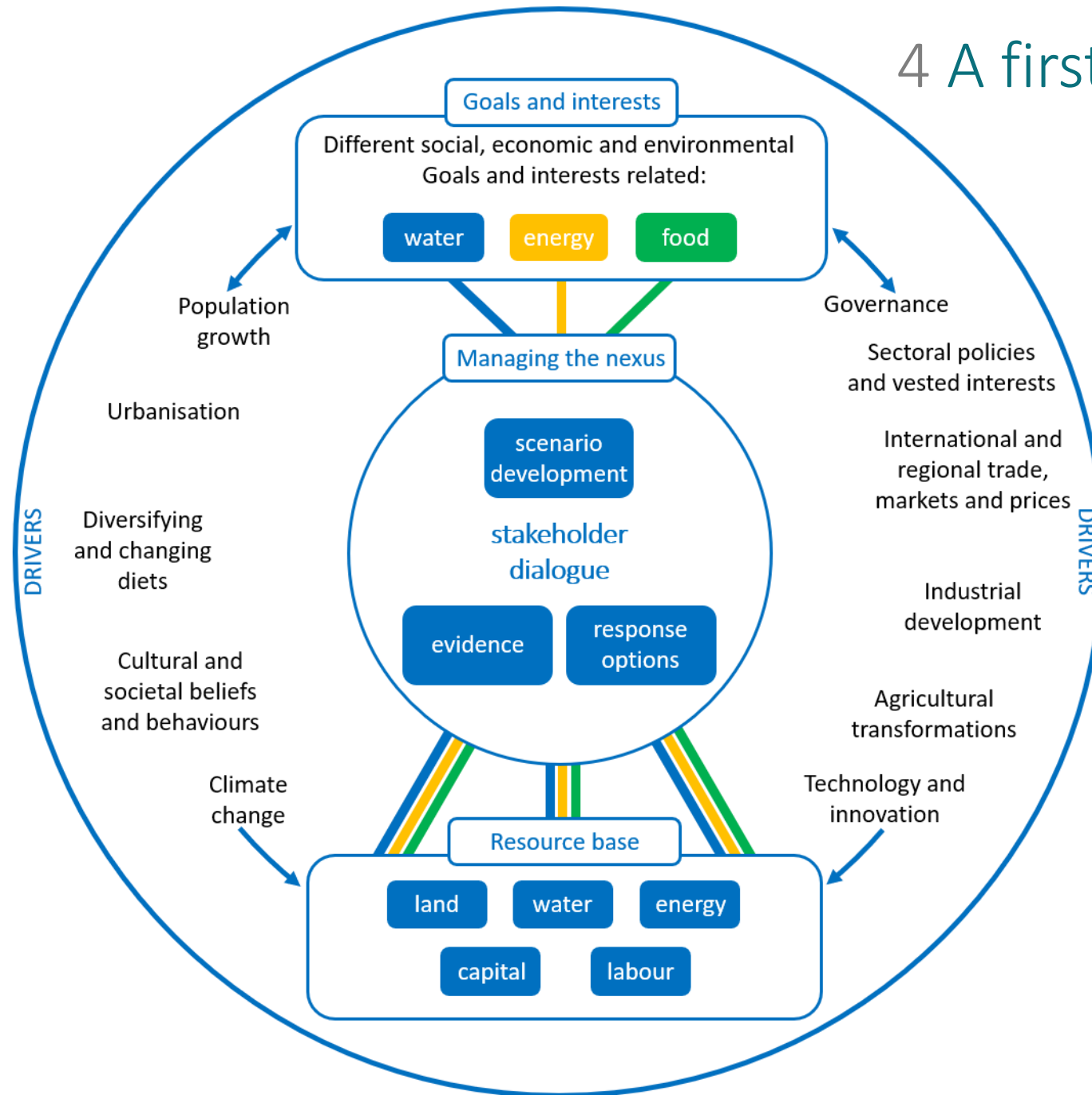


Stockholm Environment Institute, 2011. Understanding the Nexus.
Background paper for the Bonn 2011 Nexus Conference



4 A first road map (?)

- by FAO (2014) -



5 Discussions & Objectives

- short overview -

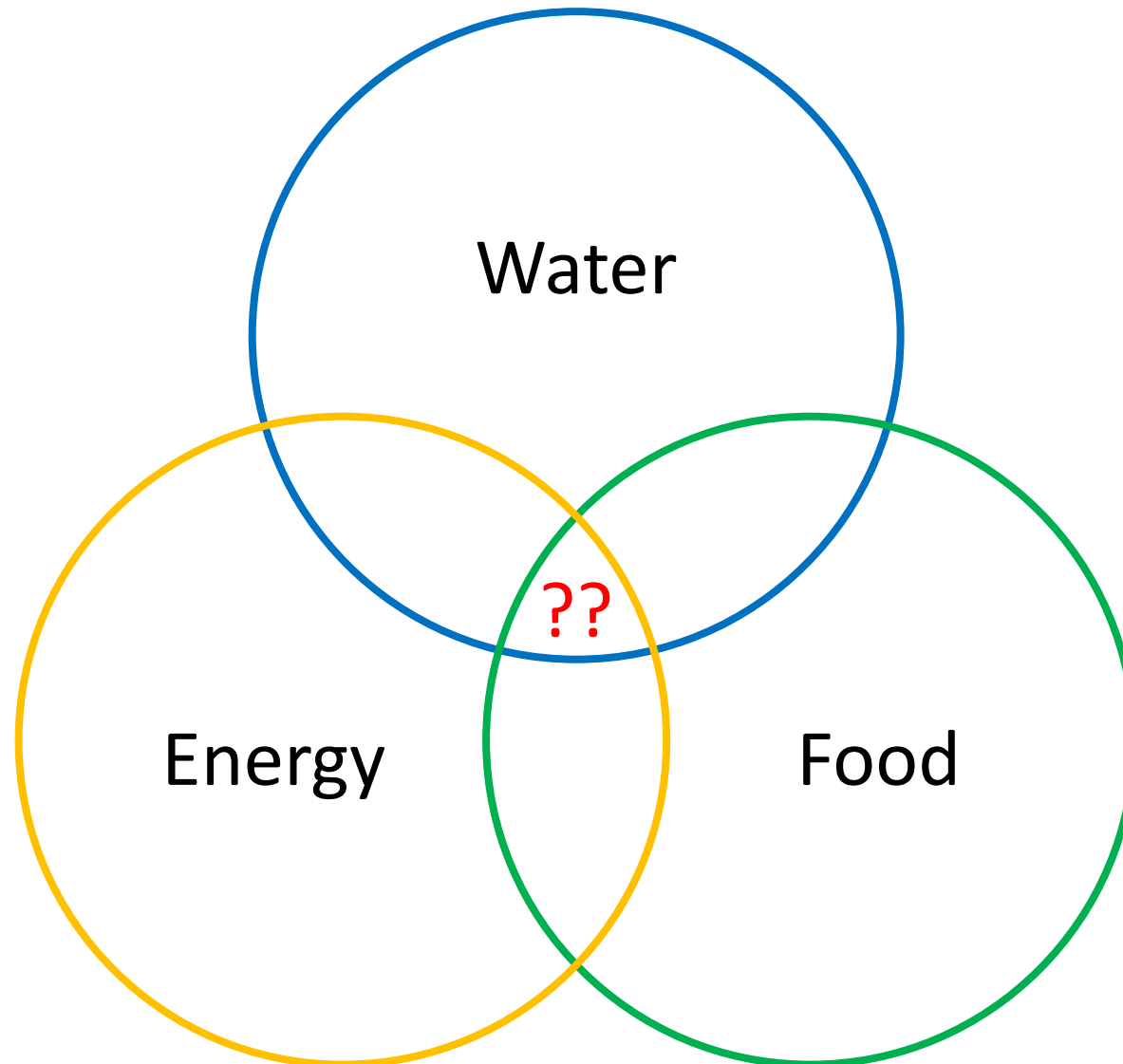
- Water-Energy-Food or Water-Food or Water-Energy or ... nexus?
- What kind of Nexus governance ? (Who owns it? (OCP, 2016))
- Water and energy markets (some numbers)
- Limits, constraints and opportunities (literature based)
- Strength, Weaknesses, Opportunities & Threads (SWOT)



... Participants presentations



5.i Water and/or Energy and/or Food ?



5.ii Nexus governance ?

- Shared governance:
coordinated among various units where all the parties involved have representatives to a single body empowered and entrusted with governing the nexus.
- High level governance unit:
with oversight to all units where an independent body with representation from all involved stakeholders will have resources and authority to implement decisions regarding the nexus governance.
- Private-Public Partnership (PPP):
The implementation of the nexus approach is expected to save resources, which can be translated into financial savings. However, for such a partnership to start up, there is a need for initial financing (seed funding). This is also of great importance in states where resources have been privatized.
- ...



5.iii Water & Energy markets

Water	Energy
US\$ 365 billion (services and equipment) US\$ 557 billion (treatment and distribution)	US\$ 37 trillion
Common good; Highly delegated (e.g. municipal level); Not (yet) traded internationally.	Involvement private companies; Managed nationally.
...	...

5.iv Limits, constraints & opportunities

- Vagueness/vastness of the framework (promote whatever one wants);
 - Holistic → no solution is believed to be left out;
 - No comparative or standardized evaluations;
 - An end in itself ↔ Mean to solve specific challenges;
 - Successes not (yet) documented.
-
- Expands the scope of the analysis
 - Solidly anchored in SDG:
 - water and sanitation **SDG 6**
 - food security **SDG 2**
 - sustainable energy **SDG7**
 - environmental protection **SDG 15**



5.v SWOT

	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the organization)	S Strengths	W Weaknesses
External origin (attributes of the environment)	O Opportunities	T Threats

	Helpful to achieving the objective	Harmful to achieving the objective
Internal origin (attributes of the organization)	What are the advantages ? What our current practices helps us with? What we have changed so far?	What are the disadvantages ? What is not done properly ? What obstacles prevent progress? What should be avoided ?
External origin (attributes of the environment)	What are our good chances ? What benefits may occur ? What changes in practices may occur ?	What obstacles we face ? Current political effects ? Behavioral adaptation of communities ?





Thank you for your constructive participation!