

The Role of GCF in Water-Climate Finance:

Developing the *Transformational Water Asset Program* *Trans-WAP*

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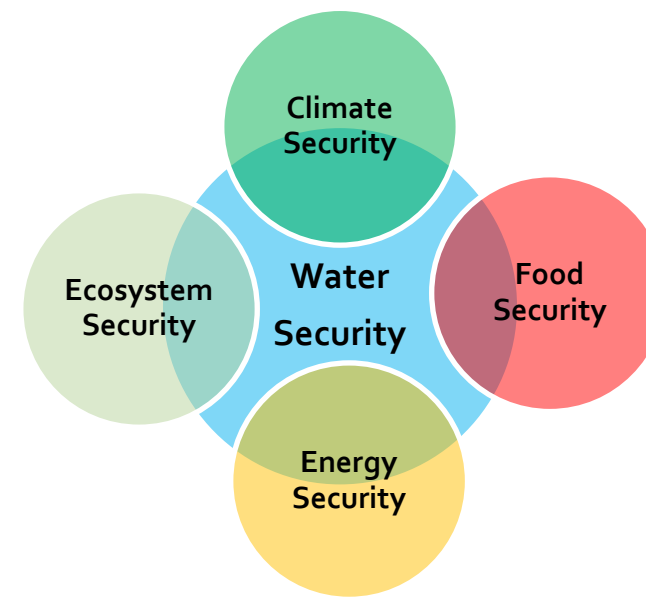
MENA-Regional Manager



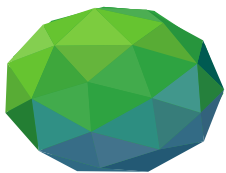
- ❑ Around **80 % of climate impacts** are manifested through water: extreme precipitation, drought, melting ice, sea-level rise and more.
- ❑ Increasing demand offering **investment opportunity**, and almost **70% of NDCs** priorities **water security actions**

Water Sector is the Connector

“Water is the **best investment** we can make to **improve** *Climate, water and food security, health, gender equality, and the environment* while **transforming** lives and communities to be more **resilient**.”



Hunger stone on the Elbe, Czech Republic, August 2022



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How we drive change!!!

01

Transformational
planning



02

Catalyzing
innovation



03

Mobilizing
finance



04

Coalition and
Knowledge to
Scale-up Success



Integrated **climate**
development **policies**
promoting **climate**
finance coherence.

Technology
development and
transfer with **enabling**
institutional
environments,
including conservation,
preservation,
sanitation asset class,
EbM, and smart
utilities

scaling-up successful
climate investments to
de-risk investments
through strengthening
domestic capital
markets and climate
financing institutions

creating and sharing
knowledge to
harmonise valuation
methodologies with
climate risks built into
financial decisions for
sustainable
development.

Investment Criteria

Climate
Base
Science
Rationale

1

Impact Potential

The potential of the programme to contribute to the achievement of the GCF's objectives and result areas.

2

Paradigm Shift Potential

The degree to which the proposed activity can catalyze impact beyond a one-off project or programme investment.

3

Sustainable Development Potential

The wider benefits and priorities of the programme.

4

Responsive to Recipients Needs

The vulnerability and financing needs of the beneficiary country and population.

5

Promote Country Ownership

The beneficiary country ownership of, and capacity to implement, a funded project or programme.

6

Efficiency & Effectiveness

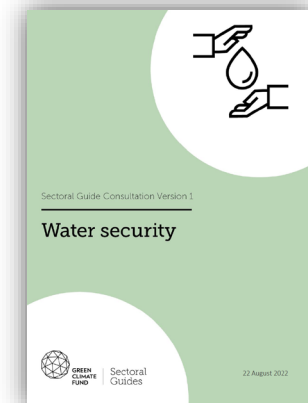
The cost-effectiveness and efficiency regarding financial and non-financial aspects.



Paradigm Shifting Pathways WATER SECURITY: SDG6 meets SDG 13

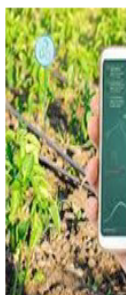
Pathway 1: Enhance water conservation, water efficiency and water reuse
(Mostly Mitigation)

Pathway 2: Strengthen integrated water resources management – protection from water-related disasters, preserve water resources and enhanced resilient water supply and sanitation
(Mostly Adaptation)



Demand Management

- Reduces energy & emissions from treating less water and developing alternative water supplies,
- Reducing non-revenue water losses
- Promoting water saving fixtures
- Water re-use systems for irrigation



Smart-Digital water Management

- Enhances efficiency of water management,
- Smart water meters for monitoring daily water consumption and real-time leak detection
- Automated irrigation



Ecosystem-based Management (EbM)

- Reduce flooding impacts
- Mitigate droughts
- Improve water quality



Alternative water sources

- Water re-use systems can utilize greywater, blackwater, rainwater harvesting, and stormwater harvesting for **non-potable uses**, including Cooling buildings, irrigating landscapes, and flushing toilets



Decentralized models

- Large-scale water re-use / water recycling models can be tailored to meet the water quality requirements of a planned use:
- Agricultural irrigation
- Replenishing groundwater basins (MAR)



Resource Recovery

- From wastewater: Biogas from anaerobic digestion and thermal conversion of biosolids
- Treatment plants also provide opportunities for solar PV, floating solar, wind etc.

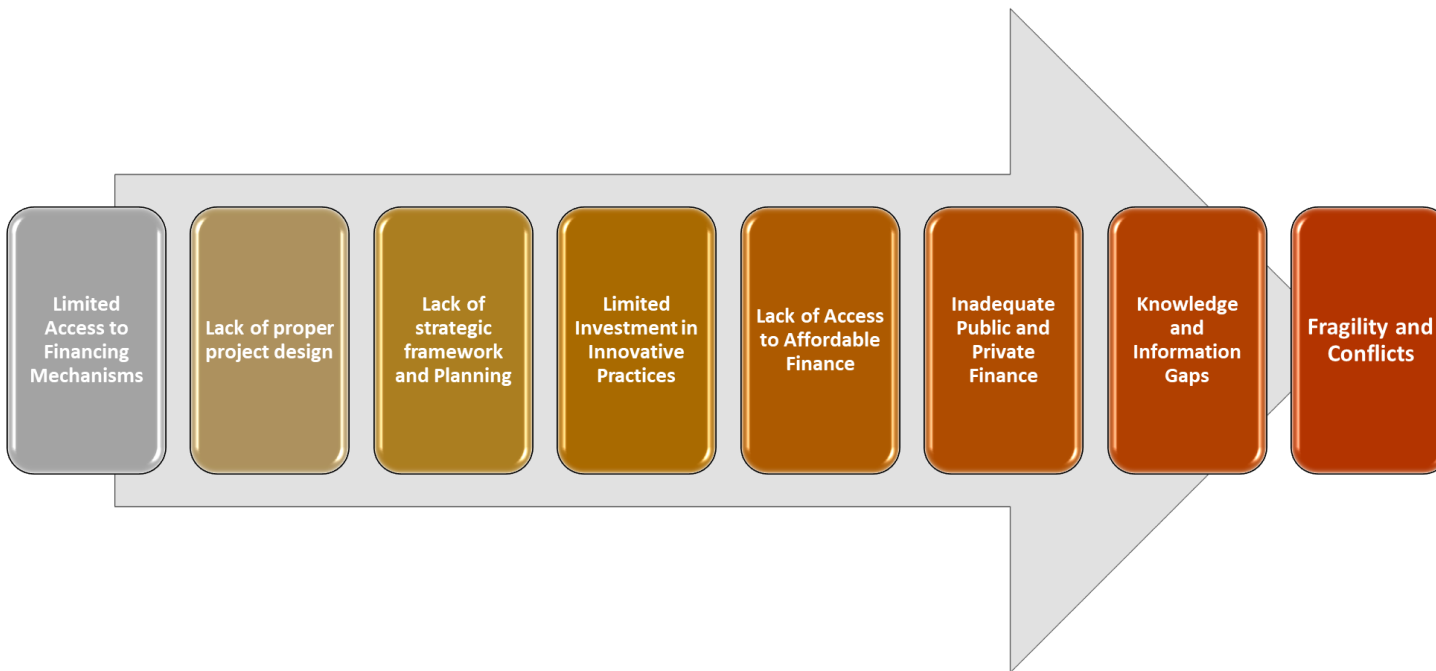


Integrated Water Resources Management (IWRM)

- coordinated development and management of water, land and related resources to **maximize sustainable development**
- involves **preserving** water in the water cycle using circular economy-thinking, e.g., water efficiency in agriculture
- Involves **adaptive planning** across land and water to ensure water security for both humans and nature in a changing climate

Innovative Approach for **New Asset classes** in sanitation, water re-use and Desalination

Barriers to Financing Projects



Under-pricing of water: Water is a **public good** and generally an under-valued resource, **not properly accounted** for by the government and the investors that depend on or affect its availability in other sectors such as urban development, agriculture, and energy.

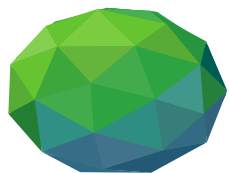
Water services: are often under-priced, **resulting in low cost-recovery** for water investments.

Capital-intensive: Water resources, irrigation, water supply, and wastewater **infrastructures are generally capital intensive, with high sunk costs and long pay-back periods.**

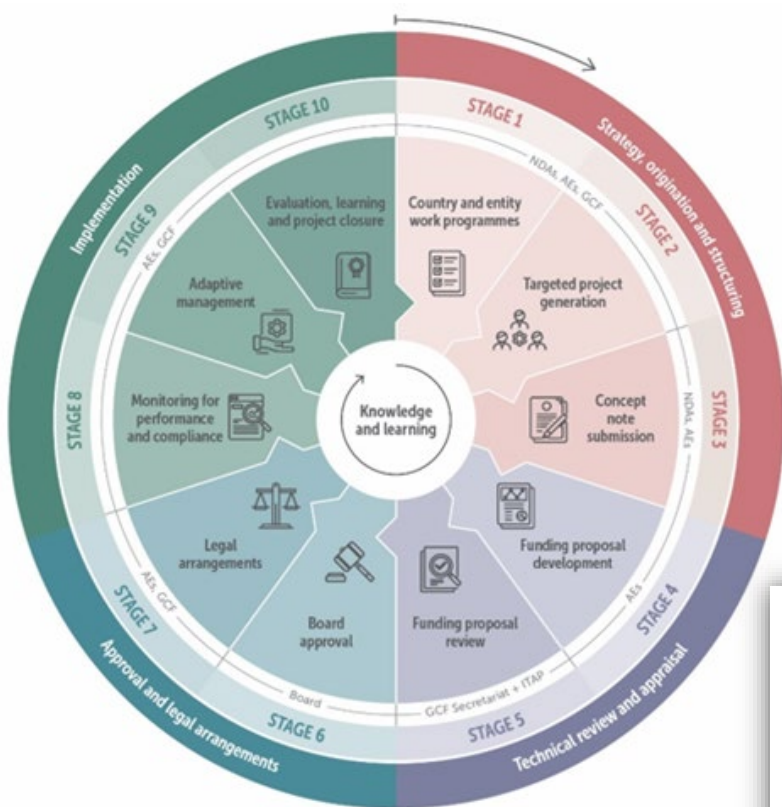
Monetising benefits: Water management **provides both public and private co-benefits, many of which cannot be easily monetised.** This reduces potential revenue flows.

Context-specific projects: Water projects are often **too small or too context-specific, raising transaction costs and making innovative financing models difficult to scale-up.**

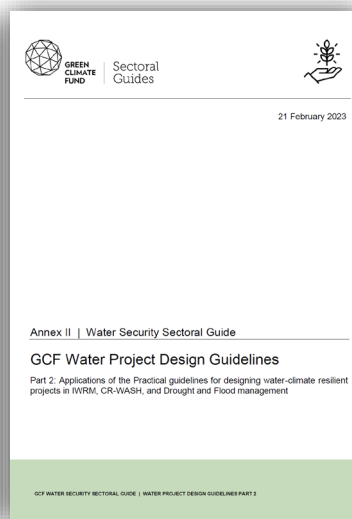
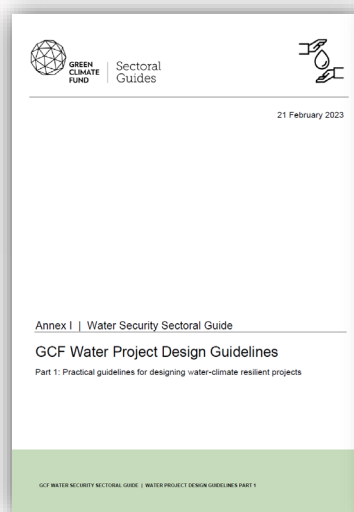
Poor business models: Business models often **fail to support O&M efficiency, hampering the ability to sustain service** at least cost over time.



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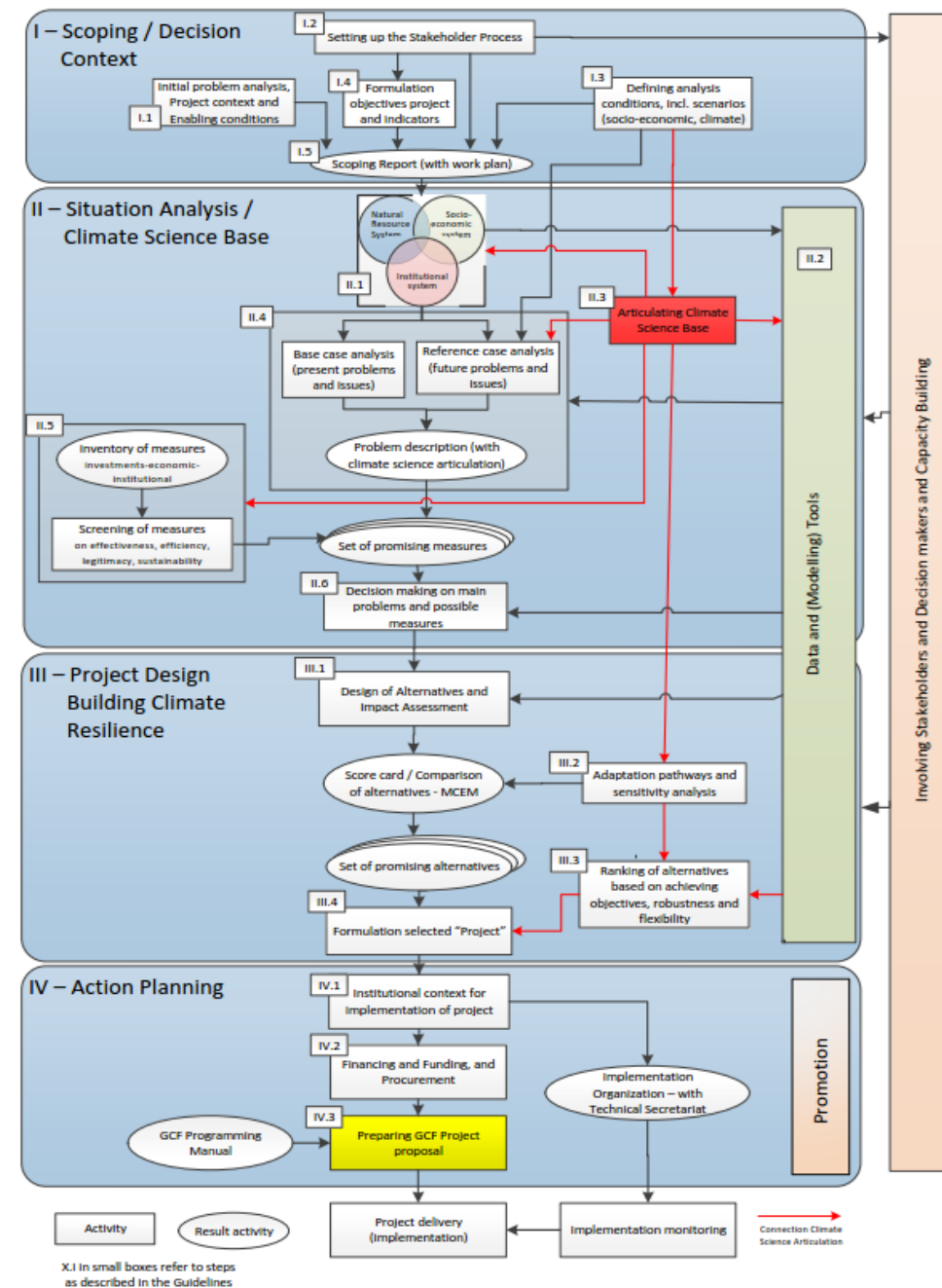


- the project should be 'owned' by the stakeholders (country ownership)
- the project should take an **integrated view** i.e: on the water system, hydrological cycle and climate risk reduction; and
- project formulation should follow a **structured process** with key checks and balances.



- IWRM projects
- Climate Resilient WASH projects
- Drought Management projects
- Flood Management projects

Project Design guideline

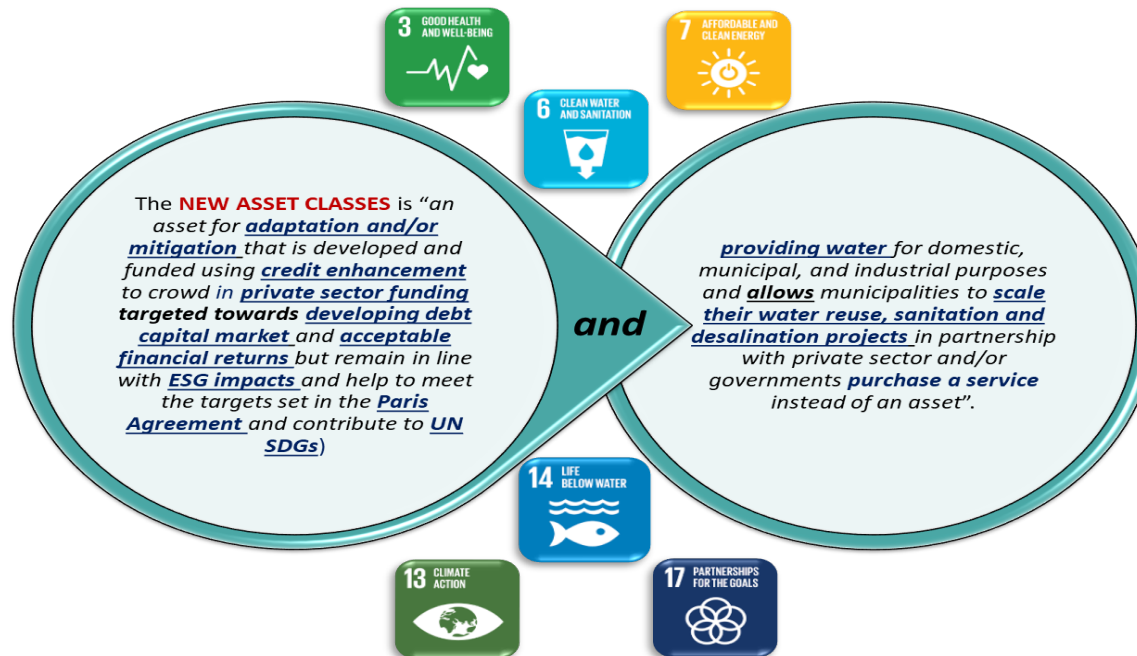


Water Asset Transition

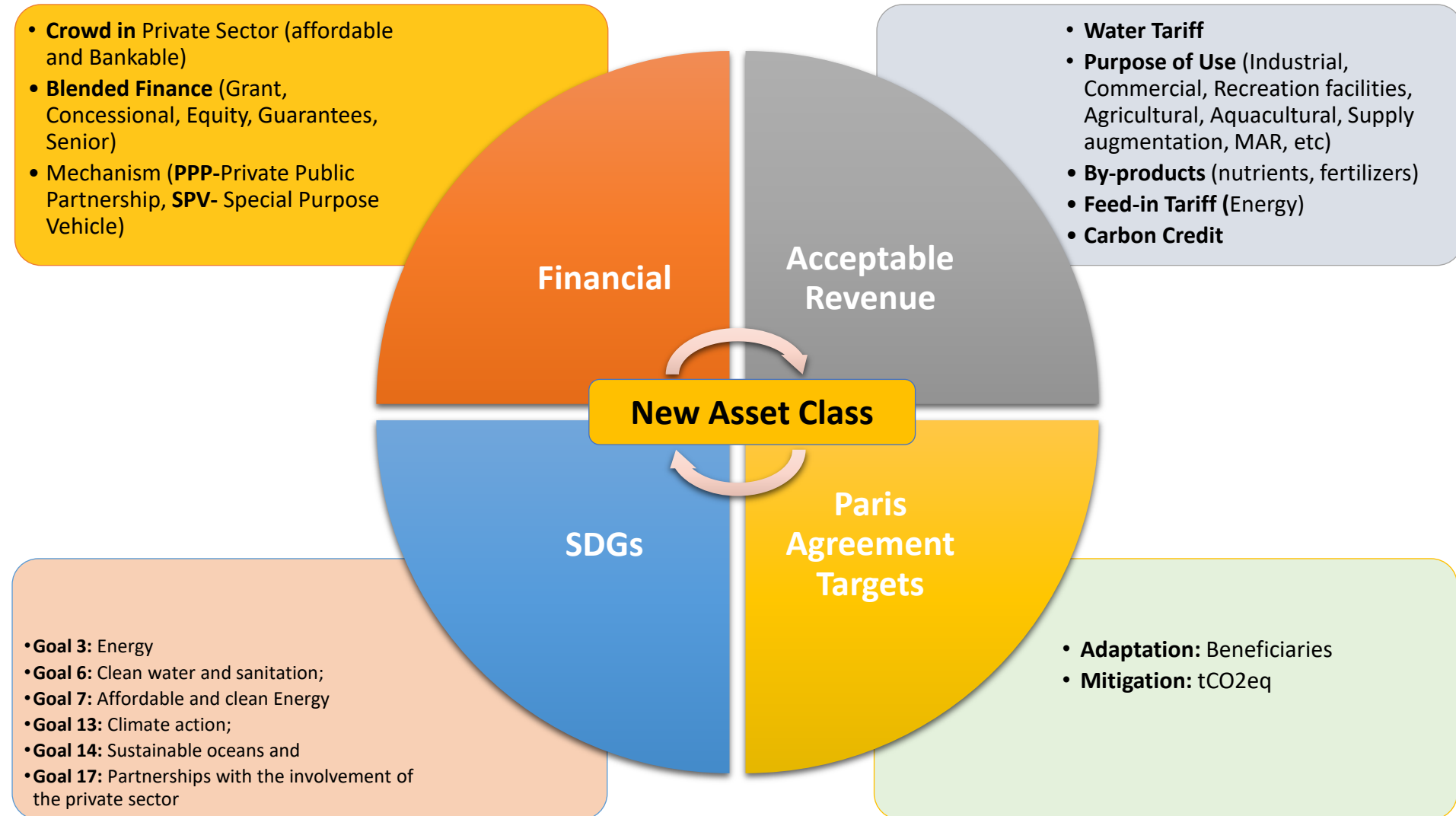


Water Asset Transition

- Treat water as "**a new asset class**" for water reuse, sanitation and desalination, using **credit enhancement** towards **developing debt capital market** and **acceptable financial returns** but remain in line with **ESG impacts and the Paris Agreement and contribute to UN SDGs** that will allows municipalities and private sector to **scale up** water reuse, sanitation and desalination projects and/or governments **purchase a service** instead of an asset.
- **support countries develop, adapt policies and legislation** to creates an enabling investment environment to identify, design, and implement public and private **funded transformational water security interventions as a new asset class**
- **finance the transition** and **de-risk private** investment in **address financial market barriers and ensure affordability and bankability** to unlock water reuse investment,
- Supporting **new financial models accompanied with acceptable revenue** in line with Paris agreement targets and SDGs



Water: New Asset Class



Transformational Water Asset Program

Improving Bankability: Create a product to scale up wastewater reuse and increase the number of bankable wastewater treatment and reuse projects in emerging climate context and markets

Improve affordability: offer concessional finance (Rate, Tenure, Grace Period, etc)

Providing Credit enhancement and improve creditworthiness (Innovative finance)

Offer a complete advisory and investment solution through technical facility

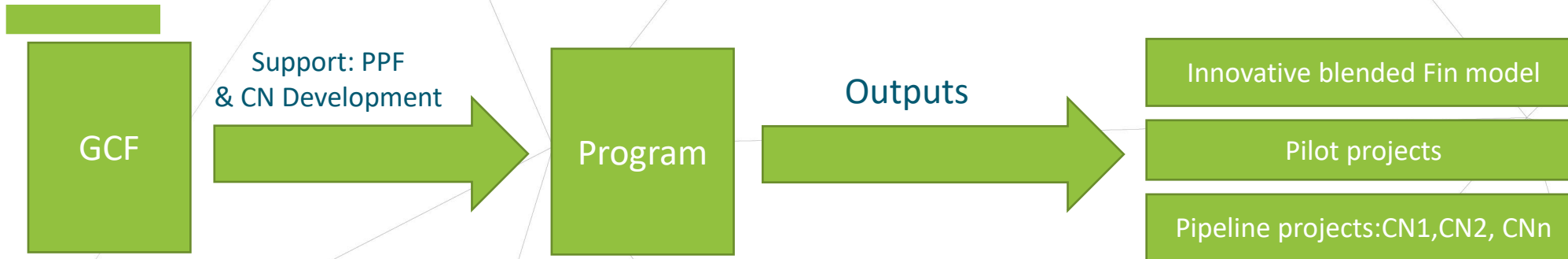
Creating a platform to enable coordination, develop pipeline and identify pilots for Water Asset Transitions

Support Pilot wastewater treatment projects & encourage agricultural, industrial and potable reuse as a viable option for water conservation and augmenting water supply under climate change

Increases sustainable water resources, climate-change resilience, and potentially increases energy efficiency vs alternate water sources.

Option A

Transformational Water Asset Program: Trans-WAP



Co-Investment Platform by the GCF, and AE Accredited Entity? (As Imp Entity) and donors with others as EE to enable coordination, develop pipeline and identify pilots for Water Asset Transitions

Transformational Water Asset Program Coordination

CN and PPF will be developed for this project that will serve as the Umbrella Program for the Initiative

TA Facility: Pipeline development
(funded via GCF/donor co financing)
GRANT (20-40 M)

Global Coordination Facility
GRANT (5-10M)

Blended Finance Facility
LOAN (400-500M)

Pilot Water Security Projects
GRANT (20-30M)

Following the umbrella program, other sub projects will be developed, focusing on DAE projects

Enabling environment,
policies, frameworks

Pipeline development
and maturation

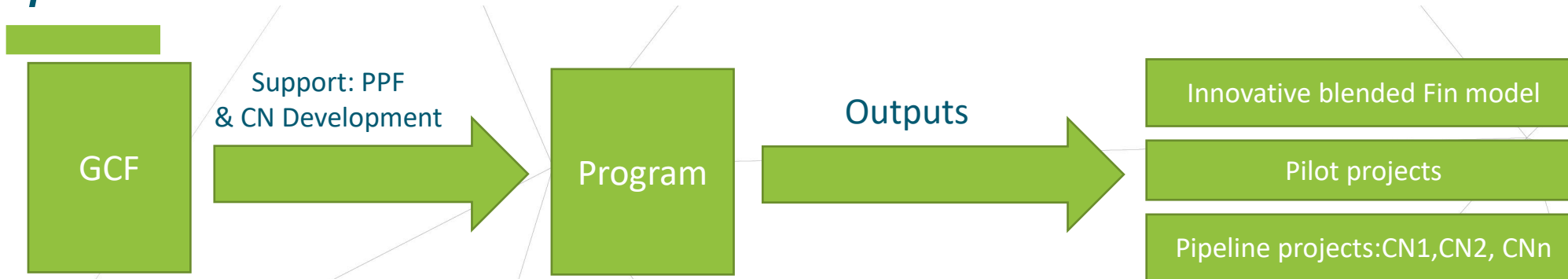
Innovative approaches
development

Investments

Coordination,
learning and
knowledge

Option B

Transformational Water Asset Program: Trans-WAP



Co-Investment Platform by the GCF, and AE Accredited Entity? (As Imp Entity) and donors with others as EE to enable coordination, develop pipeline and identify pilots for Water Asset Transitions

Transformational Water Asset Program Coordination

CN and PPF will be developed for this project that will serve as the Umbrella Program for the Initiative

TA Facility: Pipeline development
(funded via GCF/donor co financing)
GRANT (20-40 M)

Global Coordination Facility
GRANT (5-10M)

Blended Finance Facility
LOAN (400-500M)

Following the umbrella program, other sub projects will be developed, focusing on DAE projects

Enabling environment,
policies, frameworks

Pipeline development
and maturation

Innovative
approaches
development

Investments

Coordination,
learning and
knowledge

Co-Investment Platform-Water

South Africa- Water Resources Program-WRP USD 1.5 B Project



Co-Investment Platform by the GCF, and DBSA (As Imp Entity) and donors with others as EE to enable coordination, develop pipeline and identify pilots for Water Asset Transitions for water reuse

Transformational Water Asset Program Coordination

TA Facility: Pipeline development
(funded via GCF/donor co financing)
GRANT (30+30 M)

Project preparation support to progress municipal reuse projects to bankable stage

Coordination & Capacity
Building Facility
GRANT (5+5M)

**Capacity Development and Information
Communication** Education Program

Blended Finance Facility
LOAN (200M +1.2B)

Blended finance solution to address market constraints and play a catalytic role to increase climate related water reuse investments and create a new financial asset class around reuse infrastructure in SA

Sources (USD mil)	
GCF (Grant)	35
GCF subordinated loan	200
National Treasury, Municipalities and SA (Grant)	187
Infrastructure Fund (subordinated Loans)	150
DBAS, DFIs (senior Loans)	650
Senior investors* (Equity)	200
Guarantee*	50
Total	1,472

**Co Finance
1:5.6**

Key Outputs

Enabling
environment,
policies, frameworks

Pipeline development
and maturation with
DAE

Innovative approaches
development for
Water Reuse and
scaling up

Investments-Scaled
up Finance for Water
Sector

Coordination,
learning and
knowledge



Take home Messages

GCF can *de-risk investments and mobilize the private sector, improve water security and community resilient while help reduce the GHG emissions and support carbon market* through promoting Treating water as a NEW Asset Class for wastewater and sanitation services and desalination by:

Support countries develop, adapt policies and legislation to creates an *enabling investment environment* to identify, design, and implement public and private **funded transformational water security interventions as a new asset class**

finance the transition and *de-risk private* investment in **address financial market barriers and ensure affordability and bankability** to unlock water reuse and desalination investment,

Supporting **new financial models accompanied with acceptable revenue** in line with Paris agreement targets and SDG

Thank You



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