



**BLUEING  
THE  
BLACK SEA**

# Blueing the Black Sea (BBSEA) support for Innovators and Entrepreneurs

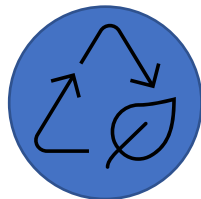
Rieko Kubota –The World Bank

Martin Gurria – Black Sea Economic Cooperation

# BBSEA Program Vision Statement in support of the CMA

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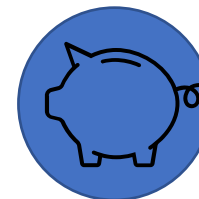
Long-term Development Objectives of the program are:



**To improve environmental health of  
the Black Sea**

First activities implemented under the program include:

- Improve knowledge on sources of pollution, in particular nutrient
- Promoting regional collaboration
- **Engaging the public, private sector and civic society for pollution prevention in the Black Sea**
- **Fostering innovation to prevent and mitigate nutrient pollution in the Black Sea**



**Increase social and economic benefits for the  
population**

Beneficiaries:

- All CMA countries: 6 riparian countries and Moldova
- Pilot activities initiated in Georgia, Moldova, Turkey and Ukraine

# Outcome Of The National Consultations

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CONSULTATIONS COMPLETED IN ALL CMA COUNTRIES  
PRIORITIES FROM THE PROGRAM IDENTIFIED FROM  
THE CONSULTATIONS WITH NATIONAL STAKEHOLDERS ARE:



Priority Pollution:  
**Nutrient**



Priority Activities:  
**Legal and Policy Reform,  
Investment plan and  
Ecoinnovation challenge**

# BBSEA Eco-Innovation Challenge

Objective: 1. Remove/Reduce nutrients to avoid eutrophication in the Black Sea  
2. To support local business ecosystem by strengthening eco-business



## Regional Window

- Eligible innovation: Early-stage concept, ideas, technology, business model contributing to objective
- Eligible entities: Private entities (including start-ups), NGO/CSO, academic institutions, youth group, women's group
- Eligible nationalities: Entities of CMA countries
- Award: a week-long study trip+ acceleration program for max 15 winners

## National Window in Georgia, Moldova, Turkey and Ukraine

- Eligible innovation: Proven concept, ideas, technology business model contributing to objective
- Eligible entities: Private entities (including start-ups), NGO/CSO, academic institutions, youth group, women's group
- Host of Innovation: Each proposal will be submitted in partnership with pre-selected "host": Municipality, Water Utility, Farmer Association or Industrial Estate
- Grants: 500,000 USD per GEF country in 2 or 3 grants  
Matching grant for in-country pilot project implementation  
Acceleration program and mentoring provided to grantees

## Implementation arrangement

Operated by Eco-innovation management team (Consultant/firm) of the BSEC (Istanbul, Turkey)

# Role of key players in Eco-Innovation Challenge

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## Innovator/ Entrepreneur

*Typically, private sector*

- Has proven solution for eutrophication
- Fulfills the eligibility criteria
- Agrees with host of innovation to apply to the challenge
- Pilots the innovation
- Makes impact!

## BSEC Secretariat

- Supports preparing water pollution problem statement
- Organizes challenge
- Supports pilot innovation
- Offers acceleration program

## Host of Innovation

*Typically, municipalities, farmers association, etc*

- Nominated by in-country BBSEA focal point
- Prepares water pollution problem statement
- Agrees with innovators to apply to the challenge
- Makes arrangement for pilot innovation



# Why Eco-innovation challenge?

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## Current challenges are....

- Gaps in expertise and/or resources prevent adopting innovation
- Hosts of innovation face financial and procurement constraints, informational barriers due to innovations untested in local context

## Eco-Innovation can....

- Support kickstarting the innovation testing for nutrient treatment
- Making innovation relevant and accessible
- Accelerate water utility/industrial entity/community's buy-in to innovation



# Challenge Participants Eligibility Criteria

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## *i. Minimum Eligibility Criteria*

In order to participate in the ECO-INNOVATION CHALLENGEs (REIC and NEICs), applicants must present the following information :

1. *Be an individual (name, ID)* or a legally established organization (business, association/cooperative, NGO, University) **from the BSEC member countries**. No public institutions will be able to apply.
2. Have an email, phone, and videoconferencing capabilities (i.e. zoom)
3. Fill out a registration & socio-environmental screening form.

*(the information does not need to be verified for them to participate in the ECO-INNOVATION CHALLENGE, only after the Eco-business is selected as a winner and before signing any grant agreement or receiving any award)*

# Geographic Scope & Eligibility Criteria

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- The Eco-Innovation Challenge will request solutions for the Black Sea Region (i.e. Turkey, Georgia, Moldova and Ukraine).
- The Eco-Innovation Challenge's eligibility, applicants shall be originated from Turkey, Georgia, Moldova and Ukraine or BSEC Member countries.
- Solution must apply to the eutrophication issue of the Black Sea region.
- Applicants can be either individual (entrepreneurs), private companies (including start-ups), NGO/CSO, research institutions, academic institutions and community groups which are based in the BSEC Member countries.
- Women-inclusive enterprises participation is encouraged.



# Hosts of Innovation

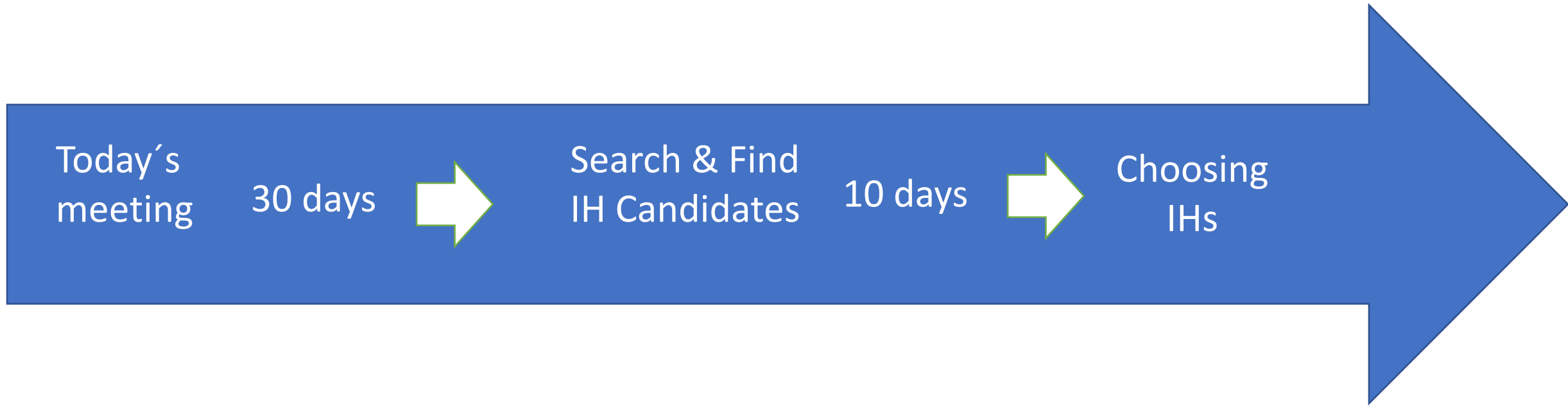
- **Hosts of Innovation or Innovation Hosts (IH)** are entities in the four countries in the Black Sea region that will facilitate and apply the innovators winners' project implementation.
- BSEC and the World Bank in coordination with the different BSEC-country focal points will identify and nominate the different IH
- IH are facing **eutrophication** issues
- The Innovation Hosts should prepare a water pollution problem statement upon agreement to join this Eco-Innovation Challenge.
- Hosts of Innovation can **include any entity** involved in **water pollution** such as **municipalities or farmers associations**.
- Host of Innovation will prepare letter of agreement to the 1) national focal points, and 2) innovators (this is prerequisite of NEIC's application by innovators)

# What is it expected from Focal Points?

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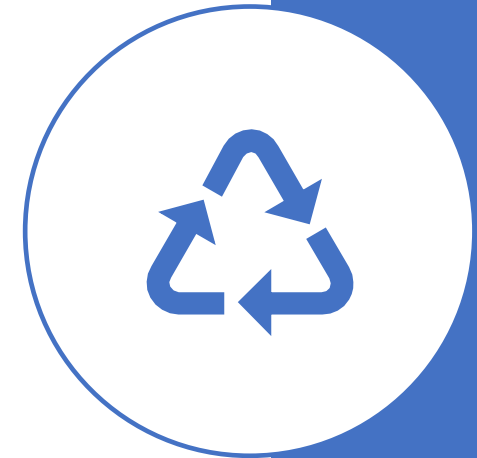
- Brainstorm and contact to identify the most suitable partners
- Identify a list of potential innovation hosts in your country
- Let us know the candidate innovation hosts **by January 15 2022**
- Identify other potential partners such as Venture capitals, academic, Accelerator's group in the country

# Timeline of Immediate Actions

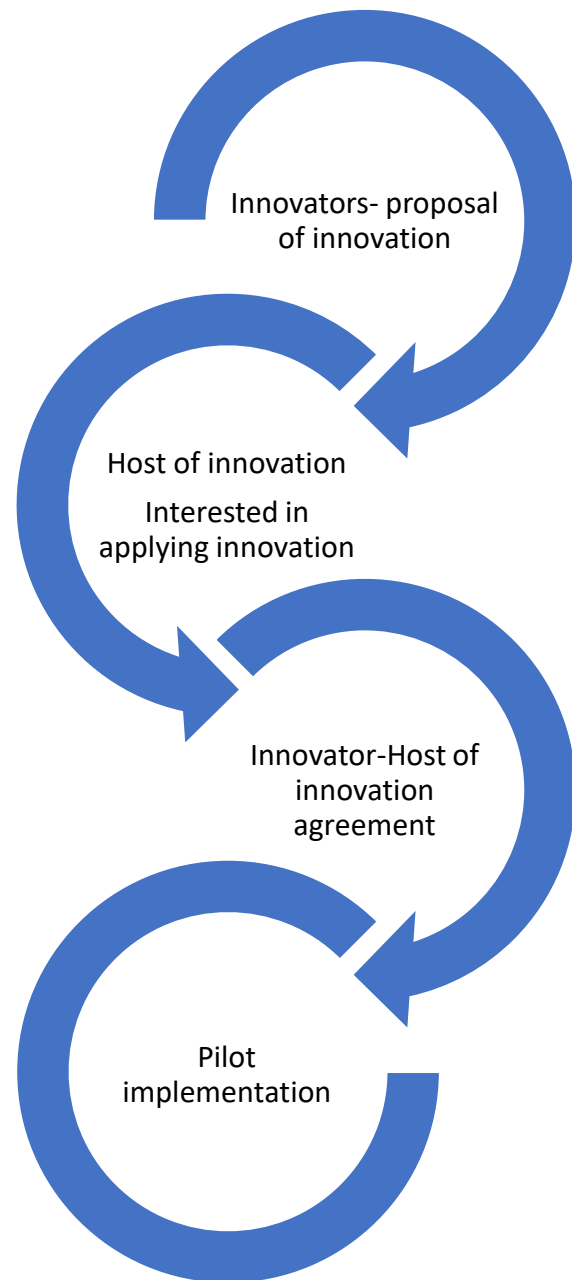


# Examples of innovation for Nitrogen and Phosphorus removal/reduction

- Utility goes energy positive: Biogas production and converting to renewable energy by accepting organic waste from livestock producers at wastewater treatment plant
- Phosphorus harvesting: Using nutrient recovery technologies, recovers phosphorus at wastewater treatment plant and convert into environmentally friendly fertilizer
- Using technology to optimize fertilizer application: sensors for efficient nitrogen use is applied to measure the real-time nitrogen status of crops which leads to decreased fertilizer use, and improved water quality



Source: US EPA



We have a technology using Portland cement to remove total Phosphorus and total Nitrogen. We are looking for Partners from the Black Sea region to apply it as an attachment to WWTP.



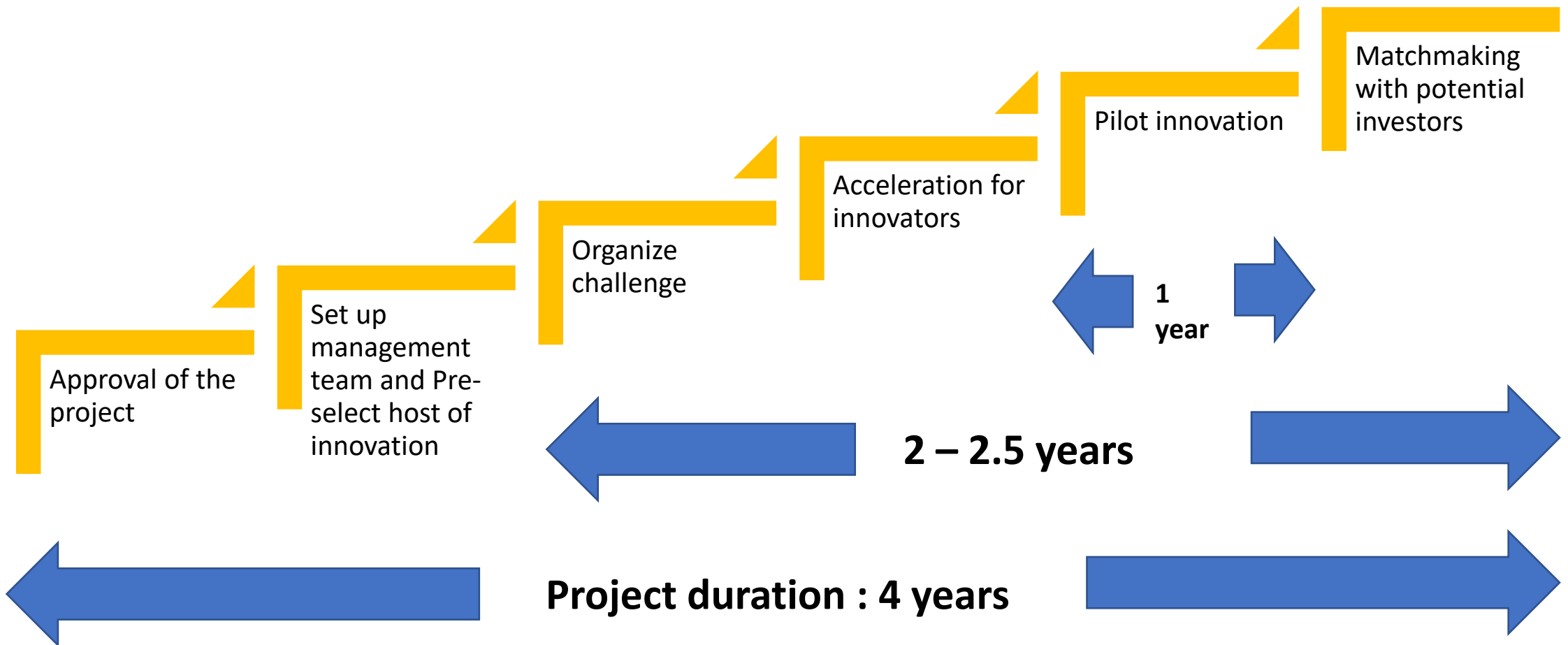
Our cooperative is looking for the solution to stop draining nitrogen and phosphorus draining from our yards. But we don't have so much resource and man power available.

Innovator and the cooperative have agreed to test the cement solution to reduce organic pollutants at the yards' drainage system. The cooperative signed an agreement and send to innovator as host of innovation.

Basic water sampling was conducted and pilot installation of Portland cement installed to test the pollutant removal. Innovator come to the cooperative to manage the solution and adjust necessary function for about one year.

# Roadmap for Eco-Innovation Challenge

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# What we expect from Acceleration program

- Awarding ceremony
- Investor, business partners, financiers connect
- Business and leadership clinic/skill workshop
- Consultation on business model for prototype/launch/scale-up depending on the stage of the businesses
- Continuous mentoring

As part of study visit in Turkey

# Eco-innovation contact:

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The World Bank:

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BSEC:

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**Thank you!**



# What is women-inclusive enterprises?

- Women-inclusive enterprises are defined as: (i) owned by women (i.e., with at least one female shareholder with a properly documented representative and managing powers); or (ii) managed by women (i.e., with at least one female C-level<sup>[1]</sup> manager or with at least 25 percent female representation in mid-level management); or (iii) employing a ratio of women that is higher than the average ratio observed in the respective sector

[C-level jobs include the following: General Manager, Executive Vice President, Deputy General Manager, Chief Executive Officer, Chief Operations Officer, Chief Finance Officer, Chief Marketing Officer, Chief Technology Officer, and Chief Information Officer.]