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# Global Cleantech Innovation Programme (GCIP)

Naoki Torii, 16 February 2023



**Global Cleantech  
Innovation Programme**



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# Advancing cleantech innovation and entrepreneurship development for climate action

# What is “clean technology”?



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**Clean technology (Cleantech)** refers to a broad range of solutions (technologies, processes, services, business models, and their combinations) that lead to an increase in positive impact or a decrease in negative impact on climate change through mitigation and adaptation, transition to a low-emission economy, sustainable energy systems, circular resource usage and other dimensions of environmental sustainability.



# What is “clean technology”?

## Cleantech-related areas

- **Information and Communications Technologies** (computing hardware or software design improvements or the application of IT, web, mobile or social applications to reduce resource consumption and environmental impacts)
- **Green Buildings** (innovative, energy- and material-efficient building materials that reduce the environmental impact of construction, improved design or construction practices, materials or systems to improve indoor environmental quality, waste reduction or disposal, etc.)
- **Transportation** (innovative technology that improves ways and means of mobility and reduces the environmental impact of mobility markets, including new types of transport services and infrastructure, efficient and portable batteries, fuel cells and bio-based transportation fuels, use of IT, etc.).
- **Agriculture, Water and Waste** (applications focusing on improving food security, resource availability, conservation and pollution control)

# What is “clean technology”?

## Cleantech-related areas

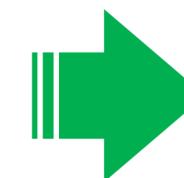
**Energy Generation** (innovations that use, enable and accelerate the usage of energy generated from alternative sources like waste heat, solar, geothermal, biofuels, wind, wave and tidal energy, hydropower, etc.)

- **Energy Distribution and Storage** (improvements in all forms of energy storage or energy transmission, including intelligent sensors, batteries, fuel cells, flywheels, advanced materials or systems, etc.)
- **Energy Efficiency** (technologies that enable energy savings in industrial processes and homes, thus reducing GHG emissions and positively impacting expenditures on energy)
- **Chemicals and Advanced Materials** (technologies that reduce or eliminate the use or generation of hazardous substances in materials or chemical products, including pharmaceuticals, household products, surface and finishing materials, packaging materials, etc.)

# What is GCIP?



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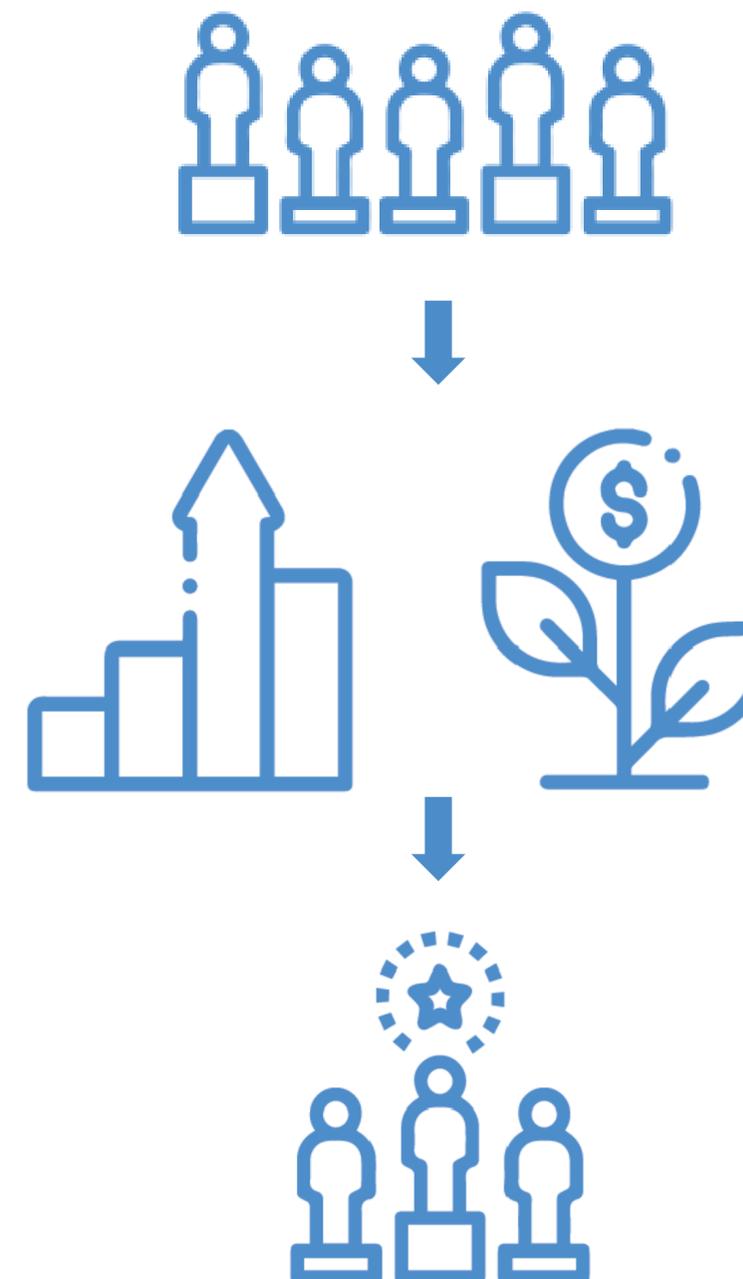
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Innovation Programme



## Global Cleantech Innovation Programme

Accelerating early-stage cleantech enterprises to transform them into investment-ready, market-competitive and scalable solutions.

Strengthening national ecosystems to make them more enabling and inclusive and ensure the long-term sustainability after the project completion.





# Global Cleantech Innovation Program

## Programme Objectives

- Fostering private sector initiative, entrepreneurship and engagement to accelerate the uptake of and investment in innovative cleantech solutions at scale;
- Promoting cleantech innovation and entrepreneurship in emerging markets and developing economies to address climate and environmental challenges.

## Two key components of GCIP

- Supporting early-stage **small and medium-sized enterprises (SMEs)** with innovative cleantech ideas through business accelerator services with a competition component.
- Strengthening **cleantech innovation and entrepreneurship ecosystems** and facilitating partnerships and networking between private and public actors to maximize impact and ensure long-term sustainability.



# GCIP Design

- Critical mass of cleantech SMEs across the valley of death
- Vibrant and connected cleantech innovation and entrepreneurship ecosystems
- Enhanced services reflecting GEF IEO findings on GCIP 1

## PILLAR 1

Transforming early-stage innovative cleantech solutions into commercial enterprises



## PILLAR 2

Cleantech innovation and entrepreneurship ecosystems strengthening and connectivity



## PILLAR 3

Programme coordination and coherence





# Pillar 1: Supporting cleantech entrepreneurs

- **Pre-accelerator** enables team formation and development of initial ideas
- **Accelerator** to develop business models and transform ideas into investable solutions
- **Advanced accelerator** provides services to high potential entrepreneurs
- **Post-accelerator** provides services in advanced business growth and commercialization, investment and market readiness



# Pillar 2: Strengthening ecosystems

- **Capacity building** and strategy frameworks for national institutions
- Dissemination of **guidance on global best practices** for the strengthening of policy and regulatory frameworks
- Knowledge creation and exchange to promote **linkages between GCIP ecosystems** and strengthen **South-South cooperation**
- **Global Forum** to enhance networking and exchange lessons learned



## Pillar 3: Enhancing coordination & coherence

- Ensures **coherence** of the GCIP **programmatic approach**
- Captures and communicates **GCIP achievements** globally
- Disseminates programme **implementation guidelines** to the participating countries
- Enables programme impact **monitoring** and provision of **tools and methodologies** to the countries

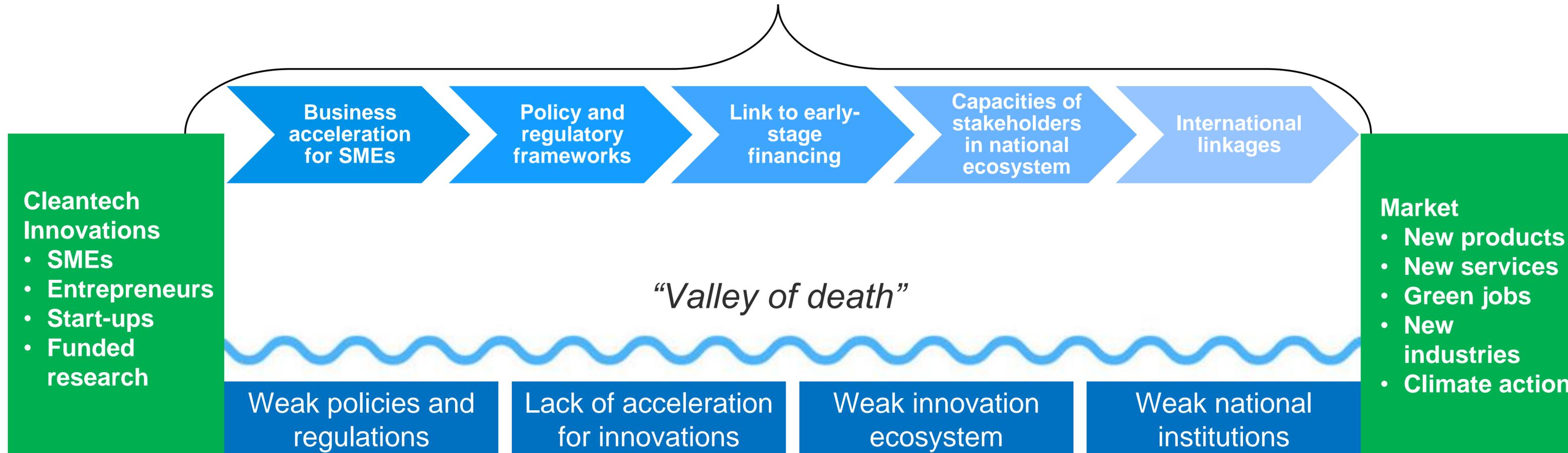
# GCIP Network



# What is the GCIP Approach?

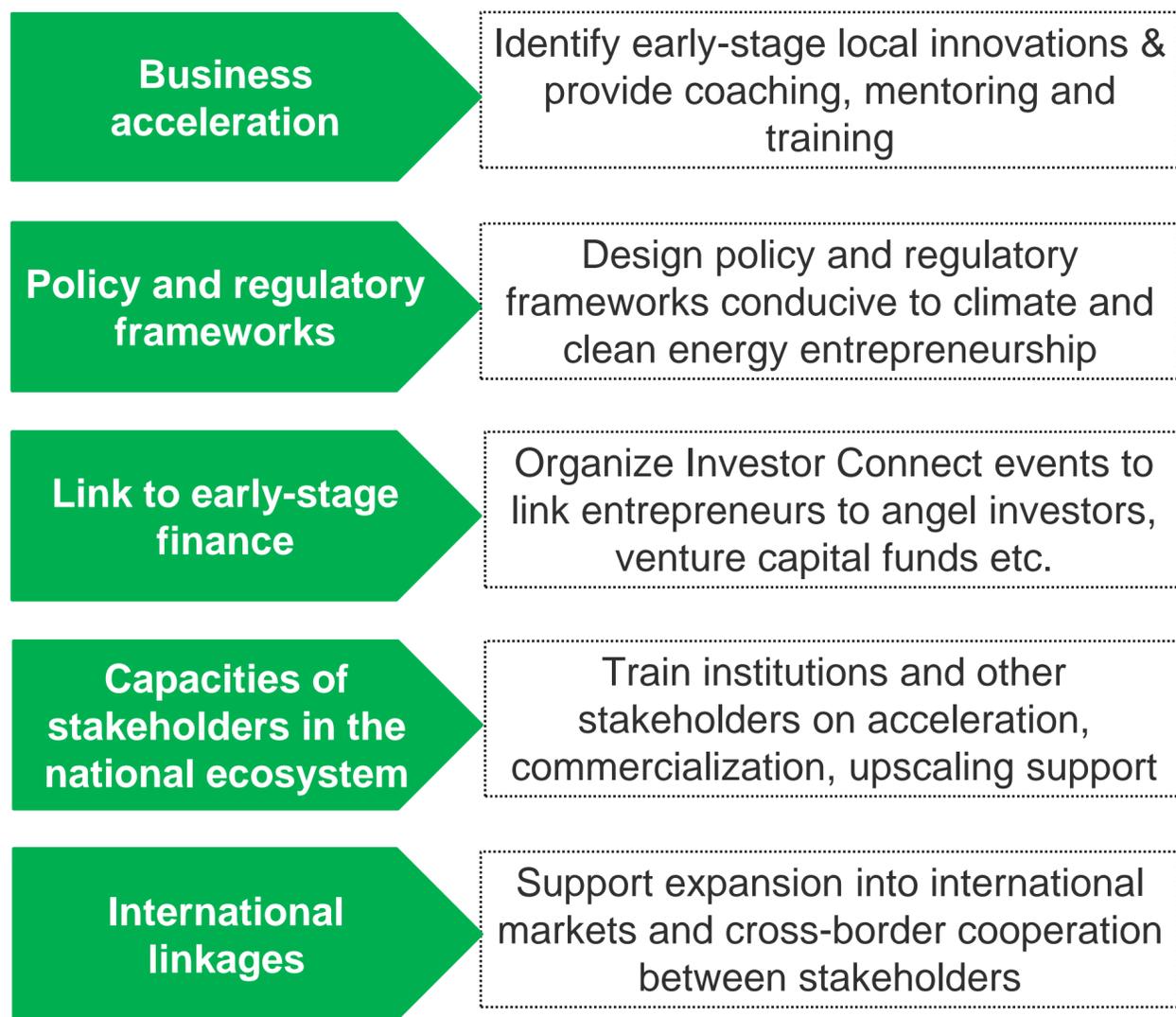


# GCIP Approach

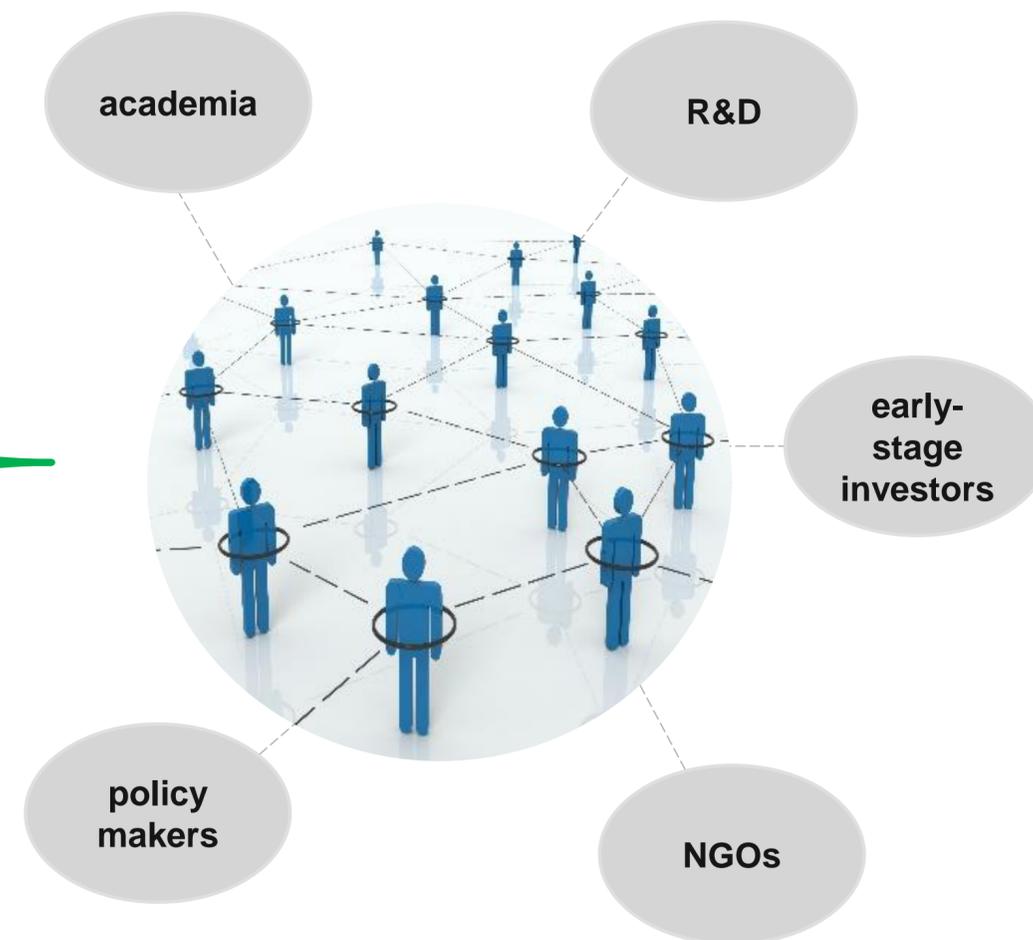




# GCIP Approach



Ecosystem building



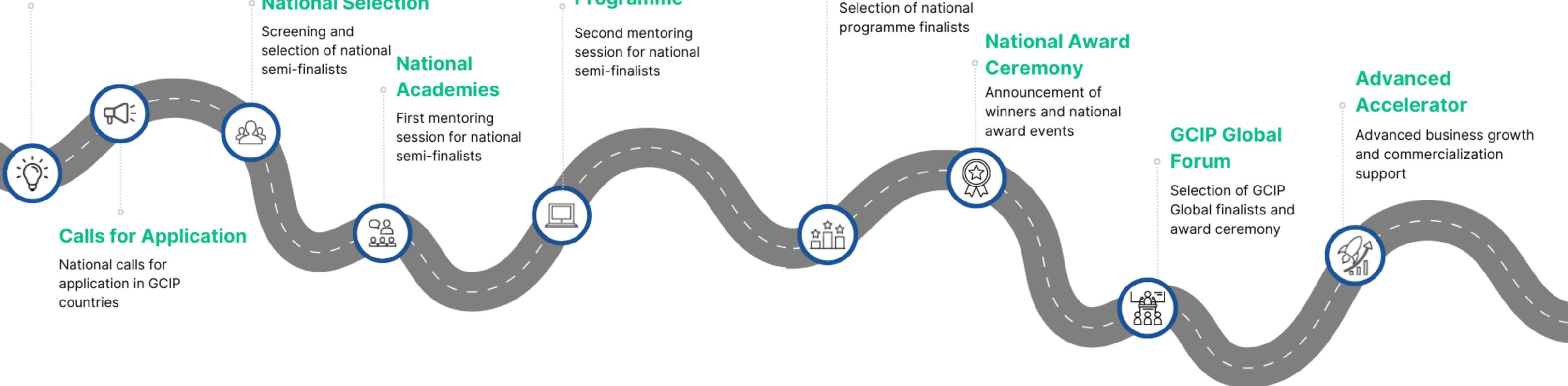
- More than 1,300 businesses accelerated across the globe
- Job creation, revenue generation, CO<sub>2</sub> emissions mitigation



# GCIP Acceleration Process

## Pre-Acceleration

Development of initial concepts and formation of early-stage teams



# Success stories



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*“You only get out of the program what you put in.  
I gave it a lot of my time, and it really paid off.”*

Simon Hazell, CEO, Inseco, 2019 GCIP South Africa

## Atomberg Technologies



**Atomberg Technologies** is a household appliances R&D and manufacturing company. Its flagship product, an energy-efficient ceiling fan, was launched in November 2015. The core innovation behind the fan is the super-efficient brushless direct current (BLDC) motor. The result is that the fan consumes 28 W at full speed, compared to an ordinary fan that consumes 75 W, reducing power consumption by 65%.

## ModulusTech



**ModulusTech** offers affordable housing through its innovative flat packed modular design. Using an industrialized housing concept, the houses can be transported and set up in minimal time, while being cost-effective and sustainable. The technology is resistant to earthquakes and cyclones, and the use of passive technologies makes the houses more sustainable, reducing the carbon footprint by 50 times compared to traditional housing. The technology enables the low cost of US\$ 3,000 per house.

## Eco-V



**Eco-V** provides renewable hot water and electricity solutions for communities (homes, hospitals and schools) and industries in the form of containerized hybrid solar micro grids that are affordable and easily transportable. **BlueGreenTower™** technology achieves 90% in energy saving for heating water (compared to electric boilers) by harvesting and storing solar power, while conserving water by using an Internet-based software management platform to optimize performance not provided by any of its competitors.

# GCIP Gender Mainstreaming

- **2013 – 2019:** Out of more than 1,000 supported enterprises, **25%** are women-led
- **2022 – 2026:** Increase women's participation to **40%**
- **GCIP II** will place a stronger focus on women's empowerment through strategic **gender-responsive action**.
- *Individual **gender action plans** developed for each GCIP partner country.*
- *Project interventions are gender-responsive to allow both women and men to equally lead, participate in and benefit from GCIP.*

# Success stories – women in cleantech

## Jaruwan Khammuang



Founder of **Fang Thai Factory**, a rice straw paper and packaging company. Its products are some of the most environmentally friendly options on the market, with a manufacturing process that follows the zero-waste management approach. Rice straw is used in every part of the paper-making process.

## Fariel Salahuddin



Energy expert and founder of **UpTrade**, former “Goats for Water (GFW)”. This is a social enterprise that empowers smallholder livestock farmers around the globe to use their livestock as currency to purchase otherwise expensive solar water pumps and solar home lighting systems.

## Euodia Naanyane-Bouwer



Founder of **Gracious Nubian**. The company is a social enterprise to manufacture innovative washable sanitary pads that can be reused for up to two years. The company’s aim is to inspire a healthy world and to be a leading provider of affordable reusable sanitary pads in developing countries worldwide.

## Dr. Salma BOUGARRANI



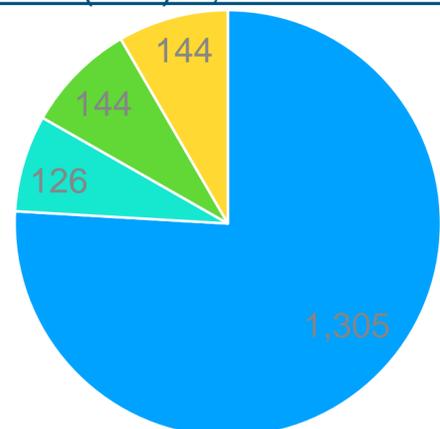
CEO and co-founder of **GREEN WATECH**, a new generation of patented, innovative, low-cost, ecological and efficient soil filters for the treatment and reuse of wastewater from rural communities and decentralized sites.

# GCIP Impact

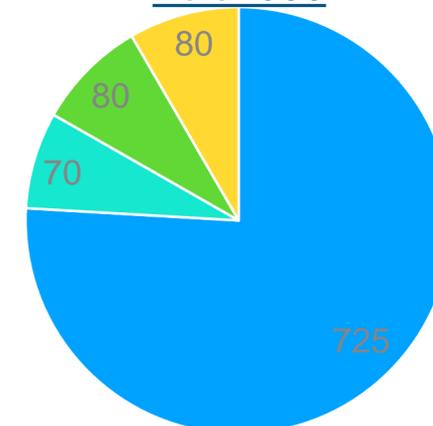


# GCIP: Projected impact

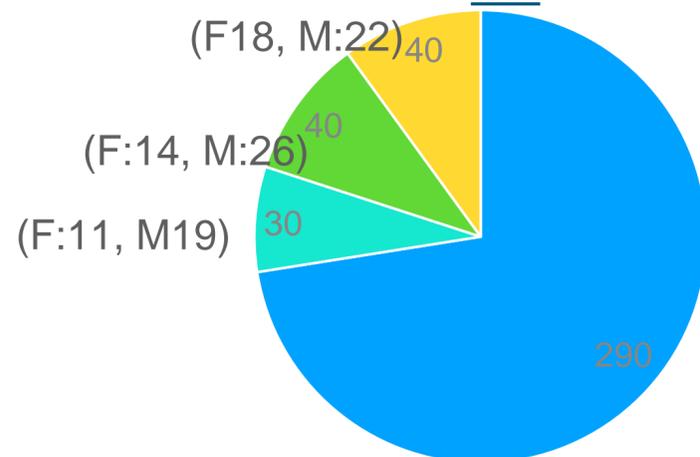
Mitigation of direct GHG emissions (ktCO2)  
Total (Min) 1,719kt CO2e



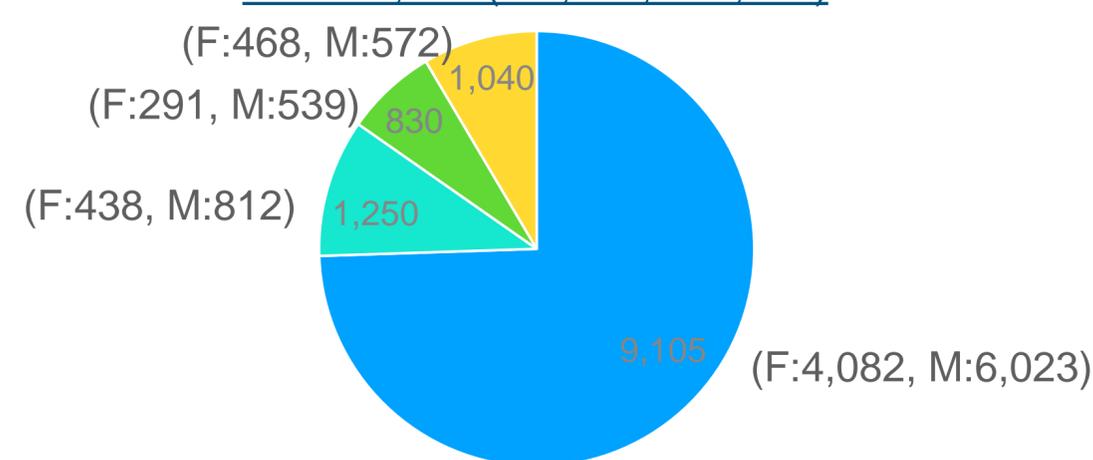
Number of enterprises supported  
Total 955



Number of cleantech experts trained  
Total 400



Total number of programme participants (beneficiaries)  
Total 12,225 (F:4,279, M:7,946)



■ Others ■ Cambodia ■ Indonesia ■ Viet Nam



# GCIP: Key benefits

## Start-ups and SMEs

- **Let your innovative cleantech ideas make a difference**
- GCIP nurtures start-up teams and SMEs developing cleantech innovations through progressive business acceleration services.
- By leveraging its network of financing partners, GCIP connects high-potential entrepreneurs to investors and helps them pilot their solutions.

## Governments and industry associations

- **Build empowering innovation and entrepreneurship ecosystems**
- GCIP fosters conducive and inclusive national innovation and entrepreneurship ecosystems in partner countries to create enabling conditions for cleantech entrepreneurship.
- GCIP enables knowledge creation and exchange to promote synergies within and across ecosystems.

## Investors and financing partners

- **Gain exclusive access to high-impact cleantech solutions**
- Through collaboration with GCIP, investors gain exclusive access to credible cleantech solutions with potential. GCIP builds investment-ready and scalable cleantech innovations, mentored and selected for economic viability, environmental sustainability, social and gender-specific impact.

## Cleantech innovation and entrepreneurship experts

- **Join a global community of cleantech experts**
- GCIP trains a community of cleantech innovation and entrepreneurship experts. Mentors, coaches and judges working with GCIP get access to networking opportunities with credible high-impact cleantech enterprises and the latest innovative developments.

## Sponsors and donors

- **Help build a better future, showcase your commitment**
- GCIP produces investment-ready and scalable cleantech solutions. With the help of additional funding and collaborations, GCIP has the potential for further expansion and upscaling as the largest cleantech innovation and entrepreneurship acceleration and support programme globally.



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- Visit our **GCIP Web platform** [gcip.tech](https://gcip.tech) for more information: get insights about GCIP work
- Follow GCIP Global on  **@GCIPsmes** or  **(Global Cleantech Innovation Programme)**
- Write us at [gcip@unido.org](mailto:gcip@unido.org)



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# Thank you!



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