



GCIP x ASEAN: ASEAN Accelerator

5th CEFIA Forum
25 August 2023

Presented by:

Dr Zulfikar Yurnaidi

Manager, Energy Modeling and Policy Planning (MPP) Department



**One Community
for Sustainable
Energy**



Global Cleantech Innovation Programme (GCIP)

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

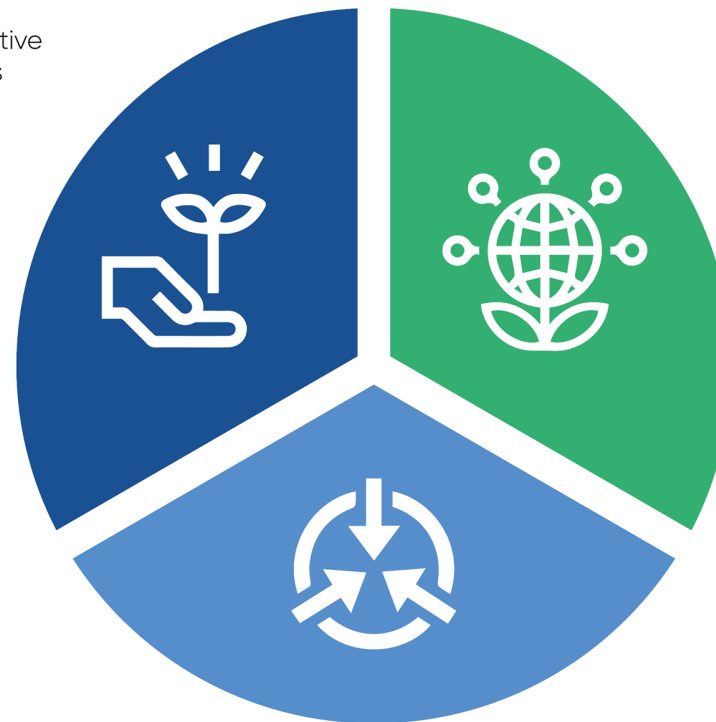
- Supporting early-stage **small and medium-sized enterprises (SMEs)** with innovative cleantech ideas through business accelerator services with a competition component.
- Strengthening **cleantech innovation and entrepreneurship ecosystems** and facilitating partnerships and networking between private 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 3

Programme coordination and coherence

PILLAR 2

Cleantech innovation and entrepreneurship ecosystems strengthening and connectivity



GREEN CLIMATE FUND

GCIP Approach



Business acceleration for SMEs

Policy and regulatory frameworks

Link to early-stage financing

Capacities of stakeholders in national ecosystem

International linkages

“Valley of death”

Weak policies and regulations

Lack of acceleration for innovations

Weak innovation ecosystem

Weak national institutions

Cleantech Innovations

- SMEs
- Entrepreneurs
- Start-ups
- Funded research

Market

- New products
- New services
- Green jobs
- New industries
- Climate action

GCIP Success Stories

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 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.

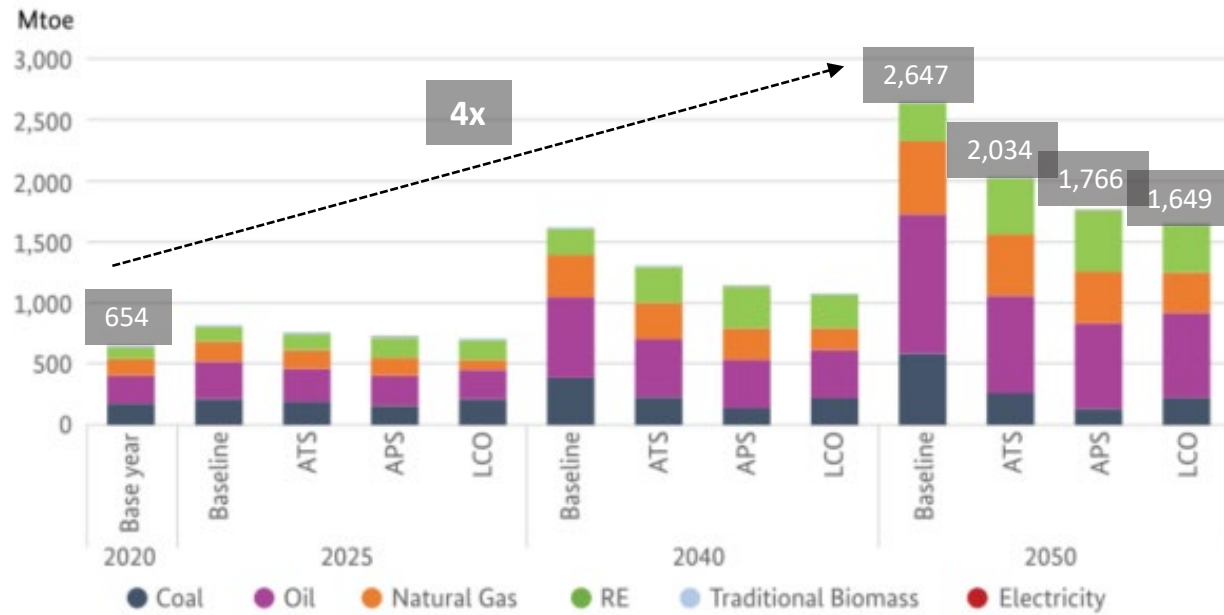
Dr. Salma BOUGARRANI



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.

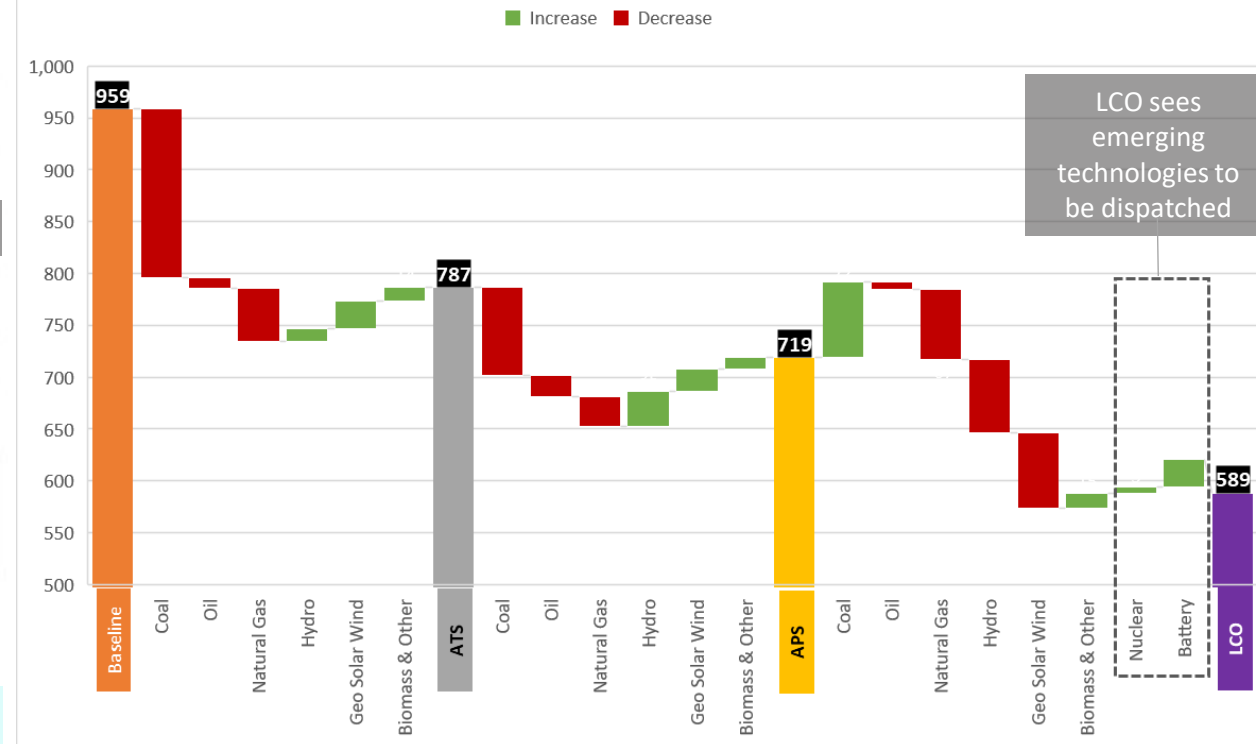
ASEAN Clean Energy Transition – Pathways

Energy Supply by Fuel Across AEO7 Scenarios



- ❑ Baseline Scenario projected a 4x of energy supply required from 2020 to 2050. Energy efficiency measures reduce it to 3x, 2.7x, 2.5x in ATS, APS, and LCO Scenario.
- ❑ To reach APAEC targets in 2025, energy efficiency measures need to be coupled with increasing share of RE

Installed Capacity Fuel Shifting in 2050



- ❑ While the total demand of installed capacity decrease due to energy efficiency, clean energy penetrates the power system.

ASEAN Clean Energy Transition – Jobs

Added Installed Capacities from 2020 level

Total RE Job Creation

2025	
ATS	857 Thousand
APS	1 Million
LCO	960 Thousand
2050	
ATS	4.5 Million
APS	5.5 Million
LCO	3.2 Million

2025 41 GW | 51 GW
ATS APS

Job addition dominated by Vietnam and Indonesia

	ATS	APS	LCO
VN	29%	31%	22%
ID	27%	27%	21%
Others	44%	42%	42%

(2050)

2050 255 GW | 311 GW
ATS APS

Hydro makes up the most RE jobs, followed by Solar

	ATS	APS	LCO
Hydro	3 Million	3.7 Million	2.5 Million
Solar	851 Thousand	1 Million	526 Thousand

(2050)

- Strong renewable deployment in the regional policies scenario (APS) is projected to provide up to 5.5 million new jobs in the construction, installation, operation and maintenance by 2050. About 67% of these would be involved in the hydropower plants, followed by 19% solar.

ASEAN Accelerator – Expansion



To know more about the latest ACE Publications,
those are available for download from:

aseanenergy.org/category/publications/



For further information or to provide feedback, please contact ACE at
secretariat@aseanenergy.org



www.aseanenergy.org



[instagram.com/aseanenergy](https://www.instagram.com/aseanenergy)



[facebook.com/aseanenergy](https://www.facebook.com/aseanenergy)



twitter.com/ASEAN_Energy



[linkedin.com/company/aseancentreforenergy](https://www.linkedin.com/company/aseancentreforenergy)

Thank You