

# Skills and Entrepreneurship in 4IR technologies for the Green Transformation

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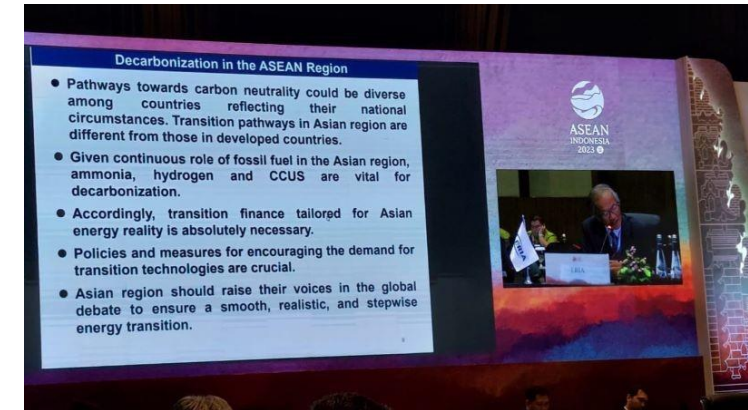
**Co-Chair Startup20 Inclusion Task Force under G20 India**



ERIA Launches **Digital Innovation and Sustainable Economy Centre (DISC)**, a visionary initiative poised to shape the future of ASEAN and East Asia through *digital innovation and sustainable economic growth* on 24th of August 2023



ERIA supports the the **ASEAN Blue Economy Framework** as a strategic approach to advance ASEAN Blue Economy goals and priorities in 2021



ERIA also took part in the **East Asia Summit Energy Cooperation Task Force Meeting in preparation for the 17th East Asia Summit (EAS)** Energy Ministers Meeting in 2023

# ASEAN's Transition towards a Greener Economy



ASEAN stands out as one of the most susceptible areas to the impacts of climate change.



In the past years, ASEAN has made notable progress to address challenges on climate changes with one of the example being the establishment of **ASEAN Circular Economy Framework** in 2021.



Governments plays an important role in efforts for green transformation with **policy interventions** such as banning single-use plastics, providing incentives for sustainable finance, boosting green innovation on smart cities and EV.



However, the region still faces numerous challenges, including high costs for the renewable energy technology necessary achieve net zero. ASEAN countries are estimated to need up to **US\$ 987 billion to achieve the short-term energy transition target** in 2030 to achieve a net zero scenario in 2050.



The **2023 ASEAN Chairman Statement** recognise the urgent need to strike a balance between economic growth and sustainable use of natural resources and protection of the environment and considering green technological advancements to strengthen ASEAN resiliency on climate change.



# Innovation and Entrepreneurship can become important enablers of **Green Transformation**



**The role of the business sector is key.** Green entrepreneurs are business owners who create and operate environmentally sustainable businesses and whose contribution combines social and economic development. By creating jobs and promoting sustainable practices, green entrepreneurship can have a significant impact.



**Demographic trends.** People in the region especially the **ASEAN Millennials and Gen Z** represent a growing portion of **ASEAN consumers** and are projected to account for roughly **75% of the total by 2030** are increasingly demanding products that are sustainably sourced and produced



**Startups and entrepreneurs** are starting to recognize the long-term economic benefits of adopting sustainable practices.



An important factors to enable those changes are **technological innovations** - advances in biodegradable materials, renewable energy, and waste management are making it easier for businesses to go green. Evidenced by **more than \$1 billion** in capital was invested in green technology companies by 2020.

# Skills Development: nurturing talent for **green entrepreneurship**

- ✓ A Framework of Entrepreneurship Education outlining innovation value creation towards knowledge, skills, and attitudes that also allows students to have experiential learning
- ✓ The rising on TVET (Technical and Vocational Education Training) and Learning Mechanism Systems (LMS) that emphasize on interdisciplinary education and "*soft skills*" to meet evolving private sector demand



## Just Transition: Inclusive approaches are critical

- ✓ Sustainability and inclusion are inter-linked and two sides of the same coin in the net-zero transition.
- ✓ Without inclusion, large pockets of resistance could emerge as a result of certain groups' fear of losing jobs and worsening economic conditions, putting pressure on governments to slow down or even stop initiatives to make economies greener.



- ✓ Policy should focus on enabling environment for :
  - ✓ Skills development
  - ✓ Green jobs and green enterprises development
  - ✓ Inclusion of women and girls
  - ✓ Inclusion of other under-represented groups

# Interesting startups are emerging

## FoodTech (Urban Tiller)

*SINGAPORE*

The world's first and only B2B leaf protein company from Singapore, with mission to accelerate adoption of plant-based foods by supplying novel ingredient Rubisco.



## CleanTech (ETRAN)

*THAILAND*

Thai startup focusing on building innovations in electric vehicles and transportation that are environmentally-friendly through the development of sustainable transportation solutions.



## E-Groceries (Grocerdel)

*CAMBODIA*

Cambodia online supermarket that connect local, small farmers for the consumers, and promoting the sustainable agriculture products.



# Interesting startups are emerging

## Smart Farming (Agrea)

*PHILIPPINES*

Innovative inclusive business to help establish food security in the Philippines. AGREA's focus is on farmers and fishermen in the Marinduque provinces by the creation of sustainable island economy.



## Renewable Energy (Xurya Daya)

*INDONESIA*

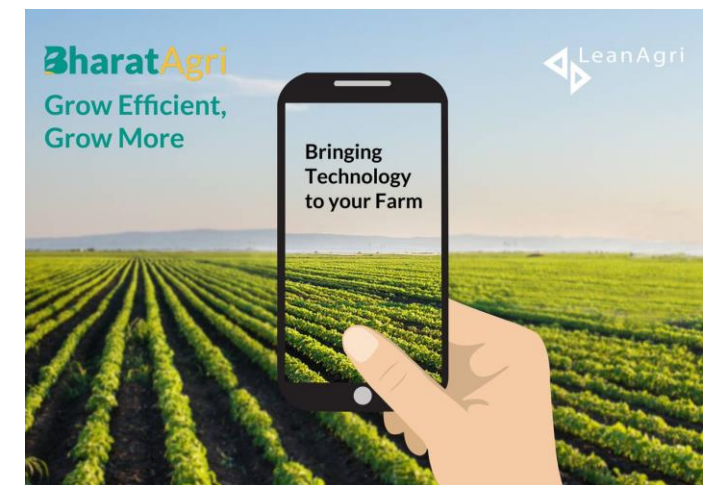
Indonesia renewable energy startup pioneering the zero-down method of switching to solar through design, install, operate and maintain rooftop solar power plants with lease scheme.



## AgTech (Bharat Agri)

*INDIA*

India tech company that supports farmers through the systematic implementation of scientific techniques by providing critical information at appropriate times and regular monitoring, enabling farmers to increase their crop yield.





# Interesting startups are emerging

## Eco-friendly Products (Wahapy Co.)

### VIET NAM

manufacturer and wholesaler and exporter of eco-friendly products, sustainably sourced biodegradable products grown in Vietnam such as: bamboo, rice flour, rice flour, leaves, wood to create a green environment and reduce plastic waste.



## Sustainable Clothing (SukkhaCitta)

### INDONESIA

B Corp certified and award-winning social enterprise that seeks to make “meaningful clothes” by applying sustainable and ethical principles in production and by investing in the empowerment of rural women in Indonesia. SukkhaCitta established the House Training of SukkhaCitta for young Indonesian artisan to adapt with the changing innovation in sustainable clothing.

# Startup20 under G20 India

## Task Forces

### Inclusion & Sustainability



Create equal opportunity for startup founders irrespective of gender, race, class, creed to significantly expand the pool of startups and encourage alternate school of thoughts developed through different experiences.

Develop conducive environment for startups which are focusing and building inclusive communities to drive equality and growth of global economies

2023

## Startup20 Communiqué

Taskforces

**Recommendations  
and Policy Directives**



Thank you

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