

Dr Fraser Thompson 10 October, 2020

Indonesia host agency



Co-convenors





Technical advisors

S Y S T E M I Q

αlphaβeta



Industry partners

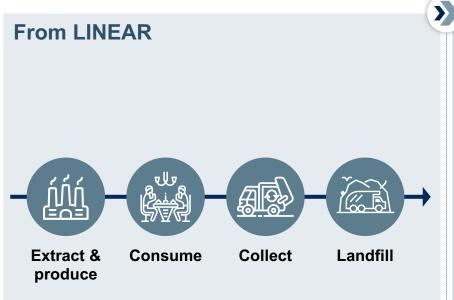




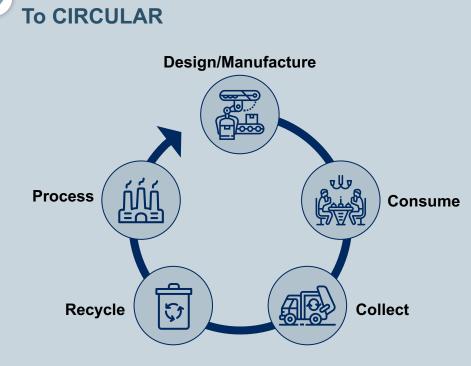
Objectives of this discussion

- Discuss the opportunity of a circular economy in Indonesia
- Discuss the roadmap for creating a circular economy in Indonesia
- 3 Highlight the barriers that need to be addressed

A circular economy is one that maintains the value of products, materials, and resources in the economy as long as possible



Linear supply chains are costly, susceptible to volatility, and harmful to our environment



Circular supply chains reduce costs, provide pricing stability, and protect our environment

A circular economy is an economic system of closed loops in which a) raw materials, components, and products retain their value as much as possible, b) renewable energy sources are used, and c) systems thinking is at the core

A range of companies in Indonesia are already adopting circular economy opportunities around the 5Rs

REDUCE





Bank Rakyat Indonesia is adopting cloud computing technologies, which reduces the need for physical servers and reduces ewaste generation at source

REUSE





Asani is one of Indonesia's first B2B electronic rental (PC, printers, monitors etc.) platform that encourages reuse of electronics

RECYCLE





Using the black soldier fly and its larvae, Magalarva converts organic waste, including food waste, into protein used for animal feed and pet food

REFURBISH





PT Sigin Interactive Indonesia provides repair and refurbishing services for used electronics and home appliances, deadon-arrival products, and PCBs

RENEW





Evoware produces cups from farmed seaweed and designs food wrappings and sachets made out of edible seaweed-based material

8 trends are supporting a shift to a circular economy approach

Trends



Degradation of natural resources



Increasing price volatility and supply chain risk



Advancement in new technologies



Increasing consumer acceptance



Shifts in the labor market



Supportive regulatory shifts

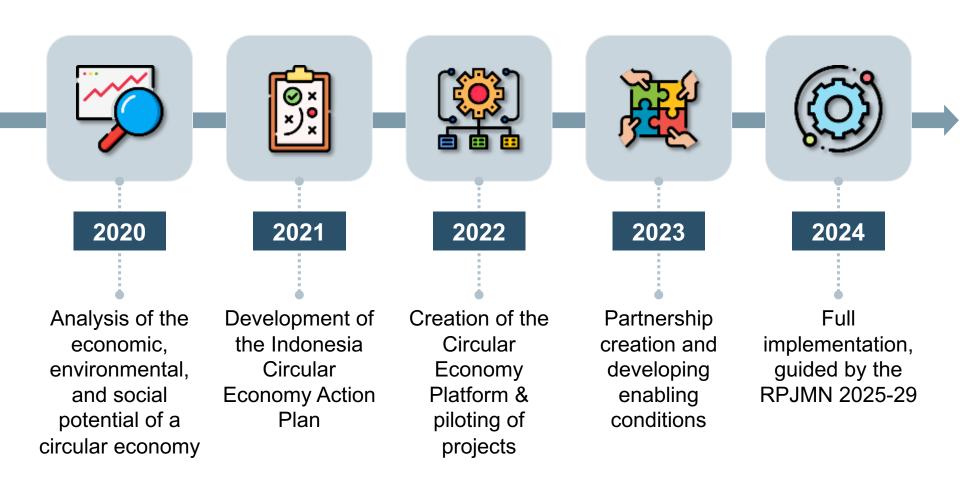


Availability of new capital to support investment



Greater collaboration due to urbanisation

Indonesia's National Circular Economy Roadmap aims to create a clear strategy to help capture the benefits of a circular economy



We focus on 5 key areas of the Indonesian economy with high potential for circularity that can solve many of Indonesia's problems

Sector

Problems that circularity can solve

Food and beverage (Food loss and waste)

Textiles (Textile waste)

Construction (Construction waste)

Wholesale & retail trade (Plastic packaging waste)

Electrical and electronic equipment (E-waste)



Over **300 kg** of food loss and waste is generated in Indonesia per person every year



 ~470,000 tonnes of textile is lost during the production process in Indonesia



Indonesia aims to cut its emissions by 29-41% by 2030 (vs BAU). **11%** of global carbon emissions are associated with materials and construction processes used in buildings

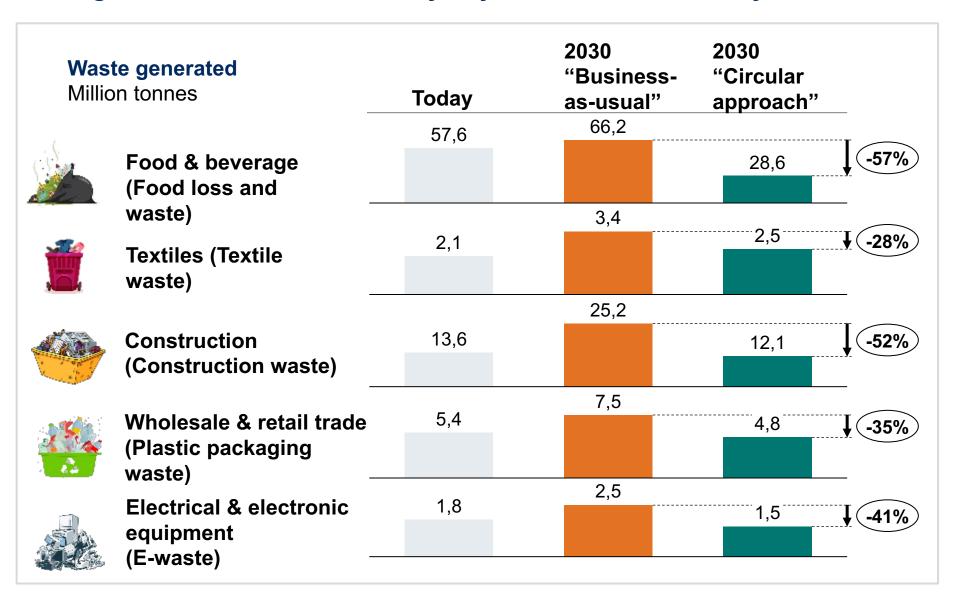


~71% of plastic packaging waste in Indonesia is either burnt, dumped on land, sent to dumpsites, or leaks into the ocean

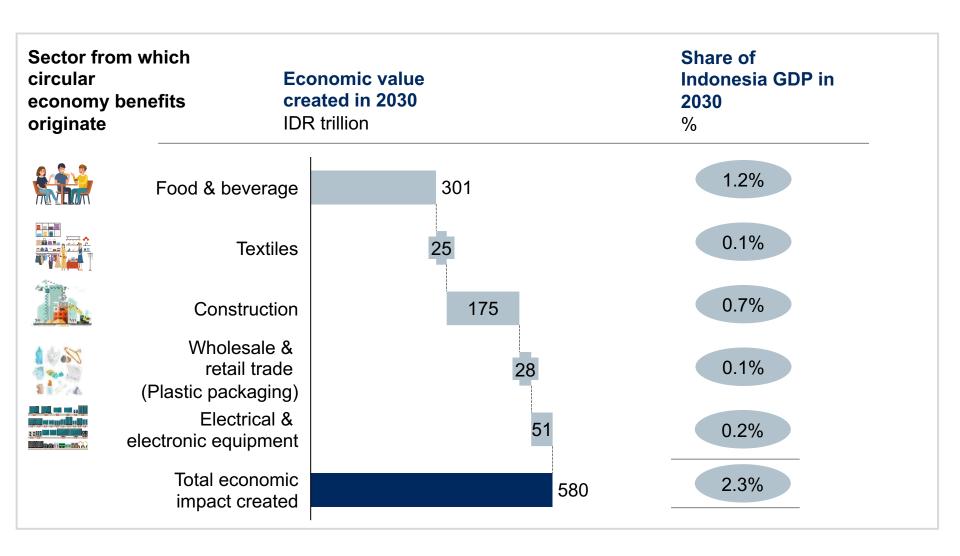


Indonesia generates **6.7 kg** of e-waste per capita, two to four times the amount generated by the Philippines, Vietnam, Laos, or Cambodia

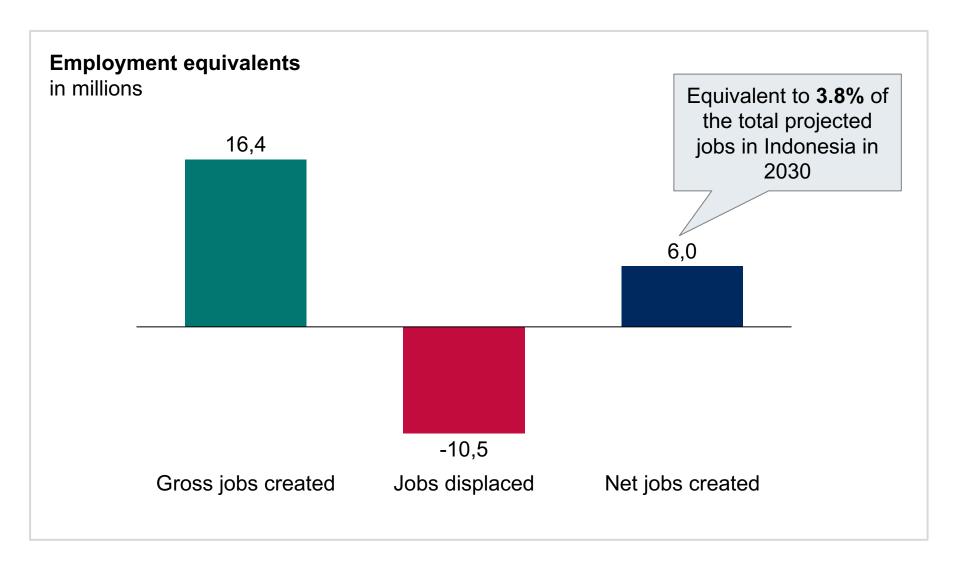
Adoption of the identified circular economy opportunities could reduce waste generation in each sector by anywhere from 28-57% by 2030



Circular economy benefits from the 5 key sectors could contribute IDR580 trillion (USD40.7 billion) in economic value in 2030 – equivalent to 2.3% of Indonesia's GDP in 2030

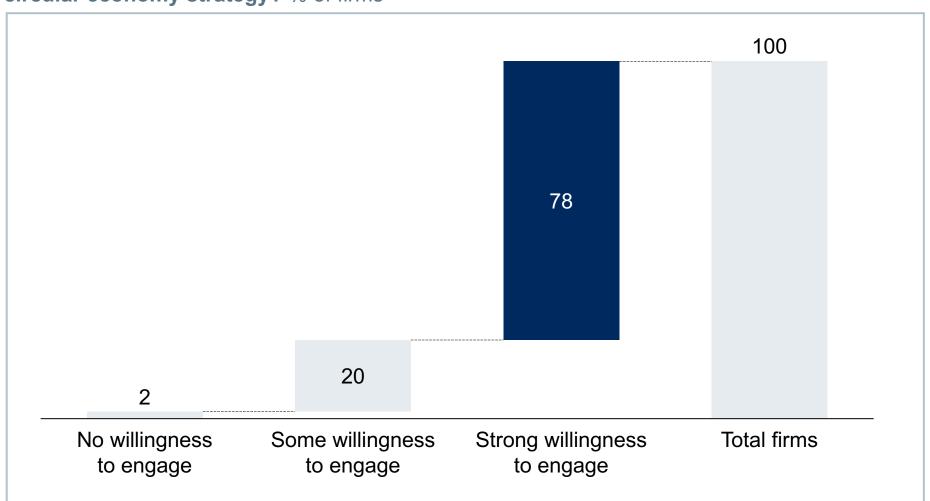


The circular economy could create net ~6 million jobs or 3.8% of the total projected jobs by 2030



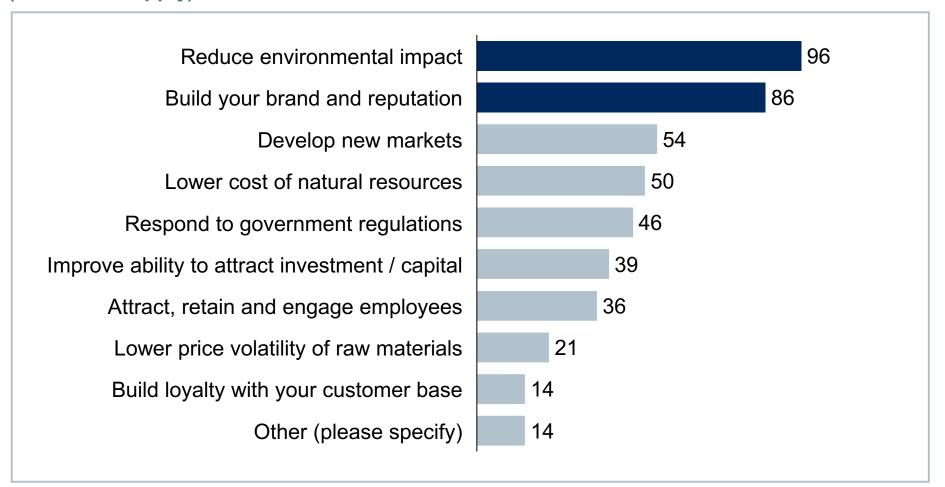
Most firms in Indonesia are interested in understanding more about circularity

Q. What is your company's willingness to engage during the development of this national circular economy strategy? % of firms



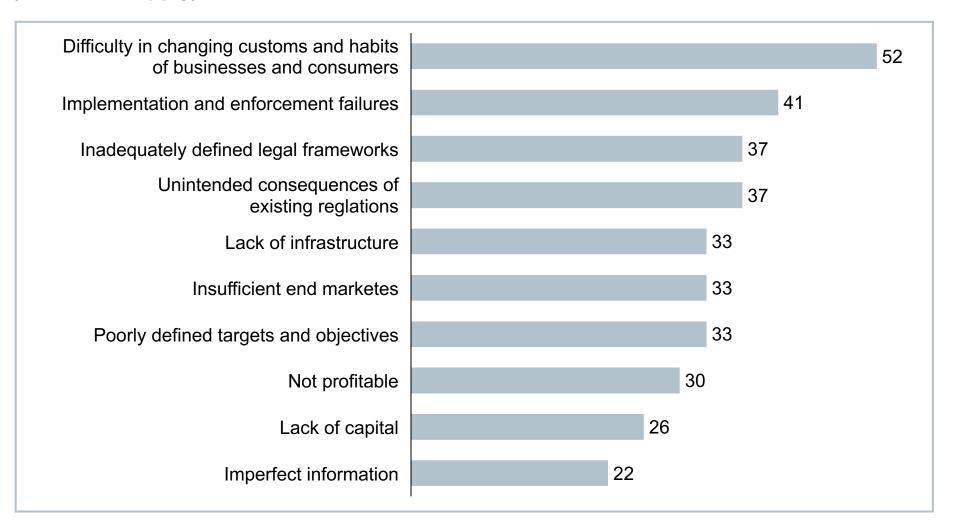
Firms in Indonesia are most motivated by reducing environmental impact and building their brand and reputation in adopting circular actions

Q. What is the main motivation for you in implementing circular economy opportunities? (tick all that apply) % of firms



A number of barriers need to be addressed to capture the circular economy opportunities

Share of firms highlighting barrier as somewhat or very relevant (tick all that apply) % of firms



Developing a multi-stakeholder approach to address those barriers and capture the opportunities is the next step!

Some examples

Engagement with global leading experts



Marina Chahboune
Founder
Closed Loop
Foundation



Martin Stuchtey
Founder
SYSTEMIO

Engagement with industry representatives



Inception Workshop 24th February 2020 Jakarta

Engagement process

Engagement with relevant government ministries













...and others...

Engagement with NGOs and associations







