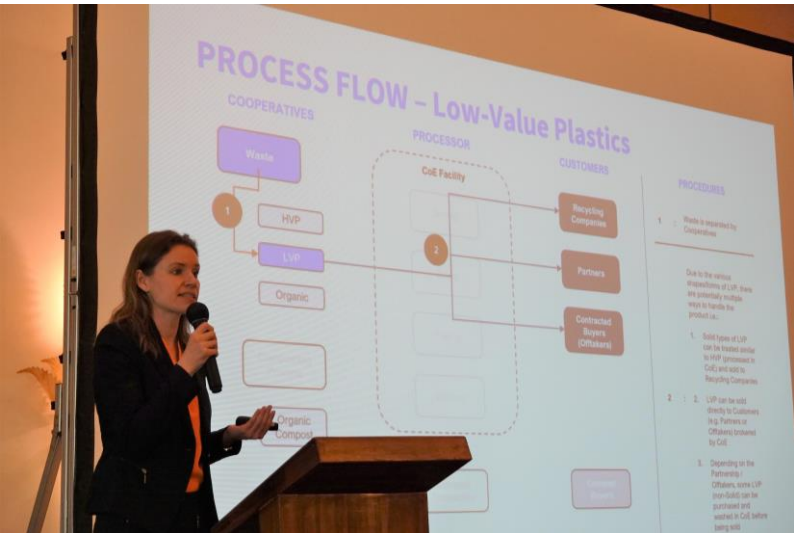


CREATING A CIRCULAR PLASTIC ECONOMY FOR BALI, INDONESIA

MAY 2023



GLOBAL OUTLOOK

400,000,000 tn

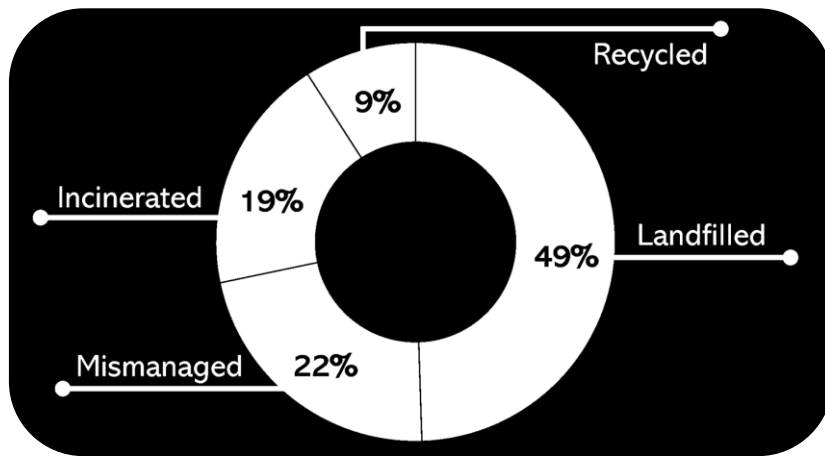
400 million tonnes of plastic are produced globally every year, much of which is mismanaged.

8,000,000 tn

8 million tonnes of plastic waste escapes into the ocean from coastal nations every year.

US\$2.5 t

Scientists estimate US\$2.5 trillion a year in damages to marine ecosystems, contaminating the food chain and water supply, and leading to severe health impacts for humans.



Despite landfills reaching saturated conditions globally, plastic recycling rates are low, averaging at only 9%. A large proportion of plastic waste is dumped at landfills and illegal dumping sites or openly burned, releasing high levels of greenhouse gas emissions.

THE BALI CRISIS

As one of the top destinations globally for tourism, Bali attracts millions of tourists each year. Behind the scenes, however, the island is increasingly being buried in plastic pollution.

1,600,000 tn

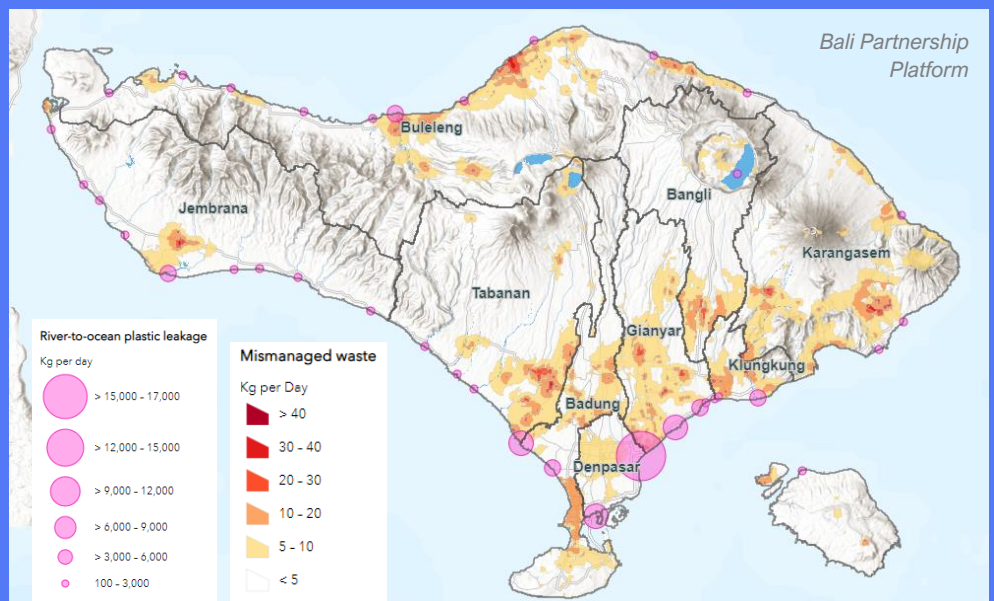
1.6 million tonnes of waste is generated per year by Bali residents, tourists, and organisations, **20% of which is plastic waste (303,000 tonnes)**, and 70% is organic waste.

50%

of total waste and 11% of plastic waste is **leaked into the ocean** from illegal dumping sites, polluting its vital marine ecosystem.

3.5x

more waste is **generated by tourists** per day than residents.



VISION

Develop Bali into one of the world's first circular economies for plastic with a replicable model for tourism-dependent islands in Indonesia and ASEAN, and globally.

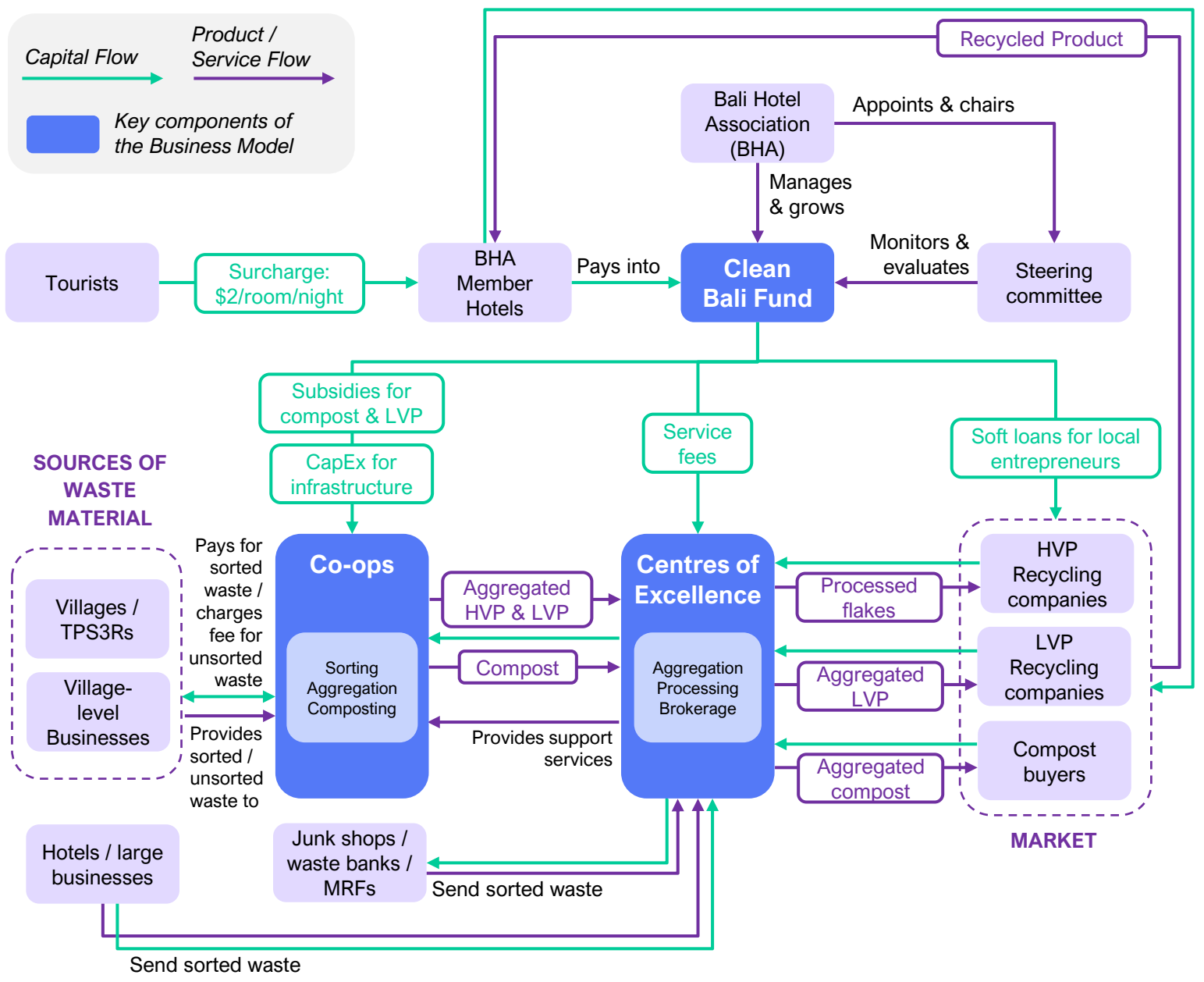
Targeting Bali's largest waste sources, **high-value plastic (HVP)**, **low-value plastic (LVP)**, and **organic waste**, this business plan provides commercially viable recommendations on how Bali can address and overcome its challenges with waste management at all stages (collection, sorting, processing, manufacturing), and serve as a circular economy model for islands where tourism is a key driver for economic growth.

The business plan is composed of **three key components**: the Clean Bali Fund, Cooperatives (Co-ops), and Centres of Excellence (CoEs).

PROJECT PARTNER:  **KIBUMI**
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BUSINESS MODEL

Improving Bali's waste circularity



KEY COMPONENTS OF THE BUSINESS MODEL

1

CLEAN BALI FUND

The Clean Bali Fund incentivises waste separation at source and partially funds waste management via a minor surcharge imposed on tourists of US\$2 per room per night.

2

COMMUNITY COOPERATIVES

Community-owned and run, the co-ops will be the first point of collection for unsorted or sorted waste at the village level. Subsidies provided by the Clean Bali Fund, will prevent underpricing of LVP and organic waste processing to ensure both types of waste are properly managed.

3

CENTRES OF EXCELLENCE

The CoEs will aggregate and/or process HVP, LVP, and compost to be sold to respective buyers. CoEs will be the first in Bali with flaking capabilities and thus can sell HVP at a higher value.

POLICIES & COMMITMENTS

PUBLIC POLICY

Based on the identified key challenges in Bali's waste management and measuring gaps within the existing policy framework, four public policy recommendations are proposed for consideration by the Bali Government. These will be critical to successfully transition Bali into a circular economy.

1 Mandate the use of recycled content

Mandate the use of a minimum of 30% recycled material in private and public construction projects by 2027, including hotels and public works.

2 Limit the export of plastic waste

Ban the export of plastic waste outside of Bali after 2027. Under the order, only recycled flakes or pellets would be allowed to be exported for further processing.

3 Ban multilayered plastic

Expand the current single-use plastic ban to include non-essential multilayered plastic such as sachets by 2025. By 2035, expand the list to include all imported and domestic virgin plastic.

4 Incentivise recyclable product design & adoption

Reward brand owners and producers with tax credits or rebates for rolling out easily recyclable products e.g., colourless or label-free products. Reward suppliers and distributors for utilising recycled low value plastic in their products.

INDUSTRY GROUP COMMITMENTS

At the same time, the private sector is essential to strengthen adoption of the Business Model. Two industry group commitments are proposed for consideration by local and regional industry associations, given their ability to collectively mobilise individual businesses swiftly.

1 Support the establishment of the Clean Bali Fund

The Bali Hotel Association and other hotel groups should make public commitments and guide members to partake in the Fund by 2024.

2 Make commitments to support the material inflow and outflow of the CoE

Hotel, retail, and agriculture industry groups should guide members to send at least 30% of their waste to CoEs, and integrate at least 30% recycled content into their respective supply chains by purchasing recycled products.

FINANCIAL ANALYSIS

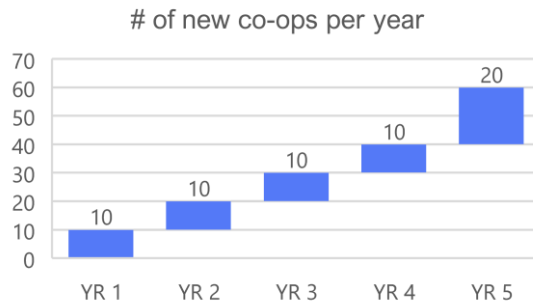
FUND INFLOW

The Clean Bali Fund is projected to raise approx. **US\$11 million** in Year 1

The Fund will be supported by a Government matching scheme in Year 3 of **US\$0.5 for every \$2** from the hotel industry.

FUND OUTFLOW

≡≡≡ The Fund will target to subsidise the building of a total of **60 co-ops** in 5 years.



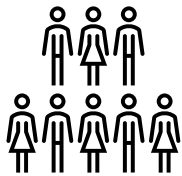
The Fund will provide:

- **co-ops** with CapEx for infrastructure and a US\$0.5/kg subsidy for the processing of LVP & organic waste,
- **CoEs** with service fees for providing capacity building and brokerage services to co-ops, and
- **local recyclers** with soft loans.

SOCIETAL IMPACT

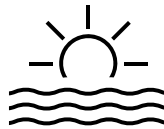
Within the first 3 years...

SOCIAL



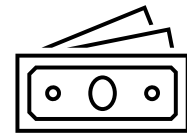
30 co-ops created across Bali incentivising ~43,000 households to separate waste at source

ENVIRONMENTAL



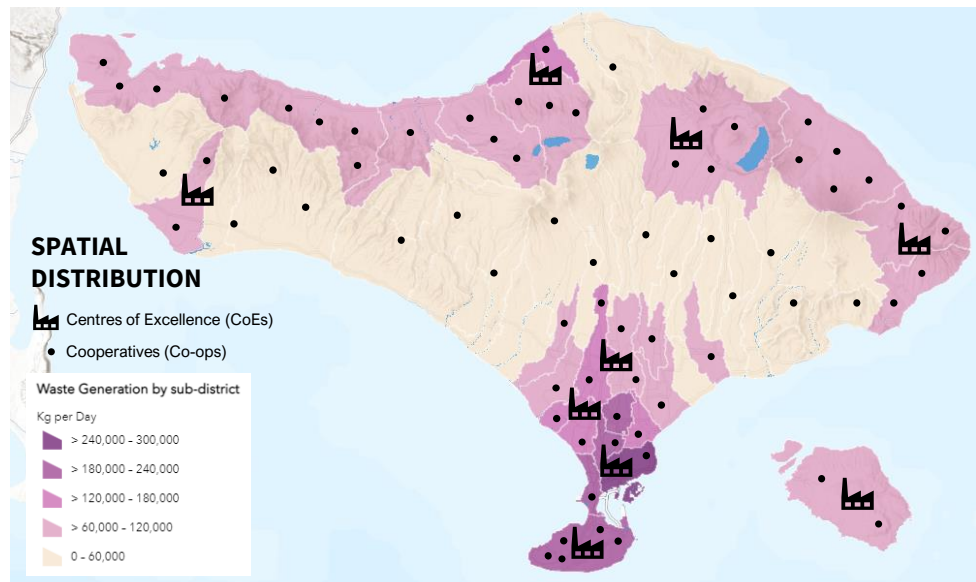
30 – 40% of LVP prevented from being dumped illegally and leaked into the ocean

ECONOMIC



Approximately US\$20 million will be directed towards co-ops to facilitate waste separation at source

For only \$2 a day, the public good (social & environmental) created is immeasurable!





The **Global Institute For Tomorrow (GIFT)**

is an independent pan-Asian think tank committed to purposeful leadership learning and partnering with clients to help them unlearn conventional wisdom and unleash organisational potential to redesign society.

The **Global Leaders Programme (GLP)** is GIFT's flagship experiential learning programme designed for senior executives from leading global organisations to think critically about the drivers of change in the 21st century and develop new business models and innovations that address the defining challenges of our time.

During this GLP, participants from business and government from around the world convened in Hong Kong and Indonesia over the course of two weeks (8 – 19 May 2023) to undertake classroom discussions, stakeholder meetings, site visits, and business plan development sessions. The highlights of this proposal were presented at GIFT's Public Forum on 19 May 2023 in Bali, which was attended by over 100 attendees.

GIFT would like to thank everyone involved who put in their valuable time and efforts to make this possible.

You can download the full report [here](#).

Scan below to
access full report



Tomorrow Matters.

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