



DESIGNING CIRCULAR EXPERIENCE

Enriching the Guest Journey
Through Circular Design

Dimas Arka
Product Designer of

wedoo x *Sayang*



© Kanma Group

* When guests leave
your restaurant,

**What do they
remember?**

Is it	Good Food	?
	Friendly Service	
	Captivating interior	





a growing number
of guests also
remember

* Authenticity

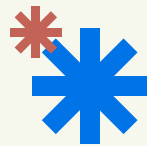
Genuine, honest, sincere, soulful,
real, unpretentious

* Meaningful Stories

Tradition, Identity, Connection,
Inspiration, heritage, emotion

* Ethicality

Responsible, cultural appreciation,
accountability, sustainability





Shifts in Hospitality Experience

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Traditional hospitality experience:
Food
Service
Atmosphere

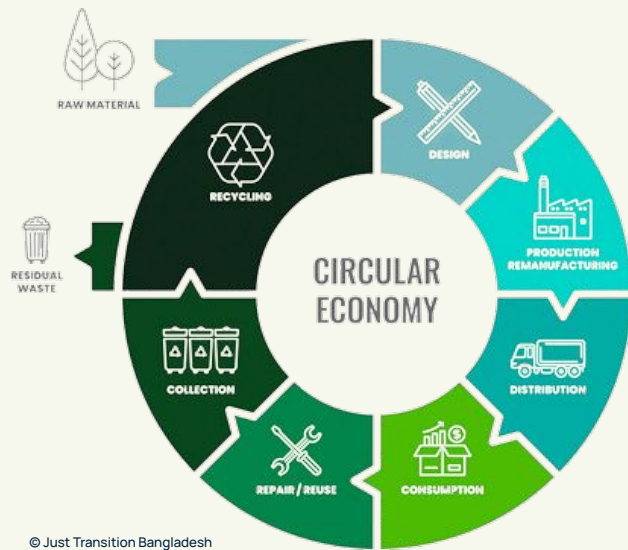


Today's hospitality experience:	
Authenticity	Purpose-Driven Brands
Meaningful Stories	Transparency
	Environmental Responsibility
Ethicality	Local Impact
Answered with Circular Design	

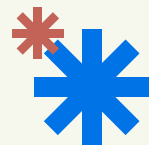


What is 'CIRCULAR DESIGN' ?

Circular design is a design approach that integrate **circular economy principle** to minimize -with the goals to eliminate- waste, instead of following the traditional “**take-make-dispose**” model.



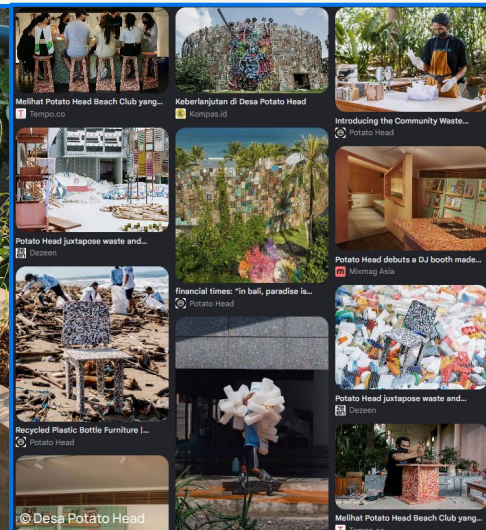
Keyword: Waste Minimization, Cradle-to-Cradle, Closed-loop System, Design for Longevity, Material Circularity



Arrival

Dining

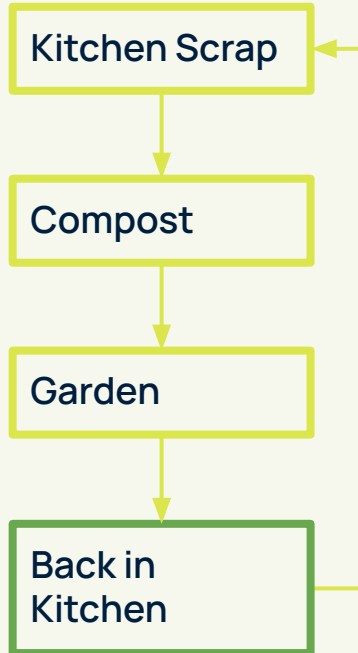
Leaving



Waste as Your Resource



Organic Waste



Inorganic Waste

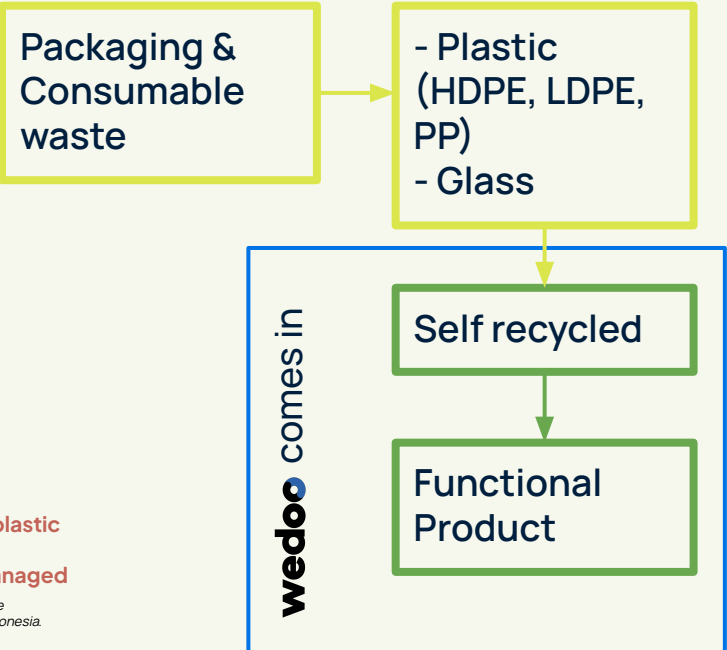


34,99% Bali's waste are inorganic with 15.70% being plastic
13,36% of inorganic waste actually being managed
26.94% or 221,583 tonnes/year inorganic waste unmanaged

1) Widiyarsana, I. M. W., Tambunan, S. A., & Mulyadi, A. A. (2021). Municipal Solid Waste Characteristics: Recycling Potential and Waste Diversion Rate in Bali Province, Indonesia. Research Square (Preprint). <https://doi.org/10.21203/rs.3.rs-494123/v1>



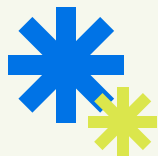
How it Could have been



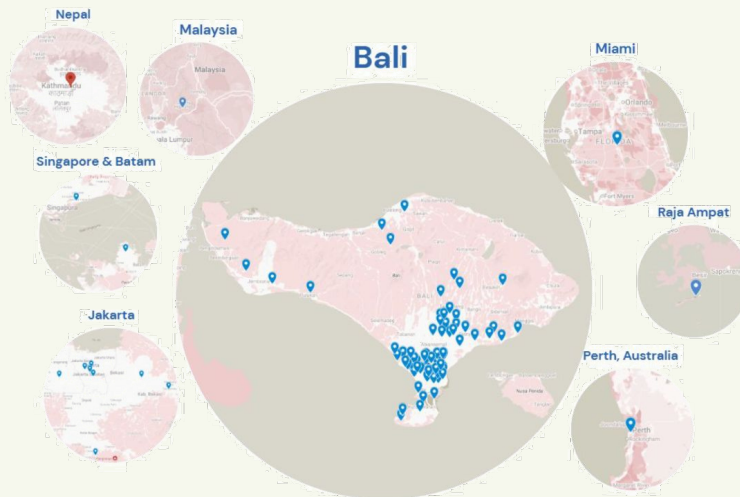


400+ Machine designed and manufactured in Bali

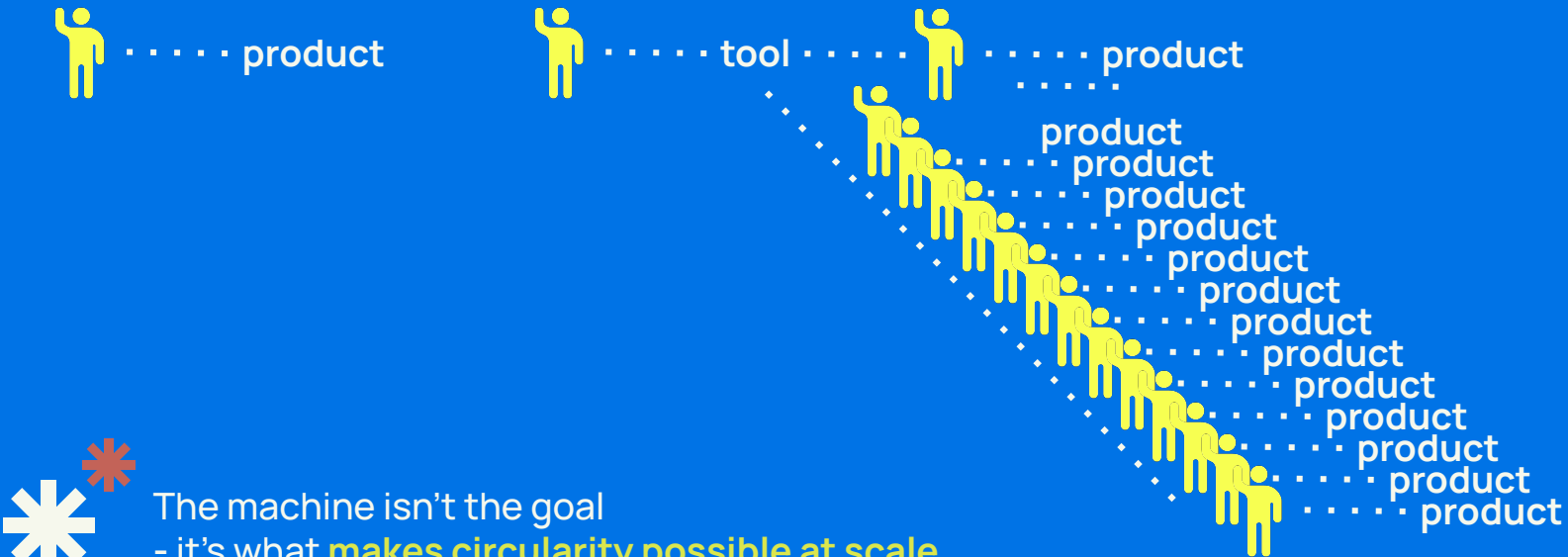




300+ Communities& Partners Building a Circular Economy



Why machinery?





Desa Potato Head, Bali
All-inclusive Solution for zero waste



THIS 5-STAR RESORT
HAS A PRECIOUS
PLASTIC RECYCLING CENTER





© Desa Potato Head

COCONUT CRUSHER

Kopi Nako Daur Baur, Bogor

Circular FnB Business







Sungai Watch and Sungai Design

Environmental movement : Turning river plastic into value





**Stopping Plastic
From Going Into The Ocean**



MEET SUNGAI WATCH!

- 300KG PLASTIC RECYCLED DAILY
- 120 EMPLOYEES
- GREAT WAGES





Munduk Moding Plantation, Bali

Eco Resort in the middle of Coffee Plantation

3. Washing

The granules are then washed to remove the dirt and produce clean raw material.

6. Printing

The plastic sheets can be further processed by the CNC (Computer Numerical Control) to create new products out of the recycled plastic.

5. Recycled Plates

The plates have the plates last also making them "beautiful" the plates depends on the type of bottle used. One of plastic plates are shown in the picture. The plates can now be used to cover a wall as in the picture.

wedoo

MULTI PURPOSE SHREDDER

© Munduk Moding Plantation

**ARTIST
COLLABORATION**

**& FRONT DESK
DISPLAY**



RECYCLED PRODUCT SHOWCASE



ARTWORKS

RENEW KEYCHAINS

Chic keychains made from sustainable materials for a greener touch.



IDR 30 k

REPLASTIC HANGER

Recycled plastic hangers blend art and sustainability, reducing plastic pollution.



IDR 70k

ARTCYCLE COASTERS

Eco-friendly coasters from recycled plastic: stylish, functional, and sustainable.



IDR 40k

ECO-FRIENDLY BATH GEL CONTAINER

Eco-friendly soap dish blends bamboo, recycled plastic, and artistic pyrography.



IDR 150k

ECO GLAM EARRINGS

Elegant earrings from recycled plastic: Stylish, sustainable, and impactful.



IDR 120 k

RECYCLED PLASTIC CHAIR

Recycled plastic chair highlights creativity and combats plastic pollution.



IDR 1.500k

GREENLOOP CLOCK

Stylish, sustainable timekeeping for a greener home.



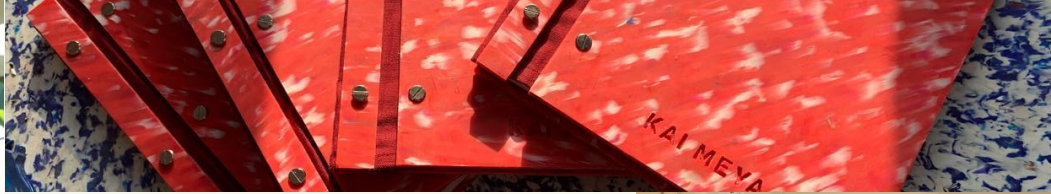
IDR 200k

BAMBOO CUTLERY

This cutlery, made entirely from organic bamboo and crafted by skilled local artisans, prioritizes sustainability.

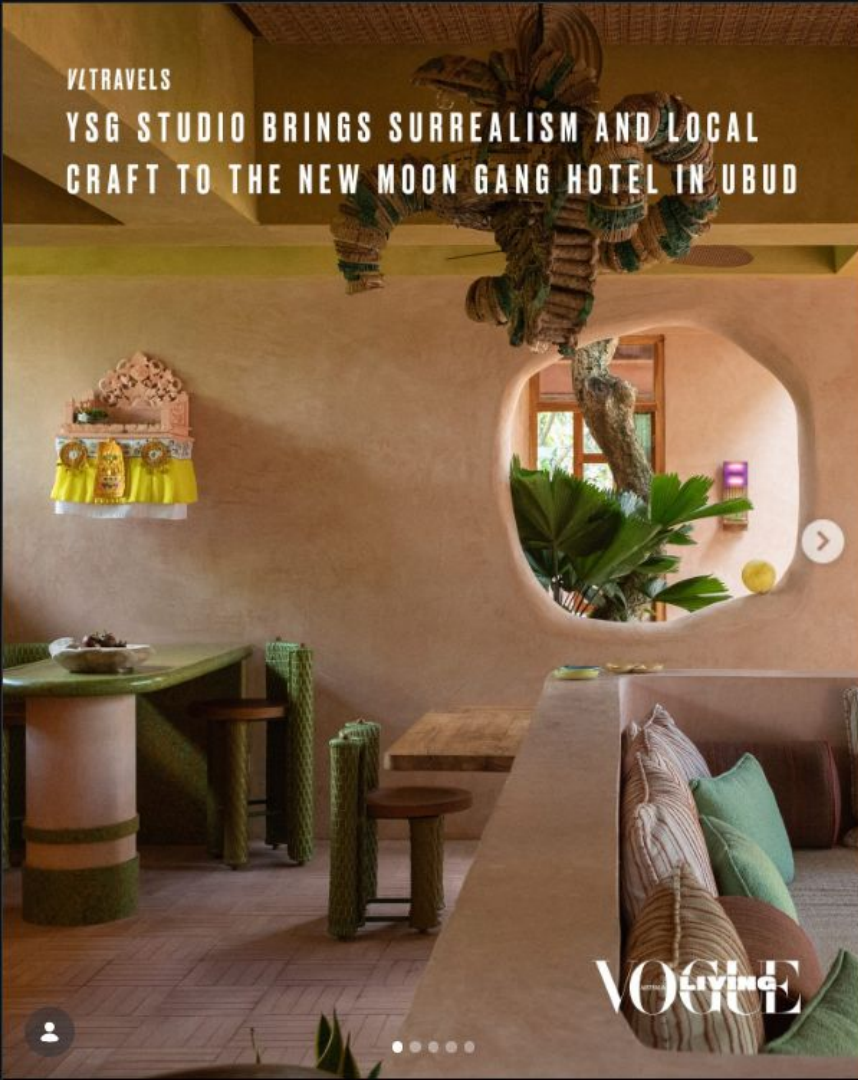


IDR 20k

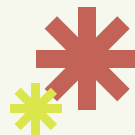


VLTRAVELS

YSG STUDIO BRINGS SURREALISM AND LOCAL CRAFT TO THE NEW MOON GANG HOTEL IN UBUD



VOGUE



Moon Gang Hotel Ubud

© Moon Gang Ubud



Kanma Resort

© Kanma Resort

Soft Plastic Agglomerator



Note: *Sayang*

Material Knowledge #2

Soft Plastic

a new material journey in progress
in collaboration with

wedoo Agglomerator Machine

PROBLEM:

Too thin and lightweight for standard shredders
soft plastic requires a different approach.

After Agglomerator



HDPE soft plastic
is shredded into consistent pieces.

Sheetpress results:
HDPE becomes slightly flexible,
more rigid.



LDPE soft plastic
turning into small particles or chunks
due to the heat generated
during the process.

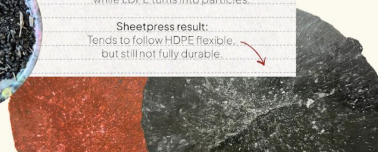
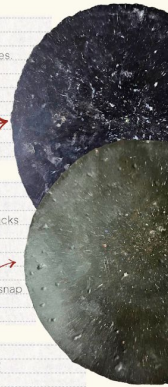
Sheetpress results:
LDPE is more flexible and harder to snap



Mix HDPE and LDPE soft plastic
both reactions happen HDPE stays shredded,
while LDPE turns into particles.

Sheetpress result:
Tends to follow HDPE flexible,
but still not fully durable.

After Sheetpress



wedoo

MATERIAL KNOWLEDGE #5 GLASS



Collaboration with Wedoo Glass Crusher

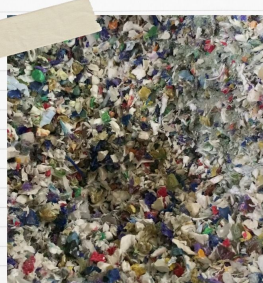
a different way to reuse glass

Problem:

Glass is commonly recycled by remelting
a process that requires high heat and energy.

Can it be used differently?

Layang



Applied in paving blocks



Plastic binds the material
Glass reinforces the structure

→ more solid than plastic alone

Layang

FROM MIX TO FORM



Glass Reinforced Plastic Paving Block



MIXING MATERIALS

Glass is hard, rigid,
and doesn't melt in this process

→ adds weight
→ improves structure

Combined with recycled plastic:

Plastic → melts and binds
Glass → stays solid, reinforces

Turning fragile material
into something more durable



Layang





 1 PET	 2 HDPE	 3 PC	 4 LDPE	 5 PP
Polyethylene terephthalate	High-density polyethylene	Polycarbonate	Low-density polyethylene	Polypropylene
Waterproof, heat resistant, tough, insoluble	Waterproof, semi-flexible, solid, heat resistant	Transparent, translucent, tough and solid, long-term stability	Tough and flexible, sometimes with sticky surface, heat resistant	Excellent resistance to chemicals, tough but flexible
				





Edu Visit

Wedoo x Sayang as
Guest Teacher at
Sekolah Prima Mandiri



We are a Bali-based environmental consultancy is at the forefront of decentralising waste management through the manufacturing of innovative waste processing machines. This initiative aims to provide creative solutions for communities, fostering the transition towards a circular economy. In a collaborative business model, We seeks to accelerate local economic development while delivering comprehensive waste management solutions to individuals, villages, businesses, and NGOs.

Our vision is to equip communities with the tools and knowledge needed to reclaim their environment by harnessing the potential of waste as a valuable resource.

Key Features of WeDoo's Circular Economy Solutions:

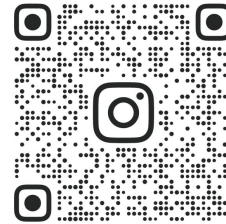
1. Tailored Waste Processing Machines
2. Scalable and Adaptable Solutions
3. Waste Audit and Sustainability Reporting.
4. Machinery Manufacturing and After-Sales Services
5. Upcycled Products, R&D, and Manufacturing Support

"Our goal is to provide tools and machinery to create a local circular economy in every island in Indonesia and beyond."

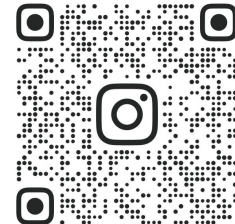
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