

A pair of hands is shown from the wrists up, cupping a small green seedling with three leaves and a tiny yellow flower. The seedling is rooted in a mound of dark, rich soil. The background is a dark, textured surface of mulch or compost. The overall tone is earthy and natural.

Food Drying Machine 24 Hours Food Waste To Compost

Mei 2025



Jumlah Sampah Makanan

Sampah Makanan Adalah Signifikan

- ❖ Food Waste Machine estimated 2.6 Million Tons per year consisting of almost 5% of landfill use
- ❖ Availability of Food Waste machine encourages separation at source
- ❖ Reduce wasteful transportation
- ❖ Data on food waste by site is known

Region	Province	Capital/Main City	Population (mid-2024 est.)	Number of Landfills (TPA)	MSW Tons/ Day
Sumatra	Aceh	Banda Aceh	5,554,800	6	640
	North Sumatra	Medan	15,588,500	78	2,000
	West Sumatra	Padang	5,836,200	3	670
	Riau	Pekanbaru	6,728,100	15	770
	Riau Islands	Tanjung Pinang	2,064,600	19	230
	Jambi	Jambi	3,724,300	5	430
	Bengkulu	Bengkulu	2,112,200	2	240
	South Sumatra	Palembang	8,837,300	13	1,020
	Bangka Belitung Islands	Pangkal Pinang	1,455,700	1	160
	Lampung	Bandar Lampung	9,419,600	18	1,080
Java	Banten	Serang	11,904,600	184	7,100
	DKI Jakarta	Jakarta	10,562,100	87	7,000
	West Java	Bandung	50,490,000	502	1,500
	Central Java	Semarang	36,516,000	139	1,500
	Yogyakarta Special Region	Yogyakarta	3,668,700	33	2,180
	East Java	Surabaya	40,665,700	392	1,500
Kalimantan (Borneo)	West Kalimantan	Pontianak	5,414,400	N/A	770
	Central Kalimantan	Palangka Raya	2,670,000	4	380
	South Kalimantan	Banjarmaru	4,073,600	15	580
	East Kalimantan	Samarinda	3,766,000	78	540
	North Kalimantan	Tanjung Selor	701,800	2	100
Sulawesi	North Sulawesi	Manado	2,621,900	2	370
	Gorontalo	Gorontalo	1,171,700	3	160
	Central Sulawesi	Palu	2,985,700	7	420
	West Sulawesi	Mamuju	1,419,200	N/A	200
	South Sulawesi	Makassar	9,073,500	115	1,450
	Southeast Sulawesi	Kendari	2,624,900	2	370
Bali & Nusa Tenggara	Bali	Denpasar	4,317,400	88	1,450
	Mataram	Bandar Mataram	5,320,100	21	1,790
	East Nusa Tenggara (NTT)	Kupang	5,325,600	3	1,790
Maluku & Papua	Maluku	Ambon	1,848,900	N/A	620
	North Maluku	Sofifi	1,282,900	N/A	430
	West Papua	Manokwari	1,134,100	2	380
	Southwest Papua	Sorong	545,861	N/A	180
	Central Papua	Nabire	1,134,100	N/A	380
	Highland Papua	Wamena	1,134,100	N/A	380
	South Papua	Merauke	545,861	N/A	180
	Papua (main province)	Jayapura	4,303,700	1	1,450
			278,543,722		42,390
				0.152	
				KG PER CAPITA/DAY	



Solusi Tepat di Lokasi yang Tepat

Pengasingan Sampah Makanan Lebih Berkesan Dengan Adanya Solusi

Waste Sources

- Separate at source is easier if the organic waste is processed at site, encourage more inclusive efforts
- **ONSITE FOOD WASTE or ORGANIC COMPOSITNG MACHINE**

Collection

- *Average per capita food waste averages 0.0375 kg per day*
- *Totaling 13.5 kg per person per year*
- *2.6 Million Tons Per Annum minimum*

Landfill

Facility Type	Food Waste (kg/day)	Estimated Quantity in West Java
Large Mall	500–1,200	54
Mid-Size Mall	300–600	144
Hospital (100 beds)	150–250	216
Hospital (50 beds)	80–120	450
Factory (500 workers)	100–200	900
Hotel (100+ rooms)	200–400	360
		2,124



Menjadi Kompos Dalam Waktu 24 Jam

HOTEL <> RUMAH SAKIT <> MALL <> PABRIK <> RESTORAN



RFID Drying Mac...

· Weight : 100kg/day

The drying machine for apartment.

GS-100HD



Dead Livestock ...

· Weight : 300kg/day

The drying machine for livestock farm.

G-300CD



Length: 1,200 mm

Width: 900 mm

Height: 1,200 mm

Weight: 420 kg

Drying Machine

· Weight : 99kg/day

The drying machine for small restaurant.

GA-100

1,200 Kg
Per Day
Food
Waste

50 kg
Per Day
Food
Waste



Fitur Mesin

Mesin yang efisien, tahan dan berkesan

- ❖ Food Waste Machine 0.275 kWh/kg
- ❖ Size range between 50 kg per day to 1,200 kg per day
- ❖ Running 24 hours 30 days a month > The electricity bill is Rp 10,000 per kg per month
- ❖ Closed Circuit, so no bad smell
- ❖ Easy to use, simple maintenance service
- ❖ Stainless steel outfit available (Option)
- ❖ No additives require

Video: <https://youtu.be/YUZmMCalcUc?si=yeN2mSgcGoLMCSXP>



Proses Pemrosesan

Proses yang hanya mengambil waktu 24 jam

Drying: Drying means dehydration, which means taking out the moisture part of the organic waste. In other words, it means the whole other parts remain as original, which is the beauty of the drying technology. To show the moisture part and solid part change of drying process, please see below picture.

De-odorizing: Food itself has good and different nutrition, but when we do not eat and keep it well the food and any type of organic waste will spoil and eventually have very bad smell—odor. If organic waste treating or recycling machine cannot resolve this odor problem, then actually the manufacturer should never think of launching the product, because this odor is not just one simple odor that can be handled by microorganism or fresh air and so on. When such different organic are mixed, especially when different foods are mixed in waste bin, then the odor is very much mixed and this is called complex odor. In addition, there are VOC (Volatile Organic Compound), which means such organic that even melts within liquid and gives bad smell to people, which is exactly what sewage sludge and spoiled food waste does.

Crushing: Without having crushing machines, GAIA technology already has crushing system embedded, so that all dried material comes out in powder form.

Sterilizing: GAIA dries organic waste in high temperature, so that all pathogen, germs, bacteria, virus are going to be killed during the drying process. The bacteria and virus usually are killed higher than 70°C and longer than 1 hour, or 80°C and longer minutes, and GAIA products are in operation with higher temperature, so all harmful virus are killed.

Recycling: Because of the functions above no. 1~4, the dried material is ready to recycle, and there are 3 (three) options for recycling. The dried material is also called as 'Biomass', you can recycle biomass as Animal feed, Fertilizer/Compost and Fuel.

DRYING



DE-
ODORIZING



Crushing &
Sterilizing



Recycle-
Compost



Berbagai Model Memenuhi Keperluan

Boleh “Mix And Match” Di Satu Kawasan Atau Fasilitas



GC-20(20kg/day)



GC-30(30kg/day)



GC-50(50kg/day)



GC-100(100kg/day)



GC-150(150kg/day)



GC-200(200kg/day)



GC-300(300kg/day)



GC-400(400kg/day)



GC-600(600kg/day)



GC-1000(1ton/day)



GC-1200(1.2ton/day)



GC-2000(2ton/day)



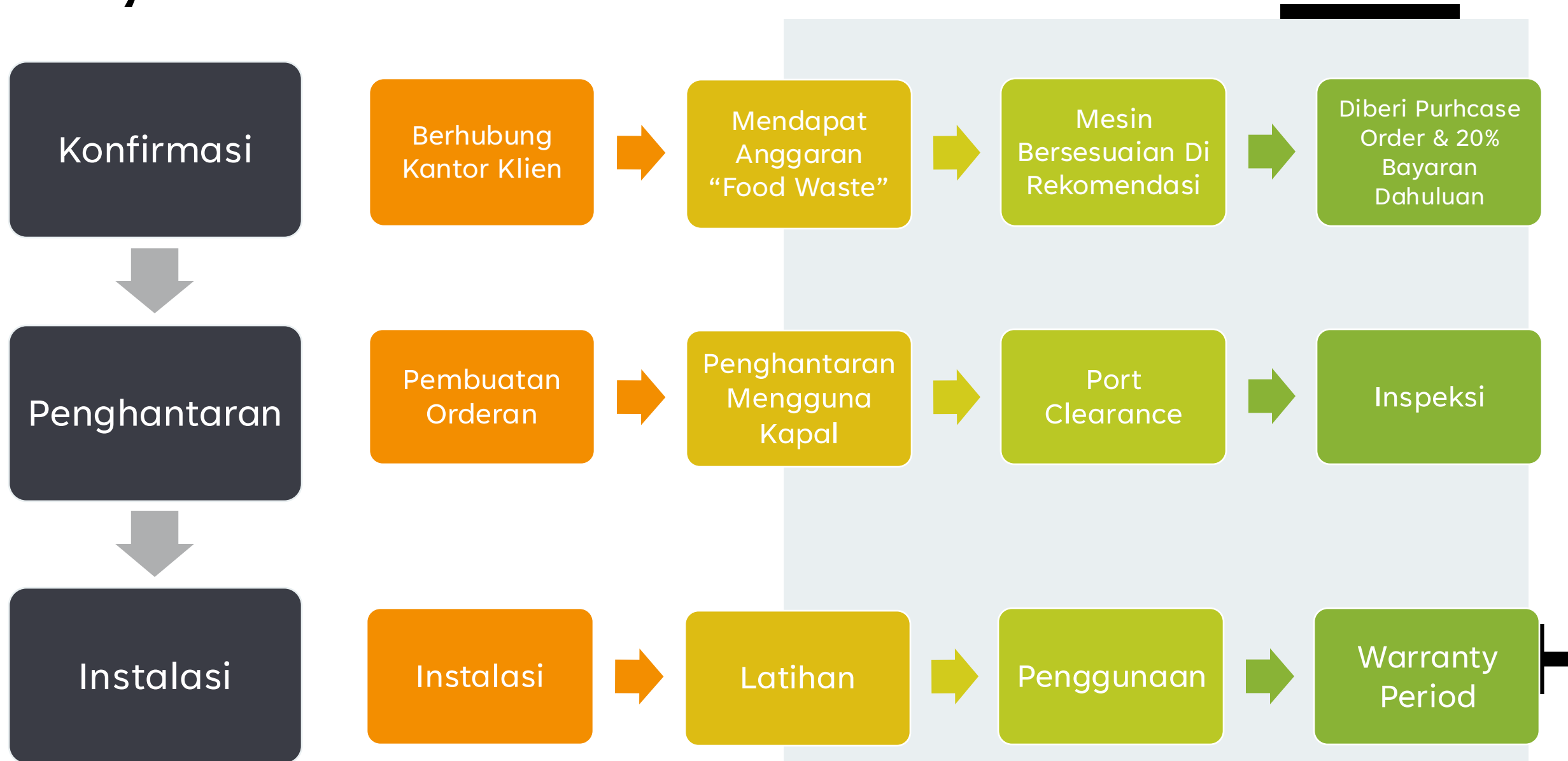
Pemrosesan Di Lokasi Pembaziran

Harga Bagi Menyelamati Environmen Disebabkan Pembaziran

Model Number Capacity	Weight (kg)	Volumetric Size (m3)	Dimension (mm)- Height - Width - Length	Remarks	Price (USD)
GC-30 30kg/day	280	0.86	1,050 * 750 * 1,095	Portable by Caster(wheels)	15,295.00
GC-50 50kg/day	420	1.26	1,200 * 880 * 1,190	Portable by Caster(wheels)	22,743.00
GC-100 100kg/day	850	1.72	1400 * 950 * 1292	Portable by Caster(wheels)	25,137.00
GC-150 150kg/day	800	2.46	1,600 * 1,030 * 1,494	Portable by Caster(wheels)	30,590.00
GC-200 200kg/day	1,000	3.18	1,700 * 1,230 * 1,523	Portable by Caster(wheels)	41,363.00
GC-300 300kg/day	1,300	4.49	1,900 * 1,350 * 1,752	Portable by Caster(wheels)	49,210.00
GC-400 400kg/day	2,500	6.66	2,400 * 1,500 * 1,850	Loading Bin Lift (60liter Bin) Included	77,140.00
GC-600 600kg/day	2,800	8.18	2,600 * 1,700 * 1,850	Loading Bin Lift (60liter Bin) and Discharging Screw Conveyer Included	102,410.00
GC-1000 1,000kg/day	4,000	11.16	3,100 * 1,800 * 2,000	Loading Bin Lift (120liter Bin) and Discharging Screw Conveyer Included	150,290.00
GC-1200 1,200kg/day	4,600	12.45	3,300 * 1,850 * 2,040	Loading Bin Lift (120liter Bin) and Discharging Screw Conveyer Included	166,250.00



Tanya Jawab



Solusi Bersama Analisis Data



- Recycles Food Waste anywhere Food Waste is created
- Treats (drying) without any bad odor & noise at any site
- No need to transport waste bins by hauling trucks to landfill sites
- Detects tipper's I/D and weighs of each black(plastic) bag of food waste
- Charges each tipper's waste by its exact disposed weight with different transaction system (Credit card)
- Saves tipper's disposing data and saves the data, and send the data anywhere through internet connection

GS-100HD			
Capacity	100Kg/day	Function	Drying/Crushing/ Sterilizing/De-odorizing
Reducing rate	80~85%	Dimension (mm)	1,600(L) X 1,000(D) X 1,700(H)
Weight	850kg	Measuring	Electronic scale embedded



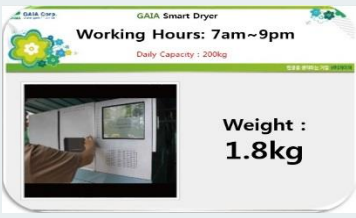
Tag RFID Card



Disposing food waste in plastic bag



Measuring Weight & Automatic Insert & Drying



The weight is displayed on screen.



Automatic Discharging & Cleaning

