



# Manado City Community Behaviour & Plastics Action Strategy (COMPACTS)

Reduce, Reuse, Recycle, to Protect the Marine Environment and Coral Reefs  
(3RproMar)

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## ACRONYMS AND ABBREVIATIONS

3RProMar	Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs
ADUPI	Asosiasi Daur Ulang Plastik Indonesia/ Indonesian Plastic Recycling Association
APBD	<i>Anggaran Pendapatan dan Belanja Daerah/</i> Local Government Income and Expenditure Budget
ASOBSI	<i>Asosiasi Bank Sampah Indonesia/</i> Indonesian Waste Bank Association
BAU	Business as Usual
BDM	Behavioural Drivers' Model
CBA	Community-based approach
CBO	Community-based organisation
CSO	Civil society organization
COMPACTS	<b>COM</b> munity Behaviour and <b>Plastics ACTION Strategy</b>
DLH	<i>Dinas Lingkungan Hidup/</i> Environmental Agency
DHS	Demographic Health Survey
DSG	Daur Sinar Gemilang (private recycling company)
DW	Dasa Wisma / group of 10 families
ESR	Extended Stakeholder Responsibility
FBO	Faith-based organization
HCD	Human-centered-design
IEC	Information, Education, Communication
IPI	<i>Ikatan Pemulung Indonesia/</i> Indonesian Scavengers Association
KemenAg	Ministry of Religious Affairs
KemenDesPDTT	Ministry of Village, Disadvantaged Regions, and Transmigration
KemenDikbud	Ministry of Education and Culture
KemenESDM	Ministry of Energy and Mineral Resources
KemenKes	Ministry of Health
Emankumars'	Coordinating Ministry for Maritime Affairs and Investment
KemenKominfo	Ministry of Communication and Informatics
KemenKoPMK	Coordinating Ministry for Human Development and Cultural Affairs
KemenKopUKM	Ministry of Cooperatives and Small, and Medium Enterprises
KemenParekraf	Ministry of Tourism and Creative Economy
KemenPora	Ministry of Youth Affairs and Sports
KemenPPPA	Ministry of Woman Empowerment and Child Protection

KemenSos	Ministry of Social Affairs
KemenTan	Ministry of Agriculture
KLHK	Ministry of Environment and Forestry
PKK	<i>Pemberdayaan dan Kesejahteraan Keluarga/</i> Family Empowerment & Welfare
PRAISE	Packaging & Recycling Alliance for Indonesia Sustainable Environment
RT	<i>Rukun Tetangga/</i> Indonesian Neighborhood association
RW	<i>Rukun Warga/</i> Indonesian Community association
SBC	Social and Behavior Change
SBCC	Social and Behavior Change Communication
SPA	<i>Stasiun Peralihan Antara/</i> Waste Intermediary Transfer Station
SPPL	<i>Surat Pernyataan Pengelolaan Lingkungan/</i> Statement of readiness to manage and monitor the environment
SUP	Single-Use Plastic
TPA	<i>Tempat Pemrosesan Akhir/</i> Indonesian Final Disposal Sites (central open dump sites or landfills)
TPS	<i>Tempat Penampungan Sementara/</i> Indonesian Temporary Storage Sites
TPS 3R	Solid Waste Processing Centre - 3R Tempat Pengolahan Sampah - Reduce, Reuse, Recycle



## FOREWORD



*On behalf of the City of Manado, I hereby present the city **COMmunity Behaviour and Plastics ACTION Strategy (COMPACTS)**. The strategy outlines our commitment to reduce plastic pollution and contamination of the environment as the Indonesia commitment according to Presidential Regulation 83 of 2018 concerning Marine Debris Handling by laying out the actions planned for the next five years. It will give stakeholders and communities an insight into the current performance and our ambition to tackle plastic waste pollution.*

*Our city generates 277 tons of waste every day a figure that is expected to rise alongside population and economic growth. With 16% of total waste generation being plastics, it might create many challenges for our environment. Poorly managed plastic waste affects human health, the quality of the environment, and economic opportunities. Plastic waste leakage into the environment can enter our waters potentially destroying the ecosystem and impacting biodiversity, as well as polluting the beautiful underwater scenery of Bunaken Islands. We can lose economic opportunities and livelihoods, especially for those working in the fishery, tourism, and hospitality industries. This strategy presents a critical pathway to ensuring our sustainability and prosperity in the future.*

*We need to change our demanding habits for plastics by only using plastic when it is necessary, prioritising reusable and recyclable plastics, and placing them in the waste collection stream for recycling. We must spread our plastic prevention commitment to our neighbours, colleagues, and children to gain the necessary high impact. Our city will make a significant investment in waste management infrastructure, equipment, and technologies. We must use these wisely to comply with the strategy and appropriately finance the operation. Sorting our waste, putting the plastic waste in the collection stream, and paying the levy our collective responsibility toward a clean and green City of Manado. These simple actions will also create economic opportunity and green jobs from the plastic value chain and recycling.*

*Looking at the priority areas, it is important to note that the city itself can never be successful on its own; we must work together as a community to tackle plastic pollution.*

June, 2024  
Andrei Angouw  
City Mayor



# 1. ABOUT MANADO COMMUNITY BEHAVIOUR AND PLASTICS ACTION STRATEGY

The Government of Indonesia has established a national action plan on marine debris handling as stipulated in Presidential Regulation Number 83/2018. It aims to reduce plastic pollution in the marine ecosystem. The Manado City area includes the Bunaken National Park, which is in the world's Coral Triangle, which is a coral reef habitat for 390 species of fish, molluscs, reptiles and marine mammals. Plastic waste leaking from Manado City can pollute and damage this aquatic ecosystem.

The city government has developed this strategy through extensive consultation involving a broad range of stakeholders along the plastic value chain; from plastic producers, policy makers, users, waste managers through to recyclers. These stakeholders have verified data and information, expressed views, and provided input for finalizing this strategy. Therefore, the Manado Plastic and Behaviour Change Strategy is a multi-stakeholder framework and plan providing guidance for reducing land-based plastic waste leakage. The city is responsible for leading and coordinating its implementation, monitoring, and evaluation to ensure continued innovation and the contribution to solving local plastic challenges.

## 1.1 City's Vision on Solid Waste Management

The vision of Manado City is to become a well-developed and prosperous city as the exemplar of North Sulawesi and Indonesia to the Asia Pacific region. This vision is to be achieved through strengthening human resources, economic development, upgraded infrastructure, urban planning and connectivity within the framework of sustainable development. Part of the realization of sustainable development is improving waste management to substantially prevent, reduce, reuse and recycle materials that would otherwise be residual waste.

Manado City's contribution to sustainable development in the waste management sector is realized through the waste management vision:

**“Become a professional waste manager with integrated and sustainable governance”**

If waste, particularly plastic waste, is managed in an integrated and sustainable governance environment by professional waste management operators and managers, the community will enjoy a clean and healthy environment.

## 1.2 Goal & Objectives

The goal of this strategy is to improve waste management in Manado City, reducing land-based waste leakage to ultimately protect the sea. The city will change plastic production and consumption by addressing the 3Rs (Reduce, Reuse and Recycle) as below:

- Reducing the use of single-use and otherwise unnecessary plastics through prevention policies and campaigns;
- Improving and expanding waste collection and processing/treatment to minimise plastic waste leakage into the environment and especially waters;
- Increasing plastics recovery and processing with the involvement of the informal sector; and
- Monitoring and refining the action measures to improve the effectiveness of the strategy.

### 1.3 Indicator & Target

This strategy guides the implementation of plastic waste minimization and management until 2030, with the indicator and target below:

*Table 1.1 Indicators and Targets*

Indicator	Baseline	Target
Local policy and resource team for shifting plastic usage and reducing unnecessary and single-use plastics	Policy in place and team are not available in 2023	Policy in place and team are available by 2025
Reduction of unmanaged plastics and plastics entering waters	The amount of unmanaged plastic reached 3,521 tons/year in 2023; of which 1,264 tons/year leak into waters	20% reduction of unmanaged plastics and plastics entering waters by 2025 and 30% by 2028.
Plastics waste recovery and processing is increased including with the participation of the informal sector	9.55% in 2023	20% by 2025 and 30% by 2028

### 1.4 Results Chains

In order to achieve the goals, objectives, targets, and associated indicators of the strategy, Manado City will change the approach and methods of implementing the current waste and plastic waste management. Currently, waste management in Manado City is carried out by multiple, fragmented, and disconnected stakeholders making municipal waste management disaggregated and effectively unsustainable. This approach leads to the inefficient use of resources, ineffective collection, underserved areas, and waste leakage, especially plastics, to the environment.

In Manado City, waste management primarily concentrates on the post-consumption phase, which has led to an increase in waste generation. This approach is characterized by the city government's quick collection and transportation of waste generation. Other stakeholders collect waste of high economic value to supply the recycling industry. However, the circular economy actors require time to separate valuable materials from the mixed waste.

Limited stakeholder capacity makes awareness campaigns on plastic waste prevention, sorting, and anti-littering inconsistent with current waste collection and transportation systems. Waste is often promoted as a valuable material, neglecting the financial burden of its management. Many people do not pay any waste management levies, making the waste management budget solely dependent upon a small budget from the Local Government Income and Expenditure Budget (APBD). Waste management cannot cover all city areas due to shortages of manpower, equipment, vehicles and operational budgets. DLH and other actors provide education so that people sort waste, but the waste will typically be mixed again during the transportation process when taken to the landfill.

**At the activity and output level**, if the city collaborates with civil society, private sector entities, the informal sector, media and other stakeholders, waste segregation and recycling will be more widely recognized as desirable, and adoption enhanced. For that, city government agencies need to coordinate awareness-raising activities among various public institutions. If the city initiates a comprehensive communication plan and consistently executes campaigns on plastic reduction, waste segregation, and anti-littering to various target groups, then they will understand the message and the awareness of stakeholders will increase. The target groups would include public institutions, communities, private sector entities (modern and traditional markets), civil society, schools, and community-based organizations. They will then accept that a reduction of plastic consumption, separate collection and not littering will positively impact environmental quality and public health. By improving waste segregation and

collection processes, the city will encourage the community and other waste generators to participate and implement separate collection services, reduce unnecessary plastics, and reduce littering. Consequently, citizens of Manado will find that implementing waste segregation, plastic 3R, and avoiding littering are easy to incorporate into their daily routines.

If Manado City acknowledges the necessity of robust policies, laws, and regulations to enforce anti-littering, waste segregation at source, and banning single-use plastic shopping bags and single-use plastic cutlery, straws, and plates in restaurants, then communities, private sector entities, civil society, community-based organizations, and media in Manado will then be well-versed in engaging in waste segregation and plastic 3R strategies.

City employees are aware that the communities' efforts in improving waste management practices must be backed up by a robust waste collection and transportation system. To accommodate this essential change, an increase in the city's budget is necessary. Therefore, the city, along with its subdistricts, needs to engage in advocacy activities to secure adequate budgets and facilitate improvement in plastic reduction strategies.

The city will then allocate an adequate budget to waste management and for the implementation of plastic 3R strategies. The city must have sufficient workforce, equipment, vehicles and infrastructure, all functioning efficiently under the well-defined guidelines of a waste management plan and Standard Operating Procedures (SOPs).

The informal sector activities will be appropriately accommodated within formal activities and associated facilities.

**At the outcome level**, if the community reduce plastic consumption, segregate their waste into organic and inorganic and/or recyclable at source in the households, and pay levies to get consistent waste collection services, the city can expand and improve the waste collection coverage, recovery, and processing because they have sufficient workers, equipment, vehicles, and infrastructure. The city will develop effective solid waste management (SWM) plans and SOPs to guide operators in collecting and optimally processing the plastics. Should the city recognize the role of the informal sector and provide better working conditions, facilities, and their integration into mainstream recovery and recycling, it could significantly enhance the recovery of plastics and other recyclables from current level.

On the production side, if retailers, shops, restaurants, and hotels do not provide single-use plastics and opt for reusable and recyclable shopping bags and containers, the quantity of overall plastic waste generated will decrease while the fraction of recyclable plastics within this reduced quantity will increase. The combination of reduced plastic waste generation and increased plastic recovery will reduce the amount of plastic that goes to the landfill. The city will also provide better infrastructure, equipment, and capacity of operators so that residual waste at the landfill could be managed effectively.

**At the impact level**, continued effective education on plastic reduction and sorting, effective collection and material recovery, and efficient resource and financial mobility will contribute to a reduction in marine plastic pollution. Plastic waste leakage into the waterways and ocean will decrease, reinvigorating the beauty of the sea and ensuring that biodiversity is maintained and preserved. It will increase economic opportunities and create sustainable livelihood opportunities in the fishery, tourism and hospitality industries in Manado City and environs.

## 2 CURRENT PLASTICS & PLASTIC WASTE MANAGEMENT

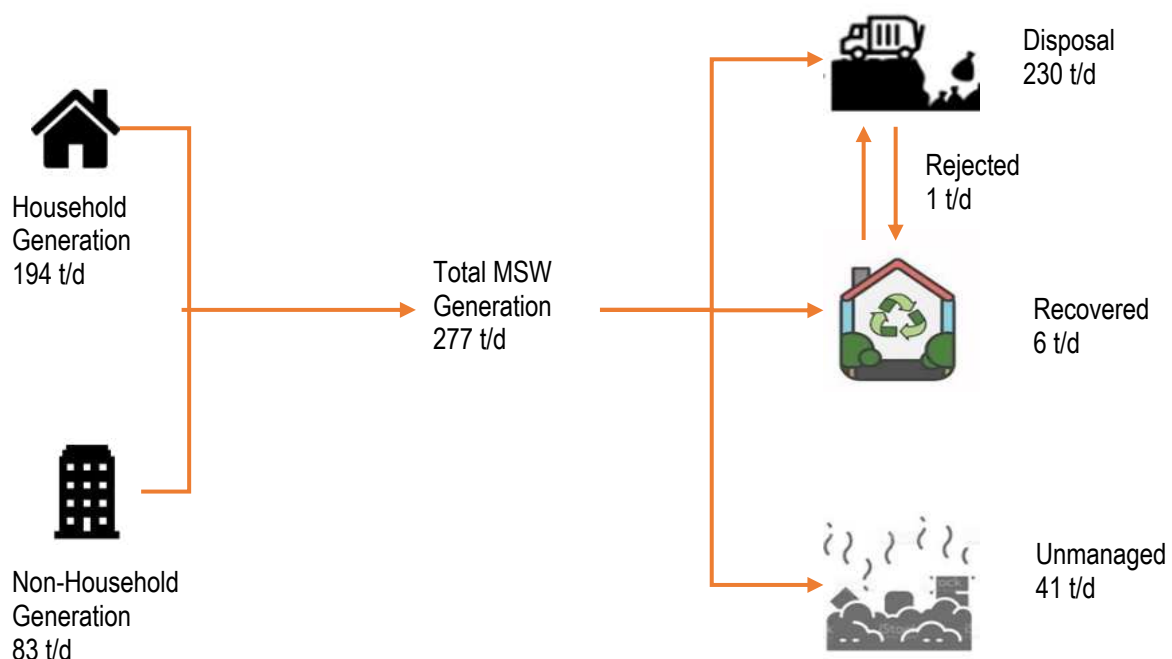
### 2.1 Plastic Production & Consumption

Plastic production involves a complex network of stakeholders consisting of resin and semi-finished plastic producers, and converters who change plastic into ready-to-use materials. Plastic is converted into final products according to the needs and specifications of users across various sectors, including construction, packaging, automotive, fashion, and others.

This strategy limits plastic production in the packaging sector where some plastic producers are under the control of the city government. Plastic producers are business actors who produce, import, sell, and distribute goods using plastic packaging (KLHK, 2019). This plastic producer group consists of manufacturers, food & beverage services and retailers. Regulating of product packaging of large manufacturers due to their scale are under the authority of the central government, while micro and small manufacturers are under the control of the city government. The city government might control the design of packaging through local licensing and other regulatory frameworks.

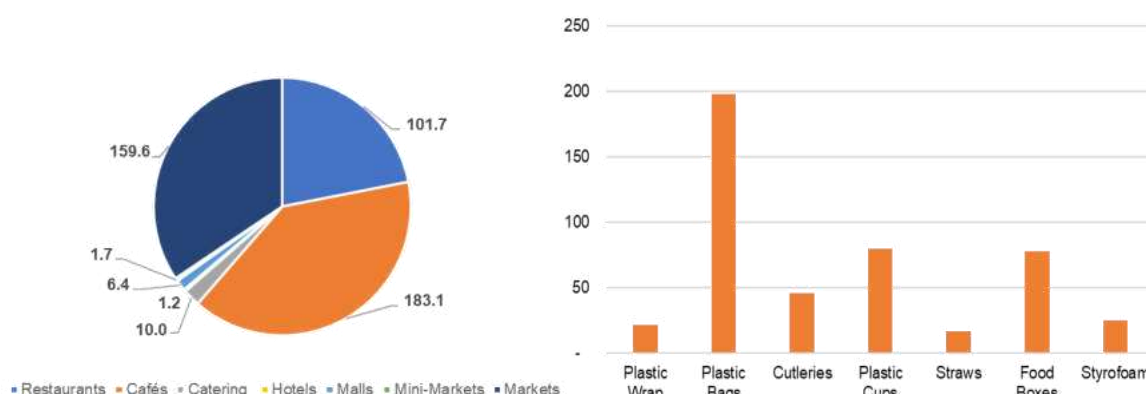
To determine plastic production and consumption patterns, a baseline assessment was conducted in 2023 in accordance with the Waste Wise Cities Tool (WaCT) and the Waste Flow Diagram (WFD) methodology. Although a waste generation and composition study for non-household waste is not required under the WaCT, a waste study was carried out in accordance with the national protocol for WACS (SNI 19-3964-1994 on Methods of Sampling and Measurement of Generation and Composition of Municipal Solid Waste).

The baseline assessment results showed that Manado City produces 0.61 kg of waste per person per day. With a total population of 454.000 people, the total waste generation is 277 tons/day of which 194 tons/day is from households and 83 tons/day from non-households. Approximately 6 tons/day of recyclables are recovered from the waste daily, and 230 tons/day of waste is placed into the landfill. Total unmanaged waste is 41 tons/day or equal to 15% of the total waste generated.



*Figure 2.1 Waste generation and flow*  
*Source: 3RproMAR Baseline report 2023*

Waste composition studies show that plastic is 15.2% of the waste stream (42 tons/day) consisting of hard plastics 6.6% and film plastics 8.6%. These plastics are produced by local and national producers. Local plastic producers generate 463.7 tons of plastic annually or equal to 3% of total plastic waste generated in the city. The highest plastic producers are cafes with 39.5%, traditional markets with 34.4% and restaurants with 21.9%. Many types of plastics are produced and provided to customers for wrapping, eating, drinking, or carrying. The baseline assessment investigated seven types of plastics namely plastic wrap, plastic bags, plastic cups, food boxes, plastic cutlery, straws, and styrofoam. The analysis revealed that the majority of plastic production comprises plastic bags with 42.7%, plastic cups with 17.2% and food boxes with 16.8%.



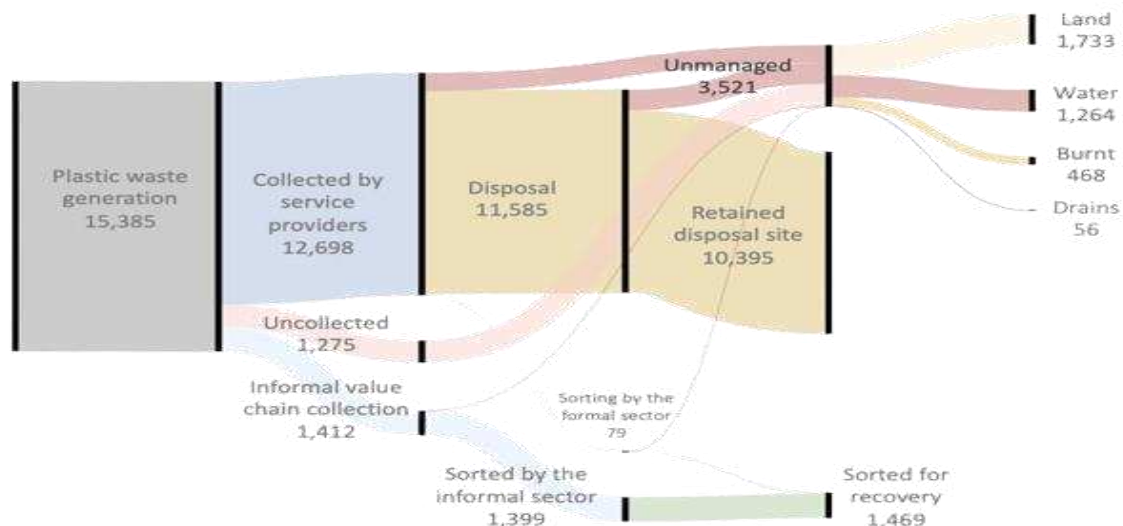
**Figure 2.2 Plastic waste types**  
**Source: 3RproMAR Baseline report 2023**

The seven types of plastic have different functions and characteristics. Plastic wrap has an essential function to maintain food hygiene and prevent damage. It is normally used to hold drinks, food or wet materials. Food boxes and plastic bags may not have an important or essential function, but they can be reused for other purposes. Plastic bags are commonly used by the households to store waste for collection, while food boxes are also used for the same function. Other types of plastic can be classed as non-essential, such as for practicability, comfortability, aesthetics, etc. Thus, most types of plastic produced are single-use and can be avoided or replaced with more sustainable materials.

## 2.2 Plastic Waste Collection and Recycling

The results of the baseline assessment revealed that Manado City produces 15,385 tons of plastic waste annually. Of that, 83% of plastic waste is collected, 8% is unmanaged, and 9% is recovered by recyclers including the informal sector. During plastic waste transportation to the landfill, 9% of plastic waste leaks along the way. 10% of the plastic waste entering the landfill leaks into the environment due to waste being uncovered and is then susceptible to being carried by water and wind. Overall, a total of 23% of plastic waste leaks into the environment. The diagram below presents plastic waste flows from collection to disposal in tons/year.





**Figure 2.3 Sankey Diagram - 2023 Baseline**  
Source: SankeyMATIC.com

Valuable plastic waste is recovered through the main actors: waste pickers, junk shops, and material aggregators (Apex traders) at the top of the waste management pyramid. There are 150 – 300 waste pickers (depending on the season) that almost exclusively work at the landfill. The recovered materials are sent to junk shops for further sorting and clean up. Some 11 junk shops are buying the materials. In addition, there are also four waste banks that buy recyclables from the community and waste collectors. Eight aggregators buy and ship the cleaned, pressed, and partially chopped plastic to recyclers in Java.

## 2.3 Plastic Waste Management Practices at Source

### 2.3.1 Current Behaviours and Practices

In the 2023 baseline study on the social and behavioural drivers of Manado citizens regarding plastic waste, the following key findings emerged:

#### Household Waste Collection Services:

- 97% of respondents in Manado reported having access to household waste collection services.

#### Plastic Waste Segregation:

- 13% of households separate their plastic waste, with the majority focusing on plastic bottles (PET). Other waste types remain unsegregated.
- Approximately 30% of non-households indicated that they segregate their waste, primarily focusing on plastic and cardboard.

#### Reusable Shopping Bags:

- 19% of respondents reported using reusable shopping bags, with a noteworthy observation that the majority (12%) use reusable bags occasionally.

#### Waste Disposal Practices:

- 78% of respondents claimed to dispose of their waste in roadside bins.

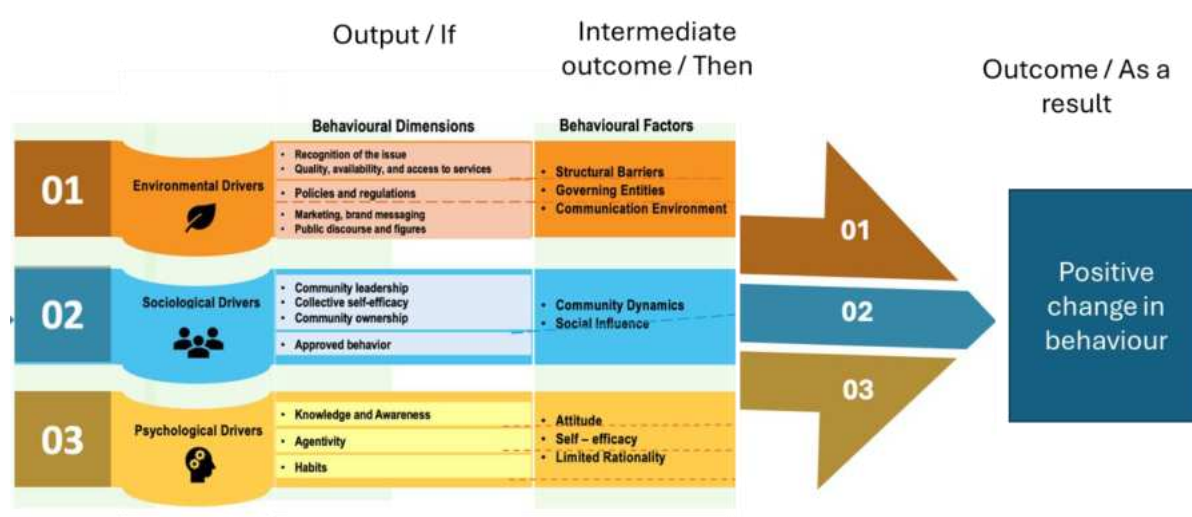
#### Plastic Recycling:

- 45% of respondents who recycle their plastic waste reported giving it to junkshops, acting as intermediate buyers purchasing various recyclable waste types from households, non-households, and waste pickers.

### 2.3.2 Behavioural Drivers

A key environmental driver contributing to the challenges in waste management services across Manado is the insufficient budget allocated to enhance waste and recycling-related services. While recycling PET bottles is economically viable and these are recovered for sale, other recyclables often go unsorted due to their limited market value. Manado lacks the infrastructure to recycle these materials locally, resulting in mixed waste streams. Thus, even if households diligently sort their waste, other non-PET recyclables remain intermixed and are not effectively recovered later in the value chain.

Following closely in importance are sociological drivers, particularly those associated with community dynamics. Community ownership, leadership, and collective self-efficacy play pivotal roles in the successful implementation of waste and recycling practices. Engaging communities is crucial, not only in assisting households with proper waste segregation but also in fostering a collective effort to reduce plastic usage. Strengthening social influence, where approved behavior within the community supports sustainable practices, is essential for lasting change.



**Figure 2.4 Behavioural Drivers**  
Source: 3RproMAR Baseline report 2023

At the individual level, households must possess knowledge about current regulations and enacted procedures to effectively sort their waste. Simultaneously, assistance in implementing segregation practices (self-efficacy) is crucial. Increasing awareness of the consequences of plastic pollution serves to enhance compliance with waste segregation and reduce avoidable plastic use. Additionally, alternative approaches, such as nudges, can be employed to instigate habit changes by acknowledging the role of limited rationality in decision-making processes.

## 3 PLASTIC CHANGE STRATEGIES AND ACTION PLANS

### 3.1 Strengthening Waste Reduction by Producers

#### 3.1.1 Problems and Challenges

The baseline assessment shows that many plastics made, distributed, and used do not have an essential role, are single-use and issued mostly free of charge. Inessential plastic packaging, such as plastic cutlery, straws and Styrofoam, is used only for a short period and is not reused nor recycled. Plastic bags are partially reused to put out household waste, especially the larger bags. Plastic cups and food boxes are also partially reused and recycled. Additionally, almost all plastics are provided free of charge. One exception is some convenience stores charge for



plastic bags, but these fees are just treated as income by the shop and not used to fund plastic management interventions. The lack of widespread fees for the use of such plastics makes plastic consumption essentially uncontrolled.

In the post-consumption phase, most plastic waste tends to be uncollected and unrecovered especially small, light, and colourful plastics mainly due to recycling feasibility constraints. In Manado City, only hard plastics with large volumes are collected. PET bottles, HDPE, and PP containers have higher value and are feasible for collection and shipping. Plastic films are economically non-viable as the price paid to the supplier (at the recyclers) is entirely absorbed by the cost of logistics. Therefore, instruments to influence the use of and the design of plastics are needed to control plastic production and subsequent consumption.

### 3.1.2 Action to be Taken

The fate of plastics is not only determined post-consumption but also from the moment they are designed. Preventing the use of plastic waste and/or single-use plastics must be implemented in the design, production, and distribution phases. Waste prevention refers to practical actions that reduce the quantity consumed of such materials before becoming waste. Waste prevention depends on complex drivers including a transformative shift in industrial processes and product design, access to plastics, and information. Employing waste prevention strategies can effectively reduce the volume of waste that must be managed, placing less strain on local waste collection and management programs.

One of the objectives of this strategy is to reduce the consumption and use of unnecessary plastic as well as reducing plastic that is difficult to collect, reuse and recycle. The City Government will encourage the production of these plastics by providing clear guidelines. The action plans that will be implemented include:

a. **To ban and control selected locally produced Single Use Plastics (SUPs):**

plastic straws, plastic cutlery, and styrofoam provide are inessential, typically single use, and susceptible to environmental leakage. These plastics will be progressively banned by issuing a mayoral regulation. Plastic bags can still be reused and therefore will be controlled by applying a plastic bag charge at point of sale to the consumer. The plastic charge should be collected and used by the relevant sectors producer association, acting

as a local Producer Responsibility Organisation (PRO) to better manage their plastic production.

The city will focus on the SUPs banning to be promoted in commercial facilities including hotels, retailers, traditional markets, restaurants, and cafes. Government offices and other public facilities will be controlled regarding the use of SUPs for office procurement, meeting and workshop snacks, as part of an overall Green Procurement approach.

**Baseline:** locally produced plastics 1.27 t/d

**Target:** reduced the production and distribution of locally produced SUPs by 20% from current business-as-usual quantities in 2025 and 50% by 2028

b. **To improve local plastic packaging design:** provide guidelines for easy-to-collect, reuse, and recycle plastic products and packaging. It will focus on supporting minimum size, colour, and maximise mono-material plastic packaging. It will address plastic packaging production for plastic shopping bags and containers. This Design for Recycling (D4R) guideline will be included in the mayoral decree.



The city government will support SMEs to comply with this packaging D4R guideline without reducing their competitiveness.

**Baseline:** locally produced plastics 1.27 t/d

**Target:** reduced 5% from business as usual by 2028

- c. **To guide voluntary plastic charge:** guide local retailers, restaurants, and cafés that charge customers for plastic bags. However, the collected funds must be transferred and managed by the retailer, restaurant, and cafe association to support plastic waste management activities. The association can assign and cooperate with waste collection operators, waste banks, junk shops, or aggregators to expand waste collection and recycling, conduct waste management campaigns and invest in any initiatives that have a direct effect on reducing plastic leakages from the environment. The use of thin film bags will be phased out by 1/1/2030 in accordance with Ministerial Decree P75/2019 “Roadmap for Waste Reduction by Producers). Thicker film (multi-use) bags can still be made available for sale after that date.

**Baseline:** total plastic leakage 9.65 t/d

**Target:** supporting other actions’ targets

- d. To promote refill business and reuse packaging: as changing plastic packaging design is more challenging, the city will promote refill business for producers and using reuse packaging for customers. The city will encourage local and national producers to offer refilling option for their customers. Customers who use reusable packaging or containers will be appreciated through various benefits.

**Baseline:** total plastics generation 42.15 t/d

**Target:** reduced from business as usual by 2028

## 3.2 Promoting Good Practices in Plastics and Solid Waste Management

### 3.2.1 Problems and Challenges

Manado experiences a thriving commercial environment, especially within the city, resulting in heightened plastic consumption. Plastic shopping bags are ubiquitous and almost exclusively provided free of charge with each purchase. The prevalence of individual packaging for various items, including single fruit, 200 ml water cups, and clothing pieces, wrapped in non-recyclable plastic foils contribute to the high levels of plastic consumption. Take-away food from restaurants is often packaged in plastic bags or Styrofoam containers, accompanied by freely distributed plastic cutlery and straws.

Notably, one supermarket chain has been imposing a charge of 200 rupiah per plastic shopping bag since August 2019. However, this nominal fee, equivalent to about one Euro cent, is considered exceedingly low even by Indonesian standards. Consequently, it does not effectively deter the use of plastic bags or serve as a substantial incentive for the adoption of reusable shopping bags.

Based on the behavioral drivers’ model, the primary factors influencing behavior are environmental drivers, particularly the inadequacy or weak enforcement of policies and regulations. In Manado, the existing regulations pertain to waste picking time, waste fee collection, and the prohibition of littering, specifically: Regional Regulation (PERDA) for Manado City No.1/2021 on Waste Management, Perda Manado No.1/2020 on Environmental Management & Protection (EMP), and Mayor Decree (Perwali) No. 33/2018 on Waste Reduction and Handling.

### 3.2.2 Action to be Taken

A change in behaviour is the key issue to improving waste management good practices.

At the micro level, individuals are expected to adopt the advocated practices, typically at the household level. The subsequent tier encompasses individuals surrounding the primary stakeholders who wield direct influence over

them concerning these specific practices. This often comprises immediate family members, friends, colleagues, or teachers. The third tier involves influential figures at the community level, along with community-based organizations exerting influence on primary and secondary stakeholders. These three tiers, namely primary, secondary, and tertiary stakeholders, are classified as micro-level stakeholders. At the meso-level, stakeholders encompass service providers from the public, private, and civil society sectors, as well as media entities.

Macro-level stakeholders encompass decision-makers at various levels, spanning local, district, regional, national, and international spheres.

All stakeholders vested with the authority to shape policies, enact laws, formulate programs, and allocate budgets are regarded as macro-level stakeholders, including elected representatives.

**Table 3.1 Stakeholder Details**

Practice	Micro-level stakeholders			Meso-level stakeholders	Macro-level stakeholders
	Primary stakeholders	Secondary stakeholders	Tertiary stakeholders		
<b>Waste segregation at the source</b>	<b>Mother</b>	Neighbors	Waste sector workers (DLH staff, especially waste fee collectors and daily paid labor)	Environmental Agency (DLH)	Ministry of Environment and Forestry
<b>Use of reusable shopping bag</b>	<b>Father</b>	Friends	Community Leaders	Manado Food and Drug Monitoring Agency	National Planning Agency
<b>No littering</b>	<b>Children</b>	Teachers	Community	Education department/ agency	Ministry of Public Works & Settlement,
	<b>Shoppers</b>	Parents	Public Figure	Sub-districts / Kecamatan	Ministry of Home Affairs (MOHA)
	<b>People in the street</b>	Waste Bank	Women Group	Public Works & Spatial Planning Affairs	Ministry of Health
<b>Reusable cutlery and straws for takeaway food</b>	<b>Restaurant customers</b>	Restaurant employees	Family Empowerment & Welfare (PKK)	Civil service police unit	Ministry of Tourism and Economic Creative
		Restaurant owner	Influencers	PD Pasar (the city-owned company that manages the traditional market)	Ministry of Education and Culture
		Street vendors	Schools	Communication and IT agency	Ministry of Woman Empowerment and Child Protection
			Modern supermarkets	CSOs: Indonesian Diving Sport Association,	Provincial law bureau
			Traditional supermarkets	Media (Local TV, Newspapers, radio, and social media)	GIZ (3R Promar)
			Restaurants	National and Local Research Academy	Bank Sulut Go
			CBOs: TWS,		IPRO

One of the objectives of this strategy is to foster the adoption of SWM and plastic consumption practices of all stakeholders at the micro level, with the support of meso and macro-level stakeholders. The city plans:

- a. **To establish plastic and educator team:** the city will establish a task force (initially the POKJA) and hold forums at the city, kecamatan, and village levels. The educator team at each hierarchy is connected and will be trained to promote behaviour change with the same goal and agenda. This task force will lead, coordinate, monitor, and evaluate education and campaign activities at all levels. Detailed training sessions related to Social Behavior Change and Communication (SBCC) are attached in **Appendix B**.
- b. **To develop, launch, and use communication plans and brands:** the city will establish a competition for the public including graphic designers for developing the logo, brand colors, and slogan for the campaign and education. The slogan has been chosen and agreed upon as "Manado BERSEHATI: Bersih (Clean), Sehat (Healthy), Aman (Safe), Tertib (In Order), Indah (Beautiful)." Branding should be used by any promoters working in Manado City including CSO, CBO, companies, city agencies, and other stakeholders. The city will provide clear guidelines for partners in developing their own communication materials.

**MANADO**   
**BERSEHATI**

**Slogan for Manado**

Shifting behaviour change is supported through various events including awareness raising, mass and social media, engaging communities, public-private partnerships, and advocacy. An extensive campaign for anti-littering, using reusable shopping bags, using reusable cutlery, and sorting waste will be conducted, according to the communication plan. A detailed communication plan is available in **Appendix A**.



Anti - littering



Using reusable bags



Using reusable cutlery



Sorting waste

- c. **To carry out, monitor, and evaluate the education and campaign activities.** The city will facilitate the implementation of education and campaigns on the agreed good practices in plastic waste prevention and management. The task force will carry out education and campaigns in cooperation with partners from city agencies, kecamatan, villages, schools, CSO, CBO, companies, etc. The task force will observe and monitor education and campaign activities being conducted by partners. These activities are to be spread through various media and events to achieve wider exposure to SWM stakeholders, as per the communications plan.



The city government will facilitate local community groups, waste banks, NGOs, and SMEs to access financial support for education and campaign activities from plastic producers, retailers, hotels, restaurants, and their various associations. One possible source of financing could be the plastic bag charges. The city government



will facilitate the media coverage of the various activities to enhance the visibility of its accomplishments as a “professional waste manager with integrated and sustainable governance” and a model city in Indonesia.

### 3.3 Expanding Plastic & Solid Waste Collection Coverage

#### 3.3.1 Problems and Challenges

The baseline study indicated that only 83% of waste is collected through the current SWM system. Some areas are underserved and therefore lead to waste leakages. These areas include parts of Malalayang, Bunaken and Bunaken Islands Districts. In fact, there are still many office and residential centres that do not receive waste collection services. The waste generated in very densely populated areas, lower-middle-income neighbourhoods, along rivers or areas near markets is often uncollected, or only partially serviced. Uncollected plastic waste then is blown away or washed into the local canals and rivers. The city government has installed river traps on several rivers, and these indicate a significant amount of waste is being either directly or indirectly dumped into the river or other waters.

Underserved areas are often caused constraints on vehicle access, as well as limitations regarding transport vehicles and the availability of cleaning personnel. Some elements such as waste banks and TPS 3R do not function optimally or do not function at all. Apart from the drivers above, waste leakage also arises due to poor waste containers, loading and unloading operations such as at SPAs, open transportation (loads uncovered) and litter from the TPA (Sumompo landfill).

#### 3.3.2 Action to be Taken

The leakage of waste and particularly plastic waste is partly due to waste services not yet reaching all areas of the city. Expanding the coverage and quality of the collection service requires investment in infrastructure, improved procedures, supported by additional funding. Waste collection will be carried out through source separation, starting with two categories: organic and inorganic or recyclable to specific areas. The waste management operators will progressively increase the number of waste categories in parallel with improved segregation adoption. The waste collectors will collect organic waste on different days to collecting inorganic waste. The waste management operators will inform the community and non-household premises about the collection schedules, vehicles and officers through SOP, guidelines, flyers, and alike. This approach will not require additional vehicles, as segregated collection will be achieved through scheduling waste collection of different materials.

To achieve this objective, the City Government plans:

- a. **To reformulate waste service levy:** the City Government will reformulate city waste levy rates to better cover the full waste management costs. This formulation is in accordance with Ministry of Home Affairs Regulation Number 7 of 2021. Tariffs will be broken down by sub-system to allow flexible implementation and to attract private and informal sector participation in waste management. This means that the billing for the various stages of waste management will be separated so a different charge can be levied for collection and a further levy applied for waste processing and disposal for example.

**Baseline:** uncollected waste 15% in 2023

**Target:** reducing uncollected waste to 5% by 2028

- b. **To facilitate SWM private and informal sector participation:** The City Government will encourage greater private and informal sector participation in the waste management sector with the aim of addressing the shortage of infrastructure and equipment. The city will offer underserved or unserved areas to be managed by the private sector and the informal sector as their concession areas. In the concession area, the private sector and organised informal sector will provide separate waste collection services for waste components separated at source in the households and initial waste processing at the relevant TPS 3R. In return, the private sector and organised informal sector take their service charge from the waste generators, based on

the future separation of levies for the various stages of waste management. Additionally, the private sector and informal sector can increase their revenues by selling recyclables recovered from the respective collection areas. This action will be focused on peri-urban and island areas where waste collection services are of a lower standard than elsewhere. The underserved areas to be prioritised will include Bailang, Tongkaina, Malalayang, and Bunaken Islands.

The city government will provide opportunities to small-scale private sector and informal sector actors working in SWM, by, for example, accessing plastic funds from the plastic producer's association and the waste collection levy to finance their operations. The city government expect their participation to at least partially address the gap in infrastructure and equipment needs.

**Baseline:** uncollected waste 15% in 2023

**Target:** reducing uncollected waste to 5% by 2028

- c. **To increase waste collection & transportation infrastructure and equipment:** the City Government will enhance its waste management infrastructure and equipment to provide more equitable access to waste collection services. The city government will focus on increasing the waste collection and transportation coverage, especially in the underserved areas of Bunaken Islands, Bunaken, and Malalayang Districts.

**Baseline:** uncollected waste 15% in 2023

**Target:** reducing uncollected waste to 5% by 2028

- d. **To manage plastic waste in waterways:** maintain the cleanliness of drains, canals, and rivers. The city will work with other stakeholders to install plastic traps and transfer the collected plastic waste to recyclers and residuals to landfill. Regular clean-up activities and maintenance will be carried out, especially before and during the rainy season. The city will work and cooperate with local community groups, NGOs, youth groups, students, and the private sector for this activity.

**Baseline:** plastic leakage in the waters 1320 t/yr.

**Target:** reduce plastic leakage in the water by 20% in 2025 and by 40% in 2028

## 3.4 Boosting Plastic Recycling

### 3.4.1 Problems and Challenges

The plastic fraction in the overall waste stream of Manado City is 16%. Hard plastics are 9% while film plastics contribute the remaining 7%. Currently, recycling actors only collect and recover hard plastics while film plastics not collected in significant quantities for recycling. The fraction of hard plastics successfully recovered is currently 9% of total plastic generation. On the other hand, film plastics are not recovered because it is not economically feasible. The margin between the selling price at the recycling companies (in Java) for the film plastics after collection, sorting and logistics costs is very low.

The collection of plastic waste has been initiated by a local NGO and associated company, incentivised by accessing an international plastic credits facility initiative, however, is still only at a small scale, confirming the difficulty in recovering these plastics.

### 3.4.2 Action to be Taken

Increasing waste collection obviously impacts landfill life if it is not offset by an increase in plastic waste recycling rates. Recycling quantities therefore need to be increased, including for plastics that are less valuable in the recycling industry such as film plastics. The proposed segregated waste collection will increase recyclable materials supplies in the recycling facilities including TPS 3R. Therefore, the city will foster public and private recycling facilities to increase capacities by improving processing procedures, increasing equipment and machinery, controlling pollution, and connecting with wider markets.

To increase the plastic waste recovery rate, the city plans:

- a. **To facilitate plastic packaging take-back by producers:** the City Government will encourage local and national plastic producers to both minimise plastic usage and in parallel take back their residual plastic packaging. This intervention connects plastic producers and local material collectors and recyclers. Current examples include the taking back of sachet packaging from the noodle producers, and PET bottles from national water bottle company. The strategy aims to expand this initiative into other companies.  
**Baseline:** the plastic recovery rate is 9%  
**Target:** supporting and contributing to other plans
- b. **To incentivize plastic processing:** the city government will facilitate innovation in plastic processing, especially film plastics which have limited economic value. It includes processing plastic waste for refuse derived fuel (RDF), fuel conversion, or other products. The initiative will access funds from the voluntary paid plastic scheme.  
**Baseline:** none of the film plastic is recovered, processed, and recycled  
**Target:** increase the reuse and recycling of film plastics by 150 Kg/day in 2025 and up to 300 kg/day in 2028
- c. **To support small waste recyclers:** the city government will support micro and small recyclers, formal and informal, to increase their capacity. These actors will be assisted in formalizing their businesses and facilitating access to financing. The city government can support by sponsoring equipment to increase plastic waste recycling capacity.  
**Baseline:** plastic recovery rate is 9% in 2023  
**Target:** contributing to increasing recovery rate to 12% by 2025 and to 13% by 2028
- d. **To install Reverse Vending Machines (RVM) and Drop boxes connecting with a digital system for recyclables' collection:** the city will cooperate with NGOs and the private sector to install RVMs in public facilities and malls to encourage a waste recycling lifestyle. Additionally, recyclable drop-offs will be distributed in waste banks, schools, and parks to provide access to a recyclables' collection system. All equipment will be virtually connected through a digital "app" that can be downloaded on mobile phones. The data obtained from the system will be used for waste management reporting by the city.  
**Baseline:** the plastic recovery rate is 9%.  
**Target:** increasing plastic recovery rate in formal facilities and contributing to recovery rate of 12% by 2025 and of 13% by 2028
- e. **To reactivate and expand waste banks and TPS 3Rs with the integration of the informal sector:** the city will facilitate access to Waste Banks and TPS 3Rs in underserved areas to increase waste collection and material recovery. Inactive waste banks and TPS 3Rs will be reactivated by refurbishment programs, strengthening operators, supporting equipment and vehicles, and the integration of informal sector actors. The city may offer the operation of TPS 3R and the waste collection service to SMEs and informal sector organizations, in connection with strategy 3.3.2-point b. Reactivation of TPS 3Rs at Cempaka and Malendeng as well as a waste bank in Malalayang will be prioritised for reactivation through informal sector integration. The city will foster the operators to develop a SOP for waste processing.  
**Baseline:** no informal workers are employed as waste collectors & sorters. The plastic recovery rate is 9%.  
**Target:** participation of informal workers as formal or semi-formal waste collectors & sorters – target of 8 people. Increasing plastic recovery rate in formal facilities and contributing to a recovery rate of 12% by 2025 and to 13% by 2028
- f. **To recover leakage plastic waste for co-firing, such as Refuse Derived Fuels (RDF):** the city will facilitate SMEs and NGOs to supply low-value plastics and other combustible materials for co-firing as a supplementary fuel source. The current initiative in collaboration with plastic credits will be acknowledged and supported. It will be connected with private sector waste collection and plastic traps in the rivers.

**Baseline:** the plastic recovery rate is 9%.

**Target:** increasing plastic recovery for co-firing by 100 tons per year in 2025 and by 150 tons per year by 2028.

## 3.5 Improving Landfill Management

### 3.5.1 Problems and Challenges

Manado City currently operates the Sumompo TPA as the only final waste processing and disposal site. The Sumompo landfill area totals 13.70 ha and has been operating since 2006. The unused area is 1.86 ha with the depth of the basin to the highest point of waste generation reaching around 50 m. Without processing, the Sumompo TPA is estimated to be full in the next four years, while, with processing and utilising a different design approach, its operational life could be increased to 9 - 10 years. The Sumompo landfill has some management shortcomings, including having no weighbridge, good approach road, unclear waste tipping zone timing and scheduling, lack of sorting space and storage for the informal sector waste pickers, inadequate time for better of recyclables from the disposed waste, poor leachate and landfill gas management controls and irregular soil cover. The tipping face is regularly relocated to areas where there is some spare capacity, rather than following a planned cell staging approach.

Collection of recyclable materials at the landfill is carried out by up to 300 waste pickers. The average amount of plastic recovered is 2.22 tons per day. The main obstacles for waste pickers in recovering recyclable materials are (1) limited collection time, (2) lack of SOPs for tipping, covering and other practices (3) interruption by the weather conditions, and (4) limited storage space for collected recyclables. Apart from these technical obstacles, they lack personal protection equipment (PPE) and a minimum of occupational health and safety services (e.g. health insurance and medical checks). Irregular covering of landfills with soil and inadequate collection of recycled materials causes plastic leakage equal to 10% of the total plastic waste entering the landfill, according to the baseline assessment.

### 3.5.2 Action to be Taken

Improvements to the management of the Sumompo TPA are aimed at ensuring a longer, safer operational life and reducing plastic waste leakages. To reduce plastic waste leakage at the landfill, the city government plans:

- a. **To improve landfill infrastructure & equipment:** the city government will improve waste management infrastructure at the landfill. The required infrastructure approach is described in the City SWM planning documents.

**Baseline:** plastic waste leakage from the landfill is 10%

**Target:** supporting activity to achieve 0% plastic waste leakage from the landfill

- b. **To improve & implement landfill SOP:** the City Government will refine the SOP to operate the TPA in a safe, scalable manner and accommodate informal sector work. Incoming waste is to be recorded, tipped at the specified cells, compacted and cells covered and closed periodically in accordance with the landfill development and staging plan. This includes placing certain waste loads, particularly waste separated at source (dry, clean) or originating from areas where recyclable waste is predominant, in special designated areas to allow manual recovery before disposing off the remaining residues.

**Baseline:** plastic waste leakage from the landfill is 10%

**Target:** 0% plastic waste leakage from the landfill and contribute to increasing the recycling rate at the landfill

- c. **To support & empower the informal sector:** The city government will support the informal sector to obtain better working conditions and increase the productivity of their material recovery by registering them as Waste Pickers Cooperative. This support includes organizing in an association/cooperative, providing PPE and ablution facilities, as well as meeting and rest room space and storage areas for recovered recyclables.



**Baseline:** the plastic recovery rate at the landfill is 9%

**Target:** Increasing plastic recovery rate of informal sectors at the landfill to 15% by 2025 and to 20% by 2028

## 4 MONITORING & EVALUATION FRAMEWORK

### 4.1 Monitoring Mechanism & Plans

Overall strategies and action plans on plastic waste and behaviour change strategy in Manado City are expected to reduce plastic waste generation, increase plastic waste collection, reduce plastic waste leakage, and increase plastic waste recovery from the current baseline. Using the WFD, the overall plastic waste collection and recovery by the end of the planning period in 2028 are visualized in the Sankey diagram below.

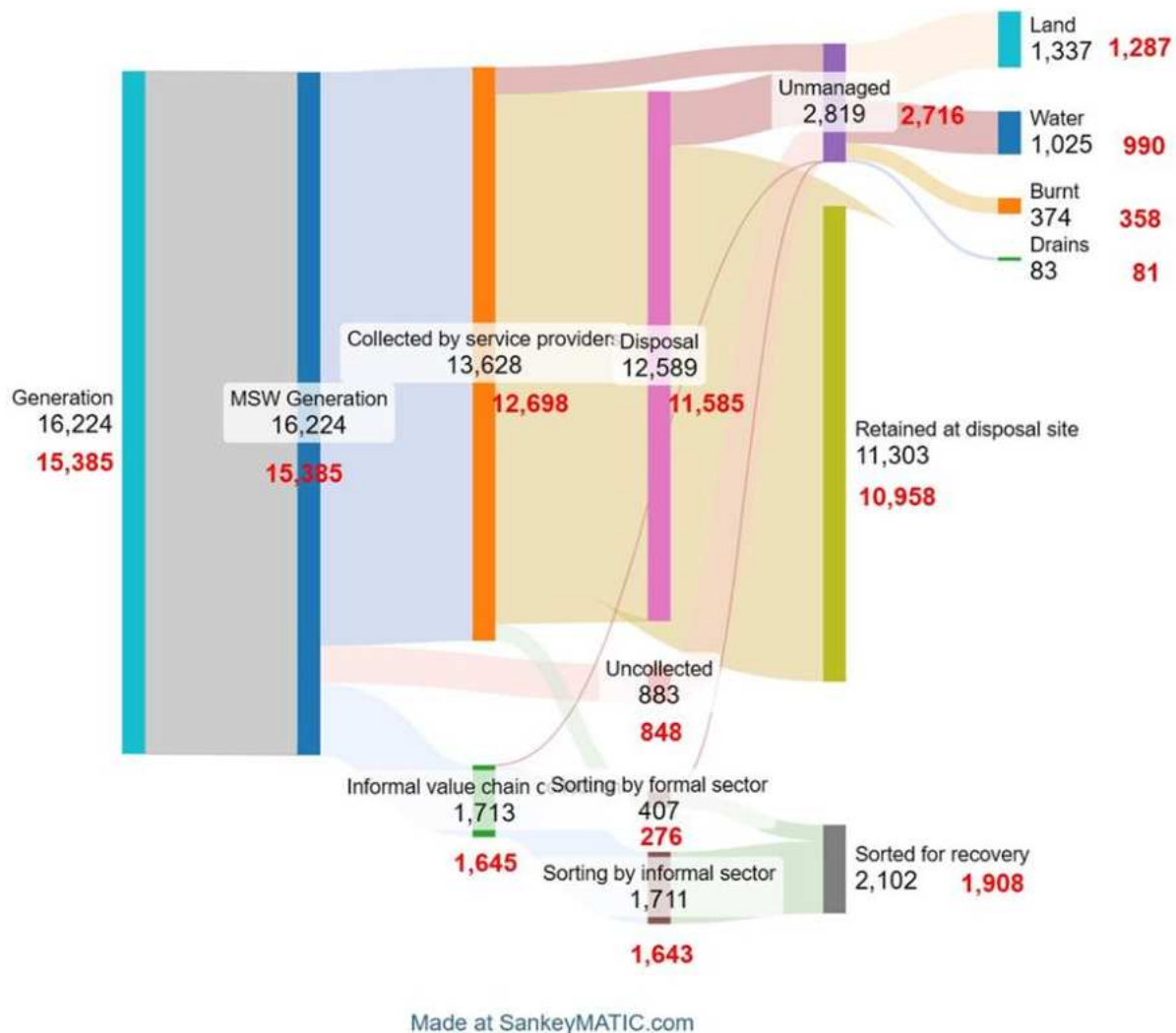


Figure 4.1 Sankey Diagram - 2023 Baseline (Red results) and 2028 Projections (Black Results)  
Source: SankeyMATIC.com

The 2023 Baseline data is presented in **Figure 4.1**, Section 1.2 for comparison. The 2028 data accounts for waste management improvements, but the waste generation quantity has been increased from the baseline results due to population increases in the interim, as well as the expected per person waste generation increases.

Monitoring the plastic and waste action plans is critical to developing sound city strategies and effective implementation. Collecting data on indicators provides quantitative evidence on the effectiveness of action plans by comparing prior to and during implementation. It will help the City of Manado Government to adjust resource allocations, human resource mobilization, engagement of other stakeholders, and adjust the implementation schedule. The city government can then better plan the actions going forward.

The monitoring mechanism and plan is a robust system to update the status of indicators and give appropriate alerts feeding into the planning system. The plan provides a system for the generation, collection and analysis of key data related to each measure of the action plan. It can be used as a dynamic tool that factors in ongoing input from local stakeholders and actively incorporates feedback into the refinement or even redesign of interventions. The plan is underpinned by indicators that define what to measure, when and how. Results can be measured against performance indicators through routine and periodic assessments and surveys. The results of the monitoring activities will be used to evaluate the relevance, effectiveness and efficiency of the specific measures, using a mixture of quantitative and qualitative methods.

**Table 4.1 Strategy and plan indicators and targets**

Strategy & Plan		Indicator	Baseline	Target					Means of Verification
				2024	2025	2026	2027	2028	
1. Strengthening Waste Reduction by Producers									
a)	To ban & control locally produced SUPs	Reduction of locally produced SUPs by 30%	1.27 t/d	0%	5%	10%	20%	30%	Survey
b)	To improve local plastic packaging design	Reduction of locally produced SUPs by 5%	1.27 t/d	0%	0%	1%	3%	5%	Survey
c)	To guide voluntary plastic charge	Supporting other plans							Activity report
d)	To promote refill business and reusable packaging	Plastic waste generation reduce from BAU (1.64% p.a.)	42.15 t/d	<1.64 %	<1.64 %	<1.64 %	<1.64 %	<1.64 %	Survey
2. Promoting Good Practices in Plastics and Waste Management									
a)	To establish plastic and waste management promoters	60 leaders	0 person	20	40	60	60	60	Activity report
b)	To develop, launch, and use communication plans and brands	Waste segregation practice 40%	13%	20%	25%	30%	35%	40%	Survey
		Using reusable shopping bags 50%	19%	25%	35%	40%	45%	50%	Survey
		Avoid littering 90%	78%	82%	84%	86%	88%	90%	Survey
		Avoid plastic cutleries	1%	2%	4%	6%	8%	10%	Survey
c)	To carry out, monitor, and evaluate the education and campaign activities								
3. Expanding plastics & waste collection coverage									
a)	To reformulate of waste service levy	Reduction of uncollected waste to 5%	15%	12%	10%	8%	6%	5%	Annual report on waste weighing at the landfill
b)	To open private and informal sector participation in SWM								
c)	To increase waste collection & transportation infrastructures/ equipment								
d)	To manage plastic leakage in the waterways	Reduction of plastic waste in waterways	3.65 t/d	10%	20%	30%	40%	50%	Waste trap report
4. Boosting plastic recycling									
a)	To facilitate plastic waste take-back by producers	Supporting other plans							Activity report
b)	To incentivize innovative plastic processing	Increase the use and recycling of film plastics by 150 kg/day in 2028	0%	0.5	0.5	1	1.5	2	Activity reports
c)	To support small recyclers	Increasing plastic recovery rate by 13% by 2028	9%	11%	12%	12%	13%	13%	Recovery report of small recyclers

Strategy & Plan	Indicator	Baseline	Target					Means of Verification
			2024	2025	2026	2027	2028	
d) To install RVM and Drop boxes connecting with a digital system for recyclable collection	contributing to a recovery rate of 12% in 2025 and 13% in 2028	9%	11%	12%	12%	13%	13%	Activity report
e) To reactivate and expand waste banks and TPS 3R with the integration of the informal sector	Increasing plastic recovery rate by 13% by 2028	9%	12%	15%	20%	25%	30%	Recovery report of waste bank & TPS 3R
	Number of informal workers working as waste collectors & sorters	0 person	4	4	6	6	8	THL (daily workers) database of Kecamatan
f) To recover leakage plastic waste for co-firing	Increasing plastic recovery for co-firing by 100 tons per year in 2025 and by 150 tons per year by 2028.	90	120	190	210	230	240	Activity report
<b>5. Improving landfill management</b>								
a) To improve landfill infrastructure & equipment	Reduction of plastic leakage at the landfill	10%	10%	10%	8%	4%	0%	Annual landfill operation report
b) To improve & implement landfill SOP								
c) To support & empower the informal sector	Increasing plastic recovery rate by 30%	9%	12%	15%	20%	25%	30%	Recovery report of waste picker association
d) Setting up a waste picker cooperative								

## 4.2 Evaluation & adoptions to the strategy

Strategy evaluation is a process to check the effectiveness of a strategy after a period of implementation and determine its ability to achieve its objective. The evaluation is based on the monitoring results of all activities and plans within the strategy. This process will be conducted annually at the end of the fiscal year. The city will convene a meeting involving representatives from key stakeholders to consolidate each activity's progress and populate the indicators. All stakeholder representatives will carry out a gap analysis comparing targeted and actual progress. If necessary, the city will hire an external resource person to undertake this evaluation.

The performance gap will be analysed to reflect the effectiveness and efficiency of activities, plans, and strategies. The review's recommendation will provide input to the city planning workshop (MUSRENBANG) and budget planning. The associated agencies will take these inputs and allocate appropriate budgets for implementation in the coming fiscal year. The required activities and budget also can be addressed to non-government stakeholders including companies, NGOs, CBO, universities, and other stakeholders.

If the gap between targeted indicators and actual achievement is significantly different, the evaluation meeting can recommend adjustment and or renewal of the strategy. Prior to the adjustment or renewal of the strategy, the evaluation meeting must review and find the reason and drivers behind the indicator performance gap. Re-strategizing will accommodate the drivers to make the coming strategy more effective in improving plastic and waste management.

## APPENDICES



**3RproMar**  
MANADO

## Appendix A - Communication Plan

The core elements of the Social and Behavior Change Communication (SBCC) strategy for Manado's plastic 3R initiative as outlined above will revolve around fostering collaborative partnerships and dialogues between Manado City, civil society, private sector entities, and communities. The aim is to collectively define the most effective approach to implement the plastic 3R strategy in Manado. These dialogues and partnerships will serve as the internal foundation of the SBCC strategy.

Externally, targeting the broader Manado public, an iterative awareness-raising campaign will be launched multiple times throughout the years. This campaign will unfold on various occasions through mass media and street-level initiatives, with a continuous presence on social media platforms. Each iteration of the campaign will spotlight a specific practice, employing emotional appeals such as pride and beauty, leveraging the strong compliance tendencies of the Manadonese people with existing laws, and fostering a sense of competition to encourage participation in the advocated behaviour. The consistent use of the same branding will ensure continuity and recognition in the public awareness campaign.

### *a) Awareness raising*

To initiate the communication campaign in early 2024, the focus will be on a no-littering awareness-raising initiative and starting the segregation only into two types, organic and inorganic waste, considered a low-hanging fruit due to its observed compliance. We don't start from something that is complicated and perhaps difficult to realize at the beginning. There is a ladder of behavior change where people need to learn from the easiest practices, while in parallel the city government is preparing a better waste transportation system, stronger intermediate facilities (TPS3R and Waste Bank), and of course a better TPA.

An awareness-raising campaign was also carried out by jointly creating branding through the Manado Coelacanth fish mascot (*Latimeria menadoensis*) and the Manado slogan BERSEHATI: Clean, Healthy, Safe, Orderly, Beautiful. which was mutually agreed upon at the SBCC workshop in December 2023. Manado's identity through the mascot design and slogan is important to encourage a sense of pride in the beauty of the city and unite the same vision and mission regarding waste management. The mascot and slogan designs were obtained through the competition with wider public participation to introduce Manado's identity and spirit to improve its waste management behavior. This mascot and slogan can consistently be developed and applied to various campaign and communication products such as posters, flyers, leaflets, banners, billboards, and assorted promotional items (flashcards, modules, cotton shopping bags, T-shirts, caps, tumblers, pins, etc.)

Guidelines for the use of mascots, logos, slogans, and templates can be provided to the city government and partners to ensure consistent awareness exposure for the people of Manado City. However, the Coelacanth fish mascot and the Manado slogan are completely the property and identity of the City of Manado.

In efforts to increase awareness, important actors have been identified. These actors play an important role in encouraging more massive and effective behavioral changes in society. The Waste Management and Circular Economy Working Group, especially in the Communication and Cooperation Sector, has been formed, which consists of the Environmental Service, Health Service, PUPR Service, Education Service, Communication and Informatics Service, as well as the Legal Section of the Manado City Regional Secretary. An Educator Team, consisting of Subdistrict and Subdistrict Cleanliness Divisions, Religious and Community Leaders, Teachers, Heads of the Environment, PKK, Media, and CSOs has also been formed. Together with four institutions receiving innovation funds/IFS, namely No Trash Triangle Initiative/NTTI, CV Daur Sinar Gemilang, Satu Tampa, and Manengkel Solidaritas, this team plans, designs, implements behavior change campaigns and communications in pilot areas, schools to city level.

The messages are to promote the prohibition of littering, and waste segregation, join the waste pickup services and pay for the service, and reduce the single-use plastic cutleries and single-use shopping bags. The core team

will facilitate the tailoring of distinct messages and arguments for various primary-level and secondary-level participants, following a matrix that will be further developed and adapted as needed during implementation:

*Table A.1 Participants, characteristics and messages*

Promoted behavior	Barrier	Main messages	Media/Channel	Participant
No littering	Not joining the pickup service Lack of waste bins in public area Low law enforcement	Throw waste in its place Don't throw waste into the river Follow the waste transportation service and pay the retribution on time Littering has penalties Protect our rivers from waste	Posters, billboards, flyers, videotrons, radio talk shows, speeches from village heads, sub-district heads at every community activity, congregational news, Friday sermons, storytelling, etc.	General public in Manado  Communities who live on riversides  Communities in underserved areas
Sorting waste into two types, organic and inorganic	Perception of sorting is complicated Already paid for the service, no need to sort it out	Sorting waste is easy Sorting waste is an obligation Your trash, your responsibility Information on types of waste, how to sort and store it	Posters, billboards, flyers, banners, videotrons, radio talk shows, speeches from village heads, sub-district heads at every community activity, congregational news, Friday sermons, inter-village or inter-school competitions, jingle competitions, storytelling, 3D wall boards at schools, etc.	General public, school, household, PKK, church/mosque congregation, office, restaurant/hotel, etc
Use of reusable shopping bags	Single-use plastic bags can be obtained easily and cheaply  There is no ban on using single-use plastic bags	Using reusable shopping bags is cooler and more economical	Posters, billboards, flyers, videotrons, radio talk shows, speeches from village heads, sub-district heads at every community activity, congregational news, Friday sermons, storytelling, etc.	General public, households, PKK, church/mosque congregations, modern/traditional markets, etc
Reduce single use plastic cutleries, cups etc	There are no prohibitions yet  Perception of practicality and hygiene	Using a tumbler is cooler and more economical  Reduce the use of single-use plastic	Posters, billboards, flyers, videotrons, radio talk shows, speeches from village heads, sub-district heads at every community activity, congregational news, Friday sermons, storytelling, etc.	General public, households, PKK, schools, food courts, restaurants/hotels, church/mosque congregations, etc

The messages and arguments outlined above will be conveyed in a humorous and catchy manner in communication materials. Visuals should portray the advocated behavior along with social support from parents,



teachers, community leaders, religious leaders, shop owners, subdistrict, urban-villages officials, and others encouraging individuals not to litter, fun memes and GIFs of local influencers or champion doing the promoted practices. Positive messages and "how-to" guidance will be prioritized over negative ones, with messages regarding littering prohibition and fines presented in fine print. Avoid showcasing dirty streets or accumulated waste heaps. Instead, opt for positive campaigns featuring diverse individuals such as mothers, children, youths, religious leaders, influencers, waste workers, the mayor, etc., actively engaging in or endorsing the promoted practices. Utilize images or videos of clean beaches, streets, school grounds, parks, waste bins, and segregated waste containers. Emphasize alternatives to Single Use Plastics (SUP) items, such as tumblers, reusable lunch boxes, and shopping bags, highlighting their advantages. Messages reminding people not to litter should be strategically placed in locations where habits are formed, and attention is crucial. While the mass media campaign (billboards, video and audio spots) should be widespread throughout Manado, localized actions and activities should focus on specific areas with heightened importance to avoid littering, such as beaches, rivers or locations experiencing significant littering issues.

Potential initiatives in neighborhoods, rivers, and beaches where littering is prevalent (these can be adjusted for other advocated practices). The POKJA-sub communication together with city educators will choose what to implement from these proposed activities (or others) in the annual plan:

- Collaboration between the City Government of Manado with **community-based organizations and CSO (faith-based groups, youth communities, PKK etc.)**:
  - to create **competitions to make jingles, songs, short videos or photos during local festivals, celebrations, sports events, school functions, religious events**, etc., aiming to raise awareness about the promoted practices.
  - **Street, beach, and river cleaning endeavors** are particularly impactful when conducted in heavily littered areas. The cleaning activity should not be an end in itself but rather a social mobilization effort promoting collective action among citizens to foster social cohesion and community ownership. Accompanying awareness activities should provide information on preventing littering and elucidate the environmental repercussions of waste, especially plastic waste. Beautification efforts, such as painting sidewalks, painting river barriers, placing flowerpots, and installing appealing waste receptacles, have proven successful in discouraging littering. Cleaning activities should be enjoyable, incorporating competitions among individuals or groups, singing, visits to interesting locations, distribution of T-shirts or caps, and social media documentation. The ultimate goal is to reduce the need for frequent clean-ups. This activity could be promoted through local social media influencers and journalists, using professional pictures for mass media communication. Branded trash bags with the mascot and Manado BERSEHATI campaign's visual identity could be distributed on certain beaches.
  - **Interactive Art or Photo Exhibitions**: Organize art exhibitions that showcase environmentally themed artworks created by local artists, students, and community members. This can serve as a visually engaging way to convey the campaign's message.
  - **Waste Segregation Demonstrations**: Host live demonstrations on proper waste segregation techniques. This can include interactive sessions on how to separate recyclables, compostables, and non-recyclables at home.
  - **Green Competitions**: Initiate friendly competitions between neighborhoods or schools to encourage plastic 3R. Recognize and reward the most eco-conscious communities with certificates, trophies, or community improvement projects.



- **Environmental Storytelling Events:** Arrange storytelling events where community members share personal experiences related to waste reduction and environmental conservation. This can create a powerful emotional connection and inspire others to take action.
- **Waste Art Installations:** Create public art installations made from recycled materials. These installations can serve as visual reminders of the campaign's objectives and spark conversations.
- **Community Film Screenings:** Host screenings of documentaries or short films related to environmental issues. Follow these screenings with discussions on how the community can contribute to positive change
- **Eco-office competition:** with the indicators of eco-friendly offices the POKJA will make a competition in which the best office will get the Green Flag, and the worst one will get the Black Flag. The competition will start with the government offices in Manado.
- Collaboration between the City of Manado and DLH with **education department/schools:**
  - **Competitions in local schools** involving jingle, song, drawing, painting, 3R projects, etc., focusing on why it is crucial not to litter (or emphasizing waste segregation or reducing the use of single-use plastic items). Existing materials and processes developed by other schools and CSOs (and CV DSG, our main partner) can be adapted and replicated. Students can also visit the recycling company to see the process. The produced content will be published on social media and advertised through mass media;
  - **Substitution of single-use water bottles and cups with reusable tumblers and/or lunch boxes** can be achieved through school partnerships with the GIZ/GOPA 3R ProMar Manado project or proactive private stakeholders. These collaborators can annually contribute reusable water tumblers and/or lunch boxes for school children. These items can be branded with the project's identity or the logo of the supporting private sector company. The donation of these tumblers and lunch boxes can be integrated into an awareness-raising initiative involving children to illustrate the environmental impact and plastic reduction achieved by adopting reusable alternatives.
  - **Educational Workshops:** Conduct interactive workshops in schools, community centres, and public spaces to educate individuals on waste segregation, plastic reduction, and the importance of environmental conservation
- **Communication material:**
  - Development of nudges or **prompts** to remind people not to litter with fun messages or pictures.
  - Distribution of **informational flyers, and posters** in the neighborhood through WhatsApp Groups, Sunday School in Church, or any community/religious event. engaging in brief conversations, possibly through a small survey of three to four questions about opinions on littering, waste segregation practices, reducing single-use plastic or paying the waste service and advice for friends and neighbors. Distributing information flyers might have a greater impact when combined with personal interaction.

## *b) Mass and social media*

Producing communication materials such as flyers, posters, videos, billboards, jingles, songs, etc. can use professional services or local resources, even to expand engagement, communication products can be created through competitions or in a participatory manner. Students, schools, and even housewives, and children can participate in making creative campaign products. The Manado City Government can help expand its impact by

collaborating with sponsors, the private sector, local radio and TV as well as influencers to spread the campaign products through various existing channels. The professionalism of the media materials will significantly enhance their potential to capture people's attention. In instances where there is no budget for a professional media campaign, prioritizing proximity activities and organizing their media coverage for publication on social media may be a more viable approach.

The City of Manado, DLH and/or partner CSOs and CBOs (including religious and community leaders) will join in popular **radio and TV broadcasts**, not limited to environmental channels, to explain the campaign's objectives and emphasize the importance of not littering (including waste segregation and reducing single-use plastic items) through interactive phone-ins. Journalists would be invited to cover local activities, fostering community engagement. More activities to be done with journalists can be found in the advocacy section.

The success of the awareness-raising campaign on social media is paramount. DLH / the City of Manado will establish dedicated social media pages (Manado BERSEHATI) on platforms such as Facebook, Instagram, YouTube, and TikTok, targeting the broader public in Manado. Additionally, a social media page on X (formerly Twitter) could be created, focusing on decision-makers in Manado, other Indonesian provinces, and at the international level.

Ideally, a professional social media agency should be engaged to run the social media campaign, ensuring broad reach through viral posts, influencers, and sponsored ads. However, if this is not feasible, the following strategies can help attract social media users organically:

- **QR Codes on Communication Materials:** Incorporate QR codes on each communication material, seamlessly guiding individuals to the Manado BERSEHATI social media pages. Encourage them to hit the "Follow" button for the latest updates.
- **Selfie-Wall at Events:** Set up an engaging selfie wall (roll-up) at every Manado BERSEHATI campaign event. Invite participants to capture vibrant selfies and share them on their social media, accompanied by campaign hashtags like #ManadoBERSEHATI, #ManadoNoWaste, #ManadoPlastic3R, #ManadoNoStraw, etc.
- **Faceboard for Specific Practices:** Introduce an interactive Faceboard at each event, spotlighting specific eco-friendly practices. Participants can snap photos showcasing actions like using reusable shopping bags, segregating waste, or responsibly disposing of waste in roadside bins. Encourage them to share these moments on their social media pages with the campaign hashtags.
- **Event Photos and Videos:** Motivate participants to capture captivating photos and videos during campaign events. Encourage them to share these multimedia assets on their social media platforms, utilizing the designated campaign hashtags to amplify the campaign's reach.
- **User-Generated Content Contests:** Organize contests encouraging followers to create and share their content related to the campaign. Offer incentives such as campaign merchandise, eco-friendly products, or recognition for the most creative and impactful submissions.
- **Engagement Through Quizzes and Challenges:** Keep followers actively engaged by organizing weekly quizzes, challenges, and competitions. Foster a sense of community participation and environmental awareness through these interactive initiatives.
- **Interactive Polls and Surveys:** Use interactive polls and surveys to gather opinions and preferences related to waste management and environmental practices. This not only engages followers but also provides valuable data for future campaign strategies.
- **Live Q&A Sessions:** Host live question-and-answer sessions on social media, featuring experts, government officials, or campaign representatives. This interactive format can provide valuable insights and foster a sense of community.

- **Encourage Partners and Organizations:** Rally support from partner organizations by urging them to follow and actively engage with the Manado BERSEHATI social media pages. Encourage the sharing of campaign posts within both professional and private WhatsApp and Telegram groups to maximize outreach.
- **Collaborate with Influencers:** Partner with local influencers and environmental advocates to promote the campaign. Their endorsement can significantly expand the reach and credibility of the message.
- **Behind-the-Scenes Content:** Share behind-the-scenes glimpses of campaign preparations, events, and activities. Humanize the campaign by showcasing the dedicated individuals working towards its success.
- **Themed Campaign Days:** Introduce themed campaign days or weeks, focusing on specific aspects of waste reduction or eco-friendly practices. Encourage followers to actively participate and share their contributions using designated hashtags.
- **Participatory Challenges:** Launch challenges that encourage followers to take tangible actions in their daily lives, such as a "Plastic-Free Week" or "Waste Segregation Challenge." Encourage participants to document their experiences and share them on social media.
- **Regular Updates and Reminders:** Maintain a consistent posting schedule to keep followers informed and engaged. Regularly share updates, reminders, and tips related to waste reduction and the campaign's progress.

### *c) Engaging communities*

Although waste is collected in most parts of Manado, there are still areas where it remains uncollected. Additionally, waste is not segregated at the source, resulting in a mix of waste types. Waste collection contractors typically sort only valuable PET waste to sell to waste banks. The GIZ 3RProMar Manado project aims to assist the City of Manado in implementing waste segregation at the source, specifically in households. Organic and non-organic waste will be collected separately by waste workers, and in rural areas, households can retain organic waste for use in makeshift composters. Organic waste will undergo separate composting, while non-organic waste will be sorted at waste banks or TPS 3R to reduce the amount of residues sent to landfills.

The GIZ 3RProMar Manado Project proposes a pilot approach to support POKJA in helping households develop local solutions for waste segregation at the source. Manado City is encouraged to select two pilot sites—one in an urban neighborhood with an existing waste-collection service, and another in a rural community lacking waste-collection service. POKJA will initiate a participatory process involving the main stakeholders in the neighborhood or community to devise and implement solutions for waste segregation. The rationale is that involving local stakeholders in solution development enhances their ability to communicate the reasons behind the new waste collection approach and enables effective follow-up on implementation and issue resolution.

Community-Based Approaches (CBAs) involve a process of dialogue, learning, decision-making, and action. In essence, community members, including vulnerable groups, collectively identify, analyze, and prioritize problems, recognize their strengths, and work out practical solutions. CBAs are particularly suitable where communities are close-knit and accustomed to coming together to discuss issues.

Human-Centered Design (HCD) is also a participatory process and a creative approach to problem-solving. It starts with understanding the individuals for whom solutions are designed and ends with tailor-made solutions that meet their needs. HCD involves building empathy, generating ideas, creating prototypes, sharing designs with the intended audience, and eventually implementing innovative solutions.

Both CBAs and HCD consist of numerous steps. Simplified models will be used by DLH, partner Civil Society Organizations (CSOs), and Community-Based Organizations (CBOs) in pilot neighbourhoods and communities. HCD is far more complex and resource intensive requiring specialists in HCD, a long engagement timeframe, and a substantial budget (in terms of personnel commitments, staff experience in HCD and finances) to ensure

sustainability of implementation beyond the project timeframe. For the local situation, it is considered that CBA is the preferred approach. As part of the GIZ 3RProMar Manado project, pilots will be implemented to introduce systematic waste-segregation at the source. Concretely, the GIZ 3RProMar Manado Project will assist DLH and POKJA in implementing CBA approach through the different steps:

*Table A.2 Comparison of CBA and HCD*

Steps	CBA	HCD
1.	<p><b>Community assessment</b></p> <p>Assessment involves establishing a central group within the pilot community to facilitate a comprehensive community assessment aimed at identifying the community's strengths, assets, capacities, and resources, as well as gaps and needs while engaging service providers.</p> <p>Before engaging with the community, there is a preparatory phase consisting of several sub-steps. Firstly, the choice of pilot communities is made, and the capacities of the partner Community-Based Organization (CBO), Civil Society Organization (CSO) and / or PKK, that will facilitate the Community-Based Approach (CBA) process are enhanced (refer to the capacity-building section).</p> <p>A second sub-step involves initiating contact with the community. The facilitator, whether a partner CBO, CSO or PKK gathers preliminary information, reaches out to community leaders, waste service providers (where available), and community groups, and immerses themselves in the community to build trustworthy relationships. The facilitator then guides the designation of a representative community "core group" responsible for conducting the assessment. Members of the core group undergo training on community assessment, a process expected to last no more than two days.</p> <p>The third sub-step entails the actual community assessment. This involves a transect walk through the community to identify areas where waste is disposed of, visiting households to observe waste management practices, engaging in discussions with residents on waste-related matters (generation, storage, segregation, collection, fees, and management), organizing group discussions with waste collection and recycling stakeholders, identifying community leaders, conversing with early adopters of waste segregation, recognizing existing solutions, and exploring the history of waste management in the community. The core group, with the assistance of the partner CBO, CSO, or PKK compiles and prepares the findings of the assessment for presentation to the community during the planning phase. The community assessment phase is anticipated to last about two weeks.</p> <p>Taken as a whole, the assessment phase requires approximately three weeks, excluding the preparation phase. Incorporating the preparation phase, which includes capacity</p>	<p><b>Inspiration</b></p> <p>The inspiration phase is pivotal in human-centered design, fostering empathy and understanding of user needs.</p> <p>It should be conducted by a cross-disciplinary teams comprising designers, researchers, and stakeholders from the community and the city of Manado. This ensures diverse perspectives and expertise are considered, enriching the insights gathered.</p> <p>Ideally, the process should be led by a HCD specialist who will strengthen the capacities of the core group and will support the team going through each step of the process.</p> <p>Steps:</p> <ul style="list-style-type: none"> <li>• Define Objectives / define design challenge: Clarify research goals and questions to guide the efforts. In the current case, it will be about introducing and new waste segregation and collection system.</li> <li>• Conduct Research: Utilize methods like observation, interviews, surveys, and secondary research.</li> <li>• Empathize: Step into users' shoes to grasp their perspectives, emotions, and motivations.</li> <li>• Synthesize Findings: Identify patterns and insights from research data using tools like affinity diagrams and personas.</li> <li>• Generate Insights: Translate research findings into actionable insights for the design process.</li> <li>• Share Learnings: Communicate insights with stakeholders to foster collaboration and ideation.</li> </ul> <p>A way to do this is to develop "Personae", a fictional representation of typical members of the community. Personas help designers and stakeholders empathize with and understand the needs, goals, behaviors, and preferences of the people who will segregate the waste at home Key components of a persona typically include:</p> <ul style="list-style-type: none"> <li>• Demographic Information: This includes age, gender, occupation, income level, education, and other relevant demographic factors.</li> <li>• Background and Context: Details about the persona's background, such as their family life, cultural influences, and life experiences, provide context for understanding their behaviors and decision-making processes.</li> </ul>

Steps	CBA	HCD
	building for facilitators from DLH, CSOs, CBOs, and PKK, the entire process is expected to take around <b>two months</b> .	<ul style="list-style-type: none"> <li>Goals and Objectives: What does the persona hope to achieve by using the product or service? Identifying their goals helps prioritize features and functionalities that align with their needs.</li> <li>Pain Points and Challenges: Understanding the persona's frustrations, obstacles, and challenges helps identify opportunities for improvement and innovation.</li> <li>Behaviors and Preferences: Insights into the persona's behaviors, preferences, habits, and communication styles inform design decisions and user interactions.</li> <li>Quotes or Anecdotes: Including quotes or anecdotes from research interviews adds a human touch, bringing the persona to life and making them more relatable to stakeholders.</li> </ul> <p>Creating personas enables design teams to empathize with users, make informed design decisions, and ensure that the resulting products or services meet the needs of their target audience effectively.</p>
2.	<p><b>Community planning</b></p> <p>The planning phase initiates with a community meeting, bringing together representatives from all categories of inhabitants, community leaders, sub-district representatives, the Department of Environment (DLH), waste and recycling service providers, and other pertinent stakeholders. The core group, supported by the partner Community-Based Organization (CBO), Civil Society Organization (CSO) or PKK will present the results of the assessment. After a discussion, the assessment will be revised and validated.</p> <p>In the second step, the core group will assist the community in formulating a vision for cleanliness and waste management in their area. Subsequently, they will establish objectives, deliberate on methods to enhance waste collection and segregation (what – organic and non-organic waste collection; how – segregation methods; when – the schedule for various types of waste collection; what type of containers or bags are required; how to obtain them with available resources; any additional requirements and how to acquire them, etc.).</p> <p>Following this, an activity plan will be developed to introduce the new system across different locations within the community. This might include the planned production and distribution of containers or bags for segregated waste, community awareness activities (door-to-door and community-wide), school engagement, participation in community celebrations, outreach through community media and social media, and more. The plan will detail who is</p>	<p><b>Ideation</b></p> <p>In the ideation phase of human-centered design, the focus shifts from understanding user needs to generating a wide range of creative solutions. This phase is characterized by brainstorming, collaboration, and experimentation as design teams seek to explore and refine ideas that address the insights gathered during the inspiration phase. The ideation phase is conducted by the same team than the one that conducted the first phase.</p> <p>Ideation begins with divergent thinking, where the goal is to generate as many ideas as possible, without judgment or evaluation. Techniques like brainstorming, mind mapping, and sketching are used to unlock creativity and explore a multitude of possibilities. In this phase, members of the team also share inspiring stories, observations and quote. This is also when the different personae can be developed and refined by the group.</p> <p>Once all insights from the research have been discussed, the team goes on to refine the core themes by creating insight statements, that is, succinct sentences that summarize the main challenges and point the way forward.</p> <p>Once those core themes have been created, the next steps will have transformed them into opportunities by using techniques like "Yes, and..." and "How Might We". A properly framed How Might We doesn't suggest a</p>



Steps	CBA	HCD
	<p>responsible for each activity, what communication materials will be used, through which channels, a timeline, and responsible individuals. Refer to the section on Social and Behavioral Change Communication (SBCC) campaigns for examples of awareness-raising activities. The plan should cover a maximum of one year, incorporating milestones for monitoring and evaluation meetings every three months. This phase can be done within <b>two weeks</b>.</p>	<p>particular solution but gives you the perfect frame for innovative thinking.</p> <p>As the ideation phase progresses, design teams must prioritize and select the most promising ideas to pursue further. Criteria such as feasibility, desirability, and viability are considered, ensuring that selected concepts align with user needs, business goals, and technological constraints.</p> <p>Then the team goes on to the prototyping phase. The prototyping phase is where ideas are translated into tangible representations that can be tested and refined based on feedback. Prototypes may include visual elements, user interfaces, and interactive components that simulate the intended user experience. Prototyping is an iterative process, with designers continuously refining and improving prototypes based on feedback from users and stakeholders. Prototypes are tested with real users to evaluate usability, functionality, and desirability.</p> <p>The next step is to develop a storyboard or a scenario of the proposed solutions. The purpose of the storyboarding phase is to visually outline the sequence of events or interactions that occur within the user experience. Storyboards are visual narratives composed of a series of illustrated frames or sketches depicting key moments in the user journey. Storyboards are used to communicate design concepts, explore user scenarios, and align stakeholders on the intended user experience.</p>
3.	<p><b>Implementation</b></p> <p>The finalized operational plan should be prominently displayed in public spaces and promoted through community media to ensure widespread awareness. The core group or community leaders will present the operational plan to the DLH, the City of Manado, and implementation partners, particularly the GIZ 3RProMar Manado Project. Ideally, a formal commitment from community leaders should be secured, and a Memorandum of Understanding (MoU) between the community, sub-districts, DLH, and GIZ 3R ProMar Manado Project could be established, clearly outlining each party's commitments.</p> <p>The core group's primary responsibility during implementation is to monitor the plan's execution. This involves mobilizing individuals and resources, coordinating activities, and providing regular updates to waste management services (sub-district and DLH) and the community. In planned activities, they should ensure the presence of a feedback mechanism for community members regarding waste collection services for both organic and non-organic waste, addressing issues promptly. For instance, setting up</p>	<p><b>Implementation</b></p> <p>Implementation is about implementing the proposed solutions.</p> <p>The Implementation phase is about bringing the proposed solution to life, and to market. It's about building partnerships, piloting idea, and getting it out there.</p> <p>The first implementation phase is about testing the proposed solutions through live prototyping. The prototypes in the ideation phase were done in the workshop setting, while the live prototyping is done in real life.</p> <p>It can run from a few days to a few weeks and is a chance to learn how your solution works in practice. Live Prototypes are all about understanding the feasibility and viability of the team's ideas.</p> <p>Once the solution has been refined through feedback in the live prototyping phase, the team, together with the community, will develop an implementation plan for piloting the solution at a larger scale and on a longer term.</p>

Steps	CBA	HCD
	<p>WhatsApp groups for each group of houses, designating a focal person in each group for a community-level WhatsApp group that reports issues and questions. The core group can then disseminate answers and solutions within the community group. Additionally, core group members will be part of a broader WhatsApp group comprising other community core groups, facilitating the exchange of experiences and solutions.</p> <p>This phase, in accordance with the timeline outlined in the operational plan, is expected to span <b>between six months and one year</b>.</p>	
4.	<p><b>Monitoring and evaluation</b></p> <p>The core group is responsible for organizing monthly (or bi-monthly) monitoring meetings involving the community, the partner CBO, Civil CSO or PKK the sub-district, and DLH.</p> <p>The implementation plan will feature both input indicators (activities) and output indicators (number of people reached). GIZ 3R ProMar Manado Project will supplement these with intermediary outcomes and outcome indicators to be measured by the project (refer to the monitoring and evaluation framework section).</p> <p>Throughout the monitoring meetings, participants will assess the plan's progress, address emerging issues, and evaluate progress based on indicators. They will collaboratively adjust the activity plan as needed.</p> <p>Upon the conclusion of the one-year plan, the core group will conduct an evaluation following a similar methodology to the initial assessment. The evaluation results will be deliberated in a community meeting, involving the validation of the assessment and the development of a new one-year plan if necessary.</p> <p>Partner CBOs, CSOs or PKK, with support from GIZ 3R ProMar Manado Project, will thoroughly document the waste segregation introduction process in their communities through pictures and videos, utilizing the most significant change techniques (refer to the monitoring and evaluation section).</p> <p>Monitoring will be continuous during implementation, while the evaluation process is expected to span approximately <b>one month</b>.</p>	

## 1. Community Assessment

Assessment involves establishing a core group within the pilot community to facilitate a comprehensive community assessment aimed at identifying the community's strengths, assets, capacities, and resources, as well as gaps and needs while engaging service providers.

Before engaging with the community, there is a preparatory phase consisting of several sub-steps. Firstly, the choice of pilot communities is made, and the capacities of the partner Community-Based Organization (CBO), Civil Society Organization (CSO) and/or PKK, and Religious/community leaders, that will facilitate the Community-Based Approach (CBA) process are enhanced (refer to the capacity-building section).

A second sub-step involves initiating contact with the community. The facilitator, whether a partner CBO, CSO or PKK gathers preliminary information, reaches out to community leaders, waste service providers (where available), and community groups, and immerses themselves in the community to build trustworthy relationships. The facilitator then guides the designation of a representative community "core group" responsible for conducting the assessment. Members of the core group undergo training in community assessment, a process expected to last no more than two days.

The third sub-step entails the actual community assessment. This involves a transect walk through the community to identify areas where waste is disposed of, visiting households to observe waste management practices, engaging in discussions with residents on waste-related matters (generation, storage, segregation, collection, fees, and management), organizing group discussions with waste collection and recycling stakeholders, identifying community leaders, conversing with early adopters of waste segregation, recognizing existing solutions, and exploring the history of waste management in the community. The core group, with the help of the partner CBO, CSO, or PKK, compiles and prepares the assessment findings for presentation to the community during the planning phase. The community assessment phase is anticipated to last about two weeks.

The assessment phase requires about three weeks, excluding the preparation phase. Incorporating the preparation phase, which includes capacity building for facilitators from DLH, CSOs, CBOs, and PKK, the entire process is expected to take around two months.

## 2. Community Planning

The planning phase initiates with a community meeting, bringing together representatives from all categories of inhabitants, community leaders, sub-district representatives, the Department of Environment (DLH), waste and recycling service providers, and other pertinent stakeholders. The core group, supported by the partner Community-Based Organization (CBO), Civil Society Organization (CSO) or PKK will present the results of the assessment. After a discussion, the assessment will be revised and validated.

In the second step, the core group will assist the community in formulating a vision for cleanliness and waste management in their area. Subsequently, they will establish objectives, deliberate on methods to enhance waste collection and segregation (what – organic and non-organic waste collection; how – segregation methods; when – the schedule for various types of waste collection; what type of containers or bags are required; how to obtain them with available resources; any additional requirements and how to acquire them, etc.).

Following this, an activity plan will be developed to introduce the new system across different locations within the community. This might include the planned production and distribution of containers or bags for segregated waste, community awareness activities (door-to-door and community-wide), school engagement, participation in community celebrations, outreach through community media and social media, and more. The plan will detail who is responsible for each activity, what communication materials will be used, through which channels, a timeline, and responsible individuals. Refer to the section on Social and Behavioral Change Communication (SBCC) campaigns for examples of awareness-raising activities. The plan should cover a maximum of one year, incorporating milestones for monitoring and evaluation meetings every three months. This phase can be done within two weeks.



### 3. Implementation

The finalized operational plan should be prominently displayed in public spaces and promoted through community media to ensure widespread awareness. The core group or community leaders will present the operational plan to the DLH, the City of Manado, and implementation partners, particularly the GIZ 3R ProMar Manado Project. Ideally, a formal commitment from community leaders should be secured, and a Memorandum of Understanding (MoU) between the community, sub-districts, DLH, and GIZ 3R ProMar Manado Project could be established, clearly outlining each party's commitments.

The core group's primary responsibility during implementation is to monitor the plan's execution. This involves mobilizing individuals and resources, coordinating activities, and providing regular updates to waste management services (sub-district and DLH) and the community. In planned activities, they should ensure the presence of a feedback mechanism for community members regarding waste collection services for both organic and non-organic waste, addressing issues promptly. For instance, setting up WhatsApp groups for each group of houses, designating a focal person in each group for a community-level WhatsApp group that reports issues and questions. The core group can then disseminate answers and solutions within the community group. Additionally, core group members will be part of a broader WhatsApp group comprising other community core groups, facilitating the exchange of experiences and solutions.

This phase, in accordance with the timeline outlined in the operational plan, is expected to span between six months and one year.

### 4. Monitoring and Evaluation

The core group is responsible for organizing monthly (or bi-monthly) monitoring meetings involving the community, the partner CBO, Civil CSO or PKK the sub-district, and DLH.

The implementation plan will feature both input indicators (activities) and output indicators (number of people reached). GIZ 3R ProMar Manado Project will supplement these with intermediary outcomes and outcome indicators to be measured by the project (refer to the monitoring and evaluation framework section).

Throughout the monitoring meetings, participants will assess the plan's progress, address emerging issues, and evaluate progress based on indicators. They will collaboratively adjust the activity plan as needed.

Upon the one-year plan's conclusion, the core group will evaluate similar methodology to the initial assessment. The evaluation results will be deliberated in a community meeting, involving the validation of the assessment and the development of a new one-year plan if necessary.

Partner CBOs, CSOs or PKK, with support from GIZ 3R ProMar Manado Project, will thoroughly document the waste segregation introduction process in their communities through pictures and videos, utilizing the most significant change techniques (refer to the monitoring and evaluation section).

Monitoring will be continuous during implementation, while the evaluation process is expected to span approximately one month.

### 5. Public-Private Partnerships

Implementation of two key practices, the use of reusable shopping bags<sup>1</sup> and the adoption of reusable cutlery, straws, and plates when purchasing food outside the home, necessitates collaboration with the private sector. Even for waste segregation, cooperation with the private sector is crucial, especially for recycling PET and the proper management of non-valuable plastic waste like SUP bags and wraps.

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<sup>1</sup> For now, it is not advisable to ban all SUP bags, as households still use them as trash bags. Therefore, DLH should concentrate on one-way plastic shopping bags that are given out for free or for a very small fee at check-out of supermarkets and shops in malls or traditional markets.

While outright bans on certain plastic items may seem appealing, successful implementation requires proactive engagement with the private sector to develop viable solutions before enforcing any bans. The SBCC sub-working group, in collaboration with the Technical Working Group (TWG), will identify essential private-sector partners for each practice. Criteria for partner selection will include existing engagement in plastic 3R, substantial influence (customer base and reputation), and active participation in communication campaigns via mass media, social media, and live events.

After preliminary discussions with potential partners, Manado City can organize group discussions around each practice to explore implementation strategies. For instance, working with a supermarket chain that already charges a fee for SUP shopping bags, the city can evaluate this experience, identify successful elements, and collaboratively decide on a new scheme. This could involve higher fees for one-way bags, loyalty points for customers using reusable bags, and commitments from supermarkets to reinvest collected funds in overall plastic 3R actions.

During discussions, innovative ideas may emerge, and private sector companies could commit to supporting initiatives aligned with their corporate social responsibility. This might include donations of reusable items for school children or employees, branded with the campaign's logo, slogan, and visual identity.

Once agreements are reached, partners can sign a Memorandum of Understanding (MoU) or a voluntary agreement with Manado City, incorporating the endorsement of planned actions, commitment to use the Manado BERSEHATI campaign branding, and planning for joint public awareness campaigns. Partners can utilize their communication channels, collaborate with civil society and community-based organizations for activities, and actively engage in awareness-raising efforts (see section on awareness-raising activities).

The main challenge lies in the proposed solutions for alternative reusable items—material choice, design, fabrication, and distribution. Therefore, starting with successful approaches, evaluating their impact, and then adapting and scaling up is crucial. Once proven successful through pilots, Manado City can consider implementing bans on SUP items.

CSOs and CBOs will play a vital role in negotiations, accompanying the city of Manado and partners in awareness-raising activities, and assisting with interpersonal communication in supermarkets, malls, and restaurants. Their involvement from the outset ensures a better understanding of proposed solutions and contributes to the documentation, monitoring, and evaluation of experiences.

As part of the GIZ 3RProMar Manado project, pilots can be implemented to test this approach. Concretely, GIZ 3RProMar Manado Project will assist POKJA in:

*Table A.3 Proposed pilot interventions*

Steps	Substitution of Single-Use Plastic Shopping Bags	Substitution of Disposable Food Service Items such as Cutlery, Straws, and Styrofoam Plates
1	Identification and Choosing Suitable Partners (Supermarket Sites, Supermarket Chains, or Malls)	Identification and choosing of a suitable site: The field mission in December 2023 identified Pantai Malalayang Beach Walk as a potential pilot site. This newly developed beach walk offers high visibility, a modern setting, and was inaugurated by the Mayor of Manado.
2	Engaging in <b>dialogues</b> with private partners involves exploring potential modalities such as the identification and selection of alternatives to SUP items, devising a financial scheme, and outlining a deployment plan with designated pilot sites. While the GIZ 3RProMar Manado project can provide assistance for one pilot site in 2024-2025, DLH has the flexibility to establish partnerships with additional collaborators and extend these partnerships in the subsequent years	

Steps	Substitution of Single-Use Plastic Shopping Bags	Substitution of Disposable Food Service Items such as Cutlery, Straws, and Styrofoam Plates
3	The <b>production of alternative products</b> to SUP items involves acknowledging that some local stakeholders have already developed solutions. These existing solutions should be carefully considered, as they have been created with their own resources, potentially making them more sustainable. Regardless of the selected solution, it is crucial that private partners can replicate it independently once the GIZ 3RProMar Manado project concludes	
4	The development of the <b>communication campaign</b> encompasses creating visuals, content for mass-media and social media campaigns, as well as on-site activities in collaboration with Civil Society Organizations (CSOs), Community-Based Organizations (CBOs) and PKK. Detailed information can be found in the section on awareness-raising.	
5	The elaboration of the <b>Memorandum of Understanding (MoU) or voluntary agreement</b> involves drawing upon the experiences shared by GIZ/GOPA in developing similar agreements in other locations.	
6	<b>Implementation and documentation</b> responsibilities will primarily fall on DLH and its partners, with support from the GIZ 3RProMar Manado project in documenting the process. The documentation aims to facilitate replication and scaling up of the approach by DLH, while also serving as a showcase for the City of Manado's innovations in plastic 3R. This documentation will encompass various formats such as articles, paper materials (flyers and brochures), photographs, videos, and audio content.	
7	<b>Follow-up, monitoring, evaluation</b> and adjustment. See the section on monitoring	
8	<b>Scaling up</b> involves initiating the entire process with new partners while also maintaining and potentially expanding existing partnerships. This entails replicating the successful model and extending collaboration to further promote plastic 3R initiatives.	

#### d) Advocacy

The successful implementation of waste segregation necessitates not only technical support but also political will, appropriate laws and regulations, and additional resources in terms of human capital, infrastructure, technology, and finances. While the GIZ 3RProMar Manado Project can provide technical assistance and limited financial support for pilot sites, the sustainability of the plastic 3R initiative relies heavily on the City of Manado prioritizing it within its administrative and political agenda. Advocacy serves as a strategic communication tool to influence decision-makers and public opinion at various levels, be it central, decentralized, or local, encouraging support for policies, legislation, programs, or sustainable initiatives, and securing the necessary funding.

Advocacy activities will encompass the following strategies:

- **Policy Briefs:** Develop concise and well-researched policy briefs that outline the environmental, economic, and social benefits of plastic 3R. Ensure these documents are easily digestible for busy decision-makers. Showcase potential economic benefits, such as cost savings in waste management, job creation in recycling industries, and the positive impact on the local economy. Decision-makers are often swayed by the economic feasibility of proposed initiatives
- **Data-Driven Presentations:** Present statistical data and evidence highlighting the success stories of other regions or cities that have implemented successful plastic 3R initiatives. Use clear visuals and infographics to make the information accessible. This content should be grounded in data and evidence, highlighting key reasons such as waste reduction, mitigating plastic pollution, addressing health, environmental, and tourism concerns, and illustrating the cost-effectiveness of managing segregated waste over mixed waste.

- **Presentation in Various Formats:** Tailoring the content of policy briefs for diverse audiences, using presentation brochures for workshops, short videos for online platforms like YouTube, PowerPoint presentations for training sessions and workshops, and engaging social media posts.
- **Expert Panels and Workshops:** Organize expert panels and workshops with key decision-makers to discuss the potential impacts and advantages of adopting plastic 3R policies. Provide them with the opportunity to ask questions and engage in meaningful discussions.
- **International Best Practices:** Present case studies and best practices from other cities or countries that have successfully implemented plastic 3R policies. Highlighting global trends and successes can inspire local decision-makers.
- **Media Engagement:** Leverage media outlets to amplify the message. Arrange interviews, write opinion pieces (op-eds), or participate in televised discussions to communicate directly with decision-makers and the broader public.
- **Media Exposure and Journalist Trips:** Organizing trips for journalists (TV, radio, and social media) to waste-related sites, plastic 3R initiatives, and locations implementing waste segregation at the source.
- **Showcasing Model Initiatives:** Identifying exemplary communities, projects, schools, private sector organizations, and public institutions engaged in plastic 3R. Facilitating journalist interviews, creating video and audio stories, and providing platforms for these entities to present their projects through presentations, exhibitions, or narratives in high-profile events, radio and TV interviews, and on social media
- **Involving Local Decision-Makers:** Ensuring active participation of local decision-makers in the launch ceremonies of the GLZ 3R ProMar Manado project, with substantial media coverage. Organizing site visits for these decision-makers to observe pilot plastic 3R activities firsthand
- **Study Trips and International Exposure:** Arranging study trips for Manado City decision-makers to visit successful recycling projects and initiatives within Indonesia or the broader ASEAN region. Additionally, organizing visits to Manado City's plastic 3R initiatives for international donor organizations, led by the city's decision-makers

## Appendix B - Supportive processes

The successful implementation of the SBCC strategy demands meticulous micro-planning by the POKJA sub-communication. This involves identifying potential private companies, CSOs, CBOs, Religious leaders, Community leaders, and PKK as partners, establishing MoUs or partnerships with them to define their roles and contributions alongside the City of Manado and the GIZ project. Stakeholder training is crucial to ensure the effective execution of planned activities. Coordination efforts are necessary to facilitate seamless collaboration, and processes need to be documented for replication and activities for subsequent publications.

The operational plan outlined below encapsulates all activities as devised during the December 2023 workshop, essential for achieving the SBCC strategy's objectives. POKJA will craft an **annual plan, complete with a budget**, outlining the City of Manado's focal areas, preferred collaborators (private sector, CSOs, CBOs, PKK), target locations, and specific desired outcomes. The plan selection process involves choosing activities from the present SBCC strategy or proposing new ones based on partner suggestions. This planning exercise is slated to occur at the outset of each year, beginning in 2024, with an additional component that assesses the preceding year's performance, starting in 2025 (refer to the planning template)

Once endorsed, the annual plan requires Manado City to establish **partnership agreements** with its partners. The city can either directly request potential partners to formulate project proposals or initiate a call or competition for proposals that address the various activities necessitating collaboration. The signing of agreements may also result from specific negotiations, exemplified by the MoU with partner supermarkets or the community agreement for waste management introduction in communities. Regardless, the City of Manado's legal department must play a role in developing partnership agreement templates.

**Training sessions related to SBCC** strategy implementation encompass:

- **Social media, video, and photography training** for POKJA, partner CSOs, CBOs, and PKK to generate content for social media and publications, documentation of processes, and boost their visibility and reach on social platforms.
- **Interpersonal communication training** for partner CSOs, CBOs, PKK, core group/ educators, and POKJA engaged in direct contact with residents for awareness-raising.
- **Community-based approaches training** for POKJA, partner CSOs, CBOs, PKK, and core group/educators to facilitate this process in pilot communities.

Given the concurrent nature of many activities, the POKJA-sub communication with city educators/core group will closely monitor to ensure proper execution and that partners receive the necessary communication materials and support. Regular meeting in planning and coordination is needed.

Documentation of activities and the participatory process is vital, involving videos, pictures, and written reports. This documentation, especially for pilot sites, will support replication and scaling up. Evaluating the success, challenges, and potential improvements for subsequent phases is crucial for refining strategies.

## Appendix C - Activity Plan

Table C.1 Activity Plan

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
<b>5 Promoted Practices (No littering, Reusable shopping bag, No SUP for cutleries, Waste Segregation, Retribution payment) + Supportive Process</b>							
Supportive processes	Annual plan (yearly)	Manado city	1) Annual planification	City of Manado	POKJA	Q1	
	Capacity Building		2) Training to Pokja, CSO, CBO, PKK, other stakeholder	3RproMar	POKJA and 3Rpromar	On going	
	MoU/ Partnership agreement between the city and private sector	Private sector	3) Signing MoU and partnership agreement	City of Manado	3Rpromar and DLH	Q2 Q3	
	Coordination and monitoring meetings	Manado city, pilot area partners	4) Coordination and monitoring meetings	City of Manado	POKJA and 3Rpromar	Quarterly	
	Supervision of activities	Pilot area, partners, educators and other stakeholder	5) Technical assistance and supervision	City of Manado	POKJA and 3Rpromar	Start in July	
	Documentation of processes and good practices	Manado city	6) Documenting of all process and good practice/ lesson learned	City of Manado	POKJA and 3Rpromar (WP4)	Start in June	
POKJA/City Level	Videotron publication in 3 city's own sites	Manado citizen	7) Develop content of video	3RproMar Manado	POKJA and 3Rpromar (WP4)	June	
			8) Publish in 3 sites of Videotron own by the Municipalities	City of Manado	Diskominfo upon request from DLH/ head of POKJA	July – 14/7/24	Launch during city anniv

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	Flash card	Priest / Community leader	1) Develop content for 5 promoted practices & printed	3RproMar Manado	POKJA and 3Rpromar (WP4	June	
			2) Share to the Priest/comm leader during the 3monthly meeting by the city	City of Manado	Camat/ Communication unit within POKJA	July	
	Flip standing paper A2 size (42x59 cm)	Ibu PKK – group of housewives	1) Co-creation with IFS Manengkel	3RproMar Manado	POKJA and 3Rpromar (WP4	June	
			2) Train the educator team how to use it		POKJA and 3Rpromar (WP4	July	
	Competition on various activities celebrating City anniversary:  • Line Dance • Clean Kampoeng	Manado citizen	1) Set up criteria for competition	3RproMar	POKJA and 3Rpromar (WP4	June	
			2) Set up appraisal team	City Manado	City Manado (Youth and sport) and others	June	
			3) Share the announcement to public/via Videotron			July	
			4) Implementation – D'day	3RproMar	POKJA and 3Rpromar (WP4		
	Competition on various activities celebrating City Anniversary:  Eco Office	Government Offices	1) Set up criteria for Eco office competition	3RproMar	DLH Kota Manado		
			2) Set up appraisal team 3) Share the announcement to public/via videotron 4) Implementation – D'day	Diskominfo upon request from DLH/ head of POKJA	DLH Kota Manado		



Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	Competition on video creation through Gala Celebration	Manado citizen/school student	1) Set up criteria for competition 2) Set up appraisal team 3) Share the announcement to public/via videotron	Education Office (Dinas Pendidikan)	POKJA and 3Rpromar (WP4)		
	Socialization for community surrounding (two events)	Manado citizen/	1) Share invitation 2) Deliver the messages – 5 promoted behaviours	DLH	DLH – Bu Lieke	June	
	Talk show in Radio	Manado citizen/	1) Create topic for talk show in Radio/TV 2) Show	City Manado/Diskominfo	DLH/POKJA	Once/month	
	Socialization for community that has tourism spot destination	Manado citizen/village heads/community leaders/religious leaders in two subdistricts with tourist destination	3) Utilize the short video on 5 promoted practices	Dinas Pariwisata	Dinas Pariwisata	July	
Promoted practices NTTI ( no littering, segregate the waste, join the pick up service and pay the fee/levies)							
NTTI	Jingle competition	Community surroundings river trap sites	1) Set up criteria for competition 2) Set up appraisal team 3) Poster/flyer for announcement via social media/mass media, radio, etc 4) Implementation 5) Provide trophies/ gifts 6) Documentation	NTTI and WP 4	NTTI	July	
	River gank movement	youth, students, and the community	1) Invitation to join the River Gank movement 2) Set up activity for river gank	NTTI and WP 4	NTTI	Start in June	



Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
		surrounding the river barrier	3) River clean up, workshop, short movie, etc with River Gank 4) Provide t-shirt, pin, cap 5) Provide poster/flyer etc 6) Documentation				
	Painting river barrier with the hands of the kids	School students or kids on one or two river barrier sites	1) Set up the preparation 2) Discussion and agreement with SD/ community near the river barrier sites 3) Implementation/D Day 4) Provide gifts/pins/caps for the participant 5) Documentation	NTTI and WP4	NTTI	July	
	Poster and flyer	Community surroundings river trap sites	1) Develop content and design the materials 2) Share through community meetings	NTTI and WP4	NTTI	Start in June	
	Billboard/ face board/ funny trash bin with mascot Opa Can and campaign slogan	Community surroundings river trap sites	1) Develop the material 2) Socialize with the community on the sites 3) Implementation	NTTI	NTTI	July	

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
Promoted practices DSG: (No littering, segregate the waste, reduce single-use plastic bag/ plastic cutlery)							
DSG	Education about waste segregation and promoted practices through banners, video/presentation, and social media content update	Schools (TK, Elementary, Junior High, High School students, Teachers, and Cafeterias	1) Develop the materials campaign 2) Implementation in the selected schools 3) Provide waste bins in the classroom 4) Provide waste bins in schools 5) Visit DSG 6) Documentation	CV DSG	CV DSG	Start in August	
	3D recycle materials madding competition between classes and between schools	Targeted schools	1) Set up criteria for competition 2) Set up appraisal team 3) Share info through posters/ flyer via social media etc 4) Coordination with schools 5) Implementation 6) Provide trophies/gifts 7) Documentation	CV DSG/ sponsor	CV DSG	August/ Sept	
	Education about reduce single-use plastic bottle/ container	Schools (TK, Elementary, Junior High, High School students, Teachers, and Cafeterias	1) Develop the materials campaign 2) Implementation in the selected schools 3) Provide tumblers for students 4) Coordination with school cafeterias 5) Documentation	CV DSG	CV DSG	Start in August	

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	Jingle-making competition for recycling and no littering campaign	Schools	1) Set up criteria for competition 2) Set up appraisal team 3) Share info through posters/ flyer via social media etc 4) Engage with potential sponsors 5) Implementation 6) Provide trophy/gifts 7) Documentation	CV DSG and sponsor	CV DSG	August/ Sept	
<b>Promoted practices Manengkel: Waste segregation, No littering, Reduce single-use plastic bag/ plastic cutlery, Retribution Payment, Reusable Shopping bag</b>							
Manengkel	Community-Based Waste Management Education Module	1. PP Assalam (Green Squad) - 30 students  2. PKK in Molas and Bailang - 20 individuals  3. Target households (400 families)	1) Develop the module 2) Try out the module	Manengkel	Manengkel	Start in May	
	Training PKK and Green Squad	PKK in Molas and Bailang  Green Squad in PP Assalam	1) Identified the PKK and Green Squad 2) Implementation of training 3) Documentation	Manengkel	Manengkel	July	

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	Coordination with the Religious Leader about the 5 promoted practices campaign through religious meetings	BKSAUA (Badan Koordinasi Antar Umat berAgama) Kecamatan Bunaken, religious leaders in Bailang, Molas and Tongkaina	1) Meeting with religious leaders in the three villages facilitated by BKSAUA 2) Develop the material campaign on promoted practices for Christian and Moslem 3) Monitoring and evaluation Documentation	WP 4	Manengkel, WP 4 with Core Group Kecamatan Bunaken and BKSAUA	Start in July	
	Educating and Socializing 5 promoted practices to the household, PP Assalam	400 households in Bailang and Molas PP Assalam	1) Identified the targeted HH 2) Implementation 3) Documentation	Manengkel	PKK Green Squad Religious leaders	Start in July	
<b>Promoted Practices Tongkaina: No Littering, retribution payment, segregation</b>							
Tongkaina	Creating and agreeing upon Village Regulations) Peraturan Kampung) which include:  agreement on sorting waste into 2 types  organic waste placed at the back of the house/garden (making bio pores, compost, etc.), pay the levies (and sanction), etc	Community leaders, Kepala lingkungan, religious leaders, Representatives of PKK	1) Identified the importance of Peraturan Kampung (Village regulation) 2) Drafting and agreeing on the content in the meeting 3) Documentation	WP 4	Core Group with WP 4 and WP 3	July	
	Posters, Flyer, and Banners to disseminate, and socialize the	Households in Tongkaina (594 H H), Schools	1) Develop the materials 2) Share through any media/channel/ meetings, etc 3) Documentation	WP 4	Educator Team	Start in July	

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	village regulation and 5 promoted behaviors	(Kindergarten, Elementary, Junior High, Vocational High School), Church, Mosque, Market, MSMEs, Visitors					
	Campaign recording through pickup vehicle	Household in Tongkaina	1) Develop the materials 2) Install to the vehicle (tricycle) 3) Documentation	WP 4	Core Group	Start in July	
	Billboard /information board with mascot about 5 promoted behaviors	Household in Tongkaina, Visitors	1) Develop the materials 2) Install 3) Documentation	WP 4	Core Group	July	
<b>Promoted Practices Satu Tampa: No littering, Reusable shopping bag, No SUP for cutleries, Waste Segregation, Retribution payment</b>							
Satu Tampa	Training and Awareness raising about promoted practices	1. Culinary business owners (MBW and surrounding areas) 2. General public (visitors to tourist/culinary places, students)	1) Develop the materials 2) Identified the participant 3) Implementation 4) Documentation	Satu Tampa	Satu Tampa	June to August	

Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	Poster Competition about 5 promoted practices	1. Households 2. Local communities Locations: -Kaeragi Weru, -Malalayang 2 -Malendeng -Ranotana Weru	1) Set up criteria for competition 2) Set up appraisal team 3) Engage with sponsors 4) Share info through posters/ flyer via social media, WA broadcast etc 5) Implementation 6) documentation	Satu Tampa and Sponsor	Satu Tampa	June to August	
	Short Video Competition about promoted behaviors	Manado	1) Set up criteria for competition 2) Set up appraisal team 3) Engage with sponsors 4) Share info through posters/ flyer via social media, WA broadcast etc 5) Implementation 6) documentation	Satu Tampa and WP 4	Satu Tampa	August-Sept	
	Education and awareness raising about 5 promoted practices	Households in targeted area – Kaeragi Weru, – Malalayang 2 – Malendeng – Ranotana Weru	1) Develop the materials 2) Identified the participant 3) Implementation 4) Documentation	Satu Tampa	Satu Tampa and Educators	Start in July	



Product/Channel		Target Group	Activity	Budget Allocation	Implementer	Time	Remark
	Education campaigns in the school through storytelling, educational games, songs, role play,	Early Childhood Education (PAUD), Kindergarten, Elementary, and the general public in targeted area	1) Develop the materials 2) Identified the participant 3) Implementation 4) documentation	Satu Tampa	Satu Tampa and Educator Team	Start in July	

## Appendix D - SBCC Operational Plan 2024 - 2028

No.	Activity	When	Input Indicator	Who	2024				2025				2026				2027				2028			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1. Advocacy																								
To encourage the city government of Manado to adopt and enforce policies, laws, and regulations that focus on five promoted practices																								
To encourage the city government of Manado to allocate an adequate budget to waste management and the implementation of plastic 3R strategies																								
1.1	Annual planification	Q1 of each year	Annual plan	DLH																				
1.2.	Development of policy briefs	At least two policy briefs per year	Policy brief	SBCC WG / DLH																				
1.3	[Select which advocacy activities should be the focus]			DLH																				
2. Behaviour change communication																								
To convince households to recognize the importance of segregating waste at home																								
To enable households to successfully implement waste segregation, plastic 3R and avoid littering																								
To encourage customers of traditional and modern market to find it easy to use reusable shopping bags																								
To encourage employees in private and public sectors to think it is normal to segregate their waste at work																								
To encourage overall Manado citizens and residents to believe that they can do the promoted practices without excessive cognitive effort																								
To convince families, friends, colleagues and neighbors in Manado to encourage people around them to do the promoted practices																								
2.1.	Development of the visual identity (branding) of the campaign	Q1-Q2 2024	Power-Point with the visual identity	SBCC WG																				
2.2	Production of the communication material	Q2-Q3 2024	Communication material produced	SBCC WG																				

[illegible]

[illegible]

## 5. Media

To engage mass media in Manado in regularly broadcast on how and why it is important to do the promoted practices [behavioral factor communication environment]

To engage with local influencers both on social media and in real life in Manado for them support waste segregation, reduction of single-use plastic items, and discouraging littering																						
4.1	Participation of DLH and partners in TV and radio broadcasts	Ongoing	Nb. of shows where DLH and partners participated in	DLH / SBCC WG																		
4.2	Training of DLH and partners in social media; video, photography, and interview techniques ;	Q2-Q3 2024	Nb. Of people from DLH, CSOs, CBOs and PKK trained	SBCC WG																		
4.3	Media coverage of plastic 3R related events	Ongoing	Nb. Of media coverage	DLH / SBCC WG																		
4.4	Development and community management of social media pages	Q3 2024 - 2028	Nb. Of people reached on social media pages	DLH / SBCC WG																		
<b>5. Supportive processes</b>																						
To encourage the city of Manado to coordinate, plan, and implement awareness-raising activities in collaboration with civil society, the private sector, and international donor organizations																						
To encourage the city of Manado for it to provide support to communities and the private sector in implementing Standard Operating Procedures (SoPs) to reduce the use of single-use plastic items, promote proper waste segregation, and discourage littering																						
To encourage the education department of city of Manado to implement a school education program focusing on reducing single-use plastic items, waste segregation, and discouraging littering																						
5.1.	Annual planification	Q1 of each year	Annual plan	DLH / SBCC WG																		







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