

# Portrait of Environmental Governance in Waste Management in Malang City

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## ABSTRAK

Pemerintah menetapkan target nasional utama terkait pengelolaan sampah, yaitu 30% pengurangan sampah dan 70% penanganan sampah tahun 2025. Namun, timbulan sampah di Kota Malang terus meningkat setiap tahunnya dan termasuk dalam kategori tinggi di Jawa Timur. Tujuan dari penelitian ini yaitu untuk menganalisis tata kelola sampah di Kota Malang dari perspektif environmental governance. Perspektif environmental governance dapat dianalisis menggunakan teori milik Belbase dengan 7 indikator good environmental governance yaitu 1. aturan hukum, 2. partisipasi dan representasi, 3. akses terhadap informasi, 4. transparansi dan akuntabilitas, 5. desentralisasi, 6. lembaga dan institusi, serta 7. akses memperoleh keadilan. Pengumpulan data dilakukan dengan cara wawancara, observasi, dan studi kepustakaan. Analisis data yang digunakan dalam penelitian ini adalah interactive model analysis Miles, Huberman, dan Saldana. Potret environmental governance dalam tata kelola sampah di Kota Malang belum sepenuhnya mencerminkan prinsip good environmental governance. Hal ini dikarenakan masih terdapat catatan dalam indikator aturan hukum, partisipasi dan representasi, serta lembaga dan institusi. Kendala yang dihadapi dalam tata kelola sampah di Kota Malang diantaranya belum diterapkan secara menyeluruh, belum maksimalnya kesadaran masyarakat dalam mengurangi dan memilah sampah rumah tangga, serta lembaga dan institusi yang belum maksimal dalam pengelolaan sampah.

**Kata kunci:** Environmental Governance, Tata Kelola Sampah, Pembangunan Berkelanjutan

## ABSTRACT

The government has set the main national targets for waste management, namely 30% waste reduction and 70% waste handling by 2025. However, waste generation in Malang City continues to increase yearly and is included in the high category in East Java. This study aims to analyze waste management in Malang City from an environmental governance perspective. The environmental governance perspective can be analyzed using Belbase's theory with seven indicators of good environmental governance, namely 1. the rule of law, 2. participation and representation, 3. access to information, 4. transparency and accountability, 5. decentralization, 6. institutions and institutions, 7. access to justice. Data collection was carried out using interviews, observation, and literature study. The data analysis used in this study is the interactive model analysis of Miles, Huberman, and Saldana. The portrait of environmental governance in Malang City waste management must fully reflect the principles of good environmental governance. This is because there are still records in the indicators of the rule of law, participation, and representation, as well as institutions and institutions. Constraints faced in waste management in Malang City include needing to be fully implemented, not yet maximal public awareness in reducing and sorting household waste, as well as institutions and institutions that could be more optimal in waste management.

**Keywords:** Environmental Governance, Waste Management, Sustainable Development

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## 1. Introduction

Climate change is a challenge faced by various countries, including Indonesia, making it part of the Sustainable Development Goals (SDGs) agenda. This environmental phenomenon is influenced by multiple sectors, including waste, whose management in Indonesia is yet to be optimal. The government has set the main national targets for waste management, namely 30% waste reduction and 70% waste handling

by 2025. However, the Ministry of Environment and Forestry said that only around 39% of waste has been appropriately managed (Kementerian Lingkungan Hidup dan Kehutanan, 2023).

More than 90% of regencies/cities still use the open dumping system, in which waste is disposed of so that it lands in a final disposal site (TPA). (Fitri et al., 2019). Based on data from the Ministry of Environment and Forestry's National Waste

Management Information System (SIPSN) for 2022, it is stated that Malang City is one of the largest producers of waste generation in the East Java region. The following describes the waste generation data in East Java.

The graph above illustrates that waste generation in Malang City is included in the high category in East Java, with the amount of waste generation reaching 279.148, 37 tons per year. (Kementerian Lingkungan Hidup dan Kehutanan, 2022). Daily waste generation in 2021 will be 677.78, while in 2022, it will be 764.79 tons (Kementerian Lingkungan Hidup dan Kehutanan, 2022). This large amount of waste generation makes waste management that has yet to be maximized a strategic issue in the Malang City Medium Term Development Plan (RPJMD) 2018-2023 (Pemerintah Kota Malang, 2019). The Malang City Environmental Service Strategic Plan (Renstra) for 2018-2023 states that there are two strategic issues in waste management, namely waste generation, which is directly proportional to population growth, and waste management operations that require a large allocation of costs (Dinas Lingkungan Hidup Kota Malang, 2019).

The amount of waste generation continues to increase along with the increase in the population of Malang City. The population of Malang City in 2022 will be 846.126 people, with a population growth rate of 0.14% (BPS Kota Malang, 2023), while the volume of waste will increase by 10% per year (Times Indonesia, 2022). The type of waste continues to experience a significant increase in household waste, but the processing could be more optimal (Radar Malang, 2022). Processing is not optimal because the household waste system uses a collection and transport system, namely from garbage cans taken by non-governmental workers from RT/RW to be taken to TPS and from TPS transported by trucks to TPA so that TPA experiences waste generation. As a producer of waste sources, the community needs to sort it out first.

Along with the increase in population and changes in people's consumption patterns, which affect the

growth in waste production, it is necessary to carry out environmental sanitation sustainably. For this waste problem to be handled, governance based on an environmental governance perspective is needed. *Environmental governance is a new paradigm in the environment, and the atmosphere is becoming the leading mainstream of development while continuing to carry out social and economic aspects* (Asiyah, 2019). Good waste management can be achieved by balancing an effective relationship between development and the environment by applying the principles of good environmental governance. Good environmental governance is a guideline for good environmental management because it uses the main focus, sustainability (Warlina, 2017).

Applying the concept of good environmental governance can reduce the waste problems faced in big cities. This is to the previous research (Nur & Husen, 2022), which illustrates that applying the concept of good environment and sustainable development has a good influence and impact on community empowerment efforts. (Purniawati et al., 2020) States that implementing good state governance requires environmental governance based on resource sustainability.

Implementing the principles of good environmental governance is an effort to realize the implementation of sustainable waste management development in Malang City. To learn good environmental management, Belbase offers seven indicators used as the principles of good environmental governance. The seven indicators include 1) the rule of law, 2) participation and representation, 3) access to information, 4) accountability and transparency, 5) decentralization, 6) institutions and agencies, 7) access to justice (Belbase, 2010). Therefore, this study aims to determine the portrait of environmental governance in waste management in Malang City. Researchers used Belbase's good environmental governance perspective to analyze waste management in Malang City.

Figure 1. Graph of Waste Generation in East Java

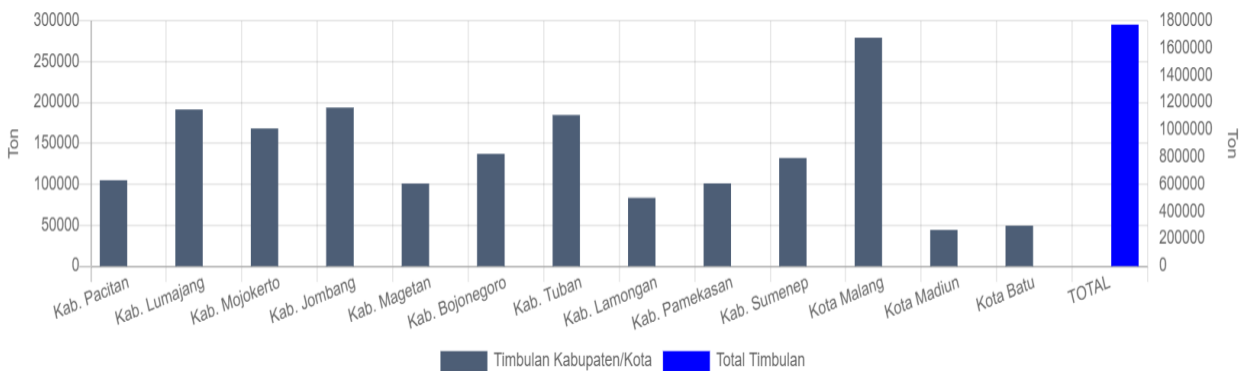


Figure 1. Graph of Waste Generation in East Java  
Source: (Kementerian Lingkungan Hidup dan Kehutanan, 2022)

## 2. Method

This study uses a qualitative method with a case study approach. A qualitative approach is a research method used to examine natural object conditions (as opposed to experiments) where the researcher is a crucial instrument, data collection techniques are carried out in a triangulation (combined) manner, data analysis is inductive in nature, and qualitative research results emphasize meaning rather than generalizations (Sugiyono, 2014). The case study approach aims to investigate and understand an event or problem by collecting various kinds of information, which is then processed to obtain a solution to resolve the revealed issue.

The selection of informants in this study was carried out using purposive sampling in which the informants were selected subjectively with the intention that the selected informants had the necessary information for the research to be conducted. The informants in this study were the Environmental Service and UPT Waste Management in Malang City. Sources of data used in this study include primary data and secondary data. Preliminary data is obtained directly through observation and in-depth interviews to gain more profound information on the portrait of environmental governance in waste management.

Primary data collection methods are direct interviews with key informants and observation. The key informants in this research are the Head of the Waste and B3 Waste Division at the Malang City Environmental Service, the Head of the UPT Waste Management, and the Director of the Malang Garbage Bank. Observations were conducted at the Environmental Service, Supit Urang Final Disposal Site (TPA), and Waste Bank. Meanwhile, secondary data was obtained from literature studies and documentation related to the portrait of environmental governance in waste management. Data analysis is an activity of processing data to make it simpler, easier to understand, and can be used to describe conditions clearly. The data analysis technique used in this study is the interactive model analysis of Miles, Huberman, and Saldana (Miles et al., 2014).

## 3. Results and Discussion

Law 18 of 2008 concerning waste management and Law 23 of 2014 concerning regional government state that implementing waste management is one of the central government's and regional governments' tasks to determine appropriate waste management policies. Regarding waste management in Malang City, the City Government has issued the latest policy, namely Malang City Regional Regulation (Perda) No. 7 of 2021 concerning Waste Management. This regional regulation replaces Regional Regulation No. 10 of 2010 concerning Waste Management, which is no longer valid. The success of environmental governance can be seen from the seven indicators of good environmental governance. There are seven

indicators of good environmental governance principles quoted from the Belbase theory, namely: 1) the rule of law, 2) participation and representation, 3) access to information, 4) accountability and transparency, 5) decentralisation, 6) institutions and agencies, 7) access to justice (Belbase, 2010).

### The rule of law

The rule of law is a way to regulate citizens so they do not act arbitrarily by obeying applicable law. In the context of good environmental governance, the rule of law is used as a legal basis for the whole community, especially in environmental and waste management. In the event of a violation committed by an individual or group that indicates damage to the environment, law enforcement agencies may impose sanctions or penalties by predetermined provisions (Belbase, 2010).

The rule of law for waste management in Malang City refers to various related legal authorities such as Undang - Undang Number 18 of 2008 concerning Waste Management, Undang - Undang Number 32 of 2009 concerning Environmental Protection and Management, Undang - Undang Number 23 of 2014 concerning Regional Government, etc. Legal regulations regarding waste management in Malang City have been regulated in Regional Regulation No. 7 of 2021. These legal regulations include sanctions for violators, institutions, business entities, and individuals. Perpetrators of indiscriminate waste disposal can be subject to sanctions, both fines and imprisonment. There are four prohibitions related to waste management in Malang City, namely people who do not dispose of waste in its place, handle waste with open disposal at the final processing site, burn waste that does not comply with the technical requirements of waste management, and mix waste with hazardous and toxic waste materials.

Public obedience to binding legal rules still needs to be higher. One of the obstacles to applying and enforcing laws in waste management is primarily the application of sanctions (Asiyah, 2019). Even though Regional Regulation No. 7 of 2021 stipulates the imposition of a maximum sanction, namely a fine of IDR 50.000.000 up to three months in prison. Meanwhile, the old Perda was only Rp. 100.000 or one week's maximum jail time. Unfortunately, the enforcement of these regulations is still lacking in evidence. Until now, no strict legal sanctions have been imposed on people who violate these regulations.

Regarding the effectiveness of Malang City regional regulation Number 10 of 2010 regarding the prohibition on dumping rubbish, it has not been fully implemented. On average, many violators of Regulation No. 10 of 2010 are arrested during sting operations and fined for protests because they claim they don't know the rules. Some admitted that this was their first time throwing rubbish carelessly, so they just requested a warning (Soraya, 2017). The previous regional regulations (Regional Regulation

No. 10 of 2010 concerning Waste Management) are no longer by existing legal developments, so adjustments need to be made. In the latest Regional Regulation, the imposition of sanctions in the form of fines or imprisonment is maximised.

Satpol PP, as regional regulation enforcers, has yet to take action against littering in Malang. It is difficult for Satpol PP to carry out a hand-catching operation (OTT) because it is impossible to wait at a location indicated to be a garbage disposal point, not the place. Satpol PP has identified the issues of inappropriate waste disposal. Whether it's on the side of the road, bridge, or to the river. Several specified locations include the Soekarno Hatta, Janti, Muharto areas, Merdeka Square, Kayutangan Heritage, and Veterans Street. The location point was found during a routine patrol by Satpol PP personnel. However, officers only found piles of garbage and had difficulty identifying who the garbage disposal was. The absence of CCTV at a number of these points is also a factor inhibiting law enforcement.

Satpol PP requires cooperation between agencies such as the Malang City Environmental Service, sub-district heads, and village heads, who need to be involved in implementing this regional regulation. Satpol PP needs to encourage sub-district and village heads to socialize aggressively in their areas. When the Camat and Lurah have been mixed, and violations are found, they should be given a warning. If you remain stubborn, then Satpol PP will act. This is so that people avoid throwing garbage in the river or not in the right place. Compliance with the law is necessary for legal certainty, and as long as there is no legal certainty, it is possible to guarantee good governance (Purniawati et al., 2020). So, implementing the rule of law in waste management in Malang City still needs to run optimally.

### **Participation and representation**

Participation involves a person or group from the public, private sector, or government agencies, while representation is the process of repeating or re-expressing an idea/idea from an object (Belbase, 2010). Malang City Regional Regulation No. 7 of 2021 concerning Waste Management mentions the role of the community. The community can participate in implementing and supervising household waste and household-like waste management activities. The role played by the community can be in the form of giving suggestions, providing education and training, and implementing waste management independently or with partners.

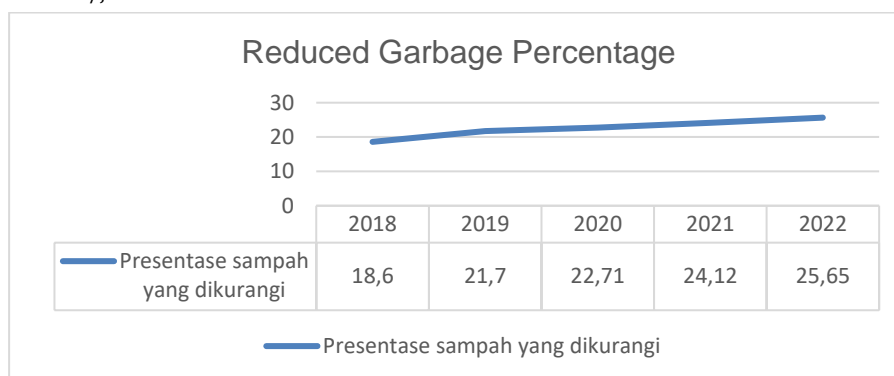
The role of the Malang City Government in participation and representation of waste management is vital. To address the strategic issue of

waste generation, the Environment Agency created a solid waste management and waste management program. Forms of participation and representation in waste management in Malang City include participating in processing waste independently or in partners with the Reduce, Reuse, and Recycle (3R) principles, such as waste bank activities, recycling, and composting. Malang City's strategy in waste management is to strengthen community participation through 3R and maximize the role of the Malang Garbage Bank. The Malang Garbage Bank (BSM) was established in 2011 and is one of Indonesia's pioneers of Garbage Banks. BSM is an institution with a cooperative legal entity in cooperation with the City Government of Malang and Corporate Social Responsibility (CSR) Limited Liability Company State Electricity Company (PT. PLN) Distribution of East Java. The Malang City Government has organized activities such as 3R Cadre (reduce, reuse, recycle), Proklam (Climate Village Program), Adiwiyata School, Eco Islamic Boarding School, and several other environmental activists to increase participation and representation.

The percentage of waste reduced in Malang City has increased over the last five years. This percentage reduction is done through Reduce, Reuse, and Recycle (3R) by the government, the private sector, and the community. The data on the percentage of reduced waste in Malang City is as follows in Figure 2.

Even though the percentage of waste reduced yearly increases, the amount of waste generated yearly continues to increase. The waste management balance shows that the amount generated from 2021 to 2022 has grown by 12.84%, and unmanaged waste has increased by 10.79% (Dinas Lingkungan Hidup Kota Malang, 2023). This is because there still needs to be maximum public awareness of reducing and sorting waste. This lack of public awareness occurs in Malang City and other big cities in Indonesia. The waste management problems in urban areas include the high rate of waste accumulation, low level of public awareness (human behavior), and issues with final waste disposal activities (Asiyah, 2019).

Facilities and infrastructure in waste management in Malang City still need to be fulfilled, for example, the availability of garbage collection sites (TPS). Every sub-district should have a TPS so that residents do not litter on vacant land. There are 37 TPS in 52 sub-districts in Malang City (Dinas Lingkungan Hidup Kota Malang, 2023). Each existing TPS can accommodate 3 to 4 sub-districts. The condition could have been better. Ideally, one sub-district is one polling station. Waste management should start from the RT/RW level and must be carried out to minimize the amount of waste.



**Figure 2.** Graph of Reducing Waste Percentage in Malang City  
 Source: (Dinas Lingkungan Hidup Kota Malang, 2023)

Waste reduction activities through Reduce, Reuse, and Recycle (3R) still need to overcome the main obstacle, namely the low public awareness of sorting waste. Even though the community's active participation in household waste management will determine the success of its implementation (Purniawati et al., 2020). Although changing people's behavior is considered difficult, it does not mean it is impossible. Continuous coaching will be optimal in changing people's behavior. The environmental governance perspective is a framework for managing the state through its interactions with the community in the context of environmental management (Budiati, 2012). To produce good environmental governance, not only by issuing policies but also by developing environmental education for the community to make environmental management more effective (Newig et al., 2019). Strategies that need to be implemented to increase public awareness can be carried out through collaborating with elementary and secondary schools on the importance of managing waste from an early age, initiating a clean waste movement, applying strict sanctions, and collaboration between actors (World Bank Group et al., 2018). Therefore, in terms of participation and representation indicators, cooperation between parties, the government, the private sector, and the community needs to be improved again, especially the still minimal role of the community in the waste sorting program from its source.

**Access to information**

Access to information is an intermediary in receiving and providing information to the public. Access to information allows the community to find the latest information regarding conditions and their environment (Budiati, 2012). The critical point of the availability of access to this information is the ease of access, meaning that people do not have to go through convoluted procedures to obtain or convey information to the government so that the circulation of data can run well and without obstacles (Belbase, 2010). From the perspective of good environmental governance, the Malang City government must provide easy procedures for the public to access all information related to governance, both in terms of

policies, programs, growth data, and environmental conditions, as well as provide access for the public who wish to submit complaints or reports in case of violations or issues.

In essence, providing access to information is not only in online form but also provided directly by offering opportunities and permission for all public members to come to the agency, service, or institution concerned to obtain the desired information. If the government seems to close access and keep the data or information needed by the community, this can lead to conflicts and a decrease in public trust in the government (Belbase, 2010). Malang City Regional Regulation No. 7 of 2021 states that the Regional Government should develop a waste management information system. Such information must be accessible to everyone. The information provided includes sources of waste, waste generation, waste composition, waste characteristics, household waste management facilities, household-like waste, and other information related to waste management.

Access to information for waste management in Malang City can be obtained by coming directly to the Malang City Environmental Service and online. Online information can be obtained through the Malang City Environmental Service website, social media (such as Twitter, Facebook, Instagram, and YouTube), print media, and other information media. The Malang City Environmental Service's website has been listed, including a list of Public Information and Documentation and a list of excluded public information and documentation. The Malang City Environmental Service participates in general information disclosure as mandated by Law Number 14 of 2008 concerning Public Information Disclosure. The Environmental Service also has a Standard Operating Procedure (SOP) in requesting public information with a standard quality of 1 day. People who want to submit complaints can contact Sambat online through the website, SMS, or applications. Online Sambat is a facility that bridges and facilitates city residents, especially sending aspirations, suggestions, criticisms, complaints, and questions to the Malang City government apparatus. The existence of complaints is the application of information disclosure as a form of open governance, making it

easier for the private sector and the public to access various information regarding development (Purniawati et al., 2020). So, the indicators of access to information in waste management in Malang City have been going well.

### **Transparency and accountability**

Transparency is information about reports on the decision-making process and the results of decisions clearly, while accountability is a form of accountability from an agency (Belbase, 2010). Transparency and accountability are often related to reports, both activity reports and financial reports, as a form of accountability for the performance that the government has carried out. The government, as executor of activities, must be accountable for the results of its implementation.

On the transparency indicator, the media is optimal for conveying information as a form of public transparency because the public can easily find information related to waste management. Without transparency there will be no public accountability (Dwiyanto, 2008). The annual Government Agency Work Accountability Report (LAKIP) and Government Agency Performance Accountability System (SAKIP) are also easy to find on the website. LAKIP is a periodic accountability media that contains performance information. At the same time, SAKIP is an instrument government agencies use to fulfil their obligations to account for success or failure. It comprises various components such as strategic planning, performance planning, performance measurement and performance reporting.

SAKIP Malang City Government itself at level A or Satisfactory and received an award from the Ministry of State Apparatus Empowerment and Bureaucratic Reform (KemenPANRB) (Menpan, 2022). Currently, only 16 out of a total of 542 local governments in Indonesia have been able to achieve a satisfactory level of accountability. LAKIP and SAKIP transparency will support the Malang City Government's vision and mission in the framework of realizing good governance. This is because transparency and accountability are tools for providing information and must create a governance system that helps stakeholders (Wong et al., 2021). With the LAKIP of the Environmental Service, we can see the successes and failures of activities in waste management in Malang City. Certainty of accountability will ensure the success of effective governance in developing countries (Bandari, 2022). Good environmental governance is a system that must be transparent, from institutional policies to environmental programs that can function adequately and involve the community in their formulation and implementation (Belbase, 2010). Therefore, from transparency and accountability, waste management in Malang City has been going well.

### **Decentralization**

Decentralization is the transfer of governmental affairs by the Central Government to autonomous regions based on the principle of autonomy. Decentralization means local governments can manage their households (Belbase, 2010). Undang - Undang Number 23 of 2014 concerning Regional Government states that one of the obligatory government affairs for provincial and district/city governments is the environment, including waste management. In the context of good environmental governance, local governments can establish their policies, either through Mayor Regulations (Perwali), Regional Regulations (Perda), Regent Regulations (Perbup), or other regulations that are relevant to the environmental conditions of the local community. Rules made by the regions must be guided by and in line with the above principles, such as Presidential Regulations (Perpres), Ministerial Regulations (Permen), and other related regulations.

Administration of government in Malang City has been regulated in Malang City Regional Regulation No. 5 of 2019 concerning Amendments to Regional Regulation Number 7 of 2016 concerning the Establishment and Composition of Regional Apparatuses consisting of the Regional Secretariat, DPRD Secretariat, Inspectorate, Service and Agencies. Sub-affairs are at the Department of the Environment for implementing governmental affairs in the environmental sector and waste management. Waste management in Malang City is regulated in "Malang City Regional Regulation Number 7 of 2021 concerning Waste Management. The Regional Regulation states that the task of the Municipal Government of Malang is to guarantee the implementation of reasonable and environmentally sound waste management. The regional government's regulations can be used as a reference (foundation) to create good governance in supporting aspects of decentralization (Nuraini & Marpaung, 2022). So, the decentralization aspect in Malang City's waste management has been carried out well.

### **Agencies and institutions**

Agencies and institutions are organizations that are directly involved and play a role in realizing the goals that have been set (Belbase, 2010). The Malang City Environmental Service organizes waste management in Malang City for technical waste management activities carried out by the Waste Management Technical Implementation Unit (UPT) located under the Environment Agency. This is the direction of Malang Mayor Regulation Number 19 of 2019 concerning establishing a Waste Management Technical Implementation Unit at the Environmental Service. The performance of the Environmental Service on targets, realization, and achievements in waste management in Malang City is contained in the following Table 1.

**Table 1.** Target, Realization, Achievement Waste Management in Malang City in 2022

No.	Performance Indicator	Target	Realization	Achievement
1.	Waste Management Percentage	99,00%	98,09%	99,08%
a.	Percentage of waste handling	73%	72,44%	99,23%
b.	Percentage of reduced waste reduction in the community and informal sector (a cumulative value)	26%	25,65%	98,65%
c.	Percentage of business actors who have carried out B3 waste management	23%	23%	100,00%

Source: (Dinas Lingkungan Hidup Kota Malang, 2023)

Based on the table above, reducing waste in the community is close to the target set. However, it has not reached the 100% maximum due to activities that have returned to normal after the COVID-19 pandemic, resulting in increased waste in Malang City. The provision of facilities and infrastructure still needs to be improved. For example, the need for a fleet of garbage trucks. Currently, the Malang City Environmental Service only has 44 garbage trucks. However, 25 are in poor condition, so their performance could improve. Ideally, Malang City should have 100 units of garbage trucks so that the transportation of waste from TPS to TPA can be faster (Dinas Lingkungan Hidup Kota Malang, 2023). One of the obstacles to this problem is the limited budget.

Malang City produces 880 tons of waste daily, 24% of which is successfully sorted at TPS. The rest, around 540 tons, was sent to the Supit Urang TPA. The average amount of waste that can be recycled at TPA is 400 tons. About 140 tons of garbage piled up (Dinas Lingkungan Hidup Kota Malang, 2023). Under these conditions, it is estimated that the Supit Urang TPA will only have three more years to live, or until 2025. The waste at the Supit Urang TPA has not been segregated optimally, causing various impacts, such as a pungent odor and groundwater contamination. Even though in waste management in Malang City, there is also the involvement of the central government. The Ministry of Public Works and Public Housing (PUPR) developed the Supit Urang Malang Final Processing Site (TPA) with a sanitary landfill system. This system is classified as environmentally friendly because it can reduce odors and minimize water, soil, and air pollution.

The waste management institution in Malang City has a clear structure and departments that handle it. The clarity of the waste management structure in Malang City so that there is no overlap in organizing waste cleaning services with other institutions. The management structure's division also facilitates the accountability pattern to agency leaders. In addition to government agencies, the private sector and the community are also involved in waste management in Malang City. This personal involvement can be seen in the CSR of PT PLN (Persero) with the Malang Garbage Bank, which has more than 30,000 customers.

Even though the clarity of the waste management structure does not overlap, achieving the percentage of waste management in Malang City still needs to be improved. Of course, this requires increased integrated handling cooperation between the Environmental Service and other parties. The

involvement of the private sector is expected to increase in waste operational activities covering the stages of transportation, management, and final disposal. Moreover, the City of Malang does not yet have technology that can reduce waste that goes into landfills, such as waste-to-energy technology. For this reason, a study of waste-to-energy technology is needed on the characteristics of Malang City waste, such as preparing and reviewing standards or the performance of environmentally friendly technology that is quick to use (best practice technology) in reducing household waste and similar types of household waste.

Waste problems in Malang City are so complex that it requires the collaboration of various parties. This is to the results of research in several cities in the world, which state that synergy or cooperation is needed between the government, the community, and the private sector in solving the problem of increasing waste volume to create a sustainable environment (Mukhlis & Perdana, 2022; Mulyono, 2018; Oliveira, 2019). Good environmental governance is part of good governance, so the critical point in implementing this paradigm is the same as good governance, namely focusing on triangular collaboration between the government, the private sector, and the community. Unfortunately, the aspect of Malang City waste management institutions and institutions is still not optimal, especially regarding support from other parties. It is said to be not optimal because the targeted goals have not been achieved optimally. In order to develop the Supiturang Final Disposal Site (TPA) requires quite a large investment. However, the development of the Supiturang TPA is hampered by the difficulty of collaborating with the private sector for investment because the institution managing the Supiturang TPA is still in the form of a Technical Control Unit (Arief, 2013). Besides that, not many people understand about sorting household waste and similar household waste. There needs to be other incentive support in an effort to optimize plastic waste management.

### Access to Justice

Access to justice means that there are ways or media to obtain accepted opportunities and rights (Belbase, 2010). The application of this principle is related to the benefits arising from the implementation of existing policies so that people feel justice with the existence of waste management programs in Malang City. The Malang City Regional Regulation (Perda) No. 7 of 2021 concerning Waste

Management regulates the principles of waste management in Malang City, one of which is based on the principle of justice. The Malang City Environmental Service opens its doors as wide as possible to the public to convey their aspirations or complaints. Even the resolution of complaints is included in the performance indicators of the Malang City Environmental Service. The performance of solving complaints about waste problems has reached 100% of the target. So, in terms of access to justice, it has been implemented.

#### 4. Conclusion

The portrait of environmental governance in Malang City waste management does not fully reflect the principles of good environmental governance. This is because there are still records in indicators on the rule of law, participation and representation, as well as institutions and institutions. Several principles of good environmental governance have been well implemented, including indicators of access to information, transparency and accountability, decentralization, and access to justice. Obstacles faced in waste management in Malang City include the rule of law where sanctions have not been fully implemented, not maximal public awareness in reducing and sorting household waste, and institutions and institutions that have yet to be maximized in waste management. Therefore, to realize good environmental governance, it is necessary to focus on collaboration and synergy between the power triangle, namely the government, the private sector, and the community.

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