

### JURIDICAL REVIEW OF LOCAL GOVERNMENT POLICIES IN OVERCOMING WASTE PROBLEMS IN KERINCI DISTRICT AND SUNGAI PENUH CITY

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#### Abstract

Waste management challenges in Kerinci Regency and Sungai Penuh City present significant obstacles to the effective implementation of regional environmental policies. This study aims to analyze the juridical aspects of waste management policies, identify barriers to their implementation, and propose strategies to enhance the effectiveness of regulations grounded in good governance principles. Utilizing a normative legal research approach with statutory, conceptual, and case analyses, the study examines regulatory disharmony between national laws, including Law No. 18 of 2008 on Waste Management, Government Regulation No. 81 of 2012, and Presidential Regulation No. 97 of 2017, and local regulations in both regions. The findings reveal three primary issues: (1) inconsistency between national policies and regional regulations, notably Kerinci Regional Regulation No. 9 of 2013 and Regent Regulation No. 42 of 2018, as well as Sungai Penuh City Regional Regulation No. 9 of 2013 and Mayor Regulation No. 19 of 2024; (2) weak enforcement of legal instruments, including administrative sanctions and incentives; and (3) limited institutional effectiveness of TPS3R (3R Waste Processing Site) and insufficient community participation in the waste bank program. The study recommends harmonizing central and regional regulations, strengthening environmental law enforcement, developing economic incentives, and optimizing the role of community-based institutions.

such as *BUM Desa* (Village-Owned Enterprises) and *KSM* (Community Self-Help Groups) to establish a sustainable waste management system.

**Keywords:** Local Government Policy; Waste Management; Regulatory Harmonization; State Administrative Law; Good Governance

## INTRODUCTION

The waste problem in Kerinci Regency and Sungai Penuh City has reached a critical level that requires an in-depth review of the juridical aspects of its management policy. Recent data shows that the volume of waste in Kerinci Regency reaches 21,962 tons per year, dominated by organic and plastic waste (Hutagalung et al., 2023), while Sungai Penuh City produces 5060 tons of waste per day (Jambi, 2025). This amount is predicted to increase in line with population growth and economic activity, but has not been matched by adequate infrastructure and management systems.

From a juridical perspective, local governments have an obligation to manage waste as mandated in Article 12 paragraph (1) letter c of Law No. 23/2014 on Regional Government. This obligation is emphasized in Law No. 18 of 2008 concerning Waste Management, which mandates local governments to formulate waste management policies and strategies (Article 5). The legal aspects of waste management are becoming increasingly crucial, especially regarding plastic waste that contributes to marine pollution, as reviewed by Kamaruddin et al. (2022) which compares the legal framework of plastic waste management in Indonesia and

Malaysia. Both regions have issued regulations to implement this mandate, namely Kerinci Regency Regional Regulation No. 9 of 2013 on Waste Management which was later strengthened by Kerinci Regent Regulation No. 42 of 2018 on Kerinci Regency Policies and Strategies in the Management of Household Waste and Waste Similar to Household Waste, and Sungai Penuh City Regional Regulation No. 9 of 2013 which was recently supplemented by Sungai Penuh Mayor Regulation No. 19 of 2024 on the Management of Household Waste and Waste Similar to Household Waste at TPS 3R in Villages within the Sungai Penuh City Area.

However, the implementation of this policy faces various juridical obstacles, including regulatory disharmony between central and regional policies, weak law enforcement, and limited community participation. Efforts to implement TPS3R (3R Waste Processing Site)-based policies as mandated in Presidential Regulation No. 97/2017 on National Policy and Strategy for Household Waste Management and Waste Similar to Household Waste have not shown significant results. This can be seen from the low level of waste recycling which only reaches 7% of the total volume of waste generated (Mayang & Afrinaldi, 2025).

Previous research shows that various waste management policies in Indonesia still face significant obstacles in implementation. Artha et al. (2023) identified a gap between policies in the RPJMD (Regional Medium-Term Development Plan) 2021-2026 and national targets, causing policy effectiveness to be disrupted. Budiyarto et al. (2024) found that although local governments have adopted waste bank and TPS3R systems, their contribution is still below 10% in national waste reduction.

Ratnasari et al. (2023) highlighted the lack of policy harmonization between national and local regulations as a factor inhibiting the effectiveness of waste management. This is emphasized by Fatmawati et al. (2022) who identified a gap between policies that have been made and their implementation in the field, indicating problems in governance and legal compliance.

In a juridical perspective, Setiawan (2020) analyzed the implementation of Law No. 18 Year 2008 on Waste Management at the regional level and found that many regional regulations have not fully adopted the principles contained in the national regulation. This is in line with the research results of Kristanto et al. (2021) which identified weak enforcement of environmental law, particularly regarding administrative sanctions for violations in waste management.

This research uses three main theoretical frameworks. First, the Theory of Authority (Hans Kelsen, 1925 cited in Voegelin, 1927) which analyzes the source and distribution of authority in waste management between the central and local governments. Second, Good Governance Theory (UNDP, 1997 cited in Satibi & Ediyanto, 2020) which emphasizes the principles of transparency, accountability, participation, and effectiveness in the implementation of public policies. Third, Legal Compliance Theory (Lawrence M. Friedman,

1975) which analyzes the variables that determine community compliance with waste management regulations.

This research aims to: (1) analyze the legal obligations of local governments in waste management based on laws and regulations; (2) identify juridical obstacles in the implementation of waste management policies in Kerinci Regency and Sungai Penuh City; (3) evaluate the effectiveness of regulations that have been implemented; (4) examine the application of good governance principles in waste management policies; and (5) formulate state administrative law-based policy recommendations to improve the effectiveness of waste management.

## METHODS

This research applies normative legal research methods with a focus on analyzing the legal norms contained in legislation related to waste management (Suhaimi, 2018). The approaches applied include a statute approach, conceptual approach, and case study approach.

The statutory approach studies the hierarchy and substance of laws and regulations governing waste management, starting from Law No. 18 of 2008, Government Regulation No. 81 of 2012, Presidential Regulation No. 97 of 2017, to Regional Regulations and Regional Head Regulations in Kerinci Regency and Sungai Penuh City. The conceptual approach analyzes relevant legal concepts, such as local government authority, good governance, and legal compliance in the context of waste management. Meanwhile, the case approach examines the implementation of waste management policies in Kerinci Regency and Sungai Penuh City, and compares them with practices in other regions that have similar characteristics.

This research uses secondary data that includes primary, secondary, and tertiary legal materials. Primary legal materials consist of laws and regulations related to waste management, starting from Law No. 18 of 2008 on Waste Management, Law No. 23 of 2014 on Regional Government, Government Regulation No. 81 of 2012, Presidential Regulation No. 97 of 2017, to regional regulations and regional head regulations in Kerinci Regency and Sungai Penuh City. Secondary legal materials include scientific journals, books, and research results published between 2018-2025, selected based on their relevance to the theme of waste

management and its juridical aspects. Tertiary legal materials include legal dictionaries, encyclopedias, and various other reference sources that serve as support in this research.

Data analysis is carried out using the legal interpretation method, which includes grammatical, systematic, teleological, and comparative interpretations. The results of the interpretation are then analyzed descriptively-analytically to evaluate the effectiveness of the policy, identify juridical obstacles, and formulate recommended corrective measures.

## RESULTS

### **Juridical Analysis of Local Government Obligations in Waste Management**

Waste management has a constitutional basis in Article 28H paragraph (1) of the 1945 Constitution which guarantees the right of every person to live in a good and healthy environment. As an implementation of the constitutional mandate, Law No. 18 of 2008 concerning Waste Management is the main legal basis governing waste management in Indonesia (Sulistiyono,2022). In Article 5 of Law No. 18 of 2008, the government and local governments are tasked with ensuring the implementation of good and environmentally sound waste management. This task is elaborated in depth in Article 9, which requires local governments to encourage the growth of awareness among the community, carry out research and technological innovation, support efforts to reduce and manage waste, and provide and facilitate infrastructure and facilities for waste management.

Furthermore, Government Regulation No. 81/2012 on the Management of Household Waste and Waste Similar to Household Waste regulates in more detail the technicalities of waste management, including waste reduction and handling. Article 11 of this Government Regulation requires district/city governments to prepare master plan documents and feasibility studies related to the management of household waste and waste similar to household waste.

Presidential Regulation No. 97/2017 on the National Policy and Strategy for the Management of Household Waste and Waste Similar to Household Waste (Jakstranas) sets the target of reducing waste volume by 30% and managing waste by 70% of total waste generation by 2025. Article 7 paragraph (3) of this Presidential Regulation requires district/city governments to establish regional policies and strategies (Jakstrada) for the management of household waste and waste similar to household waste.

In the context of regional autonomy, Law No. 23/2014 on Regional Government places waste management as a mandatory affair of the regional government related to basic services (Article 12 paragraph 1). Priska et al. (2023) confirms that Kerinci District Regulation No. 9/2013 has systematically regulated waste management with the aim of reducing waste generation and applying environmentally sound technology. This strengthens the obligation of Kerinci Regency and Sungai Penuh City to develop optimal policies for waste management.

The Kerinci Regency Government has issued Perda No. 9/2013 on Waste Management, which was then followed up with Kerinci Regent Regulation No. 42/2018 on the Policy and Strategy of Kerinci Regency in the Management of Household Waste and Waste Similar to Household Waste. An analysis of these regulations shows that Kerinci Regent Regulation No. 42/2018 has specifically adopted the national target based on Presidential Regulation No. 97/2017, which stipulates that by 2025 waste reduction must reach 30% and its handling must reach at least 70%. The Perbup also regulates the establishment of a waste management information system and the strengthening of community involvement, but does not yet detail the operational mechanism. Although it has regulated in detail the strategies, programs, and annual targets of waste management for the period 2018-2025, including the establishment of TPS3R, waste banks, and waste recycling centers in each sub-district, there are no specific provisions regarding incentive and disincentive mechanisms to encourage compliance.

Meanwhile, Sungai Penuh City has issued Perda No. 9 of 2013 on Waste Management and most recently issued Mayor of Sungai Penuh Regulation No. 19 of 2024 on the Management of Household Waste and Waste Similar to Household Waste at TPS 3R in Villages within the Sungai Penuh City Area. An analysis of the Sungai Penuh Mayor Regulation No. 19 Year 2024 shows some significant progress, including: (1) special arrangements for waste management at TPS 3R in villages within the area of Sungai Penuh City; (2) clear division of authority between the Regional Government and the Village Government; (3) innovative arrangements regarding the manager of TPS 3R in the Village which can be BUM Desa (Village-Owned Enterprises) or KSM (Community Self-Help Groups); (4) regulation of incentive mechanisms that can be given to waste management institutions; and (5) regulation of community complaint mechanisms that can be submitted verbally or in writing.

Comparative analysis of regulations at the national and regional levels shows gaps in several aspects, including: (1) technical operational arrangements that have not fully developed minimum service standards; (2) differences in incentive and disincentive arrangements between the two regions; (3) the lack of a comprehensive cooperation and partnership mechanism; and (4) differences in institutional arrangements for waste management at the village level.

### **Implementation of Waste Management Policy**

Implementative efforts in waste management in Kerinci Regency and Sungai Penuh City face various juridical and operational challenges. The tangible impact of the gap between regulation and implementation can be seen from community reports of litter strewn across the streets, which not only raises public health concerns but also damages the image of the region (Sanjaya, 2025b). Based on data from 2023-2025, there are several gaps between regulation and implementation. Although Kerinci Regent Regulation No. 42 of 2018 and Sungai Penuh Mayor Regulation No. 19 of 2024 have mandated the implementation of the TPS3R system, implementation has only reached 25% of the set target. Of the 12 TPS3R planned, only 3 are operating optimally (Mayang & Afrinaldi, 2025).

The provision of waste management facilities and infrastructure as mandated in Article 13 of Law No. 18 of 2008 has not been adequately fulfilled. Rahmadhani et al. (2024) found that of the 16 TPS3R units in Sungai Penuh City, only 3 units were operating in the medium category, while the rest were in the poor and poor categories. In Kerinci District, the coverage of waste transportation services only reached 35% of the total area, while in Sungai Penuh City it reached 52% (Jambi, 2025). Although local regulations have regulated administrative and criminal sanctions for waste management violations, their implementation is still weak. During the period 2022-2024, only 12 cases out of 87 identified violations were legally processed (Hutagalung et al., 2023).

The budget allocation for waste management of IDR 9 billion in Kerinci Regency and IDR 7 billion in Sungai Penuh City has not been optimally utilized. Budget realization only reached 50% and 65% respectively, indicating constraints in program planning and implementation (BEO.co.id-/Gudi, 2025).

Community involvement is a key factor in successful waste management. Hubaybah et al. (2022) found an important contribution of knowledge and attitude in influencing waste management behavior in primary school students, indicating the importance of early

environmental education. However, data shows low participation in waste banks. Of the 25 waste banks established in Kerinci Regency, only 8 are actively operating with a total clientele of less than 5% of total households. In Sungai Penuh City, out of 18 waste banks, only 6 are operating sustainably (Ifansyah et al., 2023). Similar challenges were also found in an international comparative study that showed that household participation in waste management programs is strongly influenced by economic and institutional incentives (Banerjee & Sarkhel, 2020). Although overall policy implementation faces challenges, there are some local initiatives that show potential to be developed. In Mukai Mudik Village, Siulak Mukai Subdistrict, residents have innovated by processing waste into organic fertilizer that provides benefits for local agriculture (Sanjaya, 2025a). Such initiatives need to be supported and replicated in other villages.

Although both regional regulations require waste segregation, implementation is still low. According to Mayang & Afrinaldi (2025), the low level of public awareness in sorting waste based on its type and the limited facilities supporting sorting in households are the main obstacles in the implementation of 3R-based waste management policies. A survey in 2023 showed that only 12% of households in Kerinci Regency and 18% in Sungai Penuh City routinely sorted waste (Latanna et al., 2023). The incentive mechanism as stipulated in Sungai Penuh Mayor Regulation No. 19 Year 2024 has not been effectively implemented. There is no reduction in retribution or other fiscal incentives for people who actively carry out waste management (Fatmawati et al., 2022).

The implementation of waste management policies also faces structural and institutional challenges. Kusuma & Bustanuddin (2024) identified problems related to the transfer of asset ownership between Kerinci Regency and Sungai Penuh City have not been fully resolved, which has an impact on the availability of waste management infrastructure. Coordination between relevant DPOs such as environmental services, health, and other supporting agencies is still limited, causing overlapping authorities and programs that do not synergize (Ratnasari et al., 2023). Nurdin et al. (2024) found that DLH (Environmental Agency) Kerinci Regency has attempted to reduce waste volume through community empowerment and the establishment of waste banks, but its implementation is still constrained by a lack of coordination with village governments and limited resources. This is in line with the finding that the number and competence of human resources handling waste management is inadequate. The number and competency of human resources handling waste management is inadequate. In Kerinci district, the ratio of waste management staff to

waste volume is only 1:15 tons/day, while the national standard is 1:8 tons/day (Mangindaan et al., 2022). Although both local regulations mandate the existence of a waste management information and monitoring system, both regions have not developed an integrated system for monitoring and evaluating waste management performance (Budihardjo et al., 2022).

### **Implementation of Good Governance Principles in Waste Management Policy**

Challenges still arise in the implementation of the principles of transparency and accountability in waste management policies. Although Law No. 14 of 2008 on Public Information Disclosure requires transparency in public policies, information related to waste management, including budget use and program performance, has not been fully accessed by the public (Kristanto et al., 2021). One of the main obstacles is the lack of coordination between agencies, as revealed in the January 2025 Musrenbang that DLH Kerinci has never coordinated with the DPRD (Regional People's Representative Council) regarding waste issues, even though this issue has reached an alarming status (Asdian, 2025). Without good communication and coordination between institutions, the principle of accountability is difficult to realize. Sungai Penuh Mayor Regulation No. 19 Year 2024 has regulated the public complaint mechanism, but its implementation has not been effective. Surveys show that 67% of respondents in Kerinci District and 58% in Sungai Penuh City are unaware of the official complaint mechanism (Arifin et al., 2023). Increased public awareness can be seen from the demands of organizations such as HMKS-SUMBAR (Kerinci-Sungai Penuh Student Association, West Sumatra) to the Kerinci DPRD to immediately develop an integrated waste management system that is environmentally friendly and sustainable (Bekabar, 2025). However, without an effective grievance mechanism, community aspirations are difficult to convey and act upon. Although both local regulations mandate the evaluation of waste management performance, its implementation has not been done regularly and comprehensively, making it difficult to measure the effectiveness of the program and make necessary improvements (Tatsuno et al., 2021). Krisnanto & Nalle (2022) underlines the urgency of assistance in the preparation of regional legal products related to waste service retribution as an effort to support sustainable waste management. The use of e-government in waste management can be a solution to improve transparency and accountability of the system, but it needs to consider the challenges of technology adoption in local government as identified by Martitah et al. (2021).

The principle of participation and collaboration in waste management policy still needs to be improved. The involvement of multi-stakeholders in the formulation and implementation of waste management policies is still limited. The waste management coordination forum as stipulated in Article 8 of PP No. 81/2012 has not been formed or functioned effectively in both regions (Anwar et al., 2025). Although the Mayor of Sungai Penuh Regulation No. 19 Year 2024 regulates the development of cooperation and partnerships, its implementation has not been optimal. Of the 5 potential partnerships identified, only 1 has been realized in Kerinci District and 2 in Sungai Penuh City (Ferdinan et al., 2022). Community empowerment programs in waste management are still sporadic and unsustainable. Phahlevy & Ni'mah (2024) emphasize the importance of adapting the legal framework to local systems and involving communities to provide practical solutions for waste management. Sungai Penuh Mayor Regulation No. 19 Year 2024 has innovatively regulated the role of BUM Desa and KSM in waste management, but there is no long-term mentoring mechanism that ensures the sustainability of the program after government assistance ends (Ifansyah et al., 2023). Research in urban Indonesia by Brotosusilo et al. (2020) underscores the importance of understanding the level of individual participation in implementing efficient waste management strategies, which can serve as a basis for designing sustainable empowerment programs.

An analysis of the effectiveness and efficiency of waste management policies shows an imbalance in resource allocation. In Kerinci Regency, 70% of the budget is absorbed for waste transportation, while the reduction and recycling program only gets 15% (BEO.co.id-/Gudi, 2025). The waste transportation and processing system is not yet efficient. The average management cost per ton of waste reaches IDR 450,000, far above the national standard of IDR 250,000-300,000 per ton (Budiyarto et al., 2024). Weak law enforcement against violations of waste management policies has an impact on the ineffectiveness of regulations. Of the total fines imposed during 2022-2024, only 35% were successfully collected (Kristanto et al., 2021). The experience of handling a waste emergency at the Payakumbuh Regional Landfill, as reviewed by Mukhlis (2024), shows the importance of optimizing the implementation of waste management policies and enforcing regulations to prevent similar emergency situations.

## DISCUSSION

### Strategies for Improving the Effectiveness of Waste Management Policies

Based on the analysis that has been carried out, strategies to improve the effectiveness of waste management policies in Kerinci Regency and Sungai Penuh City need to cover several main aspects.

In terms of regulatory harmonization, it is necessary to revise the Kerinci District Local Regulation No. 9 of 2013 to fully adopt the provisions in Law No. 18 of 2008, Government Regulation No. 81 of 2012, and Presidential Regulation No. 97 of 2017, especially regarding minimum service standards, incentive and disincentive mechanisms, as well as cooperation and partnerships. The Kerinci District Government needs to issue a technical regulation similar to the Sungai Penuh Mayor Regulation No. 19 of 2024 that regulates in detail the technical aspects of waste management operations, including supervision procedures and enforcement of sanctions. Both regions also need to develop minimum service standards in waste management that are in line with the nature of the region and the needs of citizens. The development of policies that support the conversion of waste into alternative fuels also needs to be considered, especially in relation to the cement industry that can utilize municipal waste as an energy source (Wiharja et al., 2025).

Strengthening law enforcement requires the establishment of an integrated supervisory team involving various related agencies and the community to monitor the implementation of waste management policies. The application of administrative sanctions needs to be carried out progressively, starting with written warnings, continuing with fines, and culminating in license revocation for business actors who violate waste management provisions. An integrated complaint system also needs to be developed to make it easier for the public to report violations in waste management and monitor the follow-up of complaints.

In developing incentive mechanisms, it is necessary to provide a reduction in waste retribution for households that actively sort waste and participate in the waste bank program. Social incentives in the form of awards and recognition for community groups, educational institutions, and businesses that play an active role in waste management are also important. Both regions also need to develop regional fiscal instruments, such as environmental taxes and environmental trust funds, to support the financing of sustainable waste management programs. Waste management models based on zero-waste and circular economy

approaches as implemented in Sukunan, Yogyakarta (Kurniawan et al., 2020) can be adapted to optimize the economic value of waste management and increase community participation.

In strengthening institutional capacity, it is necessary to establish a regional-level waste management coordination forum involving various related agencies, the private sector, academics, and the community, based on the rules stated in Kerinci Regent Regulation No. 42/2018. This is in line with the recommendations of Asep et al. (2023) on improving policy efficiency through government collaboration with various stakeholders. The capacity of waste management officials and personnel needs to be improved through technical and managerial training, as well as the implementation of a performance-based incentive system. The role of BUM Desa and KSM in waste management as stipulated in the Mayor of Sungai Penuh Regulation No. 19 Year 2024 also needs to be optimized, with the support of technical assistance and adequate access to capital. An integrated waste management information system also needs to be developed to facilitate monitoring, evaluation, and data-based decisionmaking. The integration of waste management programs with slum upgrading efforts also needs to be considered, adopting the citizen empowerment model in waste management that has been successfully implemented in Jepara Regency (Subekti et al., 2021).

### **Policy Implications and Practical Recommendations**

Based on the analysis that has been conducted, this research produces several significant policy implications for improving the effectiveness of waste management in Kerinci Regency and Sungai Penuh City. The Kerinci district government needs to issue a more detailed district head regulation on waste management at the village level, adopting the BUM Desa and KSM institutional model as stipulated in the Sungai Penuh Mayor Regulation No. 19 of 2024. Sungai Penuh City needs to develop technical regulations to operationalize incentive and disincentive mechanisms. Both regions need to develop minimum service standards in accordance with the characteristics of the region and fully adopt the provisions in PP No. 81/2012.

The establishment of an integrated supervisory team with clear authority and effective coordination mechanisms is a top priority in strengthening legal instruments. Standard operating procedures for the application of progressive sanctions for violations in waste management need to be developed, starting with written warnings, continuing with fines, and culminating in license revocation for business actors who violate waste management provisions. An optimal and responsive complaint system, through the use of

information technology and social media, also needs to be built to improve accountability in waste management and make it easier for the public to report violations and monitor follow-up complaints.

Measurable and sustainable economic and social incentive schemes need to be developed, with adequate budget support. The waste bank program needs to be integrated with the community economic empowerment program, with the active role of BUM Desa and KSM as stipulated in the Sungai Penuh Mayor Regulation No. 19 of 2024. Environmental economic instruments, such as waste tax and results-based financing schemes, also need to be developed to support the financial sustainability of waste management programs.

The capacity of BUM Desa and KSMs in waste management needs to be improved through technical and managerial training, as well as the implementation of a performance-based incentive system. A regional-level waste management coordination forum involving relevant agencies, the private sector, academia, and the community needs to be established based on the rules set out in Kerinci Regent Regulation No. 42/2018. An integrated waste management information system also needs to be developed to facilitate data-based monitoring, evaluation and decision-making, with effective monitoring and evaluation capabilities to measure program performance on an ongoing basis.

### **Research Limitations**

This research has several limitations that need to be acknowledged in the context of generalizing the findings and developing policy recommendations. The limited coverage area of Kerinci Regency and Sungai Penuh City means that the findings cannot be directly generalized to other regions with different geographical and socio-economic characteristics. Reliance on secondary data and normative analysis limits an in-depth understanding of the dynamics of policy implementation in the field, including informal factors that influence the effectiveness of waste management programs. This research also does not deeply analyze the economic aspects and financial impacts of the recommended waste management policy alternatives.

## CONCLUSION

This study revealed that waste management policies in Kerinci Regency and Sungai Penuh City still face significant challenges in juridical and implementation aspects. There are gaps between national regulations and local regulations, although Kerinci Regent Regulation No. 42/2018 and Sungai Penuh Mayor Regulation No. 19/2024 have adopted some of the principles in the national regulations. The implementation of administrative and criminal sanctions against violations in waste management is still weak, both in terms of supervision and enforcement. Community involvement in waste bank and waste segregation programs is also still low, due to the lack of adequate education, socialization, and incentives.

Theoretically, this research enriches the state administration law literature by integrating the concept of good governance in the analysis of waste management policies at the regional level. The findings on institutional innovation in Sungai Penuh Mayor Regulation No. 19 Year 2024 that regulates the role of BUM Desa and KSMs provide a new contribution to the discussion on decentralization of environmental management. Practically, this research provides concrete recommendations for harmonizing central-regional regulations, strengthening environmental law enforcement, and optimizing the role of community-based institutions. The institutional model stipulated in Sungai Penuh Mayor Regulation No. 19 of 2024 can be a reference for other regions in developing a sustainable waste management system.

The results indicate the need to revise the Kerinci District Regulation No. 9 of 2013 to adopt institutional innovations and incentive mechanisms as stipulated in the Sungai Penuh City regulation. The development of environmental economic instruments and strengthening community-based institutional capacity are key to the successful implementation of effective waste management policies. The limitations of research on limited area coverage and reliance on normative analysis open up opportunities for further research with an empirical approach and wider geographical coverage. Future research needs to examine the economic impact of community-based waste management systems, the effectiveness of economic legal instruments in encouraging sustainable waste management, and the integration of waste management policies with climate change and renewable energy policies.

## REFERENCES

Anwar, M. A., Suprihatin, S., Sasongko, N., Najib, M., Pranoto, B., Firmansyah, I., & Soekotjo, E. S. (2025). Sustainable Waste Management Strategies for Multilayer Plastic in Indonesia. *Cleaner and Responsible Consumption*. <https://doi.org/10.1016/j.clrc.2025.100254>

Arifin, Z., Falahudin, D., Saito, H., Mintarsih, T., Hafizt, M., & Suteja, Y. (2023). Indonesian policy and researches toward 70% reduction of marine plastic pollution by 2025. *Marine Policy*. <https://doi.org/10.1016/j.marpol.2023.105692>

Artha, A. D., Nurasa, H., & Candradewini, C. (2023). Recognizing and Detecting the Effectiveness of Policy Implementation Waste Management in Indonesia. *Jurnal Public Policy*. <https://doi.org/10.35308/jpp.v9i3.7656>

Asdian, S. (2025). *Waduh, Ternyata DLH Kerinci Tak Pernah Koordinasi dengan Dewan Soal Ancaman Sampah*. Bekabar. <https://bekabar.id/site/content/daerah/waduh-ternyata-dlh-kerinci-tak-pernah-koordinasi-dengan-dewan-soal-ancaman-sampah>

Asep, A., Ansiska, P., & Helmi, D. (2023). Rekomendasi Pengelolaan Sampah di Kota Sungai Penuh Provinsi Jambi. *Jurnal Geografi, Lingkungan Dan Kesehatan*, 1(1), 52–61. <https://doi.org/10.30598/jgk.1.1.9981>

Banerjee, S., & Sarkhel, P. (2020). Municipal solid waste management, household and local government participation: a cross country analysis. *Journal of Environmental Planning and Management*, 63, 210–235. <https://doi.org/10.1080/09640568.2019.1576512>

Bekabar. (2025). *Tuntutan HMKS-SUMBAR Diterima: DPRD Kerinci Dukung Aksi Nyata untuk Pengelolaan Sampah yang Lebih Baik*. Bekabar.

BEO.co.id-/Gudi. (2025). *Rp 4,5 M Dari Rp 9 M, Pengelolaan Sampah Kerinci, "Gagal" Dilaksanakan?* BEO.Co.Id. <https://beo.co.id/rp-45-m-dari-rp-9-m-pengelolaan-sampah-kerinci-gagal-dilaksanakan/>

Brotosusilo, A., Nabila, S. H., Negoro, H. A., & Utari, D. (2020). The level of individual participation of community in implementing effective solid waste management policies. *Global Journal of Environmental Science and Management*, 6(3), 341–354. <https://doi.org/10.22034/gjesm.2020.03.05>

Budihardjo, M., Ardiansyah, S. Y., & Ramadan, B. (2022). Community-driven material recovery facility (CdMRF) for sustainable economic incentives of waste management: Evidence from Semarang City, Indonesia. *Habitat International*. <https://doi.org/10.1016/j.habitatint.2021.102488>

Budiyarto, A., Clarke, B., & Ross, K. (2024). Overview of waste bank application in Indonesian regencies. *Waste Management & Research : The Journal of the International Solid Wastes and Public Cleansing Association, ISWA*, 734242X241242697. <https://doi.org/10.1177/0734242X241242697>

Fatmawati, F., Mustari, N., Haerana, H., Niswaty, R., & Abdillah, A. (2022). Waste Bank Policy Implementation through Collaborative Approach: Comparative Study—Makassar and Bantaeng, Indonesia. *Sustainability (Switzerland)*, 14(13). <https://doi.org/10.3390/su14137974>

Ferdinan, Utomo, S., Soesilo, T., & Herdiansyah, H. (2022). Household Waste Control Index towards Sustainable Waste Management: A Study in Bekasi City, Indonesia. *Sustainability*. <https://doi.org/10.3390/su142114403>

Friedman, L. M. (1975). *The legal system: A social science perspective*. Russell Sage Foundation.

Hubaybah, Fuji Arinda Fitri, Oka Lesmana, Fajrina Hidayati, & Puspita Sari. (2022). Elementary School Students' Waste Management Behavior Determinant in Kerinci Regency in 2021. *International Journal Of Health Science*, 2(2), 34–39. <https://doi.org/10.55606/ijhs.v2i2.208>

Hutagalung, W. L. C., Ariska, E., & Rinaldi, R. (2023). Estimasi Emisi Gas Rumah Kaca dari Proses Pengelolaan Sampah Di Tempat Pemrosesan Akhir (TPA) Kabupaten Kerinci. *Jurnal Daur Lingkungan*, 6(1), 73. <https://doi.org/10.33087/daurling.v6i1.191>

Ifansyah, M. N., Purwanto, P., Purnaweni, H., Yuniningsih, T., & Anwar, A. (2023). Community-Based Waste Management in Tabalong Regency. *Jurnal Public Policy*. <https://doi.org/10.35308/jpp.v9i1.6189>

Jambi, V. (2025). *Pimpinan Dan Komisi III Sungai Penuh Pantau DLH Kota Sungai Penuh Terkait Evaluasi Pengelolaan Sampah*. Jambi.Viralpublik.Com. <https://jambi.viralpublik.com/pimpinan-dan-komisi-iii-sungai-penuh-pantau-dlh-kota-sungai-penuh-terkait-evaluasi-pengelolaan>

Kamaruddin, H., Maskun, Patittinggi, F., Assidiq, H., Bachril, S. N., & Al Mukarramah, N. H. (2022). Legal Aspect of Plastic Waste Management in Indonesia and Malaysia: Addressing Marine Plastic Debris. *Sustainability (Switzerland)*, 14(12), 1–17. <https://doi.org/10.3390/su14126985>

Krisnanto, W., & Nalle, V. I. W. (2022). Pendampingan Penyusunan Produk Hukum Daerah Tentang Retribusi Pelayanan Persampahan Pemerintah Kabupaten Lumajang. *Abdimas Universal*, 4(1), 103–109. <https://doi.org/10.36277/abdimasuniversal.v4i1.176>

Kristanto, G. A., Kemala, D., & Nandhita, P. A. C. (2021). Challenges confronting waste pickers in Indonesia: An on-field analysis. *Waste Management & Research*, 40, 1381–1389. <https://doi.org/10.1177/0734242X211029181>

Kurniawan, T. A., Avtar, R., Singh, D., Xue, W., Othman, M. H. D., Hwang, G. H., Iswanto, I., Albadarin, A. B., & Kern, A. O. (2020). Reforming MSWM in Sukunan (Yogjakarta, Indonesia): A case-study of applying a zero-waste approach based on circular economy paradigm. *Journal of Cleaner Production*, 284, 124775. <https://doi.org/10.1016/j.jclepro.2020.124775>

Kusuma, A., & Bustanuddin, B. (2024). Implikasi Undang-Undang Nomor 25 Tahun 2008 Tentang Pembentukan Kota Sungai Penuh Terhadap Pengalihan Aset. *Limbago: Journal of Constitutional Law*. <https://doi.org/10.22437/limbago.v4i1.17837>

Latanna, M. D., Gunawan, B., Franco-García, M. L., & Bressers, H. (2023). Governance Assessment of Community-Based Waste Reduction Program in Makassar. *Sustainability (Switzerland)*, 15(19), 1–11. <https://doi.org/10.3390/su151914371>

Mangindaan, D., Adib, A., Febrianta, H., & Hutabarat, D. (2022). Systematic Literature Review and Bibliometric Study of Waste Management in Indonesia in the COVID-19 Pandemic Era. *Sustainability*. <https://doi.org/10.3390/su14052556>

Martitah, M., Arifin, S., Sumarto, S., & Widiyanto, W. (2021). Confronting E-Government Adoption in Indonesian Local Government. *Journal of Indonesian Legal Studies*. <https://doi.org/10.15294/jils.v6i2.47795>

Mayang, H., & Afrinaldi, A. (2025). *Analisis Implementasi Kebijakan Penertiban dan Pengelolaan Kebersihan Lingungan (Studi Kasus Pengelolaan Sampah Berbasis 3R di Kota Sungai Penuh)*. 23(1), 228–238. <https://doi.org/10.14710/jil.23.1.228-238>

Mukhlis, M. (2024). Optimalisasi Penerapan Kebijakan Pengelolaan Sampah Dalam Mengatasi Penanggulangan Darurat Sampah Tpa Regional Payakumbuh. *Jurnal Kesehatan Tambusai*, 5(4), 11964–11976.

Nurdin, I., Muchtar, H., & Indrawadi, J. (2024). Peran Dinas Lingkungan Hidup (DLH) dalam Pengelolaan Sampah di Kabupaten Kerinci. *Jurnal Edukasi Terkini (JET)*.

Phahlevy, R. R., & Ni'mah, M. (2024). Strategies for Household Waste Management in Winong Village Waste Bank. *Indonesian Journal of Law and Economics Review*, 19(4). <https://doi.org/10.21070/ijler.v19i4.1183>

Priska, S., Frinaldi, A., & Syamsir, S. (2023). Kebijakan Pengelolaan Sampah Oleh Pemerintah Kota Sungai Penuh Kerinci. *JIM: Jurnal Ilmiah Mahasiswa* ..., 8(2). <https://jim.usk.ac.id/sejarah/article/view/24834%0Ahttps://jim.usk.ac.id/sejarah/article/download/24834/11641>

Rahmadhani, F., Aziz, R., & Indah, S. (2024). Evaluation of TPS 3R and Waste Bank Management in Sungai Penuh City. *CIVED*, 11(2), 445–456. <https://doi.org/10.24036/cived.v11i2.548>

Ratnasari, S., Mizuno, K., Herdiansyah, H., & Simanjutak, E. G. H. (2023). Enhancing Sustainability Development for Waste Management through National–Local Policy Dynamics. *Sustainability (Switzerland)*, 15(8). <https://doi.org/10.3390/su15086560>

Sanjaya, A. (2025a). *Bumdes Mukai Mudik, Olah Sampah Menjadi Pupuk Organik*. RRI. <https://www.rri.co.id/daerah/1398051/bumdes-mukai-mudik-olah-sampah-menjadi-pupuk-organik>

Sanjaya, A. (2025b). *Sampah Berserakan di Jalan, Masyarakat Meminta Untuk di Angkut*. RRI. <https://www.rri.co.id/daerah/1325300/sampah-berserakan-di-jalanan-masyarakat-meminta-untuk-di-angkut>

Satibi, I., & Ediyanto, E. (2020). Etika Dan Perilaku Birokrasi Dalam Mendukung Penguatan Good Governance. *Jurnal Academia Praja: Jurnal Magister Ilmu Pemerintahan*, 3(02), 234–250.

Setiawan, R. P. (2020). Factors determining the public receptivity regarding waste sorting: A case study in Surabaya city, Indonesia. *Sustainable Environment Research*, 30(1), 1–8. <https://doi.org/10.1186/s42834-019-0042-3>

Subekti, S., Prayoga, I., & Sudrajat, A. S. E. (2021). Pemberdayaan Masyarakat Dalam Pengelolaan Sampah Sebagai Upaya Penanganan Kawasan Kumuh Di Kawasan Pecangaan Kabupaten Jepara. *Indonesian Journal of Spatial Planning*, 1(2), 45–50.

Suhaimi, S. (2018). Problem Hukum Dan Pendekatan Dalam Penelitian Hukum Normatif. *Jurnal Yustitia*, 19(2).

Sulistiyono, F. (2022). TANGGUNG JAWAB PEMERINTAH DAERAH KABUPATEN JEMBER DALAM MENYELENGGARAKAN PENGELOLAAN SAMPAH BERDASARKAN UNDANG-UNDANG NOMOR 18 TAHUN 2008 TENTANG PENGELOLAAN SAMPAH. *Constitution Journal*, 1(2), 157–168. <https://doi.org/10.35719/constitution.v1i2.29>

Tatsuno, M., Gamalalage, P. J. D., & Onogawa, K. (2021). Moving from waste to resource management: A case study of Lake Toba, Indonesia. *Waste Management & Research*, 39, 1365–1374. <https://doi.org/10.1177/0734242X211050774>

Voegelin, E. (1927). Kelsen's Pure Theory of Law. *Political Science Quarterly*, 42(2), 268–276. <https://doi.org/10.2307/2142789>

Wiharja, Pratama, R. A., Robbani, M. H., Suryanto, F., Suherman, Syafrudin, & Kholid, M. A. (2025). Research on the matching relationship of municipal solid waste management and alternative fuel in Indonesia's cement industry. *Case Studies in Chemical and Environmental Engineering*. <https://doi.org/10.1016/j.cscee.2025.101098>

Willetts, J., Priadi, C., Ombasta, O., Wulandari, D., Imtiyaz, I., Sudhiastiningsih, N. N. S. N., Kohlitz, J., Mills, F., & Listyasari, M. (2022). Co-developing evidence-informed adaptation actions for resilient citywide sanitation: Local government response to climate change in Indonesia. *Environment and Planning B: Urban Analytics and City Science*, 49, 2129–2150. <https://doi.org/10.1177/23998083221098740>

Undang-Undang Dasar Negara Republik Indonesia Tahun 1945.

Undang-Undang Nomor 18 Tahun 2008 tentang Pengelolaan Sampah.

Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah.

Undang-Undang Nomor 14 Tahun 2008 tentang Keterbukaan Informasi Publik.

Peraturan Pemerintah Nomor 81 Tahun 2012 tentang Pengelolaan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga.

Peraturan Presiden Nomor 97 Tahun 2017 tentang Kebijakan dan Strategi Nasional Pengelolaan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga.

Peraturan Daerah Kabupaten Kerinci Nomor 9 Tahun 2013 tentang Pengelolaan Sampah.

Peraturan Bupati Kerinci Nomor 42 Tahun 2018 tentang Kebijakan dan Strategi Kabupaten Kerinci dalam Pengelolaan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga.

Peraturan Daerah Kota Sungai Penuh Nomor 9 Tahun 2013 tentang Pengelolaan Sampah.

Peraturan Walikota Sungai Penuh Nomor 19 Tahun 2024 tentang Pengelolaan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga pada TPS 3R di Desa dalam Wilayah Kota Sungai Penuh.