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RESOURCE AVAILABILITY AND BIOECONOMY DEVELOPMENT POTENTIAL IN THE WASTE MANAGEMENT SECTOR IN MAZOVIA

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Urzędu Marszałkowskiego Województwa Mazowieckiego w Warszawie

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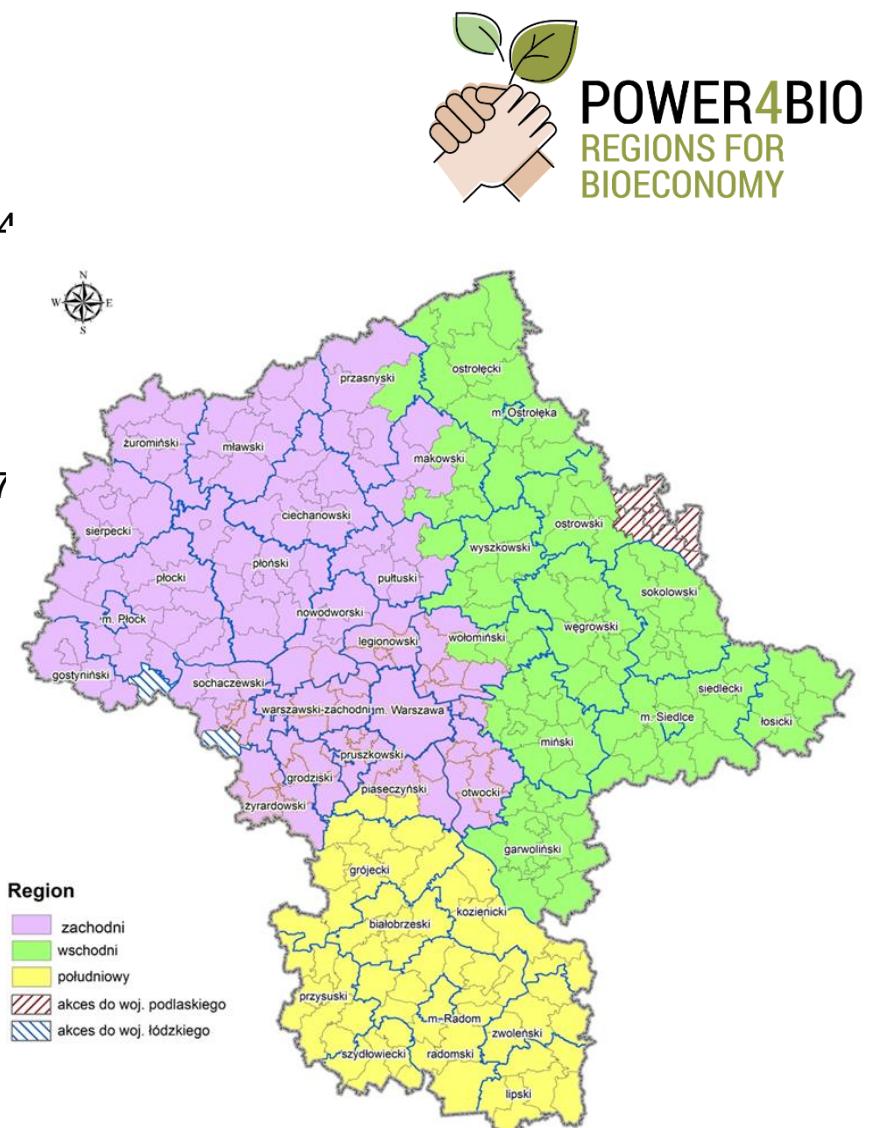
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Voivodship waste management plan - the basic document concerning waste management in the voivodship

- The currently binding Waste Management Plan for the Masovian Voivodship 2024 was adopted by Sejmik of the Mazowieckie Voivodship on January 22, 2019 by Resolution No. 3/19
- In PGO WM(Waste Management plan in the Mazowieckie Voivodship 2024), 3 regions of municipal waste management were designated in the voivodship, and 7 communities were included in the regions in the Łódzkie and Podlaskie voivodships.
 - The Plan identifies regional municipal waste processing installations:
 - For the composting of green waste and other municipal bio-waste
 - Or mechanical- biological treatment of mixed municipal waste
 - For the storage of sorting residues and mechanical-biological waste treatment
 - for thermal waste treatment





New legal conditions – introduced by the Act of 19 July 2019 amending the Act on maintaining cleanliness and order in municipalities and certain other acts (Journal of Laws of 2019, item 1579, as amended)

- Removal of the division of voivodeships into waste management regions
 - Introduction of the definition of "municipal installation", removal of the criteria and the term "RIPOK,,
 - Keeping a list of municipal installations in the BIP by the voivodship marshal
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- **COMPOSITIONS (also existing as RIPOK) FROM 6 SEPTEMBER 2019 OPERATE OUTSIDE REGULATION.**



Waste management plan for the Masovian Voivodship 2024:

- defines the goals and directions of activities in waste management in accordance with overarching documents - national and EU introducing the principles of circular economy,
- sets the general framework for waste prevention in the voivodship,
- indicates the directions and methods of dealing with waste, including bio-waste,
- determines the investment needs, including the area of bio-waste management.



Existing installations for the processing of green waste and other bio-waste and directions of their development

1. Kompostownia zarządzana przez Przedsiębiorstwo Produkcyjno Usługowo Handlowe „RADKOM” sp. z o. o. – rozbudowa (z 10 000 Mg/rok do max. 20 000 Mg/rok)
2. Kompostownia zarządzana przez Ostrołęckie Towarzystwo Budownictwa Społecznego sp. z o. o.
3. Kompostownia zarządzana przez Zakład Gospodarki Komunalnej w Ostrowi Mazowieckiej sp. z o. o. - rozbudowa (z 1 600 Mg/rok do max. 4 000 Mg/rok)
4. Kompostownia zarządzana przez Zakład Utylizacji Odpadów w Siedlcach sp. z o. o. – rozbudowa (z 1 600 Mg/rok do max. 10 000 Mg/rok)
5. Kompostownia zarządzana przez MPK Pure Home sp. z o. o. w Ostrołęce – rozbudowa etapowa (z 1 670 Mg/rok do max. 10 000 Mg/rok)
6. Kompostownia zarządzana przez BYŚ Wojciech Byśkiniewicz – rozbudowa (z 9 000 Mg/rok do max. 30 000 Mg/rok)
7. Kompostownia zarządzana przez Miejski Zakład Oczyszczania w Pruszkowie sp. z o. o. – rozbudowa (z 4 000 Mg/rok do max. 15 000 Mg/rok)
8. Kompostownia zarządzana przez Miejski Zakład Oczyszczania w Wołominie sp. z o. o. – rozbudowa (z 13 500 Mg/rok do max. 20 000 Mg/rok)

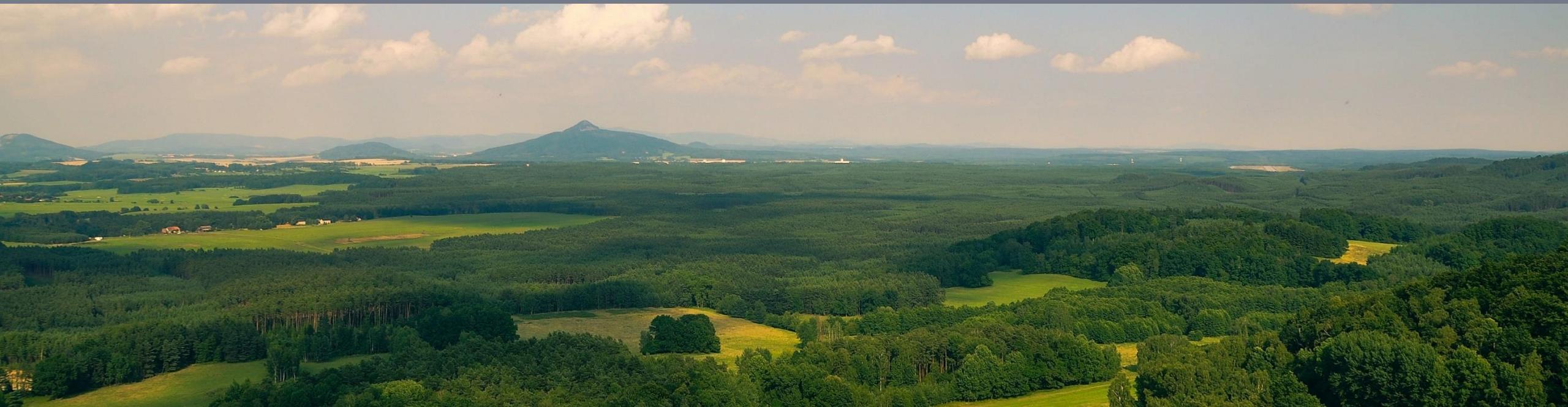


Existing installations for the processing of green waste and other bio-waste and directions of their development



9. Kompostownia zarządzana przez PPHU Lekaro Jolanta Zagórska
10. Kompostownia zarządzana przez Ziemia Polska Sp. z o.o. – rozbudowa (z 2 300 Mg/rok do max. 6 300 Mg/rok)
11. Kompostownia zarządzana przez Przedsiębiorstwo Gospodarowania Odpadami w Płocku Sp. z o.o. – rozbudowa (z 4 700 Mg/rok do max. 6 000 Mg/rok)
12. Kompostownia zarządzana przez Przedsiębiorstwo Usług Komunalnych Sp. z o.o. w Ciechanowie – rozbudowa (z 2 000 Mg/rok do max. 6 000 Mg/rok)
13. Kompostownia zarządzana przez Przedsiębiorstwo Gospodarki Komunalnej w Płońsku Sp. z o.o. – rozbudowa (z 3 000 Mg/rok do max. 6 000 Mg/rok)
14. Kompostownia zarządzana przez Novago Sp. z o.o. – rozbudowa (z 1 400 Mg/rok do max. 6 000 Mg/rok)
15. Kompostownia zarządzana przez Miejskie Przedsiębiorstwo Oczyszczania w m. st. Warszawie – konieczność modernizacji lub wskazanie do zamknięcia w 2025 r.
16. Kompostownia zarządzana przez PN-WMS Sp. z o.o. – rozbudowa (z 22 000 Mg/rok do max. 42 000 Mg/rok)
17. Kompostownia zarządzana przez REMONDIS Sp. z o.o.

Potential of the Mazowieckie Voivodeship in the field of organic fraction production and bioeconomy development strategies



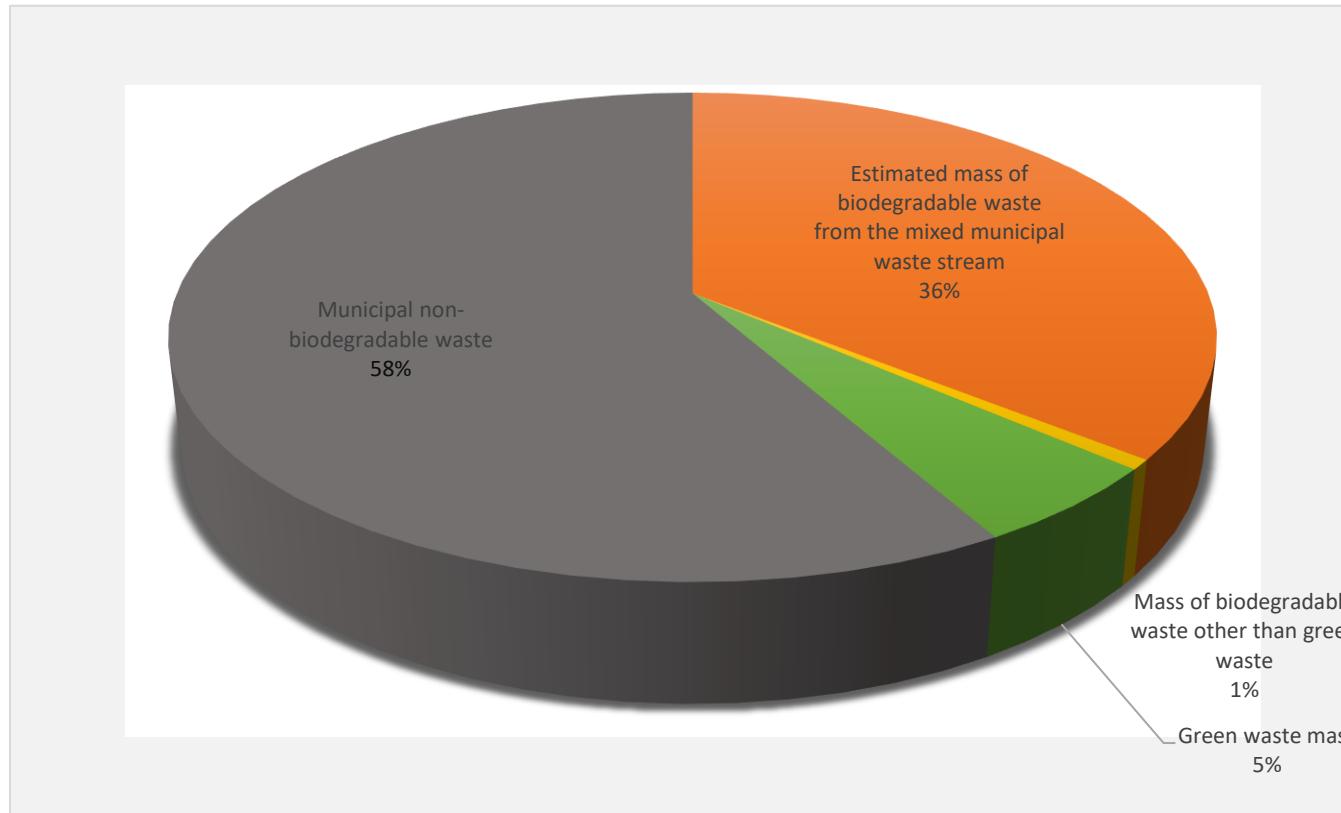
The resources of the Mazowieckie Voivodeship and bioeconomy potential



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STRUCTURE OF RECEIVED MUNICIPAL WASTE W 2018 ROKU [Mg/rok]

-opracowanie własne



Estimated mass of biodegradable waste from the mixed municipal waste stream	648,293
Mass of biodegradable waste other than green waste	11,765
Green waste mass (20 02 01)	97,73
Municipal non-biodegradable waste	1056,814
SUMA	1814,602



Key bio-waste streams generated in the Mazowieckie Voivodeship – na podstawie WSO za 2018 rok



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Lp.	Waste code	Type of waste	Mass of generated waste[Mg/rok]
Group 02 -Agricultural, horticultural, aquatic, fishery, forestry, hunting and food processing waste. The largest group of vegetable waste are:			453 039,3
1.	02 01 06	Animal excrements	104 278,1
2.	02 04 01	Sludges from cleaning and washing beetroots	68 325,58
3.	02 03 80	Marc, sludge and other wastes from processing plant products (without 02 03 81)	56 912,14
4.	02 07 80	Marc, must and post-fermentation sediments, decoctions	29 634,004
Group 03 -Wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard. The largest group of vegetable waste are:			395 335,49
5.	030105	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	138 062,52
6.	030308	Waste from sorting of paper and cardboard destined for recycling	86 292,73
Waste from aerobic decomposition of solid waste (composting)			519 990,82
Waste from sewage treatment plants not included in other groups. The largest group of vegetable waste are:			434 969,9
7.	19 08 05	Stabilized municipal sewage sludge	366 709,6240



Ways of bio-waste management in the Mazowieckie voivodship



Sewage sludge and sewage waste

- Installations for the management of municipal sewage sludge - mainly the R3 process
- Sewage sludge incineration plant in Warsaw at street Czajki –proces D10
- Agricultural use of sewage sludge

Agricultural waste

- Agricultural biogas plants (R3)
- Installations for recovery and neutralization (R3, R12) - production of fodder, production of substrates for cultivation, e.g. mushrooms, drying, composting, production of organic fertilizers
- Preparation for energy use, energy recovery (R12 / R1), briquette production, preRDF, RDF

Municipal waste

- Composting (R3)
- Biological stabilization(D8)
- There are no biogas plants to process municipal waste

Agricultural biogas plants in the Masovian Voivodeship *

Lp.	Entrepreneur's name	Place of business	Annual capacity of the installation for agricultural biogas production (m ³ / year)
1	Biogas East Sp. z o.o.	ul. Rawicza 153, Grochów Szlachecki 08-300 Sokołów Podlaski	3 090 000
2	PGB ENERGETYKA 2 Sp. z o.o.	Tończa 88A, 07-100 Liw	4 009 120
3	BIOGAZOWNIA SKARŻYN Sp. z o.o.	Skarżyn, ul. Parkowa 7b, 09-100 Płońsk	6 040 620
4	Profarms Sp. z o.o.	Zielona, ul. Robotnicza 16, 09-310 Kuczbork-Osada	500 000
5	PFEIFER & LANGEN POLSKA" S.A.	Zygmuntowo 38, 06-450 Glinnojeck	7 305 840

*as of January 24, 2019 - the General Director of the National Agricultural Support Center is the authority keeping the register of agricultural biogas producers



Investment assumptions of the Waste Management Plan

Zarząd Województwa Mazowieckiego



Plan gospodarki odpadami dla województwa mazowieckiego 2024



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- Construction of agricultural biogas plants in Chorzele, commune Chorzele, Sierakowo gm. Przasnysz, Wólka Nosowska commune Stara Kornica, Zawady commune Liw and Stoczek gm. Stoczek
- Construction of an installation for thermal conversion of municipal sewage sludge in the southern region (no possibility of managing municipal sewage sludge in any other way than thermal transformation in the planned protection area of the GZWP No. 405 Niecka Radomska)
- Extension and modernization of existing composting plants for the processing of green waste and other biodegradable municipal waste
- Construction of 5 installations for the treatment of municipal bio-waste, including the construction of an installation in Warsaw for the fermentation of biodegradable waste, the production of biogas for powering vehicles and a fertilizer
- Modernization of the existing MBP (Ministry of Public Security) installations to adapt the biological part of the plants to the treatment of bio-waste

Summary





Challenges

- A large mass of bio-waste production - huge potential of Mazovia
- Intensification of separate source collection for biodegradable waste
- Recycling waste / raw materials into the economy - implementing the principles of the circular economy
- No biogas plant for municipal waste,
- Development of installations for waste management in recycling processes

Action

- Extension of existing installations
- Construction of new installations, including construction of biogas plants for municipal waste
- Enabling the use of the processing capacity of MBP installations for the stabilization of bio-waste - after the decision is changed
- Complete elimination of landfilling of biodegradable waste
- Ecological education

The expected result

- The number of installations and processing capacity for the processing of green waste stream adjusted to the needs of the voivodeship
- Increase in the number of home composters
- The use of bio-waste for the production of biogas
- Elimination of landfilling and other disposal of biodegradable waste suitable for recovery



Thank you for your attention!

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