

Municipal Infrastructure in 2021

29.06.2022


2.3%

An increase in the length of the sewage network

In Poland in 2021 the length of the sewage network increased by nearly 3.9 thousand km (by 2.3%), and the number of sewage connections to residential buildings by 109.2 thousand pcs (by 3.0%).

Sewage system

At the end of 2021, the sewage network reached the length of 173.5 thousand km, whereas the number of connections to residential buildings – 3.7 million pcs. Compared to the previous year, the length of the newly built or reconstructed sewage network increased by about 3.9 thousand km, i.e. by 2.3%, with a simultaneous increase in the number of connections to residential buildings of over 109 thousand pcs, i.e. of 3.0%.

Compared to 2020, the length of the sewage network increased by 2.3%

Table 1. Infrastructure of the sewage system in 2020–2021

| Specification | 2020 | 2019 = 100 | 2021 | 2020 = 100 |
|---|---------|------------|---------|------------|
| Sewage network in thousand km (as of 31 December) | 169.6 | 102.9 | 173.5 | 102.3 |
| Sewage network in km per 100 km ² (as of 31 December) | 54.2 | 102.8 | 55.5 | 102.4 |
| Connections to residential buildings in thousand pcs (as of 31 December) | 3,580.2 | 103.1 | 3,689.4 | 103.0 |
| Wastewater from households discharged by sewage system during the year in hm ³ | 1,002.6 | 102.4 | 994.6 | 99.2 |

In rural areas was located 59.8% of the sewage network and 46.9% of all sewage connections to residential buildings. Compared to the previous year, the length of the sewage network in rural areas increased by 2.7 thousand km (by 2.6%), and the number of connections to residential buildings by over 66 thousand pcs (by 4.0%). In the same period, in urban areas 1.2 thousand km of the sewage network was built (an increase of 1.7%), and almost 43 thousand pcs of connections to residential buildings was installed in urban areas (an increase of 2.2%).

59.8% of all sewage network was located in rural areas

Data broken down by voivodships show that the most significant increase in the length of the sewage network, compared to 2020, was noted in voivodships: Świętokrzyskie – of 4.9%, Wielkopolskie – of 3.3%, and Podkarpackie – of 3.2%, while the least in Podlaskie – of 0.9%, and Zachodniopomorskie – of 1.1%.

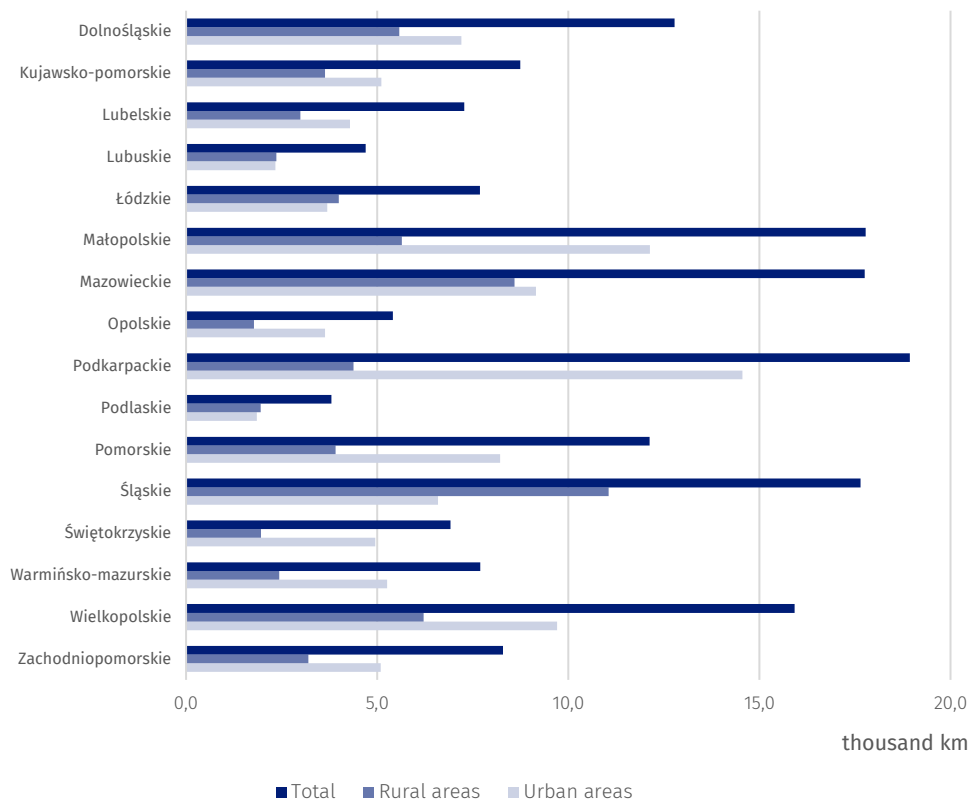
The highest density of the sewage network at the end of 2021 was in voivodships: Śląskie – 143.1 km per 100 km², and Małopolskie – 117.1 km per 100 km², whereas the lowest in voivodships: Podlaskie – 18.8 km per 100 km², and Lubelskie – 29.0 km per 100 km².

At the end of 2021, the percentage of residential buildings connected to the sewage network amounted to 52.7%, and was higher by 0.9 percentage point, compared to 2020. In urban areas, 75.5% of residential buildings were connected to the sewage network, whereas in rural areas – 39.1%.

The amount of wastewater discharged from households by the sewage system in 2021 was 994.6 hm³ (in urban areas – 857.5 hm³, and in rural areas – 137.1 hm³), and decreased, compared to 2020, by 7.9 hm³ (in urban areas it was a decrease of 12.1 hm³, and in rural areas an increase of 4.2 hm³).

The amount of wastewater discharged from households decreased

Chart 1. The length of the sewage network in 2021 by voivodships



On-site systems for wastewater discharge

The number of on-site systems for wastewater discharge as of the end of 2021 in Poland was 2,440.1 thousand pcs, of which 87.0% (2,123.1 thousand pcs) were septic tanks, and 13.0% (317.0 thousand pcs) – household wastewater treatment systems. The amount of liquid waste (domestic wastewater) collected from septic tanks during 2021 was 31.7 dam³, of which 9.2 dam³ (29.2% of the total amount) was collected in urban areas, and 22.5 dam³ (70.8%) in rural areas.

87.0% of the total number of on-site systems for wastewater discharge were septic tanks, and 13.0% – household wastewater treatment systems

Water supply system

At the end of 2021, the length of the water supply distribution network reached 316.7 thousand km, and the number of connections to residential buildings – over 6.0 million pcs. Compared to 2020, the length of the newly built or reconstructed water supply network increased by 3.3 thousand km (by 1.0%), and an increase of 133.9 thousand pcs (of 2.3%) in the number of connections to residential buildings was observed.

Compared to 2020, the length of the water supply distribution network increased by 1.0%

Table. 2 Infrastructure of the water supply system in 2020–2021

| Specification | 2020 | 2019 = 100 | 2021 | 2020 = 100 |
|---|---------|------------|---------|------------|
| Water supply distribution network in thousand km (as of 31 December) | 313.4 | 100.8 | 316.7 | 101.0 |
| Water supply distribution network in km per 100 km ² (as of 31 December) | 100.2 | 100.8 | 101.3 | 101.1 |
| Connections to residential buildings in thousand pcs (as of 31 December) | 5,904.9 | 102.0 | 6,038.8 | 102.3 |
| Household consumption of water during the year in hm ³ | 1,299.9 | 100.6 | 1,279.8 | 98.4 |
| Average household consumption of water per capita during the year in m ³ | 33.9 | 100.6 | 33.5 | 98.8 |

About 76.9% of the length of the water supply distribution network, and 62.0% of connections to residential buildings were located in rural areas. Compared to the previous year, the length of the water supply distribution network in rural areas increased by 2.1 thousand km (by 0.9%) and amounted to 243.5 thousand km, whereas the number of connections to residential buildings – by 88.0 thousand pcs (by 2.4%). In urban areas however, there was an increase of almost 1.2 thousand km in the newly built network (of 1.6%) – its length amounted to 73.1 thousand km, whereas the number of connections rose by 45.9 thousand pcs (by 2.0%).

Data broken down by voivodships show the most significant increase in the length of the water supply distribution network in voivodships: Pomorskie – of 422.3 km, Mazowieckie – of 408.9 km, and Podkarpackie – of 361.0 km, whereas the lowest in Opolskie – of 40.1 km, and Warmińsko-mazurskie – of 46.8 km.

Along with the development of water supply infrastructure, the network density within the country area increases systematically. As of the end of 2021, it was 101.3 km per 100 km² and, compared to the previous year, it increased by 0.2 km per 100 km². The highest density of the water supply network still occurs in voivodships: Śląskie – 181.2 km per 100 km² (an increase, compared to the previous year, of 1.5 km per 100 km²) and Małopolskie – 144.5 km per 100 km² (an increase of 1.8 km per 100 km²), while the lowest in voivodships: Zachodniopomorskie – 50.6 km per 100 km² (an increase of 0.6 km per 100 km²), and Lubuskie – 51.9 km per 100 km² (an increase of 0.6 km per 100 km²).

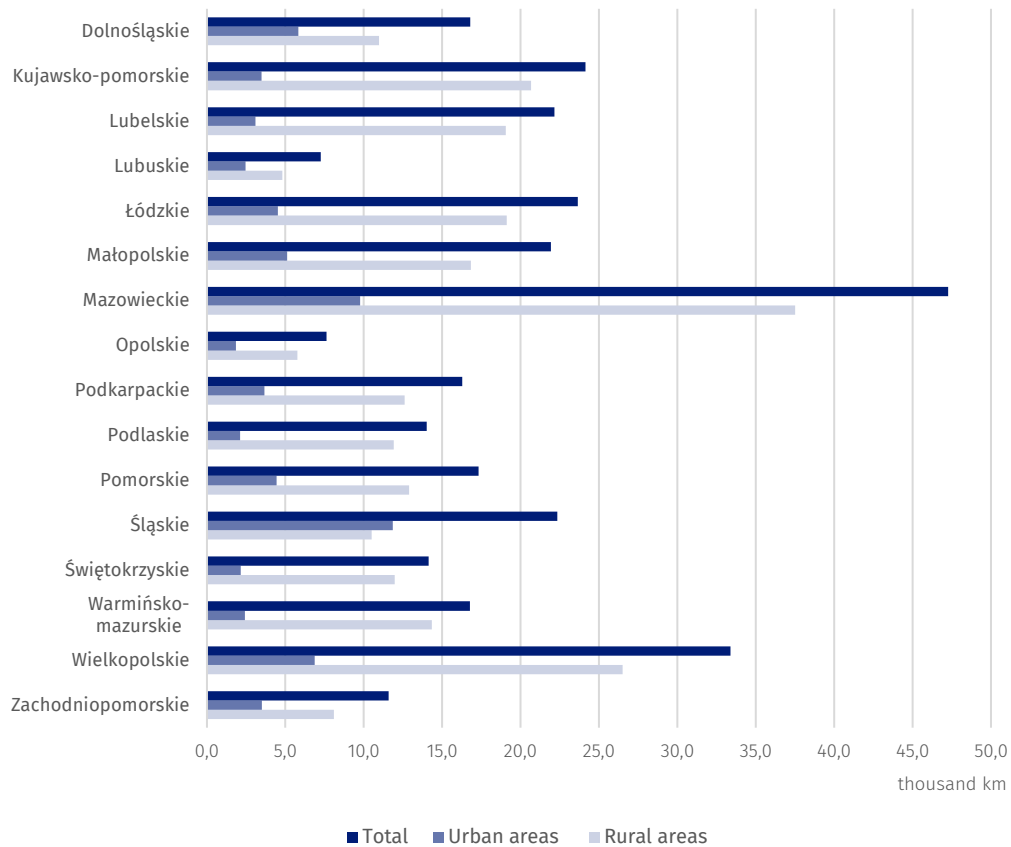
As of the end of 2021, the percentage of residential buildings connected to the water supply system increased, compared to the previous year, and amounted to 85.2%. In urban and rural areas there was noted an increase in the percentage of residential buildings connected to water supply system, of 0.2 percentage point and 1.2 percentage points, respectively.

In 2021, the household consumption of water amounted to 1,279.8 hm³ and, compared to the previous year, decreased by 20.2 hm³ (by 1.6%), whereas the average household consumption of water per capita amounted to 33.5 m³ and, compared to the previous year, decreased by 0.4 m³. In rural areas the consumption of water per capita fell by 0.2 m³, and in urban areas – by 0.5 m³.

About 76.9% of the length of water supply distribution network is located in rural areas

In Poland, a decrease in household consumption of water per capita was observed

Chart 2. The length of the water supply network in 2021 by voivodships



In case of quoting Statistics Poland data, please provide information: “Source of data: Statistics Poland”, and in case of publishing calculations made on data published by Statistics Poland, please include the following disclaimer: “Own study based on figures from Statistics Poland”.

Prepared by:
Trade and Services Department
Director Ewa Adach-Stankiewicz
Phone: (+48 22) 608 30 67

Issued by:
**The Spokesperson for the President
of Statistics Poland**
Karolina Banaszek
Phone: (+48) 695 255 011

Press Office

Phone: (+48 22) 608 38 04

e-mail: obslugaprasowa@stat.gov.pl



stat.gov.pl/en/



[@StatPoland](https://twitter.com/StatPoland)



[@GlownyUrzadStatystyczny](https://www.facebook.com/GlownyUrzadStatystyczny)



[gus_stat](https://www.instagram.com/gus_stat)



[glownyurządstatystycznygus](https://www.youtube.com/glownyurządstatystyczny)



[glownyurządstatystyczny](https://www.linkedin.com/company/glownyurządstatystyczny)

Related information

[Municipal Infrastructure in 2020](#)

[Housing Economy and Municipal Infrastructure in 2020](#)

Data available in databases

[Local Data Base](#)

[Knowledge Databases Municipal and Dwelling Infrastructure](#)

Terms used in official statistics

[Sewage system](#)

[Active sewage network](#)

[Building equipped with sewage network](#)

[Septic tank](#)

[Liquid waste](#)

[Water supply distribution network](#)

[Water supply system](#)

[Building fitted with water supply network](#)

