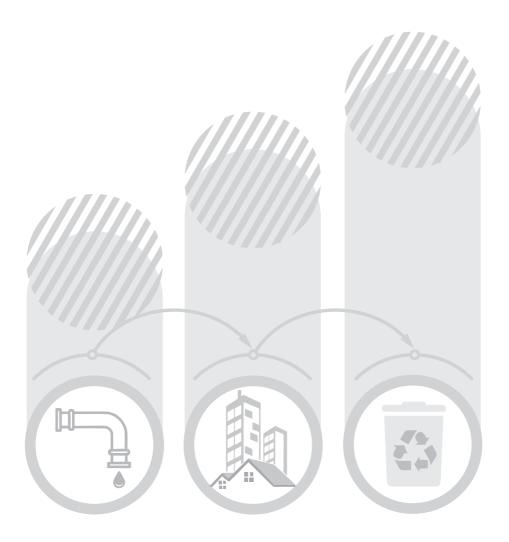


# Housing economy and municipal infrastructure in 2018





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Statistics Poland

Statistics Poland, Trade and Services Department
Editorial team
Izabella Adamczyk, Barbara Różańska, Marek Sobczyk
Supervisor
Agnieszka Matulska-Bachura
Typesetting and graphics
Eustachiusz Markowski
Publication available on website
stat.gov.pl
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#### **Preface**

"Housing economy and municipal infrastructure in 2018" is a publication on the management of dwelling stocks and municipal and household services in Poland. Information presented in this study characterises housing conditions and the state of technical infrastructure facilitating the provision of services necessary to satisfy collective needs of society in terms of own tasks of gminas, as well as enable observation of changes taking place in the surveyed area of activity.

The study presents the general state of dwelling stocks along with basic indicators describing the housing conditions of the population. The description of dwelling stocks was also presented broken down by individual forms of ownership (i.e. housing cooperatives, gminas, companies, the State Treasury, housing condominiums and public building societies).

The scope of information includes, among others, data on the number of inhabited and uninhabited dwellings, their useful floor area, sales and returns of dwellings to former owners, arrears with payments for dwellings, eviction, repayment of housing loans in housing cooperatives, and renovation of dwellings in residential buildings. The results of the study on the costs of maintaining housing and dwelling stocks were also included. In addition, the publication contains information about housing allowances paid in 2018, as well as about social premises and land designated for housing construction in the gmina's stock.

The study includes information on municipal equipment and services in the field of water supply and sewage system, heat management, electric energy and network gas distribution as well as collection and treatment of municipal waste by location of equipment or the place of providing municipal services in Poland in general, as well as broken down by voivodships, and urban and rural areas.

The publication uses the results of the balance of dwelling stocks and the reporting of entities dealing with management or administration of dwelling stocks. Presented information on municipal infrastructure was prepared on the basis of data obtained from entities operating in the field of collective water supply and collective sewage removal from households. It also presents the results of a survey of entities dealing with the collection of municipal waste, processing of municipal waste, distribution of electricity, heat energy or network gas, and data on liquid waste, provided to offices of gminas by entities dealing with their collection and transport.

Subjective scope was presented broken down by voivodships. Information at lower levels of aggregation (poviats and gminas) and broken down by urban and rural areas was made available in the Local Data Bank on the website of Statistics Poland (http://www.stat.gov.pl).

Planning further development of municipal infrastructure survey, authors will be grateful to all persons and institutions for providing suggestions and comments which would contribute to shaping and enriching the content of subsequent editions of this publication.

Director of Trade and Services Department

Ewa Adach-Stankiewicz

President Statistics Poland

Zolemut -

Dominik Rozkrut, Ph. D.

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# **Symbols**

Symbol	Description
	data not available or not reliable
_	magnitude zero
of which	indicates that not all elements of the sum are given

# **Abbreviations**

Abbreviation	Meaning
m	metre
m <sup>2</sup>	square metre
m³	cubic metre
dam³	cubic decametre
hm³	cubic hectometre
km	kilometre
km²	square kilometre
ha	hectare
kg	kilogram
t	tonne
kWh	kilowatt-hour
GWh	gigawatt-hour
MJ	megajoule
TJ	terajoule
pcs	pieces
approx.	approximately

## **Executive summary**

As of 31 December 2018, Poland's dwelling stocks increased compared to 2017 and amounted to 14.6 million dwellings with a total useful floor area of 1,084.2 million m², with 55.9 million rooms. The largest number of dwellings – approx. 8.6 million – remained in the stock of natural persons outside housing condominiums. Out of 6,052.8 thousand dwellings covered by the survey located in buildings under management or administration, almost half were dwellings owned by natural persons in buildings covered by housing condominiums. As of 31 December 2018, out of approx. 7.5 million dwelling stocks, in 25.5 % of dwellings tenants were in arrears with dwelling payments for a total amount of approx. PLN 6.5 billion. In 2018, due to arrears with dwelling payments, 89 % of 15.7 thousand total eviction proceedings were pending in courts.

In 2018, the annual maintenance costs of the dwelling stock of the surveyed entities increased compared to 2016 and amounted to PLN 34.1 billion. Cost of municipal services provided for premises decreased 0.8 % and amounted to PLN 17.8 billion. In December 2018, an increase in the average rent amount (by 5.4 %) per 1 m<sup>2</sup> of useful floor area compared to December 2016 was recorded.

In 2018, a smaller number of social premises (101.2 thousand) than in the previous year with a total area of 3,355.9 thousand m<sup>2</sup> was noted in the gmina's stocks. A smaller number of households (149,329) waited for gmina's housing stock rental than in the previous year. In 2018, the number and amount of housing allowances paid also decreased. In 2018, gminas handed over to investors 874.6 ha of land for housing construction, of which 81.7 % was meant for single-family housing.

Similarly to previous years, in 2018 further investments in the area of technical infrastructure were recorded. As of the end of 2018, there was an increase in both the length of the water supply and sewage network (308 thousand km and 160.7 thousand km, respectively), and the number of connections (water supply – approx. 5.7 million pcs, and sewage system – approx. 3.4 million pcs). The average water consumption by households also increased (to 33.3 m³ per capita) as well as the amount of sewage discharged from households (to 969.5 hm³).

As of the end of 2018, both the length of gas supply network in total and gas connections in Poland increased and reached 154.4 thousand km and 51.3 thousand km, respectively. In 2018, consumption of gas from gas supply system in households in Poland decreased to 46,903.3 GWh with a simultaneous increase in the number of consumers of 0.7 %.

Consumption of electricity by households in Poland in 2018 slightly increased and reached the level of approx. 30,506.2 GWh, while consumption of electricity per consumer in households decreased and amounted to 1,981.2 kWh.

As of the end of 2018, the length of the heating network in total amounted to 25,219.2 km, of which 64.6 % was the transmission and distribution network (16,296.0 km), and 35.4 % connections to buildings (8,923.2 km). In 2018, the heat sales volume in Poland was 194.5 thousand TJ, of which 149.8 thousand TJ (77.0 %) for heating of residential buildings.

In 2018, there was an increase in the amount of municipal waste generated in Poland – to 12,485.4 thousand tonnes (of which 83.7% originated from households). The average amount of municipal waste collected per one inhabitant also increased (to 325 kg). In 2018, there was an increase in the share (28.9%) of waste collected separately in the total amount of municipal waste generated.

As of the end of 2018, the number of public facilities of separate municipal waste collection decreased (to 2,144). As of the end of 2018, there was a decrease in the number of operational landfill sites receiving municipal waste (to 286, with an area of around 1,700 ha). The number of illegal dumping sites also decreased (to 1,607).

In Poland, as of the end of 2018, a larger number of household systems for discharge of liquid waste was recorded (about 2,419.5 thousand), of which almost 90 % were septic tanks, from which about 26.8 hm<sup>3</sup> of liquid household waste was collected. The number of dump stations operating as of the end of 2018 also increased (to 2,341 units).

# **Chapter 1**

# **Dwelling stocks in 2018**

**Dwelling stocks** are defined as both inhabited and uninhabited dwellings located in residential and non-residential buildings. Collective accommodation facilities (i.e. workers' hostels, dormitories, boarding houses, or social welfare houses), except for dwellings located therein, provisional facilities and movable objects (i.e. portable huts, railway cars, barges and ships), are not included in the dwelling stock.

**Dwelling** is a premise consisting of one or more rooms including auxiliary rooms, built or rebuilt for living in it, separated constructionally (with fixed walls) within a building, with independent entrance from the staircase, common hall, entrance hall or directly from the street, courtyard or garden.

As of 31 December 2018, the country's dwelling stocks amounted to 14.6 million dwellings with a total useful floor area of 1,084.2 million  $m^2$ , with 55.9 million rooms. The largest number of dwellings remained in the stock of natural persons outside housing condominiums – about 8.6 million (58.6 %), and almost 3.0 million (20.5 %) in housing condominiums. Total area of dwellings owned by natural persons was over 936 million  $m^2$ , which constituted over 86 % of the total area of dwellings in the country. The stocks of housing cooperatives were just over 2.0 million dwellings with a total area of 100.1 million  $m^2$ . The smallest share represented dwellings within the stock of the State Treasury – approx. 28.9 thousand dwellings with an area of almost 1.5 million  $m^2$ .

Table 1. Dwelling stocks (inhabited and uninhabited)<sup>1</sup> by type of ownership – as of 31.12.2018

Specification	Dwellings in thousands	Useful floor area in thousand m <sup>2</sup>
Total	14 615.1	1 084 166.5
Ownership of:		
housing cooperatives	2 029.9	100 085.3
gminas (municipal)	840.4	36 913.4
companies	69.1	4 038.8
State Treasury	28.9	1 470.1
public building societies	102.3	5 043.7
natural persons:2	11 544.6	936 615.1
in housing condominiums	2 966.5	154 879.3

<sup>1</sup> Data for "Total" are compiled on the basis of the balance of dwelling stocks, other information – on the basis of periodic survey conducted every two years. 2 Including other entities.

The **room** is defined as a space in a dwelling, separated from other rooms with fixed walls from the floor to the ceiling with direct sun lighting, with area not smaller than 4 m<sup>2</sup>. Both living room and the kitchen are regarded a room if they meet the above mentioned criteria.

The **useful floor area of a dwelling** should be understood as the total area of all rooms within the dwelling, especially the area of living room, kitchen (with or without a window), pantry, entrance hall, alcove, bathroom, toilets, encased veranda or porch, dressing room and other rooms, fulfilling the housing and economic needs of the residents, regardless of their purpose and way of usage.

Around 9.9 million dwellings with an area of 637.8 million  $m^2$  and 35.1 million rooms were located in urban areas. In rural areas, there were almost 4.8 million dwellings with an area of 446.3 million  $m^2$  and 20.7 million rooms. In 2018, compared to the previous year, the number of dwellings increased by 175.3 thousand (1.2 %) with a total useful floor area of 15,609.0 thousand  $m^2$  (increase of 1.5 %) and 668.7 thousand rooms (increase of 1.2 %). In urban areas, the number of dwellings increased by 125.1 thousand (1.3 %), while in rural areas by 50.2 thousand (1.1 %).

The increase in the number of dwellings was the result of, among others, investments in construction, expansion and reconstruction of existing buildings, and changes in the purpose of non-residential areas.

Out of the total dwelling stock, 67.5 % of dwellings were located in urban areas; 23.5 % of dwellings from among all urban stocks were concentrated in five largest cities, i.e. Warsaw, Krakow, Łódź, Wrocław and Poznań (inhabited by approx. 19.1 % of the urban population).

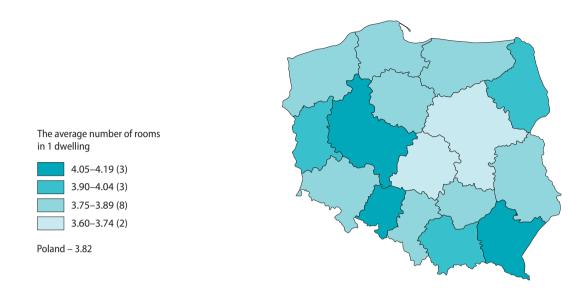
The largest increase in the number of dwellings compared to 2017 was recorded in the Pomorskie Voivod-ship (1.8 %, which represents 9.0 % of the increase in dwelling stocks of the whole country) and Mazo-wieckie Voivodship (1.7 %, which is about 22.5 % of the increase in dwelling stocks of the whole country). The smallest increase in the number of dwellings was recorded in Opolskie (of 0.6 %) and Świętokrzyskie, Śląskie and Łódzkie voivodships (of 0.7 % each).

In 2018, housing conditions in Poland improved slightly compared to previous years, which is reflected in the values of indicators illustrating the average: number of rooms in a dwelling, number of people per dwelling and per room, and useful floor area of the dwelling.

The average number of rooms per dwelling was 3.82, with 3.56 in urban areas and 4.36 in rural areas. The values of this indicator were the lowest in central voivodships: Mazowieckie – 3.62, and Łódzkie – 3.61 and the highest in the following voivodships: Wielkopolskie – 4.05, Podkarpackie – 4.10, and Opolskie – 4.19.

In urban areas, dwellings with the highest average number of rooms were located in Podkarpackie (3.84) and Podlaskie (3.83) voivodships, and the smallest in Łódzkie (3.35) and Mazowieckie (3.39). On average, dwellings in rural areas had the largest number of rooms in Opolskie (4.88) and Śląskie (4.72) voivodships, and the smallest in Lubelskie (3.99) and Świętokrzyskie (4.05).

#### Map 1. The average number of rooms in dwelling in 2018

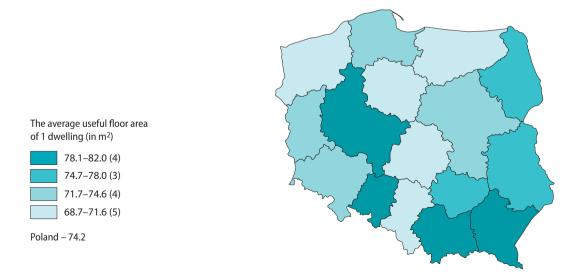


As of 31 December 2018, the average dwelling size in Poland was 74.2  $m^2$  and increased by 0.2  $m^2$  compared with the previous year. Dwellings in rural areas were on average 29.3  $m^2$  larger than in urban areas (indicators for rural areas were 94.0  $m^2$ , and for urban areas 64.7  $m^2$ ).

The largest differences in the size of dwellings between urban and rural area were observed in Śląskie (of almost 35.4 m²) and Małopolskie (of 34.5 m²) voivodships, and the smallest – in Warmińsko-Mazurskie Voivodship (20.7 m²).

On average, the largest dwellings were in the following voivodships: Podkarpackie (82.0 m²), Wielkopolskie (81.5 m²), and Opolskie (81.0 m²), and the smallest in the following voivodships: Łódzkie (69.4 m²), Warmińsko-Mazurskie (68.7 m²), and Kujawsko-Pomorskie (70.3 m²).

#### Map 2. The average useful floor area of 1 dwelling in m<sup>2</sup> in 2018

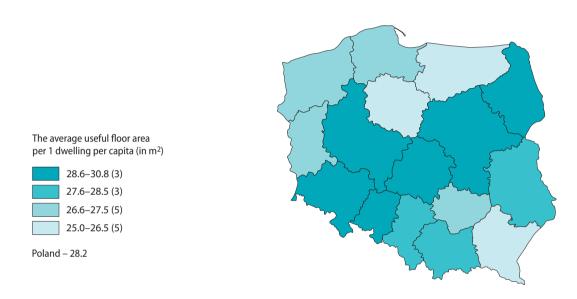


In 2018, the average useful floor area per person increased by 0.4 m<sup>2</sup> compared to the previous year and amounted to 28.2 m<sup>2</sup> (in urban areas it increased from 27.2 m<sup>2</sup> to 27.7 m<sup>2</sup>, and in rural areas from 28.7 m<sup>2</sup> to 29.1 m<sup>2</sup>). Broken down by regions, this rate ranged from 25.0 m<sup>2</sup> in Warmińsko-Mazurskie Voivodship to 30.8 m<sup>2</sup> in Mazowieckie Voivodship.

As for urban dwellings, on average, the largest useful floor area per person was in the Mazowieckie (30.4 m<sup>2</sup>), Dolnośląskie (29.1 m<sup>2</sup>), and Wielkopolskie (28.6 m<sup>2</sup>) voivodships, and the smallest in Warmińsko-Mazurskie (24.4 m<sup>2</sup>), and Kujawsko-Pomorskie (24.9 m<sup>2</sup>) voivodships.

The largest average useful floor area per person in rural areas was in the following voivodships: Podlaskie  $-33.8 \text{ m}^2$ , and Mazowieckie and Opolskie  $-31.6 \text{ m}^2$  each, and the smallest  $-25.7 \text{ m}^2$  per person in Podkarpackie Voivodship.

#### Map 3. The average useful floor area in m<sup>2</sup> per person in 2018

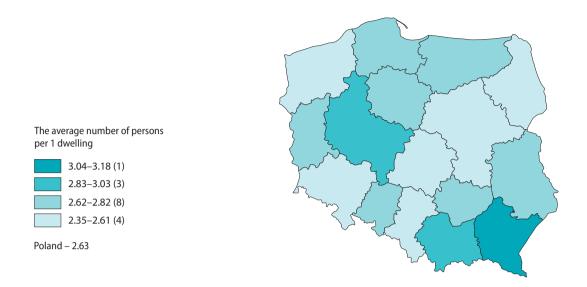


Disproportions between urban and rural areas also concerned the degree of population of dwellings. Rural dwellings had denser population than urban dwellings. On average, there were 2.34 person per dwelling in urban areas, and 3.23 in rural areas, with an average of 2.63 for Poland.

The largest number of people per dwelling was recorded in the following voivodships: Podkarpackie – 3.18, Wielkopolskie – 2.84, and Małopolskie – 2.83, while the smallest in central voivodships: Łódzkie – 2.41, and Mazowieckie – 2.35.

In urban areas, dwellings were the most populated in Podkarpackie Voivodship – 2.71, and the least in Mazowieckie – 2.10 and Łódzkie – 2.17 person in one dwelling. In rural areas, this rate ranged from 2.79 in Podlaskie Voivodship and 2.97 in Łódzkie Voivodship to 3.58 in Małopolskie and 3.61 in Podkarpackie voivodships.

#### Map 4. The average number of persons per dwelling in 2018

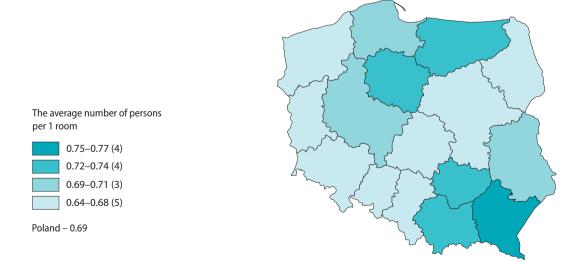


Another indicator presenting the population density of dwellings is the average number of persons per one room. For Poland, this indicator was at the level of 0.69, however, in rural areas it was higher and amounted to 0.74, and in urban areas to 0.66 person per one room.

The lowest values were observed in the following voivodships: Dolnośląskie – 0.64, Mazowieckie and Podlaskie – 0.65 each, and Opolskie – 0.66, and the highest in: Kujawsko-Pomorskie, Warmińsko-Mazurskie and Świętokrzyskie – 0.73 each, and Podkarpackie – 0.77.

The largest number of persons per one room, both in urban and rural areas, was recorded in Podkarpackie Voivodship – 0.71 and 0.83, respectively. The number of persons per one room was the lowest in urban areas in Mazowieckie Voivodship – 0.62, and in the rural areas in Podlaskie – 0.64 and Opolskie – 0.65.

#### Map 5. The average number of persons per room in 2018



The term "dwellings equipped with sanitary and technical installations" covers dwellings with at least one of the following sanitary and technical devices: a water supply system, a flushable toilet, a bathroom, central heating or gas from a gas supply system.

The description of the state of dwelling stock also takes into account the degree of fitting with basic sanitary and technical installations. A growing percentage of dwellings fitted with sanitary and technical installations indicates an improvement in the housing conditions of the population.

96.9 % of dwellings were fitted with water supply system, 93.8 % with lavatory, and 91.5 % with bathroom. The gas installation was connected in every other dwelling. Disproportions in dwellings fitted with basic installations between urban and rural areas still persisted. In urban areas, 99.1 % of dwellings were fitted with water supply system, 97.3 % with lavatory and 95.6 % with bathroom. In rural areas, 92.3 % of dwellings were connected to the water supply system, 86.6 % had a lavatory, and 83.1 % a bathroom.

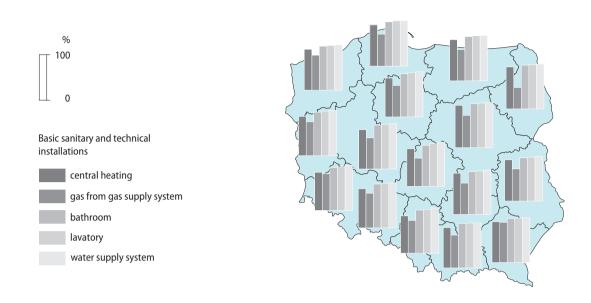
Compared to 2017, the largest increase – of 1.4% – was observed in dwellings fitted with central heating. For dwellings located in rural areas, this increase was 1.5%, while for those in urban areas – 1.4%.

The number of dwellings fitted with network gas increased by 0.8 % compared to 2017, with a higher percentage increase (of 1.9 %) in rural areas than in urban areas (of 0.6 %).

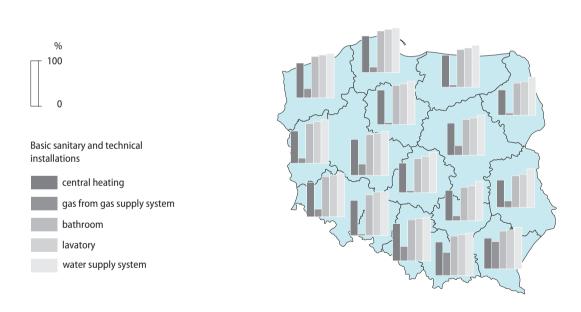
#### Table 2. Dwellings equipped with basic installations – as of 31.12.2018

		Of which fitted with:				
Specification	Dwellings in total	water sypply sytem lavatory		bathroom	gas from gas supply system	central heating
Poland – number of dwellings in thousands	14 615.1	14 159.8	13 713.9	13 378.8	8 114.1	12 071.7
% of total dwellings	100.0	96.9	93.8	91.5	55.5	82.6
Urban areas – number of dwellings in thousands	9 864.8	9 774.3	9 600.2	9 432.9	7 044.8	8 652.9
% of total dwellings	100.0	99.1	97.3	95.6	71.4	87.7
Rural areas – number of dwellings in thousands	4 750.3	4 385.5	4 113.6	3 945.8	1 069.3	3 418.8
% of total dwellings	100.0	92.3	86.6	83.1	22.5	72.0

#### Map 6. Structure of dwellings fitted with sanitary and technical systems in urban areas in 2018



#### Map 7. Structure of dwellings fitted with sanitary and technical systems in rural areas in 2018



# **Chapter 2**

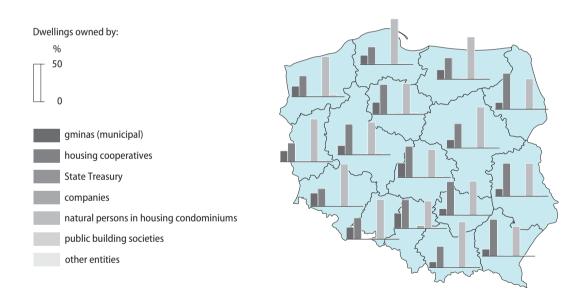
# Dwelling stocks in buildings under management/administration

#### 2.1. Types of ownership of dwelling stocks

**Dwellings have been classified** according to the following types of ownership: natural persons covered by condominiums, housing cooperatives, gminas (municipal), public building societies, companies, State Treasury, and other entities.

Out of the total number of dwellings about 6,052.8 thousand dwellings $^1$  located in buildings under management or administration nearly half, i.e. 49.0 % were dwellings owned by natural persons in buildings covered by housing condominiums, 33.5 % – owned by housing cooperatives, 13.9 % – municipal dwellings, 1.7 % – of public building societies, 1.1 % – of companies, 0.5 % – State Treasury, and 0.3 % of other entities.

#### Map 8. Dwelling stocks by type of ownership in 2018



The direction of changes in the dwelling stock observed for many years in favour of dwellings owned by natural persons is the result of among others, the processes of selling dwellings to natural persons, returning them to their former owners or heirs, as well as changing the use of dwellings for service purposes and combining small dwellings into larger ones. Dwelling stocks owned by housing cooperatives (occupied on the basis of a cooperative ownership right and a cooperative tenant's right to a dwelling) still constitute a significant percentage of dwellings.

<sup>1</sup> Without dwellings constituting a separate ownership, located in buildings owned by housing cooperatives.

Similarly to the previous year, the highest percentage of housing cooperative dwellings was recorded in the following voivodships: Podlaskie (47.6 %), Podkarpackie (48.8 %), Świętokrzyskie (44.5 %), and Lubelskie (43.6 %), and owned by gminas in Śląskie (20.0 %), Łódzkie (19.2 %), and Dolnośląskie (17.7 %). The lowest percentage of housing cooperative dwellings was in the following voivodships: Dolnośląskie (23.5 %), Pomorskie (23.4 %), and Lubuskie (24.7 %) voivodships, and owned by gminas in Małopolskie (7.7 %), Świętokrzyskie (8.8 %), and Podlaskie (9.1 %).

Still the most dwellings owned by natural persons in housing condominiums were recorded in the following voivodships: Małopolskie (60.9 %), Pomorskie (60.5 %), Warmińsko-Mazurskie (56.0 %), and Lubuskie (56.6 %), while the smallest in Śląskie (36.3 %), Łódzkie (37.1 %), and Podkarpackie (39.5 %) voivodships.

#### 2.2. Sale of dwelling stocks

**Sold dwellings** should be considered those for which agreements have been made to establish separate ownership in the form of a notarial deed (with the current or other tenant). The dwellings of housing cooperatives for which ownership has been separated are also included.

In the years 2017–2018, the process of sales or return of dwellings to former owners was continued (purchase of dwellings by natural persons). The sales process included dwellings in multi-dwelling buildings and dwellings in buildings which were sold as a whole to individual natural persons. In the analysed period, almost 134 thousand dwellings were sold to natural persons.

Table 3. Number and structure of dwellings sold in the years 2017–2018 by type of ownership

Consideration	Total		
Specification	in absolute numbers	in %	
Total	133 997	100.0	
Gminas	34 794	26.0	
Housing cooperatives	50 686	37.8	
State Treasury	1 159	0.9	
Companies	6 626	4.9	
Housing condominiums	_	-	
Public building societies	336	0.3	
Other entities	40 396	30.1	

Out of the dwellings sold, the majority -37.8% came from the stocks of housing cooperatives, 30.1 % from the stocks of other entities and 26.0 % from gminas stocks, while dwellings sold from the State Treasury stocks amounted for 0.9 %.

Table 4. Structure of dwellings sold to natural persons in Poland by voivodships (in %)

Specification	Total
POLAND	100.0
Dolnośląskie	11.0
Kujawsko-Pomorskie	4.5
Lubelskie	2.7
Lubuskie	4.2
Łódzkie	6.4
Małopolskie	7.6
Mazowieckie	15.5
Opolskie	1.3
Podkarpackie	2.4
Podlaskie	3.0
Pomorskie	8.5
Śląskie	13.5
Świętokrzyskie	2.2
Warmińsko-Mazurskie	4.1
Wielkopolskie	7.5
Zachodniopomorskie	5.8

Among dwellings sold to natural persons, the highest share was recorded in Mazowieckie (15.5 %), Śląskie (13.5 %) and Dolnośląskie (11.0 %) voivodships, while the lowest in Opolskie (1.3 %) and Podkarpackie (2.4 %).

# 2.3. Arrears with payments for dwellings

**Arrears with payments for dwellings** (including interest) include the amount not paid both by tenants and owners of dwellings, due to charges for the used dwellings, i.e. rent, water, wastewater discharging or liquid waste removal, collection of municipal waste, lift, etc.

**The arrears with mortgage payments** – the amount of installments in arrears (including interest), which debtors should pay into the housing cooperative bank account.

As of 31 December 2018, out of approx. 7.5 million<sup>2</sup> dwelling stocks (including dwellings under separate ownership but managed by housing cooperatives) in 25.5 % of dwellings occupants were in arrears with dwelling payments. Total amount of arrears from the beginning of their occurrence (including interest) under non-payment for the dwelling amounted to PLN 6.5 billion.

<sup>2</sup> Including dwellings constituting a separate ownership located in buildings owned by housing cooperatives in which housing condominiums were not created but managed by housing cooperatives.

Table 5. Arrears with payments for dwelling by type of ownership – as of 31.12.2018

Stocks	Arre	ears	Average overdue rent for one dwelling in arrears	
	thousand PLN	%	PLN	
Total	6 471 493.5	100.0	3 407	
gminas	4 189 508.0	64.7	10 728	
housing cooperatives	1 136 439.5	17.6	1 210	
companies	209 614.2	3.2	9 709	
State Treasury	61 799.7	1,0	5 069	
public building societies	59 738.9	0.9	2 392	
natural persons in buildings covered by housing condominiums	797 406.9	12.3	1 564	
other entities	16 968.3	0.3	13 117	

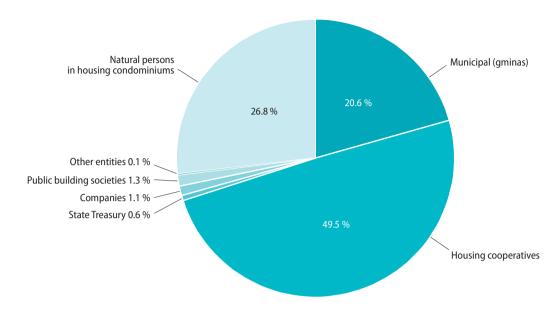
The largest share in the total amount of arrears had tenants of dwellings in gmina stocks – 64.7 % and housing cooperatives – 17.6 %. As per dwellings occupants of which were in arrears, the largest non-payment was recorded for dwellings in stocks of other entities – PLN 13.1 thousand and dwellings in gmina stocks – PLN 10.7 thousand on average, arrears for one dwelling are the lowest for stocks owned by housing cooperatives – PLN 1.2 thousand and stocks of natural persons in buildings under condominiums – PLN 1.6 thousand.

Table 6. The share of dwelling, occupants of which were in arrears with payments for dwelling by type of ownership and voivodships (in % to total stocks in particular groups of stocks)

Specification	Gminas	Housing cooperatives <sup>a)</sup>	State Treasury	Companies	Natural persons in housing condominums	Public building societies
POLAND	46.5	27.3	42.2	31.2	14.7	24.4
Dolnośląskie	46.6	24.7	30.1	26.2	12.3	21.2
Kujawsko-Pomorskie	40.4	25.3	23.3	17.3	10.9	18.5
Lubelskie	56.5	32.7	35.1	9.1	15.8	22.8
Lubuskie	52.1	29.6	31.9	15.5	12.4	21.1
Łódzkie	50.9	28.5	12.7	10.5	13.7	17.4
Małopolskie	42.0	27.9	51.9	12.1	16.7	18.0
Mazowieckie	44.9	29.1	66.8	15.1	18.6	35.9
Opolskie	46.7	23.1	47.2	20.9	11.2	23.8
Podkarpackie	36.1	24.1	27.2	5.8	14.8	26.9
Podlaskie	32.7	27.6	1.4	4.8	14.0	42.9
Pomorskie	46.7	28.1	30.1	15.2	16.5	17.8
Śląskie	50.5	27.3	27.5	50.8	11.8	26.7
Świętokrzyskie	30.8	29.6	26.0	19.0	21.8	16.8
Warmińsko-Mazurskie	50.1	26.4	29.5	16.1	11.0	24.4
Wielkopolskie	23.7	20.2	44.7	14.2	12.7	16.2
Zachodniopomorskie	62.4	31.8	50.4	15.0	15.5	31.5

a) Including dwellings constituing a separate ownership and managed by housing cooperatives.

Chart 1. Dwellings, occupants of which were in arrears with payments for dwelling – as of 31.12.2018



The arrears with payments for dwelling and mortgage credit repayments relate to the period from the beginning of their occurrence to the end of the reporting period.

Table 7. Arrears with payments for dwelling in particular group of stocks

Consideration	Arrears			
Specification	in absolute numbers	in %		
Stocks	1 899 659	100.0		
gminas	390 535	20.6		
housing cooperatives	939 097	49.4		
companies	21 589	1.1		
State Treasury	12 192	0.6		
public building societies	24 977	1.3		
natural persons in buildings covered by housing condominiums	509 974	26.8		
other entities	1 295	0.1		

In relation to the total number of dwellings in arrears (dwellings occupants of which did not make payments), 49.5% concerned cooperative dwellings, 26.8% – dwellings owned by natural persons in buildings covered by housing condominiums, 20.6% – municipal dwellings, 1.3% – public building societies, 1.1% – companies, 0.6% State Treasury, and the least, i.e. 0.1%, dwellings owned by other entities.

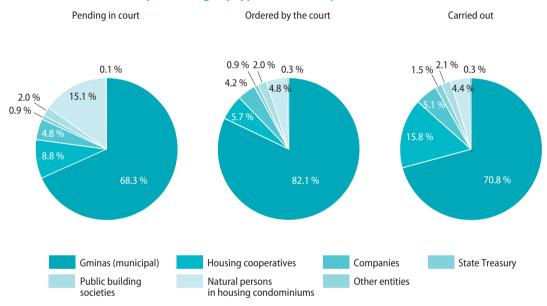
#### 2.4. Eviction proceedings

**Eviction** – any legal and factual actions carried out as a rule on the basis of court order aimed at removing occupants from a dwelling or property.

Out of 15.7 thousand eviction proceedings pending in courts in 2018, 68 % concerned tenants occupying gminas dwellings, followed by proceedings against natural persons in buildings under condominiums (15.1 %) and 8.8 % – against tenants of dwellings in housing cooperatives. The lowest share were proceedings against tenants of dwellings in stocks of other entities (0.1 %).

Nearly 89 % of eviction proceedings were initiated due to arrears with payments for dwelling. This was the most frequent reason in the case of dwellings under management of companies (in 97.6 % of all eviction proceedings), housing condominiums (95.3 %), dwellings of other entities (94.7 %)<sup>3</sup>, housing cooperatives (93.4 %), public building societies (87.3 %), gminas (86.4 %), and State Treasury (71.9 %).

Chart 2. The structure of eviction proceedings by type of ownership in 2018



Out of around 10.1 thousand of ruled evictions, 82.1 % concerned tenants occupying gminas dwellings, 5.7 % – dwellings of housing cooperatives, and 4.8 % – dwellings occupied by natural persons in housing condominiums. The basis for 91.6 % of eviction sentences were arrears with payments for dwelling.

In 2018, evictions from 5.8 thousand residential premises were carried out, of which the largest share (70.8 %) concerned gminas stocks and 15.8 % housing cooperative, while the smallest share – stocks of other entities (0.3 %) and public building societies (2.1 %).

<sup>3</sup> Dwellings constituting the property of institutions which erect buildings for profit – designated for sale (but not sold to any natural persons yet) or for rental; dwellings owned by associations, foundations, political parties, trade unions, professional and economic self-governments; the Catholic Church and other churches and religious associations, catholic universities and church institutes, etc.

In relation to the evictions in total, the majority, i.e. over 24.8 %, took place in Mazowieckie Voivodship, 19.9 % in Śląskie Voivodship, 9.0 % in Dolnośląskie Voivodship, and 6.8 % in Łódzkie Voivodship while the smallest share was in Lubelskie and Świętokrzyskie voivodships – 0.9 % and 1.3 % respectively, and in Podkarpackie – 1.4 %.

Table 8. The share of eviction proceedings by voivodships

		of eviction ending in courts	Number of evictions from dwellings ordered by the court		Number of evictions from dwellings carried out	
Specification	total	of which due to arrears with payments for dwellings	total	of which due to arrears with payments for dwellings	total	of which due to arrears with payments for dwellings
in thousands						
POLAND	15.7	13.9	10.1	9.2	5.8	5.4
POLAND=100%						
Dolnośląskie	13.8	14.4	11.4	11.4	9.0	8.8
Kujawsko-Pomorskie	4.0	4.3	6.4	6.9	5.9	6.1
Lubelskie	2.3	1.8	1.3	0.8	0.9	1.0
Lubuskie	2.0	1.9	3.0	2.7	2.4	2.4
Łódzkie	5.2	5.4	6.3	6.5	6.8	6.8
Małopolskie	5.9	5.8	3.5	3.6	4.4	4.4
Mazowieckie	20.5	18.7	20.8	21.1	24.8	25.2
Opolskie	3.4	3.6	3.8	4.0	3.7	3.9
Podkarpackie	1.2	1.2	1.6	1.6	1.4	1.4
Podlaskie	0.8	0.6	1.6	1.0	2.3	1.6
Pomorskie	8.6	8.7	4.8	4.5	4.1	3.5
Śląskie	17.1	17.5	22.3	22.3	19.9	20.4
Świętokrzyskie	0.8	0.8	0.5	0.5	1.3	1.3
Warmińsko-Mazurskie	4.0	4.2	3.5	3.6	3.9	4.0
Wielkopolskie	3.9	4.3	2.3	2.5	2.7	2.8
Zachodniopomorskie	6.3	6.7	6.8	7.1	6.4	6.5

# 2.5. Renovation of dwelling stocks

**Renovation works** – major refurbishment consisting in installing construction elements or installations in the building (dwelling) and termination of their refurbishment (replacement). Basic construction elements include: load-bearing walls, roof construction covering, external and internal plasters, roofs, woodwork, floors and reheating furnaces.

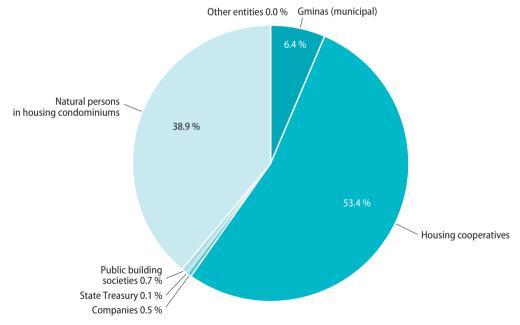
In 2018, about 678 thousand renovation works (not being major overhauls) bringing buildings and dwellings to their initial technical value were conducted. They consisted in replacement of all or some installations. About 91.9 thousand dwellings underwent renovation related to improvement of housing standards by fitting buildings and dwellings located therein with previously missing technical and sanitary systems (water supply, sewage, central heating, hot water, gas).

In the surveyed year, 22.7 thousand dwellings were fitted with central heating, 19.6 thousand dwellings were directly connected to the water supply system and 16.6 thousand dwellings to the sewage system, 55.2 thousand dwellings were fitted with installation providing hot water, while 10.1 thousand dwellings were connected to the gas supply system.

Table 9. Dwellings in which renovations were carried out, and those in which technical and sanitary systems were installed

		Dwellings in which new systems were installed directly:					:
In stocks owned by:	Renovation works	****			systems		
	carried out	total	Water supply system	Sewage system	Central heating	Hot water	Gas supply system
Total	677 585	91 885	19 590	16 647	22 703	55 241	10 062
Gminas	43 175	7 733	751	1 468	4 610	4 135	870
Housing cooperatives	361 712	36 154	5 638	2 388	2 257	29 404	1 792
State Treasury	831	9	_	-	5	2	4
Companies	3 573	333	104	109	131	77	72
Public building societies	4 551	276	69	81	240	240	15
Housing condominums	263 557	47 368	13 027	12 600	15 460	21 383	7 298
Other entities	186	12	1	1	_	-	11

Chart 3. The structure of dwelling renovations related to improvement of housing standards in 2018



Among all dwellings which in 2018 underwent renovations related to improvement of their standard, the highest share were dwellings in buildings covered by housing condominiums – 38.9 %, and owned by housing cooperatives – 53.4 %. The smallest share were dwellings remaining in the stock of other entities (in less than 0.1 % of dwellings), of State Treasury (in 0.1 % of dwellings), public building societies (in 0.7 % of dwellings), and companies (in 0.5 % of dwellings).

#### 2.6. Maintenance costs of dwelling stocks

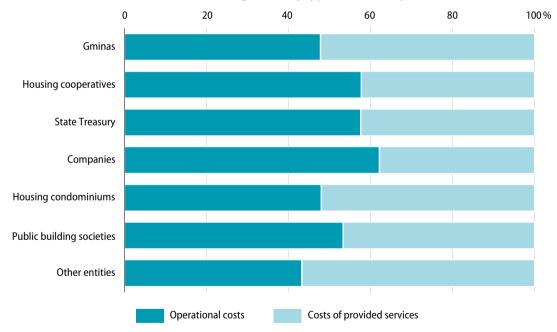
**Maintenance costs of dwelling stocs** is the purposeful consumption of tangible and current assets, external services, employees remuneration and other payments, e.g. taxes related to maintaining housing and utility resources in a given reporting period, expressed in terms of value. Costs of dwelling stock maintenance consists of: operational costs and costs of provided services.

**Operational costs** include the costs incurred by the reporting unit to maintain its own resources or managed by a housing condominium, which include: management and administration costs, maintenance and renovation costs, taxes for the gmina and other not included in any of the above mentioned category, incurred for the maintenance of premises including calculated VAT.

**Costs of provided services** connected with providing services for residential and business premises, i.e. supply of heating energy (central heating, hot water), cold water, wastewater discharging or liquid waste removal, collection of municipal waste and maintenance of lifts (provided they are not treated as maintenance and renovation costs).

In 2018 the survey on maintenance costs of dwelling stocks covered almost 7.3 million dwelling stocks<sup>4</sup>, including over 7 million residential premises, which represented 98.1 % of the surveyed stock. Annual maintenance costs of dwelling stocks of the surveyed entities<sup>5</sup> amounted to PLN 34.1 billion and were 1.9 % higher than in 2016<sup>6</sup>. Cost of municipal services provided for premises decreased by 0.8 %.





<sup>4</sup> Including dwellings constituting a separate ownership located in buildings owned by housing cooperatives in which housing condominiums were not created but managed by housing cooperatives.

<sup>5</sup> See: Methological notes (Sampling and algorithm for the generalisation of results in housing condominiums from M-01 Report on dwelling stocks for 2018).

<sup>6</sup> On the basis of periodic survey conducted every two years.

Out of the total maintenance costs of dwelling stocks, 48.0 % were operational costs and their annual amount was PLN 16.4 billion. The amount of costs varied significantly depending on the type of ownership. The lowest operational costs per 1 m² of useful floor area were charged to premises of housing condominiums – PLN 34.18 and other entities – PLN 34.51, while the highest – by premises in stocks of municipal units – PLN 90.51, public building societies – PLN 72.52, State Treasury – PLN 80.36, and companies – PLN 55.33.

Almost 45 % of operational costs were expenditures related to maintenance of buildings and premises (conservation and repairs), 33.7 % – expenditures related to administration, 21.5 % – other costs (i.e. maintaining cleanliness, charges for receiving antennas, costs related to usage of common spaces, etc.) and taxes for gminas as well as other public and legal charges.



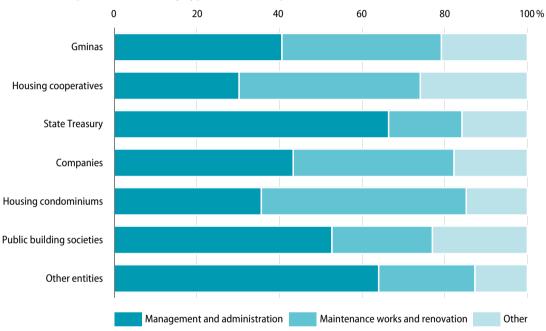


Table 10. The amount of operational costs in groups of ownership in 2018

Specification		Of which elements of operational costs			
	Total	management and administration	maintenance works and renovation		
		in million PLN			
Total	16 377.2	5 519.6	7 338.1		
Gminas	1 653.6	672.1	638.5		
Housing cooperatives	8 633.9	2 606.2	3 786.8		
State Treasury	45.1	30.0	8.0		
Companies	58.4	25.3	22.7		
Housing condominiums	5 642.4	2 007.4	2 800.0		
Public building societies	333.4	175.8	81.1		
Other entities	4.3	2.8	1.0		

In 2018, costs of municipal services provided amounted to PLN 17.8 billion. Taking into consideration the type of ownership of premises, on an annual basis, the lowest amount per 1 m<sup>2</sup> of useful floor area was paid for municipal services provided in the case of premises owned by other entities – PLN 30.25, the highest in the case of premises in the stocks of State Treasury – PLN 58.62.

In the total costs of municipal services provided, 58.9 % were charges for central heating and hot water. Other elements of costs of the services provided were as follows:

- costs related to cold water consumption, sewage discharge and removal of liquid waste 29.4 %,
- costs related to collection of municipal waste 10.7 %,
- costs of lift maintenance approx. 1 % (in some entities, e.g. housing condominiums, this item constitutes a component of costs related to maintenance and renovation).

Table 11. Amount of costs of provided services by type of ownership in 2018

Specification		Elements of costs of the provided services					
	Total	central heating and hot water	cold water and sewage discharge	collection of municipal waste	lift maintenance		
	in million PLN						
Total	17 758.7	10 466.4	5 227.7	1 895.8	168.80		
Gminas	675.6	265.3	283.5	123.7	3.12		
Housing cooperatives	9 413.3	5 799.5	2 541.3	908.6	163.94		
State Treasury	32.9	20.5	8.0	4.4	0.06		
Companies	43.0	21.4	13.1	8.2	0.20		
Housing condominiums	7 387.4	4 253.8	2 311.8	821.8	_		
Public building societies	202.7	103.8	68.8	28.6	1.43		
Other entities	3.8	2.2	1.2	0.5	0.03		

In December 2018, an increase (of 5.4 %) in the average rent amount per 1 m<sup>2</sup> of useful floor area compared to December 2016 was recorded. This rate increased in buildings with residential premises owned by:

- other entities by PLN 3.41 (by 71.6 %),
- State Treasury by PLN 2.78 (by 60.0 %),
- housing condominiums<sup>7</sup> by PLN 0.56 (by 23.5 %),
- companies by PLN 1.02 (by 21.0 %),
- housing cooperatives<sup>8</sup> by PLN 0.44 (by 14.9 %),
- public building societies by 0.39 PLN (by 3.9 %),

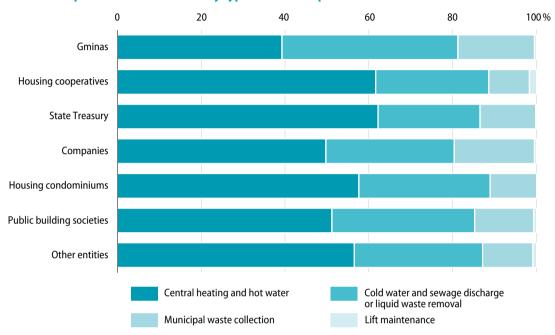
and decreased in buildings with residential premises owned by gminas – by PLN 0.01 (by 0.2 %).

<sup>7</sup> Advance payments of owners on management costs.

<sup>8</sup> Operational fee.

The average rent rates applicable in 2018 ranged from PLN 2.94 per 1  $m^2$  of useful floor area (in housing condominiums) to PLN 10.51 (in public building societies). This means the rent for a dwelling with a useful area of 53  $m^2$  was at the level of PLN 155.80 (in buildings covered by housing condominiums), while in buildings of public building societies – PLN 557.03.

Chart 6. Structure of provided services costs by type of ownership in 2018



# **Chapter 3**

# Social housing assistance

#### 3.1. Social premises

**Social premises** is a place suitable for settlement owing to equipment and technical condition, which surface of rooms per household member – i.e. one person in the case of residence of at least two people – cannot be smaller than  $5 \, \text{m}^2$ , and in the case of one-person household –  $10 \, \text{m}^2$ , with a possible lower standard of the dwelling.

The social premises rental contract shall be concluded for a fixed period. The rent price for social premises cannot exceed the half of the lowest rent price binding in municipal dwelling stock.

Social premises are a form of State aid for persons unable to independently maintain a dwelling due to poverty or homelessness. Gmina is responsible for providing (renting) them. In 2018, stocks of gminas included 101.2 thousand social premises with the total area of 3,355.9 thousand m<sup>2</sup>.

#### **Table 12.** Social premises

Specification	2015	2016	2017	2018
Number of social premises	91 706	94 651	98 631	101 201
Previous year=100	106.2	103.2	104.2	102.6
Average useful floor area of premises in m <sup>2</sup>	32.6	32.8	33.0	33.2

As of the end of 2018, the majority of social premises was located in the following voivodships: Mazowieckie – 16,617, Śląskie – 14,793, and Dolnośląskie – 10,357, with the area of: 510,455 m², 505,193 m², and 331,436 m², respectively. Out of over 100 thousand social premises, more than 7.7 thousand remained uninhabited. In 2018, almost 7 thousand social premises were acquired for the stock, of which the largest number in Mazowieckie Voivodship – 1,307 premises with an area of 40,013 m², and in Łódzkie Voivodship – 1,201 premises with an area of 35,936 m². This increase was to the greatest extent the result of a transformation/separation of premises based on a decision of the relevant body of a gmina, and to a smaller extent the result of a construction or adaptation of premises for residential purposes.

# 3.2. Demand for renting premises from gmina

**Households awaiting the rental of premises** from a gmina are understood as the households that meet the requirements of the gmina council resolution determining the rules for renting premises that are part of the gmina's dwelling stocks.

In 2018, 149,329 households waited for the rental of gmina's dwelling stocks (excluding replacement premises and temporary premises). The demand for rental of premises being part of the gminas dwelling stocks continued to decrease, and compared to 2017 amounted to 96.9 %.

In the total number of households waiting for gmina's dwelling stocks rental, 63,424 households waited for municipal dwelling rental (which is 42.5 % of all households waiting for rental of premises), while 85,905 for social premises, of which 52,589 households under execution of eviction sentences.

Table 13. Households waiting for residential premises rental from gmina – as of 31.12.2018

			For social premises				
Specification	Total	For municipal dwellings	total	of which under execution of eviction sentences			
absolute values							
POLAND	149 329	63 424	85 905	52 589			
Urban areas	128 414	50 236	78 178	51 449			
Rural areas	20 915	13 188	7 727	1 140			
POLAND=100%							
Urban areas	86.0	79.2	91.0	97.8			
Rural areas	14.0	20.8	9.0	2.2			

#### 3.3. Housing allowances

**Housing allowance** is a common and periodical financial benefit resulting from regulations on residential benefits, intended to provide financial support for expenses related to occupation of residential premises or single-family houses.

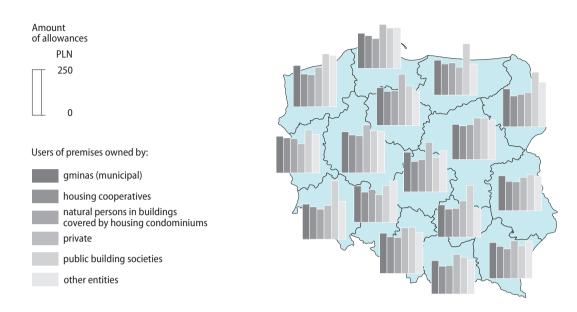
Characteristics: it is an obligatory provision granted upon the request of entitled person meaning that people meeting statutory conditions have the right to demand its payment and it is common (it will be granted regardless of the legal title to the premises that appertains the entitled person apart from exceptions stipulated by law), as well as periodical – because it is granted for a defined period with a possibility to be granted again in the case of further meeting the statutory conditions.

In 2018, 3.2 million housing allowances were paid. In comparison with the previous year, there was a slight decrease in their number (of 10.8 %). The total amount of payments was approx. PLN 664.8 million and was about 11.0 % lower compared to 2017.

Similarly to the previous year, the highest number of housing allowances was paid to the users of gmina's premises, i.e. 40.8 % of the paid number of allowances and 41.6 % of their value, and of premises of housing cooperatives, i.e. 26.2 % of the number and 23.7 % of the value of allowances. The smallest number of allowances was received by the users of dwellings of public building societies, i.e. 2.0 % of the number and 2.5 % of the value of allowances, and of other entities, i.e. 5.9 % of the number and 6.4 % of the value of paid allowances.

Similarly to the previous year, the following voivodships had the highest share in both the number and value of allowances paid in 2018: Śląskie (17.4 % of the number and 18.7 % of the value of allowances paid), Mazowieckie (10.9 % and 10.4 %, respectively), Wielkopolskie (8.7 % and 9.8 %), and Kujawsko-Pomorskie (8.2 % and 8.9 %), while the lowest: Świętokrzyskie (1.7 % and 1.4 %), Opolskie (2.0 % and 1.9 %), and Lubuskie (3.0 % of their number and 2.9 % of the value of paid allowances).

#### Map 9. The average amount of housing allowance paid out in 2018



In 2018, the average amount of housing allowances was lower compared to 2017 and amounted to PLN 205.4 (compared to the previous year, it decreased by PLN 0.4), with PLN 207.1 in urban areas and PLN 187.1 in rural areas. The highest average amount of the allowance was paid to the users of private premises – PLN 250.9, while the lowest to the users of premises being part of housing condominiums – PLN 182.1 and housing cooperatives – PLN 185.2.

The highest average amount of housing allowances paid was recorded in the following voivodships: Wielkopolskie – PLN 231.5, Kujawsko-Pomorskie – PLN 223.4, and Śląskie – PLN 220.7, and the lowest in Świętokrzyskie (PLN 167.2) and Lubelskie (PLN 174.3).

# **Chapter 4**

# **Management of land for housing construction**

The term "common land" is understood as land that is owned by municipalities and intermunicipality associations whose owners are not known and are in autonomous possession of municipality organizational units that do not have legal personality and land owned by municipalities and intermunicipality associations under the perpetual usufruct.

**Improved lands** should be understood as a building plot foreseen for residential building purposes which ensure connection of utility infrastructure of the land or building to water supply system, a sewage system or an electricity and heating system.

In 2018, gminas handed over to investors 874.6 ha of land for housing construction, of which 81.7 % were meant for single-family housing. Of the total area of land meant for housing construction, 58.6 % was land in urban areas.

Table 14. The share of lands handed over to housing construction by voivodships (in %) in 2018

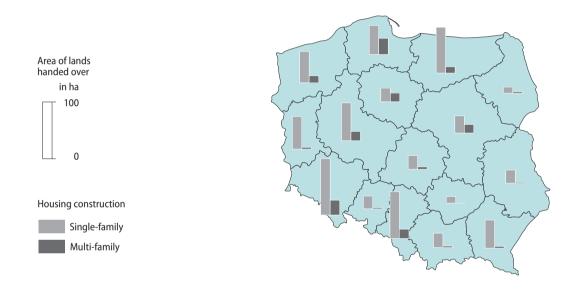
c .c	Lands har	Lands handed over to housing construction					
Specification	total	single-family	multi-family				
POLAND	100.0	100.0	100.0				
Dolnośląskie	14.3	13.9	16.3				
Kujawsko-Pomorskie	4.5	3.4	9.5				
Lubelskie	2.7	3.2	0.4				
Lubuskie	6.9	8.0	1.9				
Łódzkie	3.3	3.4	2.7				
Małopolskie	3.2	3.5	1.6				
Mazowieckie	5.2	4.2	9.4				
Opolskie	2.8	3.1	1.4				
Podkarpackie	6.0	6.9	2.0				
Podlaskie	1.5	1.5	1.6				
Pomorskie	9.1	7.2	17.8				
Śląskie	11.3	11.6	10.2				
Świętokrzyskie	1.3	1.7	_				
Warmińsko-Mazurskie	10.5	11.3	7.1				
Wielkopolskie	9.5	9.3	10.2				
Zachodniopomorskie	7.7	7.7	7.7				

In the total area of land handed over for housing construction in 2018, the following voivodships had the largest shares: Dolnośląskie (14.3 %), Śląskie (11.3 %), Warmińsko-Mazurskie (10.5 %), and Wielkopolskie (9.5 %), while the smallest – Świętokrzyskie (1.3 %), Podlaskie (1.5 %), Lubelskie (2.7 %), and Opolskie (2.8 %).

As for the land being part of gmina's stocks meant for housing construction, the largest share of land was designated for this purpose in the following voivodships: Warmińsko-Mazurskie (6.2 %), Wielkopolskie (6.0 %), Kujawsko-Pomorskie (5.8 %), and Podkarpackie (4.2 %), while the smallest in Małopolskie (0.8 %), Łódzkie (1.5 %), Podlaskie (1.9 %), and Pomorskie (2.6 %).

Out of the total area of land (23,308.6 ha) meant for housing construction being part of gmina's stocks, 78.7 % was meant for single-family housing, of which 64.9 % in urban areas and 97.0 % in rural areas.

#### Map 10. Lands handed over to investors for housing construction purposes in 2018



The following voivodships had the highest share in the total area of land handed over for single-family housing: Dolnośląskie (13.9 %), Śląskie (11.6 %), and Warmińsko-Mazurskie (11.3 %). In Pomorskie (17.8 %), Dolnośląskie (16.3 %), and Wielkopolskie and Śląskie (10.2 % each) voivodships, the largest share of land was handed over for multi-family housing.

Table 15. The share of lands handed over to housing construction by type of ownership and by voivodships (in %) in 2018

	Land for	by type of ownership:				
•	housing construction	housing cooperatives	gminas	public building societies	natural persons	companies and other
POLAND	100.0	0.2	3.0	2.2	69.2	25.3
Dolnośląskie	100.0	0.2	4.2	0.4	74.3	20.9
Kujawsko-Pomorskie	100.0	1.8	0.5	11.0	59.7	27.0
Lubelskie	100.0	_	13.4	_	78.6	8.0
Lubuskie	100.0	_	0.3	_	90.9	8.8
Łódzkie	100.0	_	2.8	7.7	75.6	13.9
Małopolskie	100.0	0.4	6.1	1.8	80.3	11.5
Mazowieckie	100.0	-	0.9	0.7	78.6	19.8
Opolskie	100.0	-	1.6	1.6	84.5	12.2
Podkarpackie	100.0	_	1.1	1.3	84.8	12.7
Podlaskie	100.0	-	_	_	78.2	21.8
Pomorskie	100.0	1.0	0.6	2.8	66.0	29.6
Śląskie	100.0	0.1	0.5	2.2	52.3	44.8
Świętokrzyskie	100.0	_	8.5	-	87.3	4.2
Warmińsko-Mazurskie	100.0	-	4.0	2.1	44.7	49.2
Wielkopolskie	100.0	_	7.5	2.5	63.9	26.1
Zachodniopomorskie	100.0	-	2.5	3.1	74.9	19.5

The smallest share of land handed over to investors for housing construction was meant for housing cooperatives construction (0.2 %), construction of public building societies (2.2 %), and municipal construction (3.0 %), and the largest (69.2 %) for private construction (natural persons).

# **Chapter 5**

# Water supply system and sewage system management

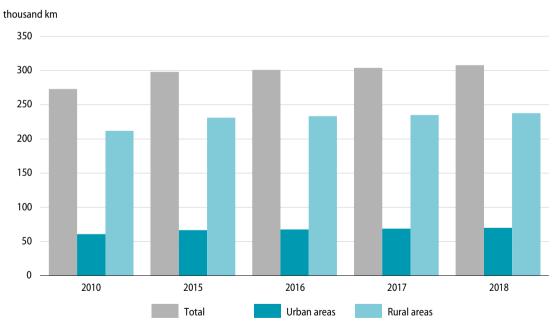
**Water supply distribution network** – street conduits used for distribution of water to consumers by the connections to buildings and other objects.

**Water supply connection** – a segment of a conduit connecting water supply network with internal water supply installation in a property of consumer together with a valve past the main water-meter.

Similarly to past years, in 2018 there were further investments in the area of technical and sanitary infrastructure. Compared to 2010, the length of the water supply network increased by 12.8 %, i.e. from 272.9 thousand km in 2010 to 307.7 thousand km in 2018, and in rural areas from 211.9 thousand km to 237.6 thousand km, i.e. by 12.1 %. The number of connections increased by approx. 735 thousand pcs, i.e. by 14.9 %, and by approx. 478 thousand in rural areas, i.e. by 15.7 %.

The most significant increase in the length of the water supply network was observed in urban areas of the following voivodships: Podkarpackie – of almost 25 %, Lubuskie – of almost 21 %, and Mazowieckie – of more than 24 %, and in rural areas of the following voivodships: Warmińsko-Mazurskie – of approx. 19 %, and Małopolskie and Zachodniopomorskie – of more than 18 % each.

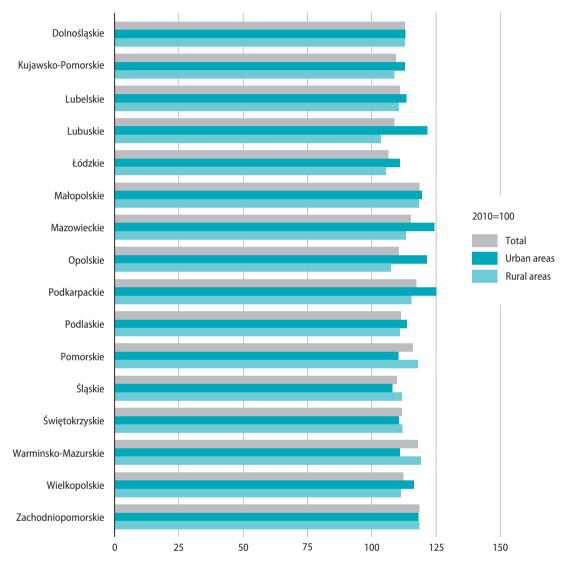
### Chart 7. The length of active distribution water supply network



As of the end of 2018, the length of the water supply network in Poland amounted to almost 308 thousand km, and the number of connections – to almost 5.7 million. Compared to 2017, the length of newly built or reconstructed water supply network increased by 3.8 thousand km, with a simultaneous increase in the number of connections to buildings of over 35 thousand pcs.

More than 77 % of the length of the water supply network and approx. 62 % of connections to buildings were located in rural areas. Compared to the previous year, the length of the water supply network in urban areas increased by more than 1.2 thousand km, and the number of connections decreased as a result of an update by 0.4 thousand pcs. In rural areas, there was an increase of more than 2.5 thousand km of new network, and the number of connections increased by almost 36 thousand pcs.

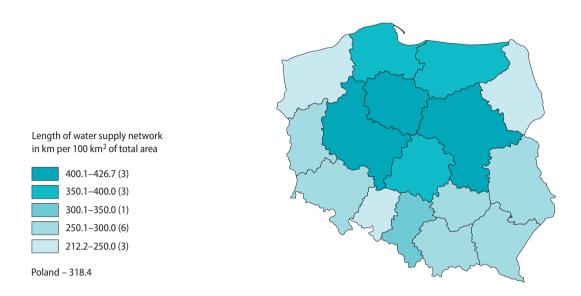




The highest values of the indicator of the water supply network density were observed in Śląskie Voivodship – 175.7 km per 100 km² (an increase of 1.0 km per 100 km² compared to 2017) and Małopolskie Voivodship – 137.4 km per 100 km² (an increase of 2.8 km per 100 km²), and the lowest in Zachodniopomorskie Voivodship – 49.9 km per 100 km² (an increase of 0.3 km per 100 km²).

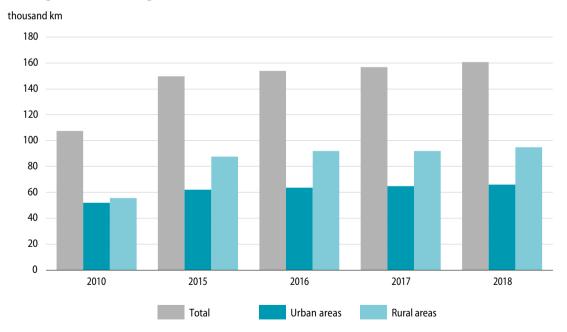
**The density of water supply network per 100 km**<sup>2</sup> – the indicator is a quotient obtained by dividing of the length of water supply network by the area of surveyed surface, multiplied by 100.

Map 11. The density of water supply network in urban areas in 2018



In the years 2010–2018, the length of the sewage network increased by 53.2 thousand km (49.4 %), reaching 160.7 thousand km in 2018. In rural areas, the increase in the length of the network was higher by 39.3 thousand km (70.6 %) than in urban areas where the increase was almost 14 thousand km (49.4 %).

Chart 9. The length of active sewage network

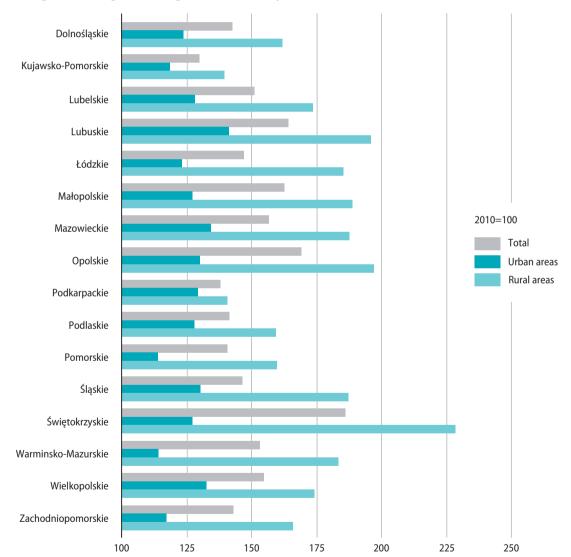


**Active sewage network** – a system of covered (underground) conduits discharging sewage from buildings and other objects to collectors or sewage treatment facilities.

**Sewage connection** – a segment of conduit connecting internal sewage installations on a property of consumer with the sewage network, past a first inspection chamber from a building, and in case of its lack – from a boundary of the property.

As far as individual voivodships are concerned, the most significant increase in the length of the sewage network in rural areas was observed in Świętokrzyskie – 85.9%, Opolskie – 69.1%, Lubuskie – 64.1%, and Małopolskie – 62.5%. In urban areas, the highest increase in the length of the sewage network was observed in the following voivodships: Lubuskie – 41.1%, Mazowieckie – 34.2%, and Wielkopolskie – 32.5%.

Chart 10. Change in the length of sewage network in the years 2010–2018



As of the end of 2018, the length of the sewage network in Poland reached about 160.7 thousand km, with the number of connections to buildings at the level of about 3.4 million pcs. Compared to 2017, the length of newly built and reconstructed sewage network increased by approx. 3.9 thousand km, i.e. by 2.5 %, with a simultaneous increase in the number of connections of almost 60 thousand pcs, i.e. of 1.8 %.

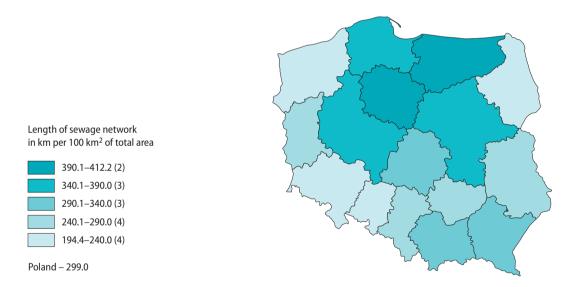
59 % of the sewage network and 45.4 % of the number of connections were located in rural areas. Compared to 2017, the length of the network in rural areas increased by 2.8 thousand km (3.0 %) and the number of connections by almost 31 thousand pcs (2.1 %). In the same period, over 1.1 thousand km of the network were built in urban areas (an increase of 1.7 %) and approx. 29 thousand km of connections (an increase of 1.6 %).

Compared to 2017, the largest increase in the length of the sewage network in total was recorded in the following voivodships: Lubelskie – of 3.8 % (in urban areas – 3.2 %), Mazowieckie – of 3.6 % (in urban areas – 1.4 %), and Wielkopolskie – of 3.2 % (in urban areas – 2.8 %).

In 2018, the highest values of the sewage network density were recorded in Śląskie Voivodship – 135.2 km per 100 km² and Małopolskie Voivodship – 107.1 km per 100 km² and the lowest in Podlaskie Voivodship – 17.9 km per 100 km² and Lubelskie Voivodship – 26.6 km per 100 km².

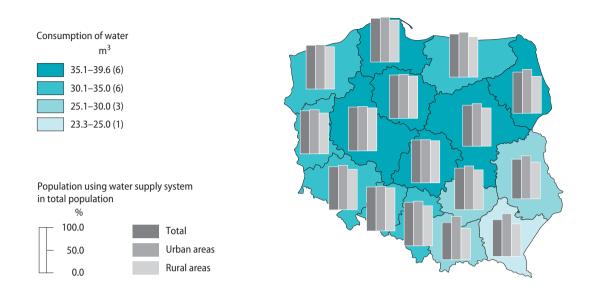
The density of sewage network per 100 km<sup>2</sup> – the indicator is a quotient obtained by dividing of the length of sewage network by the area of surveyed surface, multiplied by 100.

#### Map 12. The density of sewage network in urban areas in 2018



Development of the water supply and sewage infrastructure has contributed to the increase in the number of population using the above-mentioned network. In 2018, the water supply system was used by 92.1 % of the total population (an increase of 4.7 percentage points compared to 2010). In urban areas, 96.6 % of the total population had access to the water supply system (an increase of 1.3 percentage point compared to 2010). In rural areas, the share of population using the water supply system was at the level of 85.3 %.

Data regarding **population using water supply system** include people living in residential buildings and collective accommodation buildings connected to water supply system.



Map 13. Population using water supply system and consumption of water per capita in 2018

With an increasing number of people with access to the water supply network, in the years 2010–2018 the quantity of water used per capita increased by almost 7.1 %.

Table 16. Population using water supply system and consumption of water in households per capita

Specification	2010	2015	2016	2017	2018
Population using water supply system in total population (%) in urban areas	87.4	91.8	91.9	92.0	92.1
	95.3	96.5	96.5	96.6	96.6
Average water consumption per capita in m <sup>3</sup> in urban areas	31.1	32.2	32.2	31.8	33.3
	35.0	34.3	34.2	34.1	35.2

The average water consumption by households in 2018 amounted to 33.3 m³ per capita, with 35.2 m³ in urban areas and 30.6 m³ in rural areas. Compared to 2017, water consumption increased by 1.5 m³. In urban areas, there was an increase in consumption of 1.1 m³, and in rural areas of 2.1 m³. The largest drops in water consumption were recorded in Kujawsko-Pomorskie Voivodship -2.7 m³ per capita (1.9 m³ for urban areas and 3.6 m³ in rural areas) and in Wielkopolskie Voivodship -2.5 m³ per capita (for urban areas it amounted to 1.7 m³, while in rural areas there was an increase of 3.4 m³).

The share of the population using the sewage system increased between 2010 and 2018 from 62 % to 70.8 % (an increase of 8.8 percentage points). At the end of 2018, in urban areas 90.3 % of the population was using the system (an increase of 4.2 percentage points), and in rural areas 41.3 % (an increase of 16.5 percentage points).

Data regarding **population using sewage system** include people living in residential buildings and collective accommodation buildings connected to sewage system.

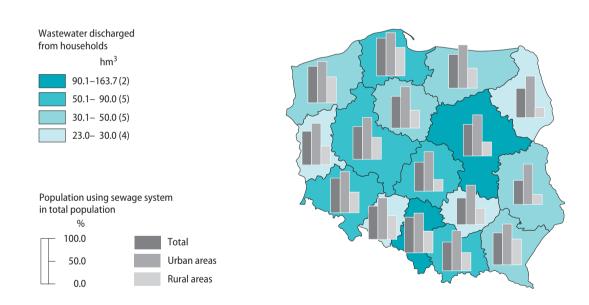
Table 17. Population using sewage system and the quantity of wastewater discharged from households

Specification	2010	2015	2016	2017	2018
Population using sewage system in total population (%) in urban areas	62.0 86.1	69.7 89.8	70.2 90.0	70.5 90.2	70.8 90.2
Wastewater from households discharged by sewage system during a year (hm³)	901.6	926.1	938.1	954.4	969.5

The amount of wastewater discharged from households in 2018 amounted to 969.5 hm<sup>3</sup> (in urban areas to 845.5 hm<sup>3</sup>, and in rural areas to 124 hm<sup>3</sup>), and compared to 2017 increased by 15.1 hm<sup>3</sup> (by 14.6 hm<sup>3</sup> and 0.5 hm<sup>3</sup>, respectively).

**Wastewater discharged** – household wastewater or a mixture of household wastewater with rainfall wastewater or a mixture of household wastewater with industrial wastewater and rainfall wastewater. **Domestic wastewater** – sewage from residential buildings, collective accommodation establishments, and public buildings, which originates from the human metabolism or activities of households as well as sewage of similar composition originating from such buildings.

### Map 14. Population using sewage system and wastewater discharged from households in 2018



# **Chapter 6**

## **Electric energy and gas supply system management**

**Gas supply network** is a system of conduits providing gas supplied by enterprises, which scope of economic activity includes transmission and distribution of gas to consumers. The system of conduits consists of:

- transmission and distribution network (with high-methane gas and nitrogenised gas) street conduits used for distribution of gas to buildings or other objects by means of connections;
- connections a system of conduits joining distribution gas supply network with buildings and other objects.

As of the end of 2018, the total length of gas network in Poland reached 154.4 thousand km, of which 86 % (133.2 thousand km) was the length of distribution network. Compared to the previous year, an increase in the total length of gas network of 2.2 thousand km was observed, of which 98.7 % accounted for the distribution network.

The length of active gas connections to buildings as of the end of 2018 was 51.3 thousand km and it was an increase of 1.8 % compared to the previous year. Their number, however, was characterised by a faster pace of growth (2.3 %), and as of the end of 2018 amounted to 2,937.1 thousand.

Out of the total number of 66.8 thousand connections installed in 2018, about 35.1 thousand were located in urban areas (an increase of 2.1 %), while about 31.6 thousand in rural areas (an increase of 2.7 %).

#### Chart 11. The length of active gas distribution network

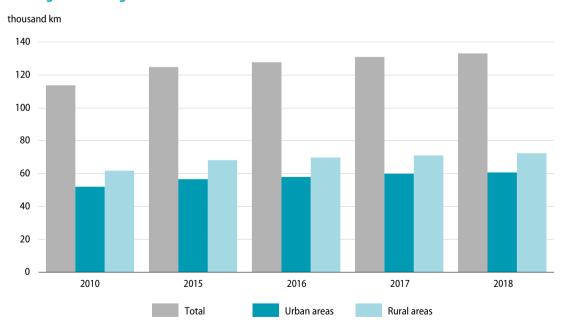
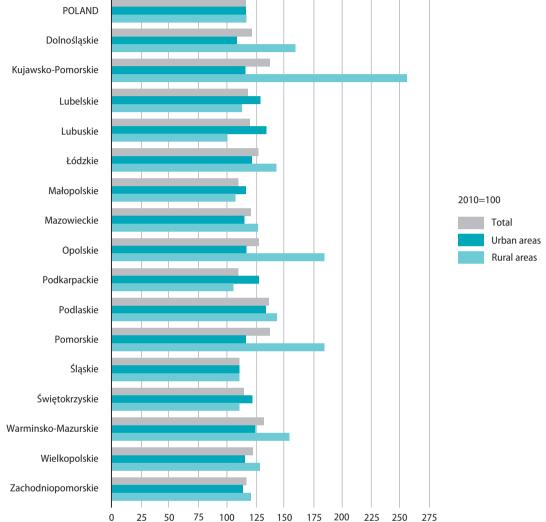


Chart 12.

As of the end of 2018, the length of the gas distribution network increased by 2.1 thousand km, and in urban areas with an increase of 0.9 thousand km (1.5%) it amounted to 60.8 thousand km, while in rural areas with an increase of 1.3 thousand km (1.8 %) it was 72.4 thousand km.



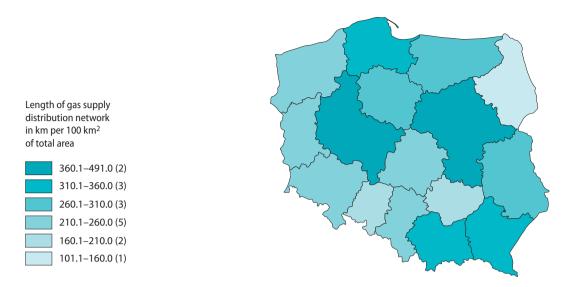
Change in the length of gas supply distribution network in the years 2010-2018



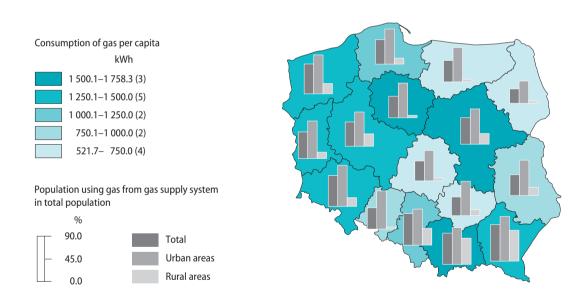
Compared to 2010, a significant increase in the length of gas supply distribution network was observed in urban areas of the following voivodships: Lubuskie (of 34.0 %), Podlaskie (of 33.6 %), Lubelskie (of 28.9 %), and Podkarpackie (of 27.7 %) as well as in rural areas of the following voivodships: Kujawsko--Pomorskie (of 156.2 %), Opolskie (of 184.5 %), and Pomorskie (of 184.4 %).

In spatial system of Poland, as of the end of 2018, the largest changes in the length of gas supply distribution network in comparison to the previous year were observed in voivodships: Łódzkie - of 4.6 % (in urban areas - of 3.7 %), Warmińsko-Mazurskie - of 4.5 % (in urban areas - of 3.5 %), and Podlaskie - of 4.3 % (in urban areas - of 4.7 %), and smallest in Śląskie - of 0.9 % (in urban areas - of 0.6 %) as well as Podkarpackie, Małopolskie and Lubuskie – each of 1.0 % (in urban areas – of 1.3 %, 1.1 %, and 1.4 %, respectively).

Map 15. The density of gas supply distribution network in urban areas in 2018



Map 16. Population using gas from gas supply system and consumption of gas per capita in 2018



Data on gas users concern the population in dwellings equipped with gas network installations.

In 2018 in Poland, the percentage of the total population using gas supply system remained at the same level as in 2017, i.e. 52.1 %.

In urban areas, the gas supply system was used by 70.9 % of the total population (by 0.3 percentage point less than in the previous year), while in rural areas users of gas supply system represented 23.9 % of the total population (by 0.6 percentage point more than in the previous year).

Table 18. Population using gas from gas supply system and consumption of gas in households per capita

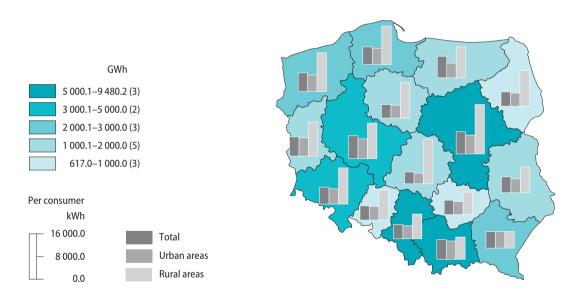
Specification	2010	2015	2016	2017	2018
Consumers of gas from gas supply system in total population (%) in urban areas	52.5	52.1	52.1	52.1	52.1
	72.9	71.6	71.4	71.2	70.9
Consumption of gas per capita (kWh)	110.0 <sup>a)</sup>	1 060.3	1 177.4	1 224.0	1 221.0
	145.9 <sup>a)</sup>	1 369.6	1 522.8	1 564.5	1 553.0

a)  $m^3$ .

In 2018 in Poland, consumption of gas from gas supply system in households amounted to 46,903.3 GWh and in comparison with 2017 decreased by 0.3 % (by 126.1 GWh) with a simultaneous rise in the number of consumers of 0.7 %. In urban areas, gas consumption dropped by 0.9 % with an increase in the number of consumers of 0.3 %. In rural areas, gas consumption increased by 1.7 % while the number of consumers rose by 3.1 %.

Data regarding the **number of consumers of gas fuels** come from entities which have concessions for gas trade and are based on the number of contracts with consumers of gas from gas supply network.

Map 17. Sale of gas to households in 2018



In 2018, compared to the previous year, the average consumption of gas from the gas supply system by households decreased by 1 % and amounted to 6,206 kWh per consumer, with 5,539 kWh per consumer in urban areas and 10,201 kWh per consumer in rural areas. Consumption of gas from gas supply system per consumer in urban areas decreased by approx. 67 kWh (by 1.2 %), and in rural areas by almost 143 kWh (by 1.4 %).

The highest average consumption of gas from the gas supply system by households was recorded in voivodships Wielkopolskie (8,087.2 kWh per consumer) and Mazowieckie (7,839.8 kWh per consumer), and the lowest in voivodships Łódzkie (4,144.3 kWh per consumer) and Kujawsko-Pomorskie (4,769.4 kWh per consumer).

Information on **number of consumers and consumption of electricity** concern households and collective accommodation establishments with complex agreements or distribution service contracts.

Data on consumption of electricity were stated on the basis of advance payments made by consumers.

Table 19. Consumers and consumption of electricity per capita in households

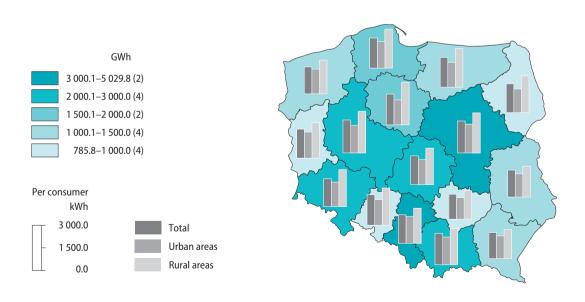
Specification	2010	2015	2016	2017	2018
Consumers (thousands)	14 178.5	14 468.0	14 676.7	15 203.9	15 397.7
in urban areas	9 409.4	9 591.7	9 732.2	10 110.8	10 243.6
Consumption per capita (kWh)	773.0	736.3	751.1	789.5	794.2
in urban areas	785.4	727.6	737.3	777.7	777.4

Consumption of electricity in households in Poland in 2018 slightly increased compared to the previous year (by 0.6 %) and reached the level of about 30,506.2 GWh, however in urban areas it slightly decreased (by 0.2 %) and amounted to around 17,953.4 GWh, while in rural areas it increased mildly (by 1.7 %) to the level of around 12,552.8 GWh.

In 2018, in comparison to the previous year, consumption of electricity per consumer in households in Poland decreased by 0.7 % and amounted to 1,981.2 kWh, however in urban areas a decrease of 1.5 % took place (consumption amounted to 1,752.7 kWh per consumer), and a slight increase of 0.5 % was noted in rural areas (consumption amounted to 2,435.5 kWh per consumer).

The highest consumption of electric energy per consumer was recorded in voivodships Wielkopolskie (2,203.6 kWh) and Mazowieckie (2,137.9 kWh), while the lowest in Świętokrzyskie (1,670.1 kWh) and Podkarpackie (1,750.0 kWh).

Map 18. Consumers and consumption of electricity in households in 2018



# **Chapter 7**

# **Heating system management**

**Heating transmission network** – a system of conduits transmitting heating medium to distribution conduits.

**Heating distribution network** – a system of distribution conduits transmitting heating medium to connections to buildings.

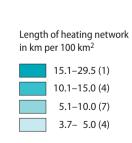
**Household connections** – conduits transmitting heating medium from distribution conduits or boiler houses to heat exchangers or heating substations in buildings or other facilities.

The total length of heating transmission network as of the end of 2018 amounted to 25,219.2 km, of which 64.6 % accounted for heating transmission and distribution network (16,296.0 km), and 35.4 % for household connections (8,923.2 km). The number of boiler houses as of the end of 2018 amounted to 23,768.

The density of heating network per 100 km<sup>2</sup> – the indicator is a quotient obtained by dividing of the length of heating network by the area of surveyed surface, multiplied by 100.

The density of heating network in Poland as of the end of 2018 was 8.1 km per 100 km². In the spatial system of the country, the largest density of heating network occured on area of voivodships: Śląskie (29.5 km per 100 km²), Małopolskie (13.3 km per 100 km²), and Łódzkie and Pomorskie (10.3 km per 100 km², each). The lowest levels of the indicator of heating network density were recorded in Lubuskie (3.7 km per 100 km²) as well as Podlaskie and Warmińsko-Mazurskie (4.1 km per 100 km², each).

### Map 19. The density of heating network in 2018



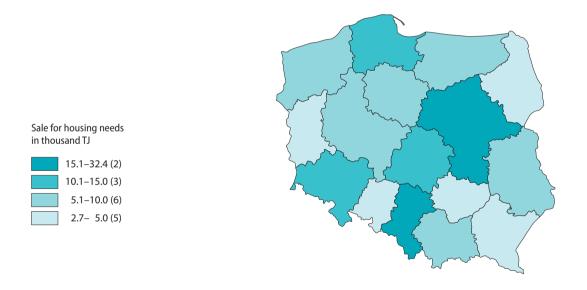


In 2018, in Poland the heat sales volume amounted to 194.5 thousand TJ, of which 149.8 thousand TJ (77.0 %) for the purpose of heating of residential buildings. It facilitated heating of 2,347,608.6 thousand m³ of cubic volume of buildings in total, of which 1,293,139.8 thousand m³ of cubic volume of residential buildings. About 191.7 thousand TJ (98.6 %) of heating energy was sold to inhabitants of urban areas, of which approx. 148.1 thousand TJ for heating purposes in residential buildings.

 Table 20.
 Heating system infrastructure and sale of heating energy

Specification	2010	2015	2016	2016 2017	
Heating network total (km, as of 31 XII)	23 666	24 688	23 918	25 232	25 219
Heating transmission and distribution network (km, as of 31 XII)	15 633	15 932	15 653	16 381	16 296
Connections to buildings (km, as of 31 XII)	8 033	8 757	8 265	8 851	8 923
Boiler houses (as of 31 XII)	14 458	23 816	24 145	24 553	23 768
Sale of heating energy (thousand TJ, during a year)	224.7	186.4	197.1	205.1	194.5
of which to residential buildings (thousand TJ, during a year)	189.7	147.2	153.3	158.3	149.8

#### Map 20. Sale of heating energy for heating purpose in residential buildings in 2018



Information concerning **heating** include residential buildings and buildings of offices and institutions with central heating provided by heating transmission network.

The largest amount of heating energy for heating purposes was generated by using solid fuels (65.32 %), followed by gas fuels (32.75 %) and oil fuels (1.93 %).

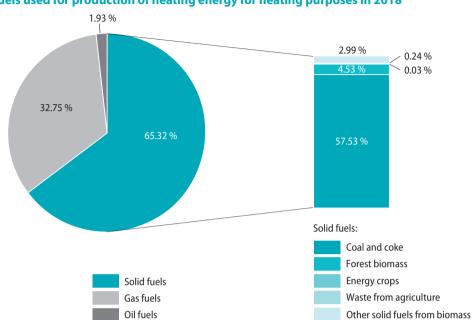


Chart 13. Types of fuels used for production of heating energy for heating purposes in 2018

# **Chapter 8**

# **Municipal waste management**

**Municipal waste** is waste generated in households (excluding discarded vehicles) as well as waste generated by other producers of waste (excluding hazardous waste) which because of its character or composition is similar to waste from households.

In 2018, in Poland there were generated 12,485.4 thousand tonnes of municipal waste, which constituted an increase of 4.3 % compared to the previous year. There was on average 325 kg of collected municipal waste per one inhabitant of Poland, and in urban areas it was 382 kg, while in rural areas – 239 kg. The largest amount of municipal waste generated fell on 1 inhabitant of the following voivodships: Dolnośląskie (394 kg), Zachodniopomorskie (377 kg), Śląskie (367 kg) and Lubuskie (361 kg), while the least of – Świętokrzyskie (201 kg), Lubelskie (222 kg), Podkarpackie (234 kg) and Podlaskie (253 kg) voivodships.

Table 21. Municipal waste collected per 1 inhabitant

Specification	2010	2015	2016	2017	2018		
	kg per 1 inhabitant						
Municipal waste collected, total	261	283	303	312	325		
Municipal waste collected, mixed	238	217	227	227	231		
Municipal waste collected separately	22	66	77	84	94		

**Municipal waste generated** – due to the fact that since 1.07.2013, all real estate owners are covered by municipalities with municipal waste management system, starting from data for 2014, the amount of waste collected is deemed to be waste generated.

In 2018, private sector entities collected 61.7 % of municipal waste (in 2017 – 61.8 %). Entities with foreign capital collected the same amount as a year before (approximately 10 %).

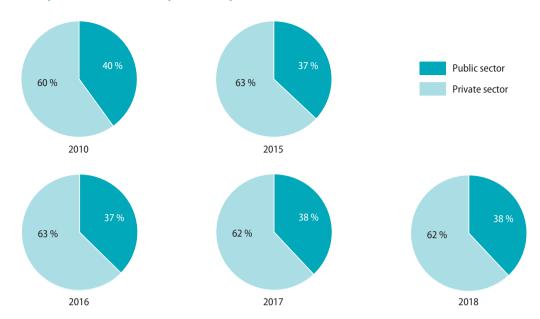
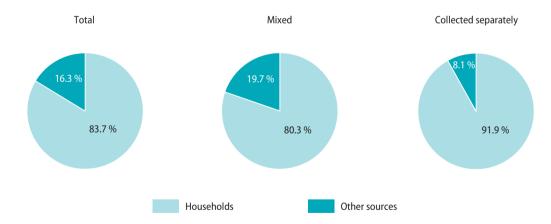


Chart 14. Municipal waste collected, by ownership sector of waste collectors

In 2018, the majority of municipal waste (10,445.8 thousand tonnes) was generated by households (83.7 % of the total amount of municipal waste generated). This amount increased by 4.8 % in comparison to the previous year. The remaining part of municipal waste, collected among others, under provision of municipal services such as street cleaning or maintenance of parks or cemeteries, amounted to 2,039.6 thousand tonnes and constituted 16.3 % of the total mass of the municipal waste collected in 2018. The share of these sources of origin of municipal waste collected in 2017 was 83.3 % and 16.7 %, respectively.

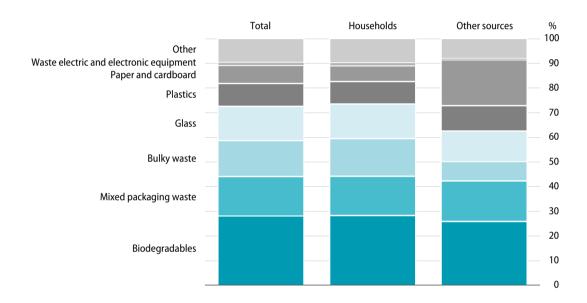
Chart 15. Sources of origin of municipal waste collected in 2018



In 2018 was recorded an increase in the share of waste collected separately in the total amount of municipal waste generated – to 28.9 % from 27.1 % in 2017. The total weight of waste collected separately increased from approximately 3,239 thousand tonnes in 2017 to about 3,608 thousand tonnes in 2018. There was approximately 94 kg of separately collected municipal waste per one inhabitant of Poland (a year before – 84 kg), with 106 kg in urban, and 76 kg in rural areas (a year before 98 kg and 64 kg, respectively).

The largest amount (91.9 %) of separately collected municipal waste in 2018 was generated by households. Compared to the previous year, the amount of this waste increased by 12.4 % – from approximately 2,951.1 thousand tonnes to about 3,317.2 thousand tonnes. It was mainly biodegradable waste, mixed packaging waste, bulky waste, and glass waste, which amounted to 73.5 % of the total municipal waste collected separately generated by households in 2018.

Chart 16. Municipal waste collected separately, by fractions and sources of origin in 2018



Waste originating from other sources, collected, among others, under provision of municipal services related with maintenance of cleanliness and order in municipalities (of which 73.2 % were biodegradable waste, paper and cardboard, mixed packaging waste and glass) accounted for 8.1 % of the municipal waste collected separately and their weight rose by 0.8 % – from about 288.4 thousand tonnes to approximately 290.8 thousand tonnes.

In 2018, the volume of separately collected glass waste amounted to 13.1 kg per one inhabitant and it was an increase of 8.7 % compared to the previous year. There was about 8.6 kg of separately collected plastic waste (an increase of 11.7 % in comparison with the amount of 7.7 kg in 2017) per one inhabitant of Poland in 2018, and about 7.0 kg of paper and cardboard waste (6.0 kg in 2017, an increase of 16.9 %). Also, a rise was observed in the volume of separately collected biodegradable waste per one inhabitant – from 23.3 kg in 2017 to 26.4 kg in 2018 (of 13.4 %) as well as bulky waste – from 11.5 kg to 13.7 kg (of 19.2 %).

Table 22.	Fractions of mu	nicipal waste	collected separa	ately per 1	l inhabitant
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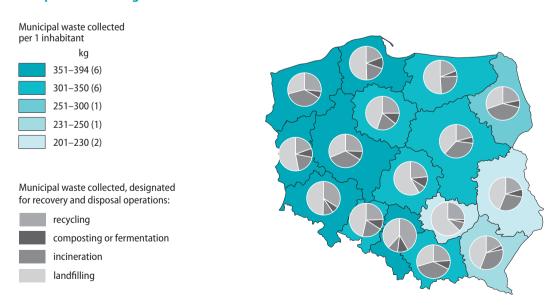
Separately collected municipal waste per 1 inhabitant (kg)	2010	2015	2016	2017	2018
Total	22.3	66.0	76.6	84.3	93.9
Paper and cardboard	4.4	6.3	6.6	6.0	7.0
Glass	5.6	11.0	11.6	12.1	13.1
Plastics	3.2	7.9	7.9	7.7	8.6
Mixed packaging		10.9	13.3	14.3	15.0
Bulky	2.7	6.8	8.8	11.5	13.7
Biodegradable	4.7	17.1	21.4	23.3	26.4

As of the end of 2018, in Poland there were 2,144 public facilities of separate municipal waste collection (4 less than in the previous year), of which 785 (36.6 %) were located in urban areas and 1,359 (63.4 %) – in rural areas.

**Recovery of waste** – any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.

More than a half (56.9 %) of municipal waste generated in 2018 was intended for recovery (7,103.1 thousand tonnes), of which about 3,269.1 thousand tonnes of municipal waste was intended for recycling (26.2 % of the volume of generated municipal waste). There were both municipal waste collected separately and material waste sorted out of mixed municipal waste. In the previous year, 3,198.7 thousand tonnes of waste intended for recycling accounted for 26.7 % of the volume of municipal waste generated.

#### Map 21. Municipal waste management in 2018



About 1,012.0 thousand tonnes of municipal waste was directed for biological treatment processes (composting or fermentation). Those were mainly bio-waste from gardens, parks and cemeteries, waste from market places, biodegradable kitchen waste and food waste from gastronomy. Compared with the previous year, the share of waste intended for such treatment in the total volume of municipal waste generated, increased by 1.0 percentage point to 8.1 %.

Almost 2,822.1 thousand tonnes of municipal waste (about 22.6 %) was intended for incineration with energy recovery. In 2017 it was 2,724.2 thousand tonnes, which accounted for approx. 22.8 % of the volume of municipal waste generated.

**Disposal of waste** – any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy.

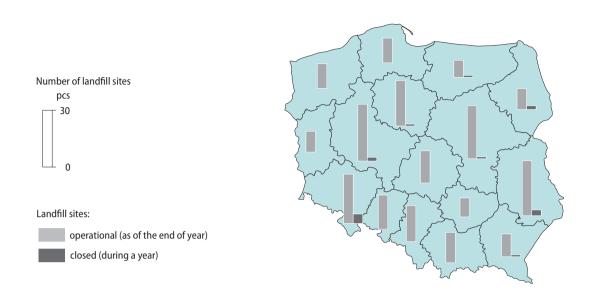
Total of 5,382.3 thousand tonnes were directed for disposal, of which 5,191.1 thousand tonnes (41.6 % of total municipal waste generated) was intended for landfilling, and 191.2 thousand tonnes (1.5 % of total municipal waste generated) for incineration without energy recovery. Compared with 2017, there was noted a slight decrease in the share of municipal waste intended for disposal through landfilling. In 2017, this particular amount of waste accounted for 41.8 % of the total volume of municipal waste generated.

### Table 23. Municipal waste treatment

Specification	2010	2015	2016	2017	2018
Municipal waste directed to recovery operations (thousand tonnes)	1 965	4 845	6 172	6 771	7 103
of which:					
material recycling	1 783	2 867	3 243	3 199	3 269
organic recycling (composting or fermentation)	181	661	814	848	1 012
incineration with energy recovery	_	1 318	2 114	2 724	2 822
Municipal waste intended for disposal (thousand tonnes)	8 076	6 018	5 483	5 198	5 382
of which:					
landfilling	8 037	5 897	5 331	5 000	5 191
incineration without energy recovery	39	121	152	198	191

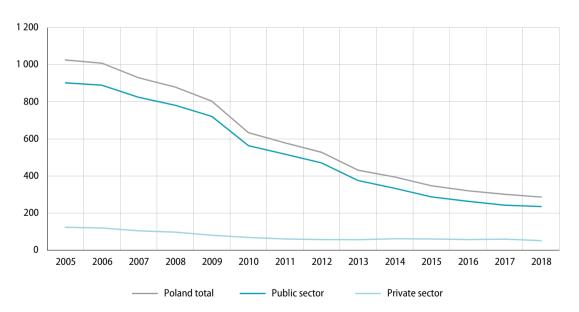
As of the end of 2018, there were 286 operational landfill sites receiving municipal waste. Those landfill sites covered the total area of 1,700 ha. In 2018, 16 landfill sites of this type, covering area of about 46.8 ha, were closed.

### Map 22. Landfill sites in 2018

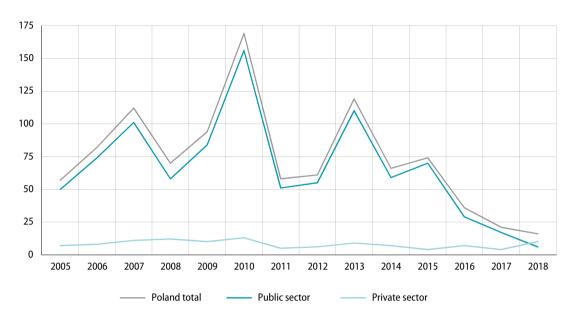


As a result of the need of conforming the municipal waste landfill sites to technical and organisational requirements resulting from legal provisions, the number of landfill sites in operation has been systematically decreasing over past several years.

### Chart 17. Landfill sites in operation

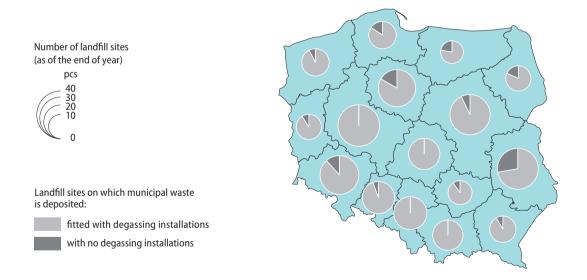






As of the end of 2018 in Poland, 258 landfill sites was fitted with degassing installations, and they accounted for 90.2 % of all operational landfill sites where municipal waste was deposited (in the previous year 88.7 %).

#### Map 23. Degassing of landfill sites in 2018

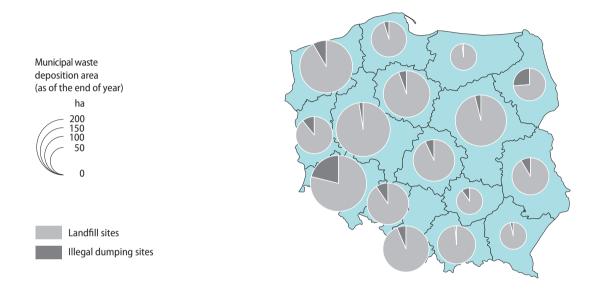


About 36.6 % of the number of degassing installations were the installations with gas released directly to the atmosphere (a decrease of 0.4 percentage point compared with 2017), while 6.8 % of the total number were those, in which the landfill gas was disposed of with energy recovery (an increase of 0.2 percentage point). About 20.2 % were installations, with the use of which the landfill gas was used for electricity production (a decrease of 0.1 percentage point).

In 2018, as a result of neutralisation of the captured landfill gas by burning, about 84,800 thousand MJ of heating energy (12.6 % less than in 2017), and about 105,357 thousand kWh of electrical energy (13.3 % less than in 2017) was recovered.

About 91.7 % of the municipal waste deposition in Poland in 2018, was the area of landfill sites in operation. The remaining part was the area of illegal dumping sites, i.e. places not intended for deposition of municipal waste.

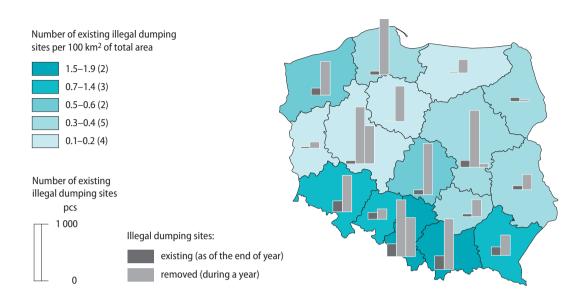
### Map 24. Municipal waste deposition area in 2018



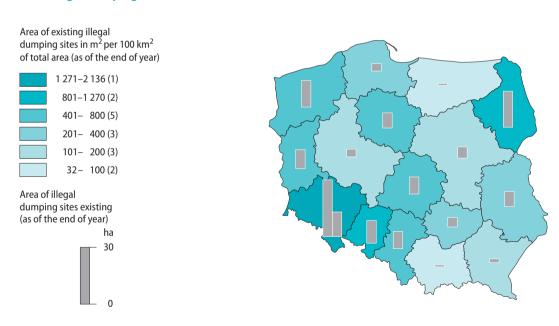
As of the end of 2018, in Poland there were 1,607 illegal dumping sites, i.e. by 3.3 % less than in the previous year. In urban areas, there were 453 such dumps (a rise of 11.3 % compared to 2017), and in rural areas – 1,154 (a drop of 8.0 % compared to 2017).

In 2018, about 10.5 thousand sites affected by abandoned municipal waste were cleared, of which 80.6 % in urban areas. Compared with the previous year, the total number of removed illegal dumping sites decreased by about 19 % (while in urban areas it was a decrease of 22 %, in rural areas – only of 3 %). During removals of illegal dumping sites, about 25.1 thousand tonnes of municipal waste was collected (less by 41.3 % than in 2017), of which 78.8 % in urban areas (a decrease of 2.2 percentage points compared with the previous year).

### Map 25. Illegal dumping sites in 2018



### Map 26. Area of illegal dumping sites in 2018

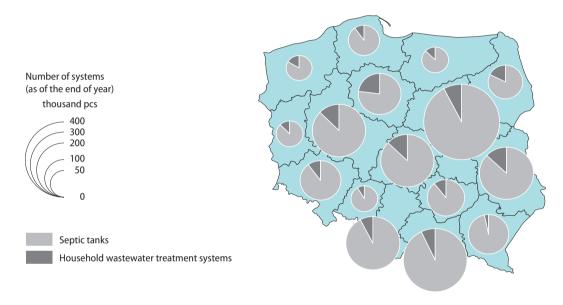


# **Chapter 9**

# **Liquid waste management**

Inhabitants of the areas with insufficiently developed sewage infrastructure use independent systems for sewage removal, namely septic tanks or household wastewater treatment systems. They are an alternative for construction of sewage system discharging sewage to wastewater treatment plants in cases where connecting of all real estates to sewage system is impossible or generates excessive costs. In Poland as of the end of 2018, there were 2,419.5 thousand of on-site systems for discharge of liquid waste, of which about 90 % were septic tanks.

Map 27. On-site systems for discharging of wastewater in 2018



The number of septic tanks increased from approx. 2,121 thousand in 2017 to 2,163 thousand in 2018 (by 2.0 %), while the number of household wastewater treatment systems increased from about 234 thousand in 2017 to approx. 257 thousand in 2018 (by 9.8 %).

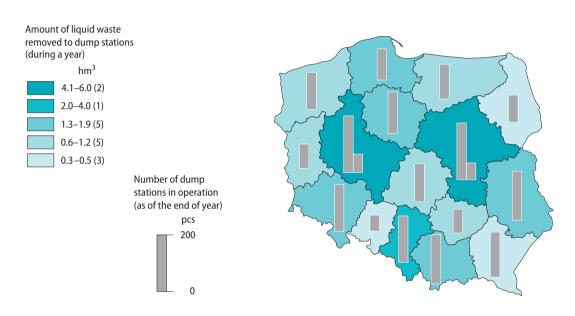
Table 24. On-site systems for discharging of wastewater

Specification	2010	2015	2016	2017	2018
On-site systems for discharging of wastewater (thousand pcs)	2 487.4	2 339.0	2 333.3	2 354.9	2 419.5
urban areas	450.2	356.2	337.1	334.5	333.5
rural areas	2 037.2	1 982.8	1 996.2	2 020.5	2 086.0
Septic tanks (thousand pcs)	2 406.8	2 136.2	2 116.7	2 121.1	2 162.7
urban areas	441.2	339.0	319.0	314.8	311.8
rural areas	1 965.6	1 797.1	1 797.7	1 806.2	1 850.9
Household wastewater treatment systems (thousand pcs)	80.6	202.8	216.6	233.8	256.8
urban areas	9.0	17.2	18.1	19.6	21.7
rural areas	71.6	185.6	198.5	214.2	235.1

The majority (more than 86 %) of on-site systems for discharging of wastewater as of the end of 2018 were located in rural areas. About 86 % of all septic tanks and about 92 % of the total number of household wastewater treatment systems were located therein.

Domestic sewage stored temporarily in septic tanks is collected from owners of the real estate equipped with such tanks by municipal organisational units or entities conducting activities in the scope of emptying septic tanks and transport of liquid waste on the basis of a permit granted pursuant to provisions of the Act on Maintaining Cleanliness and Order in Municipalities, and are afterwards entered into dump stations. In 2018, about 26.8 hm<sup>3</sup> of liquid waste was collected, and this corresponds to approx. 2.3 % of the total volume of domestic sewage discharged by sewage system to wastewater treatment plants.

#### Map 28. Dump stations and liquid waste removed to dump stations in 2018



The total number of dump stations in operation as of the end of 2018 rose compared with the previous year and amounted to 2,341. About 67 % of dump stations were located in rural areas. In 2018, approx. 71.7 % of liquid waste was collected from these areas, while 28.3 % of the total volume of domestic liquid waste removed to dump stations originated from urban areas (in the previous year – 68.6 % and 31.4 %).

Table 25. Liquid waste collected

Specification	2010	2015	2016	2017	2018
Domestic liquid waste collected (hm³)	24.6	23.0	23.1	23.7	26.8
urban areas	9.6	7.8	7.5	7.4	7.6
rural areas	15.1	15.1	15.7	16.2	19.2

## **Methodological notes**

# 1. Sources and scope of data

The source of information on municipal infrastructure in 2018 are results of surveys included in the programme of statistical surveys of official statistics:

1.26.01 – Dwelling stocks management;

1.26.06 – Technical infrastructure of water supply and sewage systems, heating, gas and energy;

1.26.08 - Municipal waste and maintenance of cleanliness and order in municipalities,

and secondary use of data from surveys:

1.44.01 - Balances of fuels and energy;

1.44.02 – Electricity and heating sector.

Forms used for obtaining the data are as follows:

- M-01 Report on dwelling stocks;
- M-06 Report on water supply network and sewage network;
- M-09 Report on collection and treatment of municipal waste;
- SG-01 part 3 Statistics of municipality: housing and municipal economy;
- Annex to the SG-01 report Statistics of municipality: housing and municipal economy;
- G-02g Report on infrastructure, consumers and sales of gas from gas supply network;
- G-02b Balance report on energy carriers and heating infrastructure.

The survey in the field of housing management in the part concerning the state of dwelling stocks and selected information characterising housing conditions, was prepared on the basis of the statistical compilation. The Balance of dwelling stocks for 2018 (as of 31 December).

The opening balance (as of 1 January) is:

- adjusted with changes resulting from the administrative division of the country announced in "Statistics Poland Communication on changes in the territorial division of the country";
- increased with newly built dwellings;
- decreased with decrements of the dwelling stocks.

The closing balance specified as a result of changes in these resources is automatically regarded as the opening balance for the following year.

During the preparation of the balance of dwelling stocks for 2018, physical decrements of dwelling stocks were taken into consideration (resulting from demolitions, fires, floods, combining small dwellings into larger ones and decrements resulting from an official reclassification of dwellings into non-residential). However, some categories of decrements which decrease the number of dwellings but do not cause physical decrements in the existing buildings, i.e. decrements due to occupants moving to other houses and using the previous houses for various utility purposes or leaving them vacant (unoccupied) were not included.

Information on dwelling stocks included in the present publication cover dwellings in residential and non-residential buildings and concern (permanently and temporarily) inhabited dwellings and uninhabited dwellings with a potential to become inhabited dwellings. However, premises in collective accommodation places (boarding schools, student dormitories, employee boarding houses, social welfare homes, small children's homes, convents, etc.) and temporarily inhabited provisory premises and movable facilities (livestock accommodations, caravans, ships, etc.) were not included.

The balance of dwelling stocks is specified by the number of dwellings, the number of rooms, the size of the useful floor area of dwellings expressed in m<sup>2</sup> fitted with basic sanitary, and technical installations.

In the part regarding dwellings managed/administered, the developed results come from statistical reporting of gminas (form SG-01 Statistics of municipality: housing and municipal economy, part 3 for 2018) and from entities whose primary activity is the possession or management of dwelling stocks (form M-01 Report on dwelling stocks in 2018) located in buildings owned by:

- companies,
- · local government units,
- housing cooperatives,
- · public building societies,
- State Treasury,
- · other entities,

and in buildings covered by housing condominiums (a 20% sample of housing condominiums).

In the survey of the cost of living, the observation covered those units which in the M-01 report in the part on the characteristics of dwelling stocks for a given voivodship in a given poviat showed the number of dwellings above 20 – this applies to gmina's units, housing cooperatives, companies, the State Treasury and other entities. Premises covered by the survey did not include dwellings owned by these units in the buildings covered by condominiums. In the case of condominiums, those covered in the above mentioned part of the M-01 report in a given year for a given voivodship in a given poviat showed a number of dwellings greater than 7 were included.

#### Sampling and algorithm for the generalisation of results in condominium survey M-01 for 2018

The sample was designed according to a stratified sampling scheme, with strata being poviats divided into urban and rural parts and into condominiums below and above 20 dwellings (poviats also constituted subpopulations for which the results were generalised). The sampling frame consisted of 166,261 units, selected according to the applicable assumptions from the Statistical Units Database. A sample accounting for approx. 20 % of the sampling frame was aimed at. Sample allocation was carried out to enable generalisations of the results at the municipality level, using the algorithm of the so-called fixed-precision sample allocation based on the study by J. Wesołowski and R. Wieczorkowski "An eigenproblem approach to optimal equal-precision sample allocation in subpopulations" (Communications in Statistics – Theory and Methods, 46:5, 2212–2231). The algorithm makes it possible to obtain an equal level of precision for generalizations of the global value a given characteristic in population subsets defined for the purposes of the survey. The algorithm was based on data from the previous edition, which enabled the estimation of the variation coefficient for characteristic "the number of dwellings" in the strata (poviats broken down by urban/rural and below/above 20 dwellings).

On the basis of the allocation, sampling was performed in the strata in line with the random sampling scheme without replacement, as a result of which a sample of 33,357 units was obtained.

In order to generalise the results, it was necessary to adjust input weights arising from the applied sampling scheme. The adjustment included non-response and information on reasons for failure to acquire information from some of the surveyed units.

Out of a total number of 33,357 sampled units, 27,420 units submitted their reports. Sampling weights are established in each strata, calculated in the survey as the ratio of the frame quantity to the sample quantity, i.e.  $N_h/n_h$ .

The final weight is equal to the sampling weight adjusted in each strata with the relevant multiplier, considering information on sample calculation (RA symbol) in a given strata. The adjustment multipliers in poviats were established on the basis of the following formula:

$$Wk = \frac{n_{1h} + n_{2h} + n_{3h}}{n_{h} - n_{3h}},$$

where:

 $n_h$  – quantity of the sample drawn in a given stratum,

 $n_{1h}$  – quantity of the sample examined in the stratum (RA = 01),

 $n_{2h}$  – number of units refusing to complete the questionnaire (RA = 22),

 $n_{3h}$  – number of units in the stratum with which no contact was made (RA = 24).

The adjustment multiplier corresponds to the estimation of the ratio of the number of units designated to be surveyed to the number of the actually surveyed units in a given strata, given that the group of the units, belonging to the population in focus, covers all instances of refusal and, proportionally, certain part of instances of failure to make contact.

The final weight is equal to the sample weight multiplied by the relevant adjustment multiplier, namely:

WEIGHT = 
$$\frac{N_h}{n_h} * wk$$

The generalisation of global values of a given feature in a given class (i.e. in accordance with the resultant cell definition in the table) consists in multiplying the FEATURE value of the feature by the WEIGHT multiplier corresponding thereto (attributed to each data record) and aggregating this value, following all the records of a given class. If the determination of an average value of a given feature in a given class was deemed necessary, the weighted sum was finally divided by the sum of values of the weights used. Whenever the resultant tables required the calculation of the quotient parameters, such calculation consisted of establishing the relevant weighted sums of both the numerator and the denominator, and then dividing both values.

The dwelling stock survey (M-01 form) in 2018 covered 43,101 units, which showed 6,052.8 thousand dwellings, of which 33,357 units account for approx. a 20 % sample of units selected from the population of condominiums. Among all units included in the survey, the statistical obligation was fulfilled by 37,006 units, of which 27,420 were condominiums. 3,540 units refused to submit the report, and it was impossible to make contact with 2,488 units. The total response rate was 86.0 %. In the case of condominiums, the rate was lower and amounted to 82.2 %, and for the remaining entities it reached 96.5 %.

In spatial terms, the highest total response rate was observed in the voivodships: Podkarpackie (92.0 %), Lubelskie and Śląskie (91.7 % in each), and Podlaskie (91.6 %), with the lowest rate in the following voivodships: Wielkopolskie (79.4 %) and Opolskie (80.9 %).

The survey in the scope of water supply and sewage systems is conducted as a full survey and covers entities which primary, secondary, and ancillary activities is management of water supply and sewage systems.

Data regarding users of water supply and sewage systems concern population living in residential buildings, and in collective accommodation establishments, connected to a specific network.

Data on gas consumers concern the population in dwellings equipped with gas network installations.

Data concerning population using water supply and sewage systems, since 2014, due to a change in estimation methods, are not fully comparable with the respective data presented also in the publication "Municipal infrastructure".

Data on energy management cover entities granted concessions for transmission and distribution of fuels and energy. Information on number of consumers and consumption of electricity concern households and collective accommodation establishments with complex agreements or distribution service contracts. Data on consumption of electricity were stated on the basis of advance payments made by consumers.

Data on number of consumers of gas fuels come from entities which have concessions for gas trade and are based on the number of contracts with consumers of gas from gas supply network.

Information concerning heating energy include residential buildings and buildings of offices and institutions with central heating provided by heating transmission network, considered as a system of interconnected installations cooperating with each other, used for transmission and distribution of heating medium to recipients. Information on boiler houses include types of boilers, their power (i.e. maximum quantity of heat energy, which can be produced by boilers in a given time unit), annual production, and installed equipment supporting air protection (limiting emissions of air pollutants).

Since 2014, data on heating referring to sales of heating energy, number of boiler houses, cubic volume of buildings with central heating, characteristics of boilers, and equipment installed in boiler houses protecting the atmosphere against emissions of pollutions take into the account the revised subjective scope of the survey.

The survey providing information on municipal waste is conducted as a full survey and includes entities operating in the field of collection or treatment of municipal waste. Results include: amount of waste collected (of which from households) and intended for recovery and disposal processes.

Due to the fact that since 1.07.2013, all real estate owners are covered by municipalities with municipal waste management system, the amount of waste collected is deemed to be waste generated. The conducted reform of the municipal waste management system changed the organisation of collection of municipal waste from real estate owners. At present, municipalities are obligated to organise tenders for collection of municipal waste from real estate owners or tenders for collection and management of that waste. Real estate owners do not enter into contracts with entities providing municipal waste collection services from inhabitants by themselves.

For computing data per 1 inhabitant (1,000 of population, etc.) as of the end of the year (e.g. number of population using municipal equipment), data on population as of 31 XII were used, while for data describing the magnitude of a phenomenon during the year (e.g. consumption) – as of 30 VI.

## 2. Main definitions

**Dwelling stocks** – both inhabited and uninhabited dwellings located in residential and non-residential buildings. Collective accommodation facilities (i.e. workers' hostels, dormitories, boarding houses, or social welfare houses), except for dwellings located therein, provisional facilities and movable objects (i.e. portable huts, railway cars, barges and ships), are not included in the dwelling stock.

**Dwelling** – a premise consisting of one or more rooms including auxiliary rooms, built or rebuilt for living in it, separated constructionally (with fixed walls) within a building, with independent entrance from the staircase, common hall, entrance hall or directly from the street, courtyard or garden. Under auxiliary rooms one shall understand: a hallway, a hall, a bathroom, a toilet, a dressing room, a pantry, a storeroom and other rooms located within the premises of a dwelling, serving the occupants to fulfil their housing and economic needs.

Uninhabited dwelling - a dwelling in which nobody stays temporarily or lives permanently.

#### These dwellings are unoccupied for various reasons and that is why they are classified as follows:

- allotted for permanent living, i.e. dwellings:
  - for sale or to be let, being functional places, uninhabited because of judicial proceedings, because of completing administrative and legal formalities, as well as being housing reserve of gminas;
  - new, to be inhabited, located in newly built buildings and buildings being currently extended;
  - being renovated or waiting for renovation;
- the so-called second dwellings, which are used by their owners (occupants) for temporary or seasonal stay;
- used only for running a business (only dwellings that have not been permanently adapted to such a business).

#### Type of the entity that is the owner (co-owner) of a building:

- **gminas** (municipal dwellings) dwellings owned by gminas or poviats (local self-government communities), owned by gminas but located in buildings constituting a shared real property i.e. dwellings which serve meeting the needs of all inhabitants of gmina, as well as dwellings handed over to gminas, but remaining at the disposal of public use units, such as: health care institutions, social welfare centres, educational system entities, culture institutions, serving mainly the housing needs to employees of these entities;
- housing cooperatives privately-owned dwellings (occupied by virtue of the housing cooperative
  ownership dwelling entitlement) or tenancy dwellings (occupied by virtue of tenancy), located in buildings constituting the property or the joint property of housing cooperatives, excluding dwellings
  for which, on the grounds of the Act of December 15, 2000 (Official Journal from 2003, No 119, item
  1116) a separate ownership title was established, for the benefit of one or more natural persons;
- State Treasury dwellings staying as part of resources of National Agricultural Support Centre, the Military Property Agency, under management of entities subordinate to ministers, of state administration, of state control, etc.;
- **companies** dwellings which are the property of public enterprises, including State Forests and state organizational entities e.g. public scientific and research institutes, public higher education institutes (excluding catholic universities) art institutes, Agriculture Circle Companies; municipal enterprises, excluding housing enterprises; private enterprises and other private organizational entities;

- **public building societies** dwellings in buildings being the property of legal entities having in their names "public building society" irrespective of participation in costs of constructing the building by another entity (a gmina, a housing cooperative, a company) in return for receiving the dwellings (on rental terms) for third parties indicated by such an entity;
- natural persons covered by condominiums the term of condominium refers to a multi-dwelling building (or several buildings), in which part of or all units represent separate ownerships of natural persons, confirmed by a relevant entry in the land and mortgage register. A given housing community comprises all owners of the premises (both residential and commercial);
- other entities dwellings constituting the property of institutions which erect buildings for profit
   – designated for sale (but not sold to any natural persons yet), or for rental, e.g. developers; dwellings
   owned by associations, foundations, political parties, trade unions, professional and economic self –governments; the Catholic Church and other churches and religious associations, catholic universities and church institutes, etc.

**Useful floor area of dwellings** – the useful floor area of a dwelling should be understood as the total area of all rooms within the dwelling, especially the area of living room, kitchen (with or without a window), pantry, entrance hall, alcove, bathroom, toilets, encased veranda or porch, dressing room and other rooms, fulfilling the housing and economic needs of the residents, regardless of their purpose and way of usage.

The area of the hallway is usually calculated as a floor area of a dwelling. The area of the hallway is not calculated as useful floor area unless it connects the residential part of the building to its storage or economic part, or there is more than one dwelling in the building and the hallway is used by all residents as a common accessible hall.

The area of balconies, terraces, recessed balconies, mezzanines, wardrobes, cabinets, cubby holes, laundries, drying rooms, rooms for storing prams, attics, cellars and coal-holes, as well as the area of garages, water pump rooms and boiler rooms is not recognized as dwelling's useful floor area.

**Room** – a space in a dwelling, separated from other rooms with fixed walls from the floor to the ceiling with direct sun lighting, with area not smaller than 4 m<sup>2</sup>. Both living room and the kitchen are regarded a room if they meet the above mentioned criteria.

The entrance hall, the hall, the bathroom, the toilet, the pantry, the encased veranda or porch, the dressing room, the alcove, the storeroom, etc. are not regarded a room, regardless of their area and lighting.

**Social premises** – social premises is a place suitable for settlement owing to equipment and technical condition, which surface of rooms per household member, i.e. one person in the case of residence of at least two people – cannot be smaller than 5  $\text{m}^2$ , and in the case of one-person household – 10  $\text{m}^2$ , with a possible lower standard of the dwelling. It shall be entitled to people who obtained the right to social premises on the basis of eviction sentence or when they experience financial difficulties due to which their housing needs cannot be satisfied.

These are dwellings rented by a gmina on the grounds of social premises rental contract, concluded in accordance with the Act of 21 June 2001 on Protection of residents rights, gmina's dwelling stock and alteration in Civil Code. It regards the premises before art. 2 of the Act of 22 March 2019 coming into force (Journal of Laws item 756), i.e. up to 20 April 2019.

The social premises rental contract shall be concluded for a fixed period. The contract's effective term is up to the gmina authorities and shall result from its granted freedom in conducting housing policy. When determining a period for which the contract shall be concluded, the orders of granting social premises – resulting from the statute – should be taken into account by the gmina. The most important goals in granting social premises is to support poor families and prevent homelessness.

The rent price for social premises cannot exceed the half of the lowest rent price binding in municipal dwelling stock. At the lease's start the deposit shall not be collected.

**Technical and sanitary installations in dwellings** – this category refers to dwellings with at least one of the following sanitary and technical appliances: a water supply system, a flushable toilet, a bathroom, central heating or gas from gas supply system.

Dwellings are considered to be equipped with:

- a water supply system if there is a tap with running water within the premises. 'Supply of piped water' is understood as a system (including the recipient installations in the dwelling), which supplies water from the water supply system (by means of active connections) from the street pipeline to local systems (own water intake);
- a flushable toilet if there is a sanitary system within their premises, connected to the water supply
  system, and discharging wastewater to the sewage system, or to the local appliances (septic tanks);
- a bathroom (bathing device, shower with water outflow) a room, with a bathtub or a shower (or both), as well as a system discharging wastewater to the sewage system, or to the local appliances (septic tanks);
- gas supply from the gas supply system if there is a system within the premises which (along with recipient installations in the dwelling) supplies gas to active connections;
- **central heating** if there is a system within the premises which supplies heat from a central heating source, i.e. heat and power stations, thermal power station, local boiler house within the premises of the housing estate, central heating furnace installed in own boiler house or in any other room. Electric floor heating is also regarded as central heating.

**Renovation works** – major refurbishment consisting in installing construction elements or installations in the building (dwelling) and termination of their refurbishment (replacement). Basic construction elements include: load-bearing walls, roof construction covering, external and internal plasters, roofs, woodwork, floors and reheating furnaces.

Material effects of executed works are illustrated:

- by the number of dwellings in buildings where renovation works not constituting major refurbishment were conducted and to which the renovation was directly or indirectly related (for instance in the course of refurbishment of the roof, thermal insulation of building's walls etc.);
- by the number of dwellings in the buildings to which sanitary-technical installations (water supply system, sewage system, central heating, hot water, gas supply system and community television aerials) were installed, and which the particular buildings and dwellings in these buildings did not have access to earlier.

**Arrears with payments for dwellings** – an amount not paid both by tenants and owners of dwellings, due to charges for the used dwellings, i.e. rent, water, wastewater discharging or liquid waste removal, collection of municipal waste, lift, etc. The arrears with payments occur when users of dwellings are at least one month behind with current payments.

**Arrears with repayment of mortgage credit** – an amount of installments in arrears (including interest), which debtors should pay into the housing cooperative bank account.

**Eviction** – any legal and factual actions carried out as a rule on the basis of court order aimed at removing occupants from a dwelling or property.

Definition of eviction doesn't exist at law regulations and this term should be understood as any factual and legal actions aimed at removal of persons and things from the premises or real estate and handing over the premises or real estate to an entitled person. A legal basis of eviction is primarily Article 222 § 1 of the Civil Code (protection of property). On its basis, the owner may request from the person who actu-

ally wields his property that the thing be handed over to him, unless that person has an effective authority over the owner to possess the thing. This effective right is a legal title which can undermine the owner's request. Execution of eviction is carried out by the state (by a bailiff or administrative enforced organ) and it can take place in compliance with the Civil Code or by the act of administrative enforcement proceedings, depending on the nature of the obligation or authority's jurisdiction.

**Maintenance costs of dwelling stocks** – the purposeful consumption of tangible fixed and current assets and external services, employees remuneration and other payments, e.g. taxes related to maintaining housing and utility resources in a particular reporting period, expressed in terms of value.

The basic criterion for classification of costs is their division per types.

#### **Operational costs** include:

- costs of maintaining the management and the administration costs, i.e.: remunerations for employees
  of the management and administration including benefits (without remuneration of caretakers); costs
  of postal services, of communication, bank and court fees; purchase of materials, equipment maintenance, costs related to purchase of stationery; costs of maintenance of premises of the management
  and administration; other costs related to functioning of the administration;
- costs of maintenance and renovation, i.e.: expenses related to current and major refurbishments; removal of failures; technical supervision; systematic inspections, maintenance of installations and devices; costs of greenery renovation; repairs of pavement between the buildings; costs of purchase of third party services related to maintenance and current refurbishments of dwelling stock and common rooms;
- other costs incurred for maintenance of premises (including the calculated VAT) such as: charged
  at a flat rate charges of gas supplied to dwellings in which there are no gas-meters installed; fees
  for community aerials; costs of keeping cleanliness including the purchase of third-party services
  (including remuneration of caretakers, cleaners, gardeners); costs of cleaning agents, work tools and
  other materials; costs of disinfection and rat extermination; costs of greenery maintenance (without
  costs of renovation if there are recognised amongst costs of maintenance and renovation); costs of
  utilities consumed in common rooms: electric energy, hot and cold water, central heating, gas and
  costs of liquid waste removal from those rooms and taxes for the gmina.

**Costs related to service provision**, i.e.: heat power supply (from the central heating), hot and cold water, sewage discharge, liquid waste removal and collection of municipal waste; maintenance of lifts (if they are not entered in the costs of maintenance and renovation).

**Rent** is a financial benefit paid by the lessee to the lessor in return for providing the dwelling or units for use. The charges for those premises are related to costs of building maintenance, i.e. include: property tax, costs of administration and management, costs of maintenance, costs of technical maintenance of the building, greenery maintenance, costs of maintenance of all common rooms and payments for maintaining cleanliness, electricity and heating.

The rent does not include housing fees for the occupied dwelling unit, such as e.g.: for the central heating and hot water, gas, waste collection, etc.

**The advance payment of owners of the premises** for covering the costs managing the common real estate, is made by the owners of distinguished premises in the form of monthly payments. Costs of managing of common real estate include:

- expenses for systematic renovation and maintenance works,
- charges for supply of electric energy, heating, gas and water in the part concerning the common real estate and fees for community aerial and lift,

- insurance, taxes and other public law fees, unless they are covered directly by owners of particular premises,
- expenses on keeping cleanliness and tidiness,
- remuneration for members of the management or the administrator.

The management of a housing condominium is obliged to settle annually the charged advance payments for covering the costs of managing the common real estate.

**Operating charge** – costs related to the operation and maintenance of real estate in parts attributable to their premises, operation and maintenance of real estate property belonging to housing cooperatives, which are obliged to pay members of housing cooperatives who are entitled to cooperative rights to the premises by making payments.

**Housing allowance** is a common and periodical financial benefit resulting from regulations of the Act of 21 June 2001 on residential benefits (Journal of Laws from 2013 item 966, as amended), intended to provide financial support for expenses related to occupation of residential premises or one family houses.

Characteristics: it is an obligatory provision granted upon the request of entitled person meaning that people meeting statutory conditions have the right to demand its payment and it is common (it will be granted regardless of the legal title to the premises that appertains the entitled person apart from exceptions stipulated by law), as well as periodical – because it is granted for a defined period with a possibility to be granted again in the case of further meeting the statutory conditions.

The criteria entitling to be granted housing allowance are:

- legal title to the premises allowance may be granted to residential premises tenants and subtenants
  living in residential dwellings to which they have cooperative right to residential premises, in residential dwellings in buildings constituting their ownership and to the owners of housing premises and
  other persons having a legal title to occupy residential premises (e.g. contract for use) and bearing
  expenses for their maintenance, as well as persons inhabiting housing premises without a legal title,
  waiting for alternative or social premises;
- · the amount of family income;
- dwelling's size dwelling's useful floor area. The Act uses the expression of "a normative surface"
   the allowance is granted for a strictly defined number of the dwelling's meters.

When calculating the amount of allowance expenses (borne by a household) related to rent are taken into account, as well as the exploitation costs of thermal power, water and commissioning of liquid waste. Housing allowance constitutes a difference between housing expenses on normative useful floor area of the inhabited dwelling and the part of expenses borne by a person granted the allowance.

From 2004 payment of housing allowances is – according to Article 10 (1) of the Act of 21 June 2001 on residential benefits (Journal of Laws from 2013, item 966 as amended) – own task of the gmina.

Pursuant to the Act of 13 November 2003 (Journal of Laws from 2014 item 1115 as amended) with income of local government units, housing allowance height must not exceed 70 % of actual expenses incurred for the housing premises. The commune council, by means of a resolution, may increase or reduce, no more than by 20 percentage points, the height of percentage rates. This means that the maximum height of paid allowance may amount from 50 % to 90 % residential expenses.

The information presented in the publication applies only to housing allowances physically paid in reporting year, regardless of the date of the granted performance allowance decision.

**Municipal infrastructure** – basic installations and service institutions, which are essential to functioning of the economy and population.

**Water supply system** – a set of water network devices serving collection of surface and underground waters, public wells, devices serving storage and treatment of water, water supply networks, and water pressure control devices.

**Water supply transmission network** – conduits bringing water from distant water intakes to distribution network.

**Water supply distribution network** – street conduits used for distribution of water to consumers by the connections to buildings and other objects.

**Water supply connection** – a segment of a conduit connecting water supply network with internal water supply installation on a property of consumer together with a valve past the main water-meter.

**Street water outlet** – a publicly available facility connected directly to water mains, serving the community for drawing water directly from the mains.

**Water delivered to households** – the quantity of water collected from water supply network using facilities installed in a building.

**Sewage system** – a complete sewage collection system serving discharging of wastewater, including sewage network, outlets of devices used to emit sludge into the waters, or into the ground, sewage pretreatment and treatment facilities, and sewage pumping stations.

**Active sewage network** – a system of covered (underground) conduits discharging sewage from buildings and other objects to collectors or sewage treatment facilities.

**Sewage connection** – a segment of conduit connecting internal sewage installations on a property of consumer with the sewage network, past a first inspection chamber from a building, and in case of its lack – from a boundary of the property.

**Wastewater discharged** – household wastewater or a mixture of household wastewater with rainfall wastewater or a mixture of household wastewater with industrial wastewater and rainfall wastewater.

**Domestic wastewater** – sewage from residential buildings, collective accommodation establishments, and public buildings, which originates from the human metabolism or activities of households as well as sewage of similar composition originating from such buildings.

**Septic tank** – an installation and device intended for an accumulation of liquid waste where it is generated.

**Household wastewater treatment system** – a complex of devices intended for treatment of sewage produced in one or more households.

**Liquid waste** – sewage stored temporarily in septic tanks.

**Dump station** – an installation and device, placed near a sewer or a wastewater treatment plant, intended for a collecting of liquid waste transported by sewage disposal vehicles from where it is accumulated.

**Gas supply network** – a system of conduits providing gas supplied by enterprises, which scope of economic activity includes transmission and distribution of gas to consumers. The system of conduits consists of:

• transmission and distribution network (with high-methane gas and nitrogenised gas) – street conduits used for distribution of gas to buildings or other objects by means of connections;

 connections – a system of conduits joining distribution gas supply network with buildings and other objects.

**Boiler house** – a building or a room with boilers and devices used for production of thermal energy for heating or both heating and supplying hot water.

**Municipal waste** – waste generated in households (excluding discarded vehicles) as well as waste generated by other producers of waste (excluding hazardous waste) which because of its character or composition is similar to waste from households.

**Biodegradable waste** – waste capable of undergoing anaerobic or aerobic decomposition.

**Collecting of waste** – gathering of waste for the purpose of transport to a waste treatment facility, including the preliminary sorting (not leading to essential change of character and composition of waste and not leading to change of classification of waste) and preliminary storage of waste by a waste collector.

**Separate collection** – the collection where a waste stream is kept separately by type and nature so as to facilitate a specific treatment.

**Municipal waste separate collection facility** – a stationary place where inhabitants can hand over various types of municipal waste, e.g. paper and cardboard, glass, composite packaging, plastics, or biodegradable municipal waste.

**Waste management** – the collection, transport, recovery and disposal of waste, including the supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker.

**Treatment** – recovery or disposal operations, including preparation prior to recovery or disposal.

**Recovery** – any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.

**Thermal treatment of waste** – incineration of waste by oxidation and other processes of thermal treatment of waste including pyrolysis, gasification, and plasma process provided that substances originating from these processes of thermal treatment of waste are incinerated afterwards.

**Energy recovery** – thermal waste treatment as a result of which energy is generated.

**Recycling** – any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.

**Disposal** – any operation which is not recovery even where the operation has as a secondary consequence the reclamation of substances or energy.

Landfill site - a structure for the deposit of waste.

**Degassing of landfill sites** – collection of biogas from landfills receiving biodegradable waste. Collected gas is cleaned and used for production of energy, and if it is not possible (e.g. when its quantity is too small for effective energy production), it is neutralized through combustion in burners.