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# Market Study & Data Set Municipal Wastewater Treatment Plants in Europe

**Extract**

Plants – Capacities – Operators – Trends

Cologne, September 2013

ecoprogram GmbH

## **Market Study & Data Set Municipal Wastewater Treatment Plants in Europe**

The market for municipal wastewater treatment plants will continue to grow in the long term. Over the past 20 years, the number of municipal wastewater treatment plants in Europe has increased steadily while their technical standard improved.

And the quantitative and qualitative development of wastewater treatment in Europe continues. The EU Urban Wastewater Treatment Directive and the EU Water Framework Directive still provide the strongest market stimuli – especially in Eastern and Southern Europe. By contrast, maintenance and renewals as well as measures for reducing operational costs (primarily in terms of energy) dominate in Central and Northern Europe.

In light of these developments, ecoprogram GmbH has analysed the European market for municipal wastewater treatment plants in detail. We have gathered extensive data on the plant asset and its development. In doing so, we have also collaborated with local subcontractors.

This up-to-date overview of trends, estimations, numbers and facts of the European market for municipal wastewater treatment plants is based on our market knowledge and detailed research and is of interest for manufacturers, suppliers, operators, associations, economic promotion institutions, research institutes and consultants.

### **The market study on municipal wastewater treatment plants includes:**

- An overview of the essential political, economic, managerial, operational and technical trends affecting the supplier market for municipal wastewater treatment.
- A precise description of the present and the future market volumes, up to and including 2017, based on a transparent and comprehensible methodology.
- **Included in the study:** detailed particulars for more than 2,600 wastewater treatment plants with a capacity of at least 50,000 population equivalents.
- **Optional as a data set:** detailed particulars for more than 7,000 wastewater treatment plants with a capacity of at least 15,000 population equivalents in MS Excel.

This data includes, amongst others, details on capacities, the type of treatment and addresses. They comprise information on more than 80 per cent of all plants in this size group in Europe (about three fourths of all European capacities). Please find a data sample on our [website](#).

The study is available in English and German from € 2,900,- plus VAT. Subscribers of ecoprogram's w&b Monitor will receive a discount starting from 600.- €. **Please find detailed price information at the end of this extract.**

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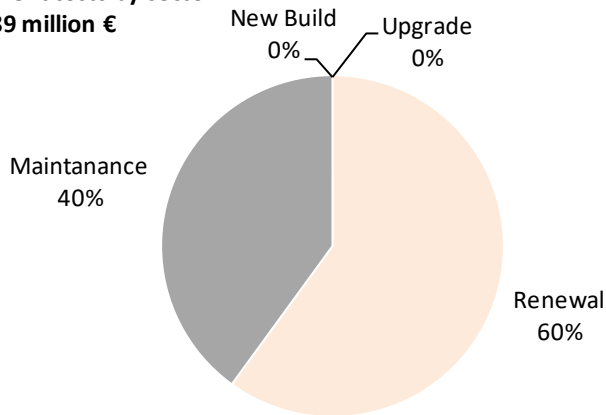
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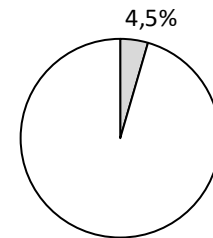
## 7.21 Netherlands

Figure 66: Market assessment Netherlands

Investment costs by sector  
n= 1689 million €



Percentage of total market



Estimation: ecoprolog

Inhabitants (million)	16.7	Inhabitants not connected to sewage system*	-
Number of WWTPs	356	Connected to sewage system, no WWTP*	-
Capacity total (million inhabitants)	24.0	Connected to mechanical treatment*	-
		Connected to secondary treatment*	4%
		Connected to additional treatment*	96%

\*EEA, 2005

### Municipal structure

The Netherlands has 12 provinces that consist of 443 municipalities.

The municipalities in the Netherlands are responsible for the sewage system but not for wastewater treatment. The so-called *Waterschappen* perform this task and there are 27 such authorities in the country. The tradition of some of them dates back to the 13<sup>th</sup> century when they were for instance responsible for drainage and flood control. Some of the *Waterschappen's* boards are based on historical regional borders that do not exist any longer. The authorities are financed by representatives who are elected to this office. They are financed by the wastewater fees.

### Requirements

The Netherlands has decided to reduce the total pollution of nitrogen and phosphorus from all municipal WWTPs by 75 per cent nationwide. There was thus no need to designate sensitive areas.

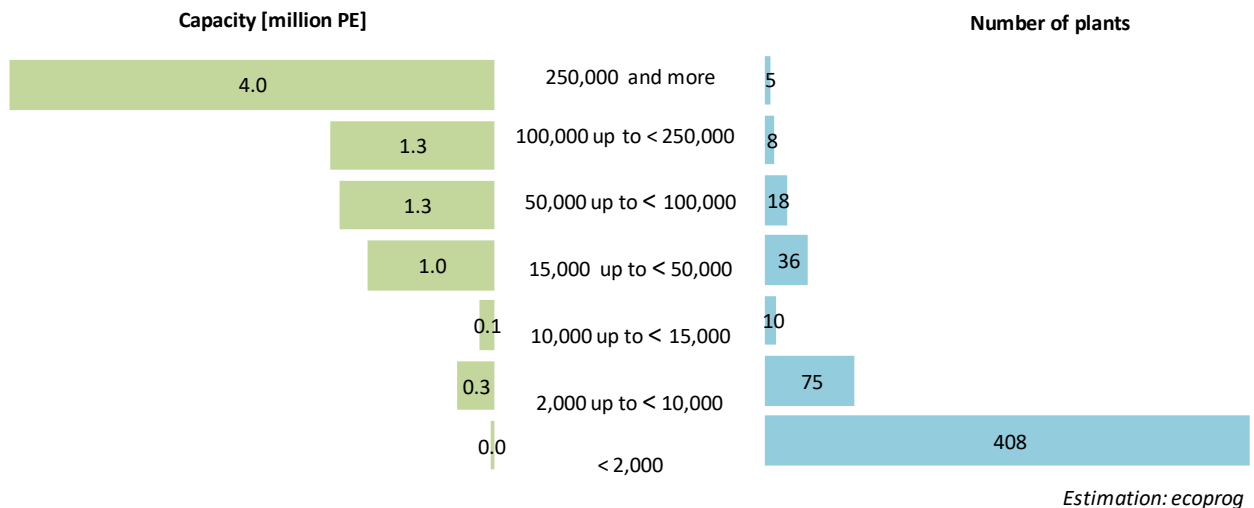
Overall, 334 agglomerations in the Netherlands fall within the scope of the EU Urban Wastewater Directive. The polluting load of all settlements amounts to about 16.1 million population equivalents.

[...]

Plants

Depending on the source, there are between 500 and 560 operational municipal wastewater plants in Slovakia. The range of fluctuation primarily affects the number of smaller WWTPs. About 65 plants have a capacity of at least 15,000 population equivalents.

**Figure 80: Municipal wastewater treatment plants and capacities in Slovakia**



The largest plant is located in the capital Bratislava and has a capacity of about 1 million population equivalents. As many facilities in larger cities, it has by now been equipped with a nitrification stage.

It is currently difficult to gather more detailed information in Slovakia, as expansion activities are still very dynamic. Parts of the existing statistical material are out-dated for the same reason. Due to the plant in Bratislava, for instance, it has to be assumed that the input share is considerably larger than the 6 per cent the table at the beginning of this chapter is showing.

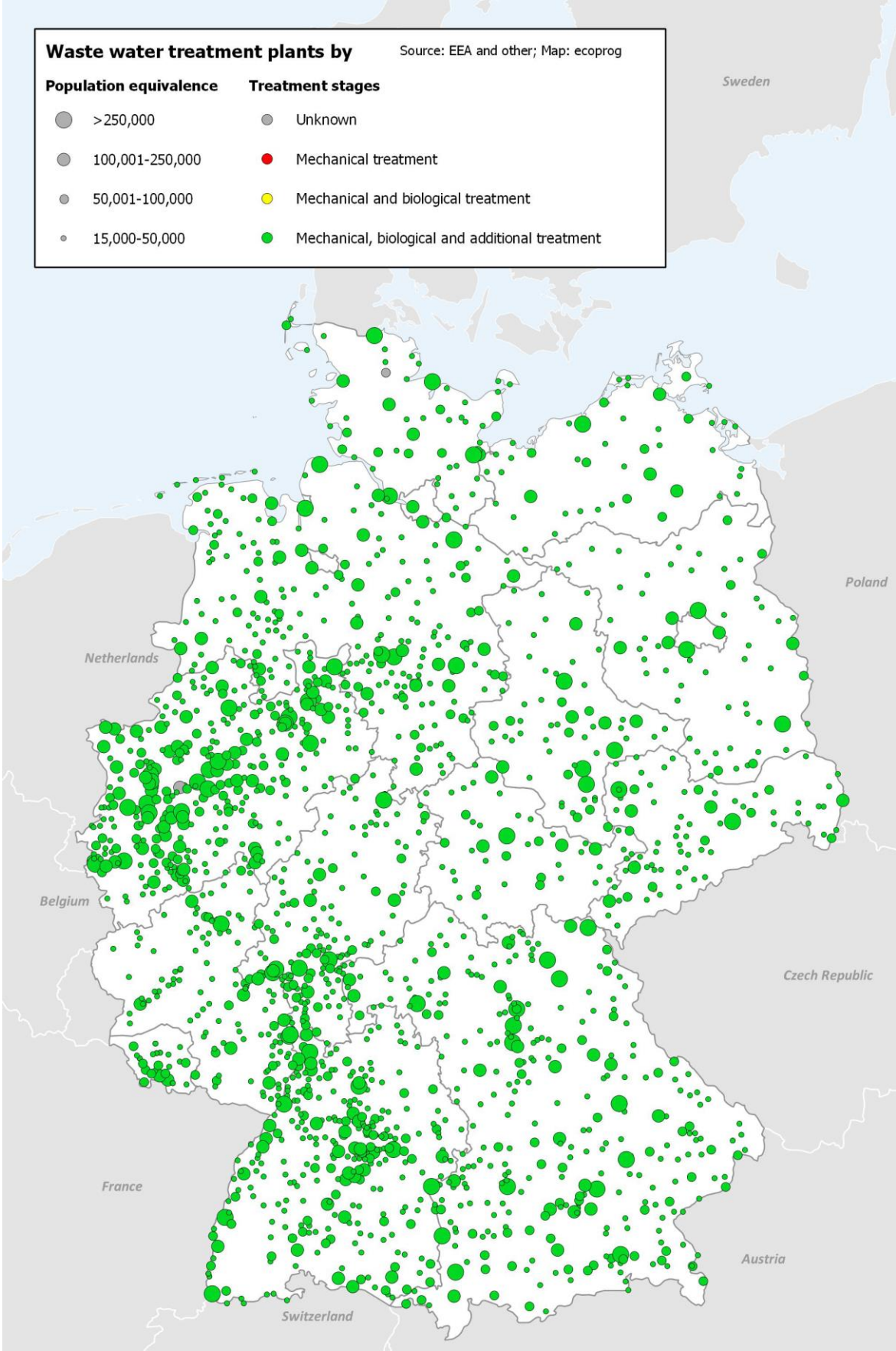
Market development

Slovakia finally has to implement the specifications of the EU Urban Wastewater Directive by 2015. The transitional periods for the country are thus among the longest in the EU.

According to the initial scheduling, the focus by 2010 should have been the expansion of the sewage system network and the focus by 2015 should have been the modernisation of the WWTPs.

According to a 2011 government report, the number of persons connected to the sewage system [...]

Figure 46: Map of municipal wastewater treatment plants in Germany



## Market development

[...]

Nevertheless, at least some parts of the Romanian treatment market have gained some momentum due to the renewed structure and the substantial funding. Several smaller municipal wastewater treatment plants were awarded in 2012/2013, for instance plants in the cities of Pucioasa and Fieni (contractor: Stulz-Planaqua) in July 2012 and three plants around Silvaniei (contractor: WTE) in 2013.

Even though the municipal wastewater treatment goals agreed upon with the EU have not been reached, the number of projects can be expected to increase in the years to come. This is mainly due to the fact that the EU is determined to finance many projects completely with European funds. EBRD loans complement the grants.

## Known plants with at least 50,000 population equivalents

### **ApaServ S.A. Fagaras**

Str. Negoiu nr. 147  
Fagaras  
Tel.: +40 268 21 17 67  
Fax: +40 268 21 29 65

#### Plant: Fagaras

Fagaras  
Size (PE): 82.900  
Treatment: mechanical and biological  
Remarks: Modernisation planned until 2017

### **Aquaterm AG 98 S.A.**

#### Plant: Curtea De Arges

Curtea De Arges  
Size (PE): 61.800  
Treatment: mechanical and biological  
Remarks: Modernisation planned until 2013

### **C.J. ApaServ S.A.**

Str. Lt. Draghescu 20  
Piatra Neamt  
Tel.: +40 233 233 340  
Fax: +40 233 218 937

#### Plant: ROWP Piatra-Neamt

Strada Muncii  
Piatra Neamt  
Size (PE): 87.671  
Start of operation: 1982  
Treatment: Secondary treatment

### **Compania Apa R.A. Brasov**

Str. Vlad Tepes 13  
Brasov  
Tel.: +40 268 40 86 02

Fax: +40 268 47 14 27

#### Plant: Brasov

Brasov  
apabrasov@apabrasov.ro  
Size (PE): 400.000  
Start of operation: 1970  
Treatment: mechanical and biological  
Remarks: Serving also Cristian, Rasnov, Ghimbav, Sacele, Harman, Sanpetru. Will need further extension and upgrade (nutrient removal).

#### Plant: Sacele

Sacele  
apabrasov@apabrasov.ro  
Size (PE): 60.000  
Start of operation: 20017  
Treatment: No information on basic treatment  
Remarks: Modernisation planned until 2017

### **Compania de Apa Somes S.A.**

Bd. 21 Decembrie 1989 nr. 79  
400604 Cluj Napoca  
Tel.: +40 264 59 14 44  
Fax: +40 264 43 08 86

#### Plant: ROWP Cluj-Napoca

Bulevardul Muncii  
400641 Cluj Napoca  
Size (PE): 424.973  
Start of operation: 1977  
Treatment: Secondary treatment

### **Compania de Utilitati Publice R.A.**

Str. Nicolae Titulescu 9  
Focsani  
Tel.: +40 237 23 85 30  
Fax: +40 237 22 64 02



**Northern Ireland Water**

Northland House, 3 Frederick Street  
BT1 2NR Belfast  
Tel.: +44 2890 741 166

Plant: Belfast

Herdman Channel Road  
Belfast  
Size (PE): 318.985  
Start of operation: 1998  
Treatment: Biological with nitrogen removal

Plant: Culmore, Londonderry

Coney Road  
Culmore, Londonderry  
Size (PE): 144.509  
Start of operation: 2005  
Treatment: Biological treatment

Plant: Hollywood

Kinnegar Drive  
Hollywood  
Size (PE): 113.700  
Start of operation: 1998  
Treatment: Biological with nitrogen removal

Plant: Lisburn

4 Tullynacross Road Hilden  
BT27 5SA Lisburn  
Size (PE): 83.722  
Start of operation: 1991  
Treatment: Biological treatment

Plant: Ballymena

39 Slaght Road  
BT 42 2JE Ballymena  
Size (PE): 76.538  
Start of operation: 1993, Modernisierung in 2003  
Treatment: Biological treatment with phosphorous removal

Plant: Newtownabbey

103 Shore Road  
Newtownabbey  
Size (PE): 75.644  
Treatment: Partial biological – 50% receives primary only  
Remarks: Will be modernised to full secondary operation in 2006

Plant: Donaghadee

High Bangor Road  
Donaghadee  
Size (PE): 66.982  
Treatment: Screening and sea outfall  
Remarks: Will be modernised to full secondary operation in 2007

Plant: Dunmurry

Glenburn Road South  
Dunmurry  
Size (PE): 65.047  
Start of operation: c. 1978  
Treatment: Biological treatment

Plant: Briggs Rock

Size (PE): 65.000  
Treatment: No information on basic treatment

Plant: Newry

Rampart Rd  
BT34 Newry  
Size (PE): 63.200  
Treatment: Secondary treatment

Plant: Newtownards

147 Comber Road  
Newtownards  
Size (PE): 54.426  
Start of operation: c. 1980  
Treatment: Biological treatment

Plant: Dungannon, Co Tyrone

Moygashel Lane  
Dungannon, Co Tyrone  
Size (PE): 50.810  
Start of operation: 1995  
Treatment: Biological treatment with phosphorous removal

Plant: Omagh, Co Tyrone

Beltany Road  
Omagh, Co Tyrone  
Size (PE): 50.272  
Treatment: Biological treatment  
Remarks: New plant operational 2005

Plant: Portadown

Ballynacor Lane  
BT63 5RP Portadown  
Size (PE): 50.033  
Start of operation: 1970  
Treatment: Biological treatment with phosphorous removal

**Northumbrian Water Ltd.**

Abbey Road, Pity Me  
DH1 5FJ Durham  
Tel.: +44 0 1443 452 300  
Fax: +44 0 1443 452 323

Plant: Howdon

Size (PE): 1.024.632  
Treatment: secondary treatment

Plant: MIDDLESBOROUGH STW

Dabholm Rd, Tees Dock Rd  
TS18 Middlesborough  
Size (PE): 568.783  
Treatment: Secondary and additional treatment, UV treatment

Plant: Hendon

Size (PE): 225.205  
Treatment: secondary treatment

Plant: HARTLEPOOL STW

Brenda Rd  
TS25 Hartlepool  
Size (PE): 107.610  
Treatment: Secondary and additional treatment, UV treatment

Plant: Horden

Size (PE): 106.081  
Treatment: secondary treatment

Plant: Darlington Stressholme

Size (PE): 93.579

## Plant register

A.I.D.A. (IT)	263	Alcazar De San Juan-Campo De Criptana (ES)	418
Aachen-Eilendorf (DE)	222	Alcoi (ES)	410
Aachen-Nord (DE)	222	Alcudia (ES)	406
Aachen-Soers (DE)	221	Alcudia (ES)	418
Aachen-Süd (DE)	222	Alessandria - Orti (IT)	268
Aalen (DE)	215	Alexandria (RO)	371
Aalst (BE)	79	Alexandroupoli (GR)	232
Aarau (CH)	431	Alfeld (DE)	196
Aarle-Rixtel (NL)	313	Alfonsine (IT)	276
Aartselaar (BE)	77	Alfreton Stw (UK)	451
Abbeville (FR)	152	Algeciras (ES)	413
Abertamy (CZ)	99	Alghero (IT)	256
Abrera (ES)	390	Alguazas (ES)	408
Acerra (IT)	283	Aljarafe Guadiamar (Azna) (ES)	393
Acheres (FR)	143	Alkmaar (NL)	310
Achim (DE)	196	Allers (UK)	447
Adeje Arona (ES)	403	Alloa Wwtw (UK)	447
Aefligen (CH)	428	Almansa (ES)	416
Agde (FR)	136	Almassora (ES)	410
Ager-West (AT)	71	Almeirim/Alpiarca (PT)	360
Agra I (PT)	361	Almelo-Sumpel (NL)	319
Agrana (AT)	66	Almelo-Vissedijk (NL)	319
Agrinio (GR)	232	Almere (NL)	315
Aguilas (ES)	408	Almeria Capital (ES)	390
Ahaus (DE)	196	Almunecar (ES)	392
Ahlen (DE)	196	Alphen Kerk En Zanen (NL)	313
Ahrensburg (DE)	206	Alphen Noord (NL)	312
Aime (FR)	144	Altamura (IT)	262
Aïre (CH)	431	Altdorf (CH)	428
Aix-En-Provence (FR)	150	Altea (ES)	395
Aix-Les-Bains (FR)	151	Altenburg (DE)	224
Ajaccio (FR)	148	Altenrhein (CH)	427
Alacant (Monte Orgegia) (ES)	405	Altötting-Neuötting (DE)	196
Alacant (Rincón De León) (ES)	404	Alvim Renseanlegg (NO)	330
Alassio - S.Anna (IT)	288	Alytaus Nuoteku Valykla (LT)	297
Albi (FR)	133	Amay (BE)	77
Albstadt (DE)	210	Ambares-Et-Lagrave (FR)	150
Albufera Sur (ES)	417	Amersfoort (NL)	323
Alcala De Henares Este (ES)	412	Amiens (FR)	149
Alcala La Real (ES)	391	Amstelveen (NL)	308
Alcalá Oeste (ES)	400	Amsterdam West (NL)	308
Alcanena (PT)	361	Amsterdam Westpoort (NL)	308
Alcantarilla (ES)	407		

## Price and product information

You can order the market report here:

<https://www.ecoprolog.com/publikationen/wasserwirtschaft/kommunale-klaeranlagen-in-europa/order-kommunale-klaeranlagen.htm>

### Price models:

- Single user copy: 2,900.- €\*
- Company version: 5,800.- €\*
- Corporate version: POA

### Product information:

Single user copy: personal copy (personalised and password-protected PDF file, sent via e-mail)

Company version: company-wide copy (legal entity), sent via email

Corporate version: for different, legally connected companies (e.g. sister companies, subsidiaries abroad). Price depends on number of companies and employees.

Subscribers of ecoprolog's waste & bio Infrastructure Monitor ([Info](#) | [Order](#)) will receive a discount of 600.- € (1,200.- € in case of a company version).

Options: Additionally, you can order all detailed information on plants and projects in MS Excel (only available in combination with a company or corporate version): 2,900.- €\*

The enhanced data package includes:

- Detailed particulars for more than 2,600 wastewater treatment plants with a capacity of at least 50,000 population equivalents, as provided in the market report
- Additional information on more than 7,000 municipal wastewater treatment plants with a capacity of more than 15,000 population equivalents

Additionally, you can order a printed copy of the study: 150.- €\*

\* plus 19% VAT for customers within Germany and EU customers without a VAT ID.