

VEWIN



ASSOCIATION OF DUTCH WATER COMPANIES

Water Supply Statistics 2003



Water Supply Statistics 2003

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Association of Dutch Water Companies
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Introduction

Objective

Water Supply Statistics is an annual VEWIN publication containing basic data on Dutch drinking water to support sector policy making. Water Supply Statistics is also intended to be of service to third parties such as ministries, the European Union, companies, institutions and consumers.

Collecting the data

Since 1997 most Dutch water supply companies have taken part in the VEWIN benchmark report used to describe the performance of the companies concerned in terms of water quality, level of service, environmental performance, finance and efficiency.

Since the year 2000 the administrative load on water companies has been reduced by gathering the water supply statistics data together with those for the benchmark report using the *Finance & Efficiency* module. A separate questionnaire applies to companies not taking part in the voluntary benchmark report. The publication also contains tables whose data have been derived from other sources. The rates overview (table 3) for instance comes from the VEWIN publication 'Overview of water charges as of 1 January 2003' (*Tarievenoverzicht leidingwater per 1 januari 2003*) and the overview of the breakdown of domestic water consumption (table 4) comes from the VEWIN/NIPO report 'A different pattern of consumption' (*Een ander consumptiepatroon*) of December 2001.

Structure of the publication

Readers who want to review the most significant sector data at a glance should find enough in the summary overview on the next page. After the summary overview a breakdown follows according to theme:

- *Chapter 1*: the water companies, supply areas and employment;
- *Chapter 2*: water production and raw water sources;
- *Chapter 3*: water sales;
- *Chapter 4*: financial data (balance sheet, investments and taxes);
- *Chapter 5*: infrastructure.

Water supply statistics available on internet

Water supply statistics are available on www.vewin.nl in Dutch and English.

Other VEWIN reports

Besides the Water Supply Statistics 2003 VEWIN also has other publications at its disposal with information about water companies such as:

- Annual Review of the Water Sector in the Netherlands (Jaarboek voor de Watersector in Nederland);
- Reflections on Performance, Benchmarking in the Dutch Drinking Water Industry (Water in Zicht, Bedrijfsvergelijking in de Drinkwatersector) 1997, 2000 and 2003;
- Overview of Water Charges as of 1 January 2004 (Tarievenoverzicht Leidingwater per 1 januari 2004);
- Water Quality Statistics CD-rom (CD-rom Statistiek Waterkwaliteit).

The publications Water in Zicht and Tarievenoverzicht Leidingwater are PDF documents and can be downloaded from www.vewin.nl. For information about these publications and to submit orders contact VEWIN on 31 70 4144 750 or e-mail vewin@vewin.nl.

Summary overview

	1993	1998	2002	2003
General				
number of water companies ¹⁾	37	27	17	17
employees as full-time equivalents ²⁾	8,039	7,461	5,867	5,443
drinking water connections (x 1,000) ³⁾	5,923	6,554	7,231	7,287
% metered	92	90	96	96
Production (million m³)				
<i>drinking water</i>				
own production	1,186	1,171	1,168	1,191
import balance and purchase from third parties	8	5	2	4
<i>other water</i>				
own production ⁴⁾	56	68	53	56
import balance and purchase from third parties	6	6	13	15
Sale (million m³)				
<i>drinking water</i>				
small scale users	699	722	709	734
medium scale users	252	223	225	226
large scale users ⁵⁾	179	174	177	173
total ⁶⁾	1,130	1,119	1,111	1,132
<i>water not charged</i> ⁷⁾				
<i>other water</i> ⁴⁾	64	57	57	59
	62	75	67	71
Turnover (million euro) ⁸⁾				
<i>drinking water</i>				
small scale users	680	921	990	1,024
medium scale users	150	247	265	266
large scale users ⁵⁾	109	156	172	171
total ⁶⁾	939	1,324	1,427	1,461
<i>other water</i> ⁴⁾				
	24	24	30	29
Financial data (million euro)				
investments	582	445	374	433
taxes ⁹⁾	.	.	358	375
Infrastructure				
transport and mains supply network (x 1,000 km)	96	100	109	112
¹⁾ Including Bronwaterleiding Doorn. ²⁾ Number of employees on payroll calculated as people working full-time. ³⁾ Since 2000 <i>administrative</i> connections, before 2000 <i>technical</i> connections. ⁴⁾ Excluding production and supply by subsidiary and associate companies (approximately 64 million m ³ in 2003). ⁵⁾ Including drinking water delivered under non-drinking water contracts. ⁶⁾ Excluding mutual deliveries (<i>wholesale</i>) and export. ⁷⁾ Think of leakage, cleaning losses, firewater and measuring differences. ⁸⁾ Comprises the variable rate and the standing charges and/or compensation for available capacity. Exclusive of VAT and tap water tax. ⁹⁾ A specification is given in table 7.				

Chapter 1 The water companies

~ General

A number of general characteristics of the water companies operating in the Netherlands at the end of 2003 is shown in Table 1. Figure 1 shows the relevant supply areas.

~ Legal structure

With the exception of Waterleidingbedrijf Amsterdam (municipal company) and Delta Drinkwater BV all companies are limited liability companies with associated municipalities and provincial bodies functioning as shareholders. In the year under review (2003) Delta Drinkwater was still a full subsidiary of multi-utility company Delta NV. In 2004 Delta's water interests merged with Waterbedrijf Europoort creating Evides NV.

~ Characterisation

Watertransportmaatschappij Rijn-Kennemerland and Waterwinningsbedrijf Brabantse Biesbosch do not distribute drinking water themselves but deliver partly treated water (*other water*) to associate companies. All other companies both produce and distribute drinking water and a number *other water*.

Figure 1 Supply areas on 31-12-2003 ¹⁾

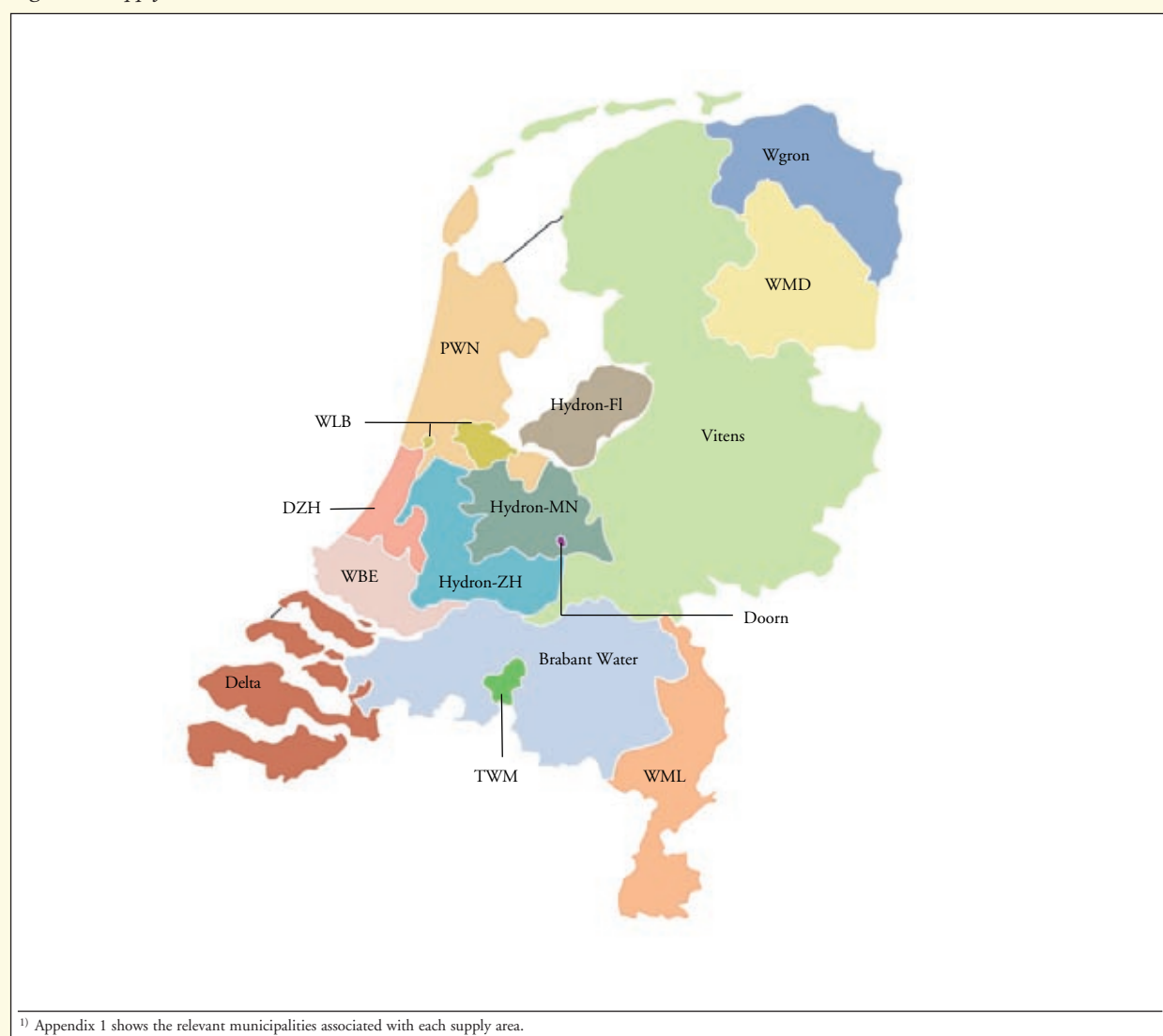


Table 1 Overview of the water companies on 31-12-2003 ¹⁾

Water company	code name	employ- ees (fte) ²⁾	sales in supply area <i>1,000 m³</i>	administrative connec- tions <i>x 1,000</i>	inhabitants in supply area
Waterbedrijf Groningen	Wgron	232	44,862	271	574
Waterleidingmaatschappij Drenthe	WMD	154	29,121	187	430
Vitens	Vitens	1,018	249,870	1,599	3,800
PWN Waterleidingbedrijf Noord-Holland	PWN	483	102,818	707	1,607
Waterleidingbedrijf Amsterdam	WLB	573	70,178	482	884
Watertransportmaatschappij Rijn Kennemerland ³⁾	WRK	-	-	-	-
Duinwaterbedrijf Zuid-Holland	DZH	518	70,871	572	1,168
Waterbedrijf Europoort ⁴⁾	WBE	429	139,792	738	1,496
Hydron Zuid-Holland	Hydron-ZH	220	47,639	317	742
Hydron Flevoland	Hydron-Fl	95	18,472	119	297
Hydron Midden-Nederland	Hydron-MN	387	77,323	539	1,215
Delta Drinkwater ⁴⁾	Delta	39	36,250	221	452
Brabant Water	Brabant Water	726	156,925	934	2,206
Tilburgsche Waterleiding-Maatschappij	TWM	88	13,066	90	200
Waterwinningsbedrijf Brabantse Biesbosch	WBB	39	-	-	-
Waterleidingmaatschappij Limburg	WML	443	74,932	511	1,142
The Netherlands		5,442	1,132,119	7,287	16,214

¹⁾ In addition to the overview the NV Bronwaterleiding Doorn was also in operation in the year under review. This publication does not include data on this company which has an annual drinking water supply touching 1 million m³.

²⁾ Full-time equivalents on own pay-roll.

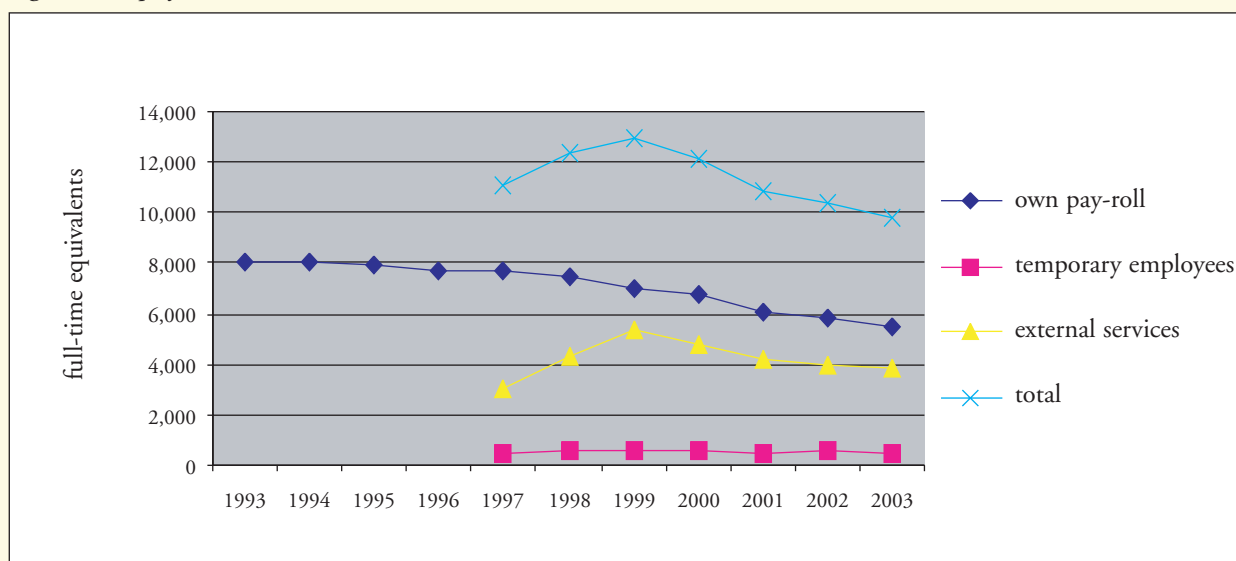
³⁾ As of 1 January 2003 WRK's activities are carried out by WLB and PWN staff. WRK has remained contract holder and owner.

⁴⁾ On 1 July 2004 WBE and Delta merged into Evides NV. The merger became effective on 1 January 2004 retroactively.

~ Employment

Figure 2 shows the development of employment in the drinking water sector in terms of full-time equivalents (ftes). This shows that the water companies are undertaking their work with steadily fewer people. The number of employees on the payroll of water companies dropped from 8,093 ftes in 1993 to 5,442 ftes in 2003 (-32,7%). Since 1999 the purchase of external services too declined by over one-quarter: converted to ftes, external services purchases amounted to 5,323 in 1999, compared to no more than 3,879 in 2003. Since 1997 the number of temporary staff has fluctuated between 487 and 627.

Figure 2 Employment 1993 - 2003



Chapter 2 Water production

~ *Water balance*

Figure 3 shows the water balance for the year 2003. It shows the amounts of water extracted, produced and supplied for all companies together. Purchases from third parties (non-water companies) as well as imports and exports have also been included. Water extraction has been indicated per type of raw water source and according to processing method (*direct processing* and *infiltration*). Supply has been divided into supplies to differentiated sectors of final users and supplies between water companies themselves (*wholesale supply*).

Chapter 3 discusses the water supply in greater detail. This chapter sheds light particularly on water extraction and water production.

~ *Water extraction*

At the top of the water balance the quantities of water extracted are indicated per type of raw water source. Figure 4 shows the development of these figures as of the year 1993. The use of surface water increased by 4.3 percentage points over the past ten years to reach 39.2% in 2003. At the same time the use of river groundwater and ground-water dropped by 2.6 percentage points to a share of 60.0% and the use of natural dune water dropped by 1.7 percentage points to a share of 0.8%.

~ *Water production*

In 2003 the water companies together produced 1,191 million m³ of drinking water from 224 purification stations. This means production remained about the same as 1993. Against 2002 production rose from 1,168 million m³ to 1,191 million m³. The high production figures in 2003 were related to a remarkably hot dry summer. Figure 5 represents the development of production over the past ten years.

Other water implies water not of drinking water quality. Usually this concerns applications for which less drastic purification suffices, but may also refer to applications requiring precisely more drastic treatment (e.g. demi-water). In 2003 production of this *other water* amounted to 56 million m³, 5% more than 2002. Figure 6 shows production was thus identical to that of 1993. It should be noted that since the early 1990s a number of drinking water companies have assigned '*other water* activities' to subsidiaries and sister companies. In 2003 the subsidiaries and sister companies produced yet another 64 million m³ for the Dutch market.

Figure 3 Water balance 2003 (in millions m³)

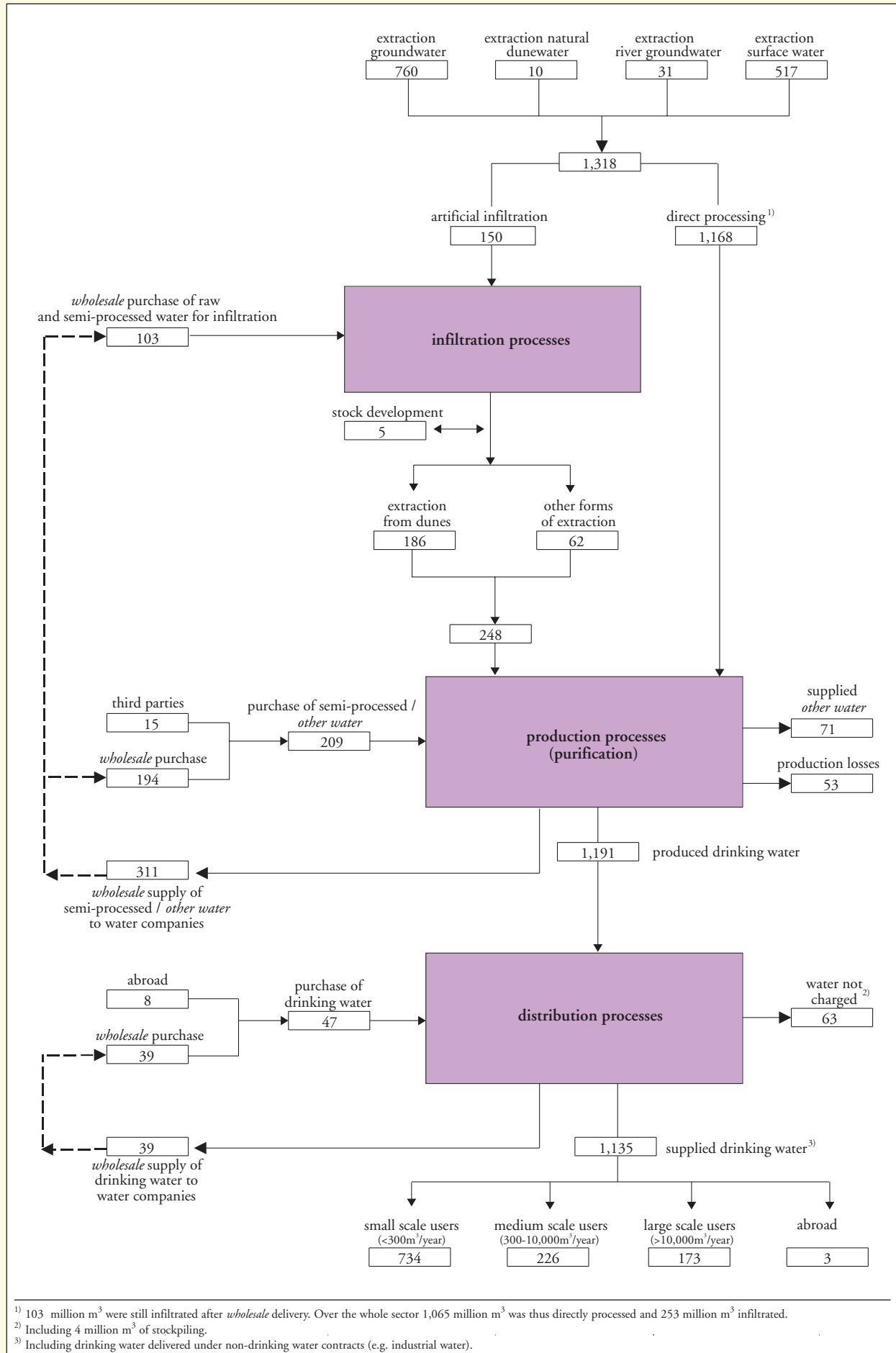


Figure 4 Water extraction 1993 - 2003

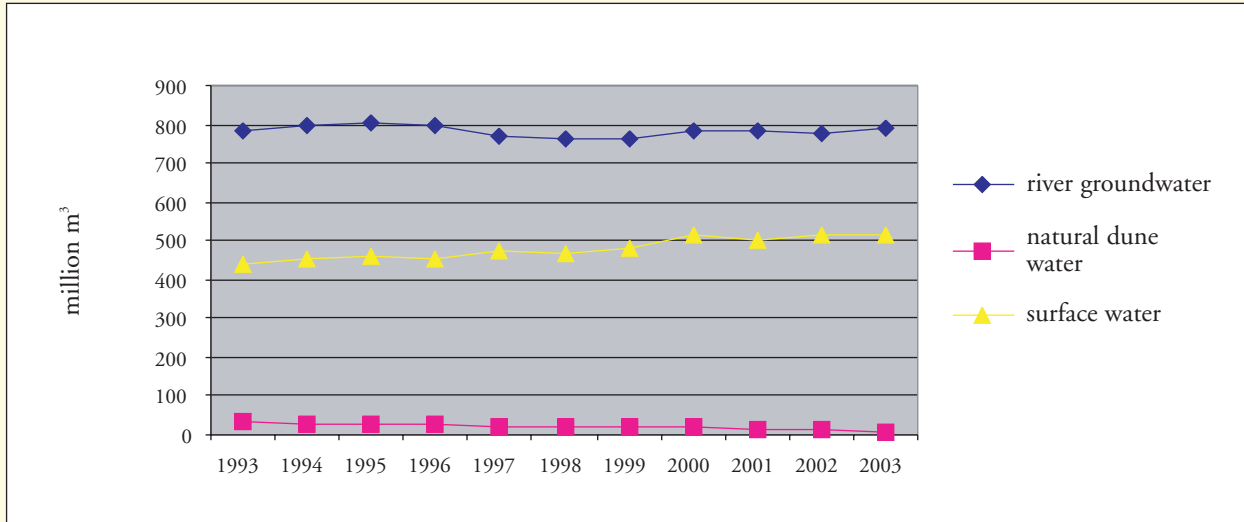


Figure 5 Production of drinking water 1993 - 2003

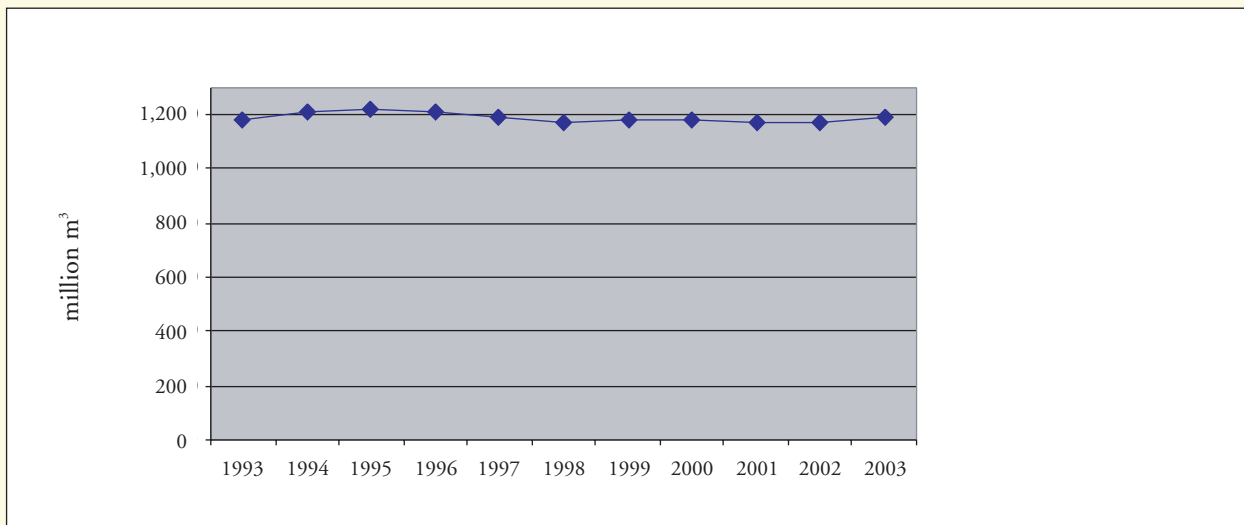
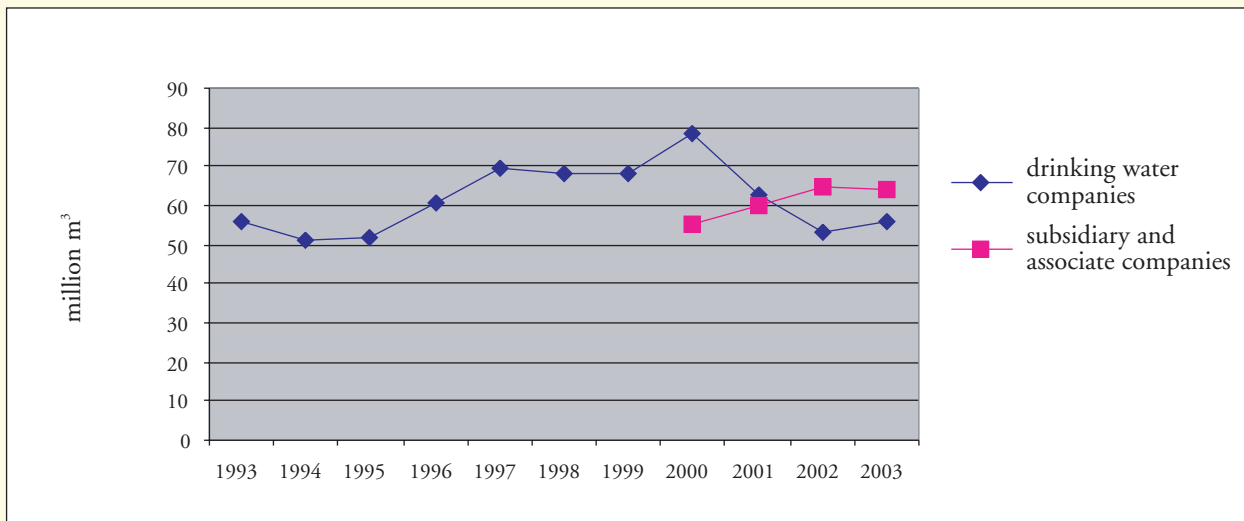


Figure 6 Production of other water 1993 - 2003



Chapter 3 Water sales

~ Water sales 2003

The water balance 2003 (figure 3) shows the deliveries of drinking water and *other water* at national level. This chapter shows the turnover and number of connections related to the deliveries. These figures are summarised in table 2. Some derived indices for the various consumer groups have also been indicated, such as the average consumption per connection and the average price per m³.

Table 2 Summary of water sales 2003

	connections ¹⁾	sales	average supply per connection	turnover ²⁾	average price ²⁾
		million m ³	m ³ /connection	million €	€/m ³
drinking water					
<i>final users</i>	7,286,672	1,132	155	1,461	1.29
of which small scale users	7,000,181	734	105	1,024	1.40
medium scale users	282,241	226	799	266	1.18
large scale users ³⁾	4,250	173	40,666	171	0.99
<i>wholesale sales</i>	.	39	.	19	0.48
<i>exports</i>	.	3	.	.	.
other water					
<i>final users</i> ⁴⁾	324	71	217,595	29	0.41
<i>wholesale sales</i>	.	311	.	38	0.12
<i>exports</i>	-	-	.	-	.
total					
<i>final users</i>	7,286,996	1,203	165	1,490	1.24
<i>wholesale sales</i>	.	350	.	57	0.16
<i>exports</i>	.	3	.	.	.

¹⁾ Administrative connections for drinking water, technical connections for *other water*.
²⁾ Comprises the variable rate and the standing charges and/or compensation for available capacity. Exclusive of VAT and tap water tax.
³⁾ Including drinking water delivered under non-drinking water contracts.
⁴⁾ Exclusive of sales by subsidiaries and associate companies (approximately 64 million m³).

~ Sales development

Over the previous century Dutch drinking water sales increased strongly up from approximately 300 million m³ in 1950 to 1,166 million m³ in 1990. Sales levels remained reasonably stable between 1990 and 1995 to slowly decline to 1,111 million m³ in 2002. A remarkable fact is that after this decline, sales in 2003 (1,132 million m³) exceeded 2002 levels by 2%. The primary reason was the hot and dry summer of 2003. The increase was entirely due to the small-scale sector (+25 million m³). Sales to the large scale market decreased by 4 million m³. Figure 7 indicates the water sales development for the different consumer groups over the past ten years.

In 2003 *other water* sales increased by 4 million m³ to reach 71 million m³ (+6%). Compared to 1993 *other water* sales rose by 9 million m³ (+14%). Note that in 2003 water companies' subsidiaries and sister companies sold another 64 million m³ of *other water* on the Dutch market.

Figure 7 Sales in own supply area 1993 - 2003

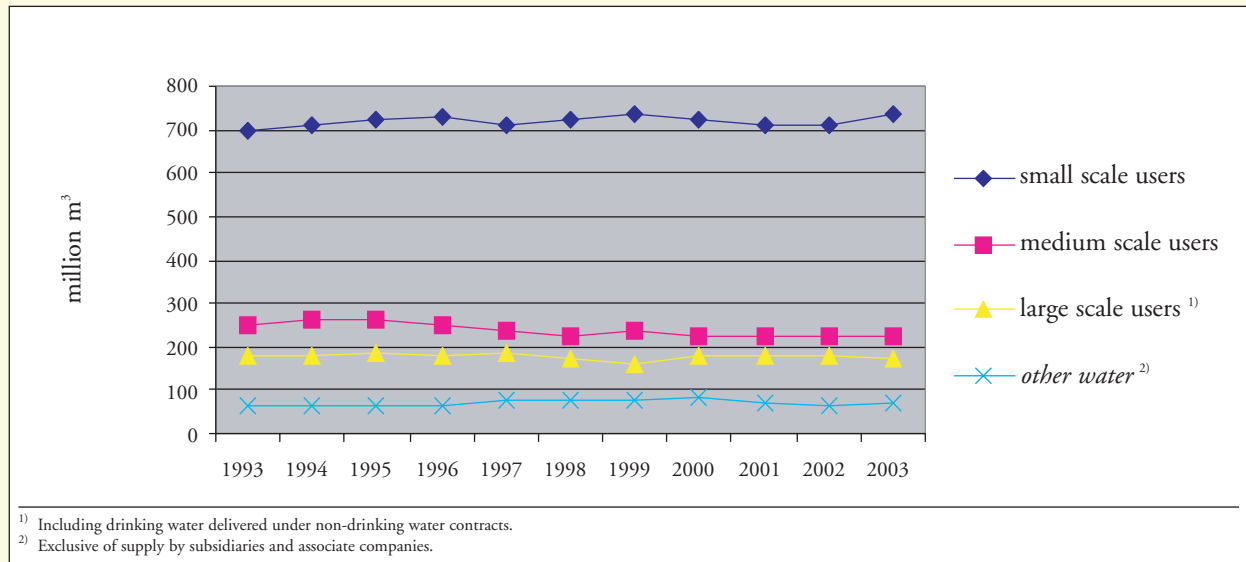


Figure 8 Turnover from own supply area 1993 - 2003

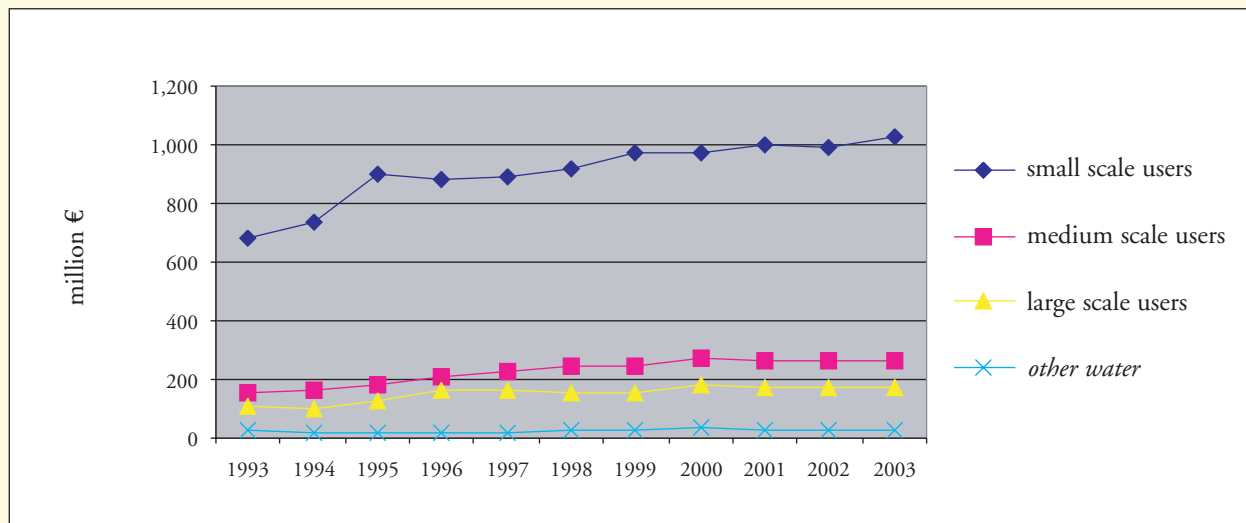
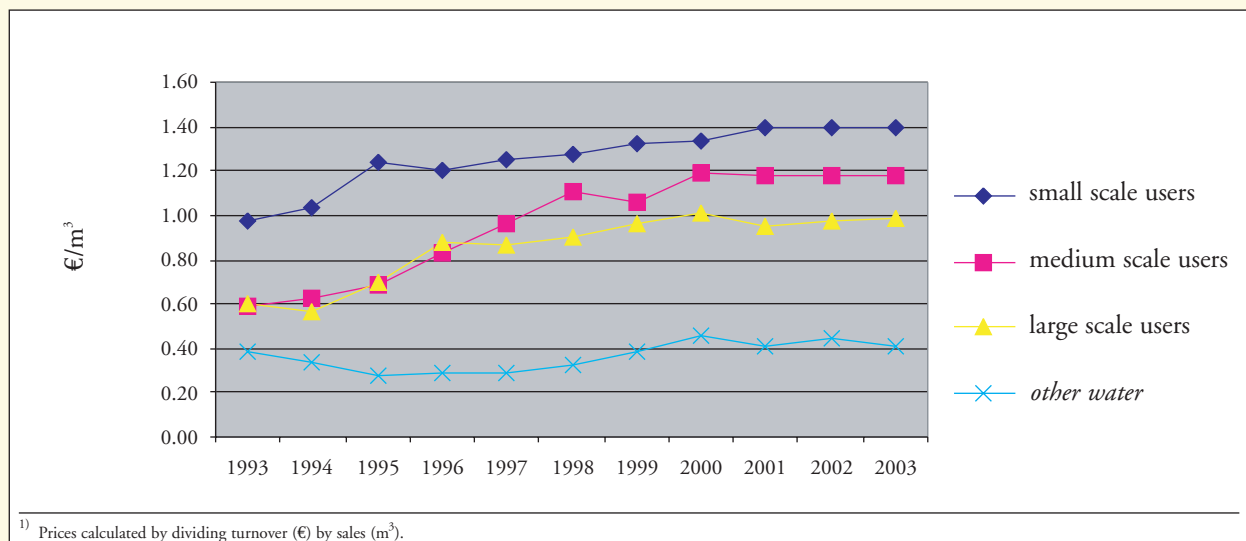


Figure 9 Price development 1993 - 2003 ¹⁾



~ *Turnover and price development*

Figure 8 shows the turnover development for water supply for each consumer group. The total turnover of drinking water and *other water* rose from € 963 million in 1993 to € 1,490 million in 2003. The average prices per consumer group are shown in Figure 9.

Prices for households (€ 1.40/m³) and small business users (€ 1.18/m³) remained unchanged in 2003; the price for large scale consumers (€ 0.99/m³) increased by € 0.02/m³. On average the drinking water price increased by 1 cent reaching € 1.29 per cubic metre. The price of *other water* declined from € 0.45 to € 0.41 per cubic metre.

Looking at the previous decade the average drinking water price per cubic metre (for all consumer groups together) increased from € 0.83 in 1993 to € 1.29 in 2003; the price of *other water* went up from € 0.38 to € 0.41. Over this ten year period the increase of the consumer price index was 28%. Of the increase of the drinking water price 28% (€ 0.13/m³) was thus due to inflation; another 27% was caused by the ground-water tax introduced in 1995 (€ 0.12/m³, see table 7).

Since the introduction of the VEWIN benchmark (reference year 1997, € 1.12/m³) the average drinking water price rose by less (+15%) than the consumer price index (+18%). For more information on the VEWIN benchmark consult the report 'Reflections on Performance, Benchmarking in the Dutch Drinking Water Industry 2003' (*Water in Zicht 2003*).

~ *Rates*

On average, for the year 2003, 78% of a domestic water bill consisted of a variable volumetric rate and 22% consisted of a fixed rate (standing charge). Only one company applied a fully variable rate for all households. Table 3 shows the drinking water rates for each supply area, extracted from the VEWIN publication 'Overview of water charges as of 1 January 2003' (*Tarievenoverzicht Leidingwater per 1 januari 2003*). The outcome in the total column was calculated using the standing charges and the volumetric rate, indicating the average drinking water price per m³ for a standard family (2.28 individuals) at average consumption (46 m³/individual/year).

Subsequent to the consolidation process that has taken place in the water sector many companies are now harmonising their rates in the various sub-areas. Water rates in the sub-areas may also differ because some municipalities levy distribution and concession reimbursements charged on to the people living in those areas. In table 3 these levies are incorporated in the standing charges.

Table 3 Rates of drinking water to households 2003 ¹⁾

company	standing charge	volumetric rate	total per m ³
	€		
Wgron			
Province	18.72	0.93 ²⁾	0.95
City	30.00	1.30 ³⁾	1.36
WMD	36.52	0.88	1.23
Vitens			
Friesland	30.00	1.10	1.39
Overijssel	16.52	1.18	1.33
Gelderland			
Arnhem, Nijmegen, Apeldoorn etc. ⁴⁾	30.00	0.94	1.23
Other municipalities ⁵⁾	17.58	1.12	1.29
PWN	40.57	1.26	1.65
WLB			
General	38.88	1.30	1.67
Amstelveen	15.55	1.30	1.45
DZH			
General	41.20	1.29	1.68
Den Haag	58.20	1.29	1.84
Leiden	70.95	1.29	1.97
Warmond	49.34	1.29	1.76
Rijnwoude	46.13	1.29	1.73
Leidschendam-Voorburg	47.05	1.29	1.74
WBE			
General	62.88	0.99	1.58
Delft	54.84	1.12	1.64
Hydron-ZH	69.22	1.24	1.90
Hydron-Fl	-	1.26	1.26
Hydron-MN	23.64	0.97	1.20
Delta			
General	44.04	1.10	1.52
Putte, Ossedrecht, Woensdrecht enz.	38.40	0.85	1.22
Brabant Water			
General	38.40	0.85	1.22
Helmond en Mierlo	38.40	0.88	1.25
Baarle Hertog	38.40	1.21 ⁶⁾	1.18
TWM			
Tilburg	29.40	0.89	1.17
Goirle	29.40	0.87	1.15
WML			
General	15.90	1.36	1.51
Maastricht	19.06	1.36	1.54

¹⁾ Metered houses. Exclusive 6% VAT and tap water tax (€ 0.141/m³), including groundwater tax. Standing charges include distribution and concession reimbursements. The total price per m³ is calculated from the standing charge and the volumetric rate for an average family of 2.28 individuals (CBS, 2003) and average consumption per individual of 46 m³ a year (VEWIN/NIPO, 2001). Calculation: (standing charge + 2.28 x 46 x volumetric rate) / (2.28 x 46).

²⁾ Up to 18 m³ per connection nil, more than 18 m³ € 0.93.

³⁾ Up to 18 m³ per connection nil, more than 18 m³ € 1.30.

⁴⁾ The supply area of former water company NUON Water Gelderland.

⁵⁾ The supply area of former water company Waterbedrijf Gelderland.

⁶⁾ Up to 15 m³ per individual nil, more than 15 m³ € 1.211.

~ *Domestic drinking water consumption by application*

Every three years VEWIN researches the Dutch population on domestic water usage. Table 4 shows the main outcomes of the last research held in 2001. Updated figures will be available late 2004. The main uses of domestic drinking water are the shower (33%), the toilet (28%) and the washing machine (18%). Domestic water consumption per head per day between 1992 and 2001 dropped from 135.0 to 126.2 litres. This decline is expected to continue, inter alia because of growing penetration of low-water-use toilets and washing machines.

Table 4 Breakdown of domestic water consumption 1992 - 2001

	1992	1995	1998	2001
	<i>litres/person, day</i>			
bath	8.0	9.0	6.7	3.7
shower	39.5	38.3	39.7	42.0
washbasin	3.7	4.2	5.1	5.2
toilet flush	42.7	39.0	36.2	34.8
washing, by hand	2.5	2.1	2.1	1.8
washing, by machine	23.2	25.5	23.2	22.8
washing up, by hand	8.8	4.9	3.8	3.6
washing up, by machine	0.7	0.9	1.9	2.4
food preparation	2.6	2.0	1.7	1.6
drinking coffee, tea and water	.	1.5	1.5	1.5
other	3.3	6.7	6.1	6.7
total	135.0	134.1	127.9	126.2

Source: report on domestic water consumption by VEWIN/NIPO 2001.

Chapter 4 Financial data

Chapter 3 deals at length with water sales. This chapter discusses financial factors such as balance sheet, investments and taxes.

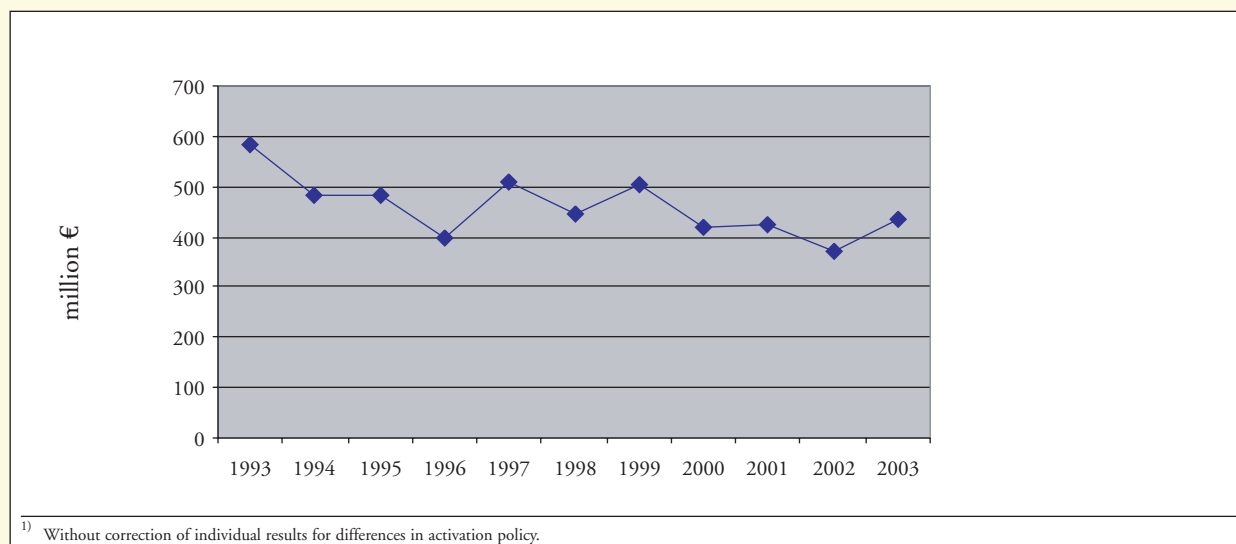
~ The balance sheet

Table 5 shows the balance sheet of the Dutch water sector. This was created by aggregating individual company figures, most of which were valued at historical cost price. Total balance sheet assets end 2003 were € 5.8 billion, of which € 1.3 billion (21.5%) was financed by own capital, € 3.9 billion (66.1%) by loans and € 0.7 billion (12.4%) by other capital (contributions from third parties and contingencies).

Table 5 Financial balance sheet on 31-12-2003 (million €)

Assets		Liabilities	
<i>fixed assets</i>		<i>shareholders' equity</i>	
- tangible fixed assets	5,389	- share capital	121
- intangible fixed assets	34	- reserves	1,137
- financial fixed assets	102	<i>other capital</i>	
- total	5,524	- contributions from third parties	552
		- contingencies	174
<i>current assets</i>		<i>long-term loan capital</i>	
- stocks	17		2,940
- account receivables/debtors	323	<i>short-term loan capital</i>	
- liquid assets/cash	-17	- loans	417
- total	324	- creditors	182
		- advances	24
		- other	300
		- total	923
total	5,848	total	5,848

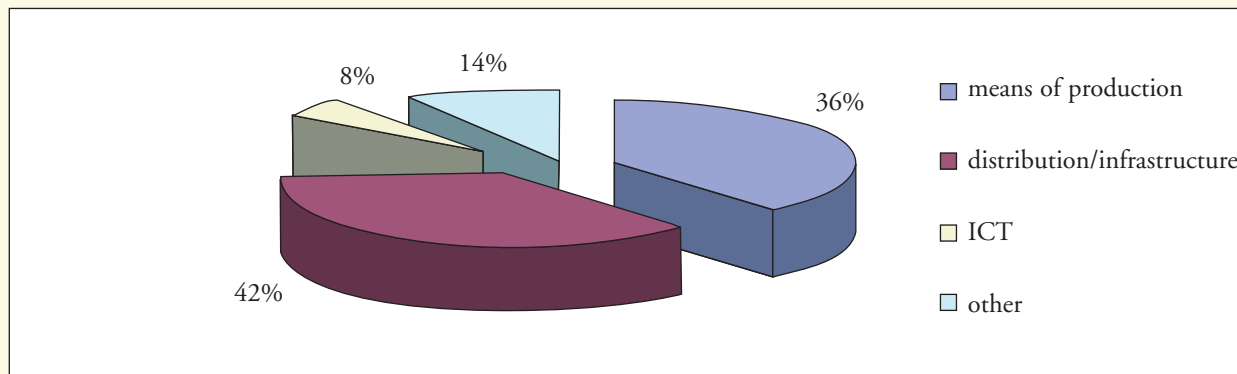
Figure 10 Development of investments 1993 - 2003 ¹⁾



~ Investments

Figure 10 shows the water companies' investments and their growth. Investments have fluctuated around € 450 million since 1993. In 2003 investments amounted to € 433 million; 42% of which was invested in distribution processes, 36% in production and 8% in information and communication technology.

Figure 11 Investments by process 2003



~ Taxes

Table 6 shows the development in rates of the national ground water tax and tap water tax. Both are based on the Environmental Resource Tax Act (Wet Belastingen op Milieugrondslag). The table does not include the provincial groundwater levies on the basis of the Ground Water Act (Grondwaterwet) and distribution and concession reimbursements. The provincial groundwater levies vary per province whereas distribution and concession reimbursements vary per municipality. The latter are only levied in a limited number of places. The average tax load resulting from the provincial groundwater levies and the distribution and concession reimbursements is determined by dividing the paid tax amounts by the total drinking water supplied (1,132 million m³, see table 2). Table 7 shows the outcomes of this, along with other taxes.

Table 6 Water tax rates under the Environmental Water Resource Tax Act, 1995 - 2003

	1995 - 1998	1999	2000	2002	2003
	<i>euro-cent/m³</i>				
<i>groundwater tax</i>					
normal rate	15.4	15.8	16.0	16.82	17.43
infiltration discount ¹⁾	12.7	13.2	13.4	14.09	14.6
<i>tap water tax</i> ²⁾			12.9	13.6	14.1

1) Discount on normal rate with prior infiltration (Environmental Water Resource Tax Act, article 6).

2) Tax on drinking water and *other water* that is supplied through a water network to third parties. The tax only applies to the delivery of the first 300 m³.

Allocated over the total drinking water supply the provincial groundwater levy amounts to 1.0 cent/m³; distribution and concession reimbursements to 0.7 cent/m³. Allocated over drinking water from groundwater or infiltrated water (together almost 70% of total drinking water supply) average tax load of the provincial groundwater levy amounts to 1.4 cent/m³.

In 2003, the total tax load was € 375 million (table 7), of which € 369 million was allocated to drinking water, equivalent to € 0.33 per cubic metre delivered. The drinking water taxes include € 159 million (€ 0.14/m³) from taxes that raise water costs and € 210 million (€ 0.19/m³) from tap water tax and VAT. Tap water tax and VAT are collected from consumers by the drinking water companies on behalf of the government. Though consumers must pay these taxes to the water company (on top of the water price charged), they do not form part of companies' turnover.

Table 7 Taxes 2003

	total levy	drinking water share ¹⁾	
		levy	levy per m ³ ²⁾
	million €		€/m ³
direct taxes (cost-price increasing)			
national groundwater tax	143	140	0.12
provincial groundwater levy	12	11	0.01
distribution and concession reimbursements	8	8	0.01
total	163	159	0.14
indirect taxes			
tap water tax ³⁾	116	116	0.10
VAT on water sales ⁴⁾	89	88	0.08
VAT on tap water tax ⁵⁾	7	7	0.01
total	212	210	0.19
total	375	369	0.33

¹⁾ The drinking water share has been calculated. On calculation of the direct taxes the outcomes of the 2003 benchmark were used, which differentiates drinking water activities and non-drinking water activities. The share of drinking water activities in taxes amounts to 97.3% for the national groundwater tax, 96.3 % for the provincial groundwater levy and 100% for piping and concession reimbursements. The calculation of the indirect taxes is shown in footnotes 3 to 5.

²⁾ The drinking water levy calculated in the previous column divided by the drinking water supplied to final users (1,132 million m³)

³⁾ Levy estimated as follows: supply of drinking water to small scale users x rate for tap water tax (€ 0.141 / m³) + medium scale and large scale administrative connections for drinking water x 300 m³ x rate for tap water tax + (in the total column) connections for *other water* x 300 m³ x rate for tap water tax.

⁴⁾ Calculated as follows: turnover from water delivered to final users x 6%, respectively turnover from drinking water delivered to final users x 6%.

⁵⁾ Calculated as follows: previously calculated tax on tap water x 6% (VAT is also levied over tax on tap water).

Table 8 shows the effect of these taxes on the average Dutch drinking water price. The drinking water rate (€ 1.29/m³) consists of taxes for almost 11% (€ 0.14/m³) and the total price (€ 1.48/m³ including VAT and tap water tax) for a comfortable 22% (€ 0.33/m³).

Table 8 Average drinking water price in the Netherlands 2003

	€/m ³	share in total price
reimbursement for the water company	1.15	77.7%
cost-price increasing taxes	0.14	9.5%
<i>average tariff</i>	<i>1.29</i>	
tap water tax and VAT	0.19	12.8%
<i>total amount due for average buyer</i>	<i>1.48</i>	

Table 9 represents the build-up of the average drinking water price for the small scale sector only. Small scale consumers (sales < 300 m³) pay tap water tax on their entire consumption as a result of which the tax pressure for this consumption group (€ 0.37 per m³) slightly exceeds the average tax pressure of all consumer groups in the Netherlands (€ 0.33 per m³) together.

Table 9 Average drinking water price for small scale consumers 2003

	<u>€/m³</u>	<u>share in total price</u>
reimbursement for the water company	1.26	77.1%
cost-price increasing taxes	<u>0.14</u>	8.6%
<i>average tariff</i>	<u>1.40</u>	
tap water tax and VAT ¹⁾	<u>0.23</u>	14.3%
<i>total amount due for average buyer</i>	<u>1.63</u>	

¹⁾ € 0.141 + 6% VAT x (€ 1.40 + € 0.141)

Chapter 5 Infrastructure

Table 10 and table 11 give an overview of the length and structure of the transport and mains supply network as on 31 December 2003. The development of the network length and the most frequently used materials (asbestos cement, PVC and cast iron) are shown in figure 12. In this figure all other materials are referred to under 'other'.

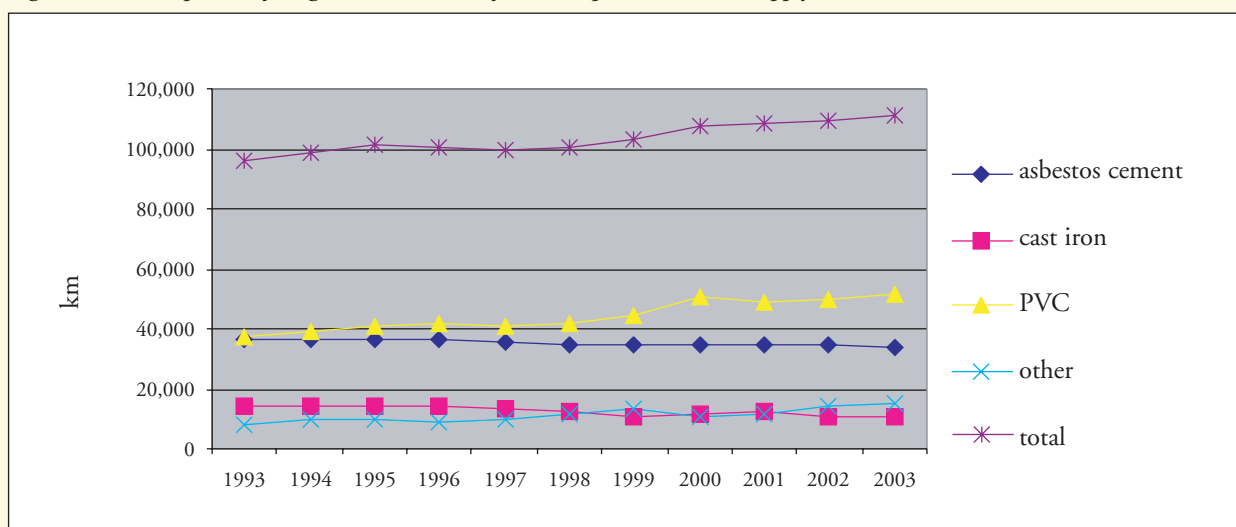
Table 10 Network length on 31-12-2003

company	total
	kilometre
Wgron	4,687
WMD	4,154
Vitens	36,201
PWN	9,576
WLB	2,676
WRK	332
DZH	4,419
WBE	6,497
Hydron-ZH	3,933
Hydron-Fl	2,224
Hydron-MN	6,250
Delta	4,523
Brabant Water	16,702
TWM	861
WBB	25
WML	8,453
The Netherlands	111,513

Table 11 Network structure on 31-12-2003

material	total
	kilometre
asbestos cement	34,206
cast iron	10,936
nodular cast iron	2,772
steel	2,673
concrete	1,147
PVC	51,170
polyethene (PE)	7,007
glasfibre reinforced synthetics	38
other	1,565
total	111,513

Figure 12 Development of length and structure of the transport and mains supply network 1993 - 2003



Appendix 1

SUPPLY AREAS AND RELATED MUNICIPALITIES IN 2003

Waterbedrijf Groningen

All Groningen municipalities and the municipality of Tynaarlo (Eelde-Paterswolde).

Waterleidingmaatschappij Drenthe

Aa and Hunze, Assen, Borger-Odoorn, Coevorden, De Wolden, Emmen, Hoogeveen, Midden-Drenthe, Noorderveld, Westerveld (partly) and Tynaarlo (partly). Supplies to a number of areas in Leek, Meppel, Onstwedde and Ooststellingwerf.

Vitens

The provinces of Friesland, Gelderland and Overijssel, the municipality of Noordoostpolder. Supplies also to the municipalities of Meppel and of Westerveld, both in the province of Drenthe.

PWN Waterleidingbedrijf Noord-Holland

Aalsmeer, Akersloot, Alkmaar, Amstelveen (partly), Andijk, Anna Paulowna, Beemster, Bennebroek, Bergen (NH), Beverwijk, Blaricum, Bloemendaal, Bussum, Castricum, Drechterland, Edam-Volendam, Enkhuizen, Graft-de Rijk, 's-Graveland, Haarlem, Haarlemmerliede & Spaarnwoude, Haarlemmermeer, Harenkarspel, Heemskerk, Heerhugowaard, Heiloo, Den Helder, Hoorn, Huizen, Landsmeer, Langedijk, Laren, Limmen, Medemblik, Naarden, Nederhorst den Berg, Niedorp, Noorder-Koggenland, Obdam, Oostzaan, Opmeer, Purmerend, Schagen, Schermer, Schoorl, Stede Broec, Texel, Uitgeest, Uithoorn, Velsen, Venhuizen, Waterland, Weesp, Wervershoof, Wester-Koggenland, Wieringen, Wieringermeer, Wognum, Wormerland, Zaanstad, Zandvoort, Zeevang, Zijpe. Supplies to a number of areas in the municipalities of Alkemade, Amsterdam, Eemnes, Heemstede, Hillegom, Hilversum, Leimuider, Loosdrecht, Muiden and Warmond.

Waterleidingbedrijf Amsterdam

Amstelveen (built-up area), Amsterdam, Diemen, Heemstede, Muiden and Ouder-Amstel. Supplies to areas in a number of surrounding municipalities.

Duinwaterbedrijf Zuid-Holland

Bergschenhoek, Berkel and Rodenrijs, Bleiswijk, 's-Gravenhage, Hillegom, Katwijk, Leiden, Leidschendam, Lisse, Nieuwerkerk a/d IJssel, Noordwijk, Noordwijkerhout, Nootdorp, Oegstgeest, Pijnacker, Rijnsburg, Rijnwoude, Rijswijk, Sassenheim, Valkenburg, Voorburg, Voorhout, Voorschoten, Warmond, Wassenaar, Zevenhuizen-Moerkapelle and Zoetermeer.

Waterbedrijf Europoort

Albrandswaard, Barendrecht, Bernisse, Binnenmaas, Brielle, Capelle a/d IJssel, Cromstrijen, De Lier, Delft, Dordrecht, 's-Gravendeel, 's-Gravenzande, Heerjansdam, Hellevoetsluis, Korendijk, Maasland, Maassluis, Monster, Naaldwijk, Oud-Beijerland, Rotterdam, Rozenburg, Schiedam, Schipluiden, Spijkenisse, Strijen, Vlaardingen, Wateringen and Westvoorne.

Hydron Zuid-Holland

Alblasserdam, Alkemade, Alphen a.d. Rijn, Bergambacht, Bodegraven, Boskoop, Giessenlanden, Gorinchem, Gouda, Hardinxveld-Giessendam, Graafstroom, Hendrik Ido Ambacht, Jacobswoude, Krimpen a/d IJssel, Leerdam, Leiderdorp, Liemeer, Liesveld, Moordrecht, Nederlek, Nieuw-Lekkerland, Nieuwkoop, Ouderkerk, Papendrecht, Reeuwijk, Ridderkerk, Rijnwoude, Schoonhoven, Sliedrecht, Ter Aar, Vianen, Vlist, Waddinxveen, Zederik, Zoeterwoude and Zwijndrecht.

Hydron Flevoland

Almere, Dronten, Lelystad and Zeewolde.

Hydron Midden-Nederland

Abcoude, Amerongen, Amersfoort, Baarn, De Bilt, Breukelen, Bunnik, Bunschoten, De Ronde Venen, Driebergen-Rijsenburg, Eemnes, Hilversum, Houten, Leersum, Leusden, Loenen, Loosdrecht (municipality De Wijde Meren), Lopik, Maarn, Maarssen, Montfoort, Nieuwegein, Oudewater, Renswoude, Rhenen, Scherpenzeel, Soest, Utrecht, Veenendaal, Woerden, Woudenberg, Wijk bij Duurstede, IJsselstein and Zeist. Supplies to a number of areas in Kortenhoef.

Bronwaterleiding Doorn

Doorn.

Delta Drinkwater

Bergen op Zoom (Halsteren), Borsele, Dirksland, Goedereede, Goes, Hulst, Kapelle, Middelburg, Middelharnis, Noord-Beveland, Oostburg, Oostflakkee, Reimerswaal, Schouwen-Duiveland, Sluis, Terneuzen, Tholen, Veere, Vlissingen and Woensdrecht.

Brabant Water

Aalburg, Alphen-Chaam, Asten, Baarle-Hertog, Baarle-Nassau, Bergen op Zoom, Bergeyk, Bernheze, Best, Bladel, Boekel, Boxmeer, Boxtel, Breda, Cranendonck, Cuyk, Deurne, Dongen, Drimmelen, Eersel, Eindhoven, Etten-Leur, Geertruidenberg, Geldrop, Gemert-Bakel, Gilze and Rijen, Goirle (partly), Grave, Haaren, Halderberge, Heeze-Leende, Helmond, 's-Hertogenbosch, Heusden, Hilvarenbeek, Laarbeek, Landerd, Lith, Loon op Zand, Maasdonk, Mierlo, Mill en Sint Hubert, Moerdijk, Nuenen, Oirschot, Oisterwijk, Oosterhout, Oss, Ravenstein, Reusel-de Mierden, Roosendaal, Rucphen, Schijndel, Someren, Son en Breugel, Steenbergen, St. Antonis, St. Michielsgestel, St. Oedenrode, Tholen (partly), Tilburg (partly), Uden, Valkenswaard, Veghel, Veldhoven, Vught, Waalre, Waalwijk, Werkendam, Woensdrecht (partly), Woudrichem and Zundert. Supplies to a number of areas in Nederweert.

Tilburgsche Waterleiding-Maatschappij

Tilburg and Goirle. Supplies to a number of areas in Hilvarenbeek.

Waterleidingmaatschappij Limburg

Ambt Montfort, Arcen and Velden, Beek, Beesel, Bergen (L), Brunssum, Echt/Susteren, Eijsden, Gennep, Grubbenvorst, Gulpen/Wittem, Haelen, Heel, Heerlen, Helden, Heythuysen, Horst aan de Maas, Hunsel, Kerkrade, Kessel, Landgraaf, Maasbracht, Maasbree, Maastricht, Margraten, Meerlo-Wanssum, Meerssen, Meijel, Mook and Middelaar, Nederweert, Nuth, Onderbanken, Roerdalen, Roermond, Roggel en Neer, Schinnen, Sevenum, Simpelveld, Sittard/Geleen, Stein, Swalmen, Thorn, Vaals, Valkenburg a/d Geul, Venlo, Venray, Voerendaal and Weert.

Appendix 2

SIGNS AND DEFINITIONS

Signs

- . = data missing
- 0 = the figure is less than half the chosen unit
- = nil
- nothing (blank) = data not available for explicable reasons

Definitions

- ~ *Water company*
 - a. a company providing drinking water for consumers;
 - b. a company providing *wholesale* drinking water on large scale to companies referred to under a.;
 - c. a company providing drinking water for consumers and *wholesale* drinking water to companies as referred to under a.

- ~ *Drinking water*

Water (partially) destined for human consumption.

- ~ *Other water*

Water of different quality than drinking water. For instance non-filtered, semi-filtered water as well as distilled and demineralised water.

- ~ *Supply area*

The municipal areas or part(s) of these where a water company delivers and invoices water.

- ~ *Production*

The amount of water pumped by treatment plants into the network.

- ~ *Wholesale delivery*

Deliveries between water companies.

- ~ *Third parties*

Companies or institutions that are not water companies.

- ~ *Natural dune water*

Groundwater naturally present in the dunes. Water supplied by man from external sources for treatment here (artificial infiltration) is not considered natural dune water.

- ~ *Artificial infiltration*

Feeding water into a so-called infiltration area where the water passes through the soil. After a certain period, partially purified by its passage, the water is pumped up to be further processed into drinking water. A special form of artificial infiltration is depth infiltration, whereby the water does not sink naturally through the soil, but is pumped directly deep underground.

- ~ *Direct processing*
Production of water without prior artificial infiltration.
- ~ *River groundwater*
Water extracted from the ground that is physically close to open water or a river and besides groundwater, consists of at least 10% infiltrated surface water.
- ~ *Technical connection*
The technical connection is the pipe between the mains network and the consumer, including water meter (if present).
- ~ *Administrative connection*
An administrative connection is taken to mean the premises to a technical connection (e.g. an apartment). A collective (technical) connection may include several administrative connections.
- ~ *Mains supply network*
The water network to which the connection pipes of consumers are connected.
- ~ *Transport network*
The water network through which drinking water or *other water* flows, except the mains supply network and consumer connection pipes. This concerns the pipelines for bringing water into the purification stations, pipelines between water companies (*wholesale* deliveries) and those between purification stations and the mains supply network.
- ~ *Small scale users*
Consumers using less than 300 m³ a year.
- ~ *Medium scale users*
Consumers using between 300 m³ and 10,000 m³ a year.
- ~ *Large scale users*
Consumers using more than 10,000 m³ a year.

Appendix 3

LITERATURE

1. VEWIN, Water Supply Statistics 1993-2002 (1994-2003).
2. VEWIN/Accenture, Reflections on Performance 2003, Benchmarking in the Dutch Drinking Water Industry (2004).
3. VEWIN, Overview of Water Charges as of 1 January 2003 (2003).
4. VEWIN/NIPO, A Different Pattern of Consumption (2001).

