

WATER CONSUMPTION

Freshwater resources are of major environmental and economic importance. Their distribution varies widely among and within countries. In arid regions, freshwater resources may at times be limited to the extent that demand for water can be met only by going beyond sustainable use.

Freshwater abstractions, particularly for public water supplies, irrigation, industrial processes and cooling of electric power plants, exert a major pressure on water resources, with significant implications for their quantity and quality. Main concerns relate to the inefficient use of water and to its environmental and socio-economic consequences.

Definition

Water abstractions refer to freshwater taken from ground or surface water sources, either permanently or temporarily, and conveyed to the place of use. If the water is returned to a surface water source, abstraction of the same water by the downstream user is counted again in compiling total abstractions: this may lead to double counting.

Mine water and drainage water are included, whereas water used for hydroelectricity generation (which is considered an *in situ* use) is excluded.

Comparability

Definitions and estimation methods employed by countries to compile data on water abstractions and supply may vary considerably and change over time. In general, data availability and quality are best for water abstractions

Overview

Most OECD countries increased their total water abstractions over the 1960s and 1970s in response to higher demand by the agricultural and energy sectors. However, since the 1980s, some countries have succeeded in stabilising their total water abstractions through more efficient irrigation techniques, the decline of water-intensive industries (e.g. mining, steel), the increased use of cleaner production technologies and reduced losses in pipe networks. More recently, this stabilisation of water abstractions has partly reflected the consequences of droughts (with population growth continuing to drive increases in public supply).

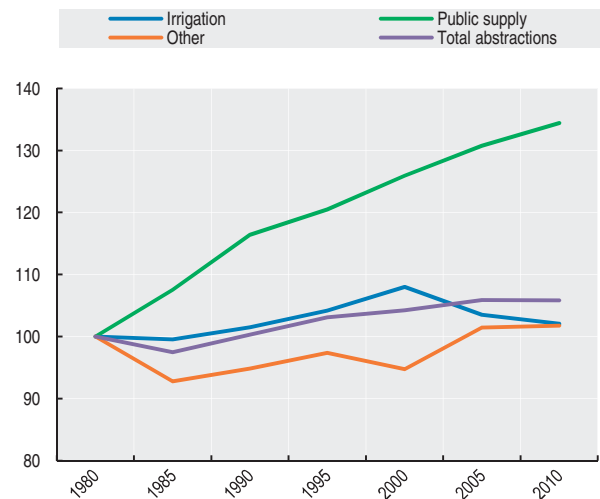
At world level, it is estimated that, over the last century, the growth in water demand was more than double the rate of population growth, with agriculture being the largest user of water.

for public supply, which represent about 15% of the total water abstracted in OECD countries. The OECD totals are OECD Secretariat's estimates based on linear interpolations to fill missing values. Data for the United Kingdom refers only to England and Wales.

Please note that breaks in time series exist for Estonia, France, Hungary, Luxembourg, Mexico, Turkey and the United Kingdom.

Water abstractions in OECD countries

1980 = 100



StatLink <http://dx.doi.org/10.1787/888932709225>

Sources

- OECD (2013), *Environment at a Glance: OECD Environmental Indicators*, OECD Publishing.
- OECD (2012), *OECD Water Statistics*, OECD Environment Statistics (database).

Further information

Analytical publications

- OECD (2013), *Water and Green Growth*, *OECD Green Growth Studies*, OECD publishing.
- OECD (2012), *OECD Environmental Outlook*, OECD Publishing.
- OECD (2012), *OECD Studies on Water*, OECD Publishing.
- OECD (2012), *Water*, *OECD Insights*, OECD Publishing.
- OECD (2009), *Managing Water for All: An OECD Perspective on Pricing and Financing*, OECD Publishing.

Websites

- OECD Environmental Indicators, Modelling and Outlooks, www.oecd.org/env/indicators.
- The Water Challenge: OECD's Response, www.oecd.org/water.



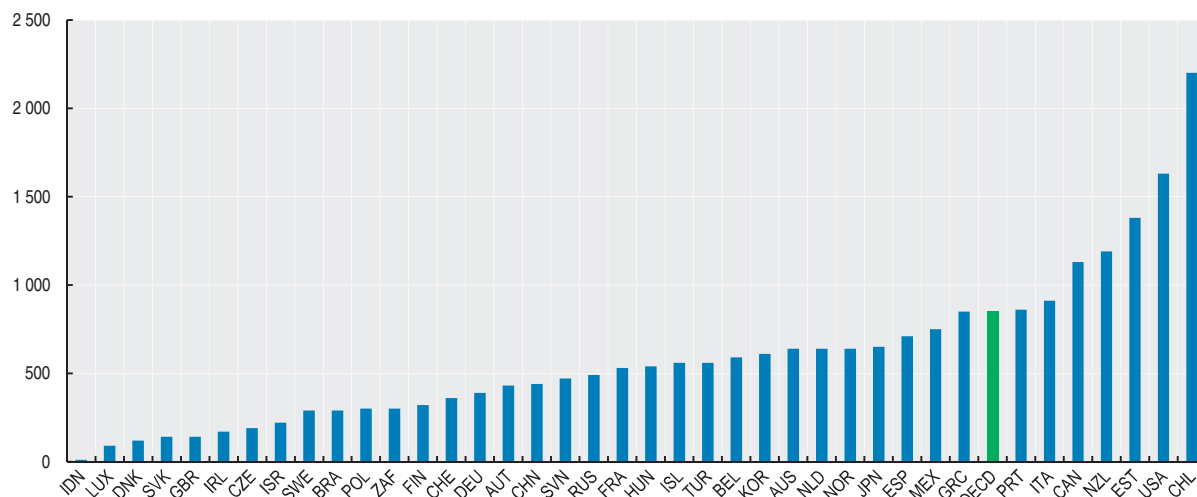
WATER CONSUMPTION

Water abstractions

	Water abstractions per capita m ³ per capita						Total abstractions Millions m ³					
	1985	1990	1995	2000	2005	2010 or latest available year	1985	1990	1995	2000	2005	2010 or latest available year
Australia	920	..	1 330	1 130	920	640	14 600	..	24 070	21 700	18 770	14 100
Austria	470	490	430	..	..	..	3 580	3 810	3 450	..	..	..
Belgium	..	..	810	740	610	590	..	..	8 250	7 540	6 390	6 220
Canada	1 620	1 610	1 610	..	1 300	1 130	42 380	43 890	47 250	..	42 060	37 250
Chile	..	..	..	..	1 950	2 200	..	..	..	..	31 760	36 510
Czech Republic	360	350	270	190	190	190	3 680	3 620	2 740	1 920	1 950	1 950
Denmark	..	250	170	140	120	120	..	1 260	890	730	640	660
Estonia	..	2 050	1 240	1 070	970	1 380	..	3 220	1 780	1 470	1 300	1 840
Finland	820	470	510	450	320	..	4 000	2 350	2 590	2 350	1 680	..
France	630	660	710	550	550	530	34 890	37 690	40 670	32 720	33 870	33 440
Germany	680	760	530	470	430	390	41 220	47 870	42 920	38 770	35 560	32 300
Greece	550	780	730	910	870	850	5 500	7 860	7 790	9 920	9 650	9 470
Hungary	590	610	580	650	490	540	6 270	6 290	5 980	6 620	4 930	5 430
Iceland	460	660	620	580	560	..	110	170	170	160	170	..
Ireland	..	..	330	..	190	170	..	..	1 180	..	800	730
Israel	..	380	330	270	250	220	..	1 780	1 810	1 730	1 730	1 600
Italy	..	..	..	740	..	910	..	..	..	41 980	..	53 750
Japan	720	720	710	690	650	650	87 210	88 910	88 880	86 970	83 420	83 100
Korea	460	480	520	550	610	..	18 580	20 570	23 670	26 020	29 160	..
Luxembourg	180	150	140	140	..	90	70	60	60	60	..	50
Mexico	..	..	800	720	740	750	..	..	73 670	70 430	76 510	80 590
Netherlands	640	530	420	560	700	640	9 350	7 980	6 510	8 920	11 450	10 610
New Zealand	..	..	..	810	1 170	1 190	..	..	..	3 140	4 910	5 200
Norway	490	..	550	530	620	640	2 030	..	2 420	2 350	2 860	3 030
Poland	440	400	340	310	300	300	16 410	15 160	12 920	11 990	11 520	11 640
Portugal	..	730	1 080	860	860	..	..	7 290	10 850	8 810	9 150	9 150
Slovak Republic	400	400	260	220	170	140	2 060	2 120	1 390	1 170	910	790
Slovenia	..	..	..	450	460	470	..	..	..	900	920	950
Spain	1 200	950	850	910	820	710	46 250	36 900	33 290	36 690	35 660	32 470
Sweden	360	350	310	300	290	..	2 970	2 970	2 730	2 690	2 630	..
Switzerland	410	400	370	360	340	360	2 650	2 670	2 570	2 560	2 510	2 660
Turkey	390	510	560	680	650	560	19 400	28 070	33 480	43 650	44 320	40 560
United Kingdom	230	240	190	210	190	150	11 530	12 050	9 560	11 180	10 320	8 350
United States	1 960	1 880	1 770	1 690	1 630	..	467 340	468 620	470 510	476 800	482 390	..
EU 27	..	..	..	..	..	..	..	..	..	..	..	..
OECD	1 000	980	940	910	890	850	1 000 200	1 022 510	1 033 260	1 038 460	1 051 740	1 043 880
Brazil	..	..	..	290	..	..	..	..	..	50 210	..	..
China	..	..	..	430	430	440	..	..	..	550 960	561 100	593 400
India	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	..	0	10	10	10	..	..	760	1 160	1 510	2 350	..
Russian Federation	820	740	620	550	520	490	117 270	110 400	91 920	80 780	74 370	69 920
South Africa	300	13 240

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Water abstractions

 m³/capita, 2010 or latest available year

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