

Appendix D Urban performance indicators

Indicator category	Indicator subcategory	Indicator Code	Indicator name
Asset	Water treatment plants	A1	Number of water treatment plants providing full treatment (no.)
Asset	Other water assets	A2	Length of water mains (km)
Asset	Other water assets	A3	Number of properties served per km of water main (no./km)
Asset	Other water assets	A4	Number of wastewater treatment plants (no.)
Asset	Other water assets	A5	Length of sewer mains and channels (km)
Asset	Sewerage assets	A6	Number of properties served per km of sewer main (no./km)
Asset	Water main breaks	A8	Number of water main breaks, bursts and leaks (no. per 100 km of water mains)
Asset	Water main breaks	IA8	Number of water main breaks, bursts and leaks
Asset	Water losses	A9	Infrastructure leakage index (ILI)
Asset	Water losses	A10	Real losses: service connections (L/service connections/day)
Asset	Water losses	A11	Real losses: water mains (kL/km water main/day)
Asset	Sewerage breaks & chokes	A14	Number of sewer mains breaks and chokes (no. per 100 km of sewer main)
Asset	Sewerage breaks & chokes	A15	Number of property connection sewer breaks and chokes (no. per 1,000 properties)
Customers	Connected properties & population	C1	Population receiving services: water supply (000s)
Customers	Connected properties & population	C2	Number of connected residential properties: water supply (000s)
Customers	Customers	C3	Number of connected non-residential properties: water supply (000s)
Customers	Connected properties & population	C4	Total number of connected properties: water supply (000s)
Customers	Connected properties & population	C6	Total number of connected properties: water supply (000s)
Customers	Connected properties & population	C7	Number of connected non-residential properties: wastewater (000s)
Customers	Connected properties & population	C8	Total number of connected properties: wastewater (000s)
Customers	Water quality complaints	C9	Number of water quality complaints: water supply (per 1,000 properties)
Customers	Water quality complaints	IC9	Number of water quality complaints: water supply
Customers	Water service complaints	C10	Number of water service complaints (per 1,000 properties)
Customers	Water service complaints	IC10	Number of water service complaints
Customers	Sewerage service complaints	C11	Number of sewerage service complaints (per 1,000 properties)
Customers	Sewerage service complaints	IC11	Number of sewerage service complaints
Customers	Billing & account complaints	C12	Number of billing and account complaints: water supply and sewerage (per 1,000 properties)
Customers	Billing & account complaints	IC12	Number of billing and account complaints: water supply and sewerage

Indicator category	Indicator subcategory	Indicator Code	Indicator name
Customers	Total water & sewerage complaints	C13	Number of water and sewerage complaints (per 1,000 properties)
Customers	Total water & sewerage complaints	IC13	Number of water and sewerage complaints
Customers	Connect time to a telephone operator	C14	Percentage of calls answered by an operator within 30 seconds (%)
Customers	Average duration of unplanned water supply interruptions	C15	Average duration of an unplanned interruption: water supply (minutes)
Customers	Water interruption frequency	C17	Number of unplanned interruptions: water supply (per 1,000 properties)
Customers	Water interruption frequency	IC17	Number of unplanned interruptions: water supply
Customers	Restrictions/legal action for non-payment of water bill	C18	Number of restrictions for non-payment of water bills (per 1,000 properties)
Customers	Restrictions/legal action for non-payment of water bill	IC18	Number of restrictions for non-payment of water bills
Customers	Restrictions/legal action for non-payment of water bill	C19	Number of legal actions taken for non-payment of water bills (per 1,000 properties).
Customers	Restrictions/legal action for non-payment of water bill	IC19	Number of legal actions taken for non-payment of water bills
Environment	Comparative sewage treatment levels	E1	Percentage of wastewater treated to a primary level (%)
Environment	Comparative sewage treatment levels	IE1	Volume of wastewater treated only to a primary level (ML)
Environment	Comparative sewage treatment levels	E2	Percentage of wastewater treated to a secondary level (%)
Environment	Comparative sewage treatment levels	IE2	Volume of wastewater treated only to a secondary level (ML)
Environment	Comparative sewage treatment levels	E3	Percentage of wastewater treated to a tertiary level (%)
Environment	Comparative sewage treatment levels	IE3	Volume of wastewater treated to a tertiary level (ML)
Environment	Biosolids reuse	E8	Percentage of biosolids reused (%)
Environment	Net greenhouse gas emissions	E9	Net greenhouse gas emissions: water supply (tonnes CO ₂ equivalents per 1,000 properties)
Environment	Net greenhouse gas emissions	IE9	Net greenhouse gas emissions: water supply (tonnes CO ₂ equivalents)
Environment	Net greenhouse gas emissions	E9.1	Net greenhouse gas emissions: water supply – bulk utility (tonnes CO ₂ equivalents per ML)
Environment	Net greenhouse gas emissions	E10	Net greenhouse gas emissions: wastewater (tonnes CO ₂ equivalents per 1,000 properties)
Environment	Net greenhouse gas emissions	IE10	Net Greenhouse gas emissions: wastewater (tonnes CO ₂ equivalents)
Environment	Net greenhouse gas emissions	E10.1	Net greenhouse gas emissions: wastewater – bulk utility (tonnes CO ₂ equivalents per ML)
Environment	Net greenhouse gas emissions	E11	Net greenhouse gas emissions: other (tonnes CO ₂ equivalents per 1,000 properties)
Environment	Net greenhouse gas emissions	IE11	Net greenhouse gas emissions: other (tonnes CO ₂ equivalents)
Environment	Net greenhouse gas emissions	E11.1	Net greenhouse gas emissions: other – bulk utility (tonnes CO ₂ equivalents per ML)
Environment	Net greenhouse gas emissions	E12	Total net greenhouse gas emissions (tonnes CO ₂ equivalents per 1,000 properties)

Indicator category	Indicator subcategory	Indicator Code	Indicator name
Environment	Net greenhouse gas emissions	IE12	Total net greenhouse gas emissions (tonnes CO ₂ equivalents)
Environment	Net greenhouse gas emissions	E12.1	Total net greenhouse gas emissions: bulk utility (tonnes CO ₂ equivalents per ML)
Finance	Revenue	F1	Total revenue – water supply (\$000s)
Finance	Revenue	F2	Total revenue – wastewater (\$000s)
Finance	Revenue	F3	Total Income for the utility (\$000s)
Finance	Revenue	F4	Percentage of residential revenue from usage charges: water supply (%)
Finance	Revenue	F5	Revenue per property: water supply (\$/property)
Finance	Revenue	F5.1	Revenue per ML: water supply – bulk utility (\$/ML)
Finance	Revenue	F6	Revenue per property: wastewater (\$/property)
Finance	Revenue	F6.1	Revenue per ML: wastewater – bulk utility (\$/ML)
Finance	Revenue	F7	Total income per property (\$/property)
Finance	Revenue	F7.1	Total income per ML: bulk utility (\$/ML)
Finance	Revenue from community service obligations (CSOs)	F8	Community service obligations ratio
Finance	Written-down replacement costs of fixed assets	F9	Written-down replacement cost of fixed water supply assets (\$000s)
Finance	Written down replacement costs of fixed assets	F10	Written-down replacement cost of fixed wastewater assets (\$000s)
Finance	Costs	F11	Operating cost per property: water supply (\$/property)
Finance	Costs	IF11	Operating cost: water supply (000s)
Finance	Costs	F11.1	Operating cost per ML: water supply – bulk utility (\$/ML)
Finance	Costs	F12	Operating cost per property: wastewater (\$/property)
Finance	Costs	IF12	Operating cost: wastewater (000s)
Finance	Costs	F12.1	Operating cost per ML: wastewater – bulk utility (\$/ML)
Finance	Costs	F13	Combined operating cost per property: water supply and wastewater (\$/property)
Finance	Costs	F13.1	Combined operating cost per ML: water supply and wastewater: bulk utility (\$/ML)
Finance	Capital expenditure	F14	Capital expenditure: water supply (\$000s)
Finance	Capital expenditure	F15	Capital expenditure: wastewater (\$000s)
Finance	Capital expenditure	F16	Total capital expenditure: water supply and wastewater (\$000s)
Finance	Economic real rate of return	F17	Economic real rate of return: water supply
Finance	Economic real rate of return	F18	Economic real rate of return: wastewater
Finance	Economic real rate of return	F19	Economic real rate of return: water supply and wastewater
Finance	Dividends	F20	Dividend (\$000s)
Finance	Dividends	F21	Dividend payout ratio
Finance	Net debt to equity	F22	Net debt to equity ratio
Finance	Interest cover	F23	Interest cover ratio
Finance	Net profit after tax	F24	Net profit after tax (NPAT) (\$000s)

Indicator category	Indicator subcategory	Indicator Code	Indicator name
Finance	Community service obligations (CSOs)	F25	Community service obligations (\$000s)
Finance	Capital works grants	F26	Capital works grants: water supply (\$000s)
Finance	Capital works grants	F27	Capital works grants: wastewater (\$000s)
Finance	Capital expenditure	F28	Capital expenditure per property: water supply (\$/property)
Finance	Capital expenditure	F28.1	Capital expenditure per ML: water supply – bulk utility (\$/ML)
Finance	Capital expenditure	F29	Capital expenditure per property: wastewater (\$/property)
Finance	Capital expenditure	F29.1	Capital expenditure per ML: wastewater – bulk utility (\$/ML)
Finance	Net profit after tax	F30	Net profit after tax (NPAT) ratio
Health	Water quality compliance	H1	Water quality guidelines (text)
Health	Water quality compliance	H3	Percentage of population where microbiological compliance was achieved (%)
Health	Water quality compliance	H4	Number of zones where chemical compliance was achieved (e.g. 23/24)
Health	Water quality compliance	H4a	Total number of zones
Health	Water quality compliance	H5	Risk-based drinking water management plan externally assessed? (yes/no)
Pricing	Residential tariff structure	P1	Tariff structure: water supply (text)
Pricing	Residential tariff structure	P1.2	Fixed charge: water supply (\$)
Pricing	Residential tariff structure	P1.3	Usage charge: step 1 (\$/kL)
Pricing	Residential tariff structure	P1.4	Usage charge: step 2 (\$/kL)
Pricing	Residential tariff structure	P1.5	Usage charge: step 3 (\$/kL)
Pricing	Residential tariff structure	P1.6	Usage charge: step 4 (\$/kL)
Pricing	Residential tariff structure	P1.7	Usage charge: step 5 (\$/kL)
Pricing	Residential tariff structure	P1.3a	Upper bound of usage: step 1 (kL)
Pricing	Residential tariff structure	P1.4a	Upper bound of usage: step 2 (kL)
Pricing	Residential tariff structure	P1.5a	Upper bound of usage: step 3 (kL)
Pricing	Residential tariff structure	P1.6a	Upper bound of usage: step 4 (kL)
Pricing	Residential tariff structure	P1.7a	Upper bound of usage: step 5 (kL)
Pricing	Residential tariff structure	P1.12	Special levies: water supply (\$)
Pricing	Residential tariff structure	P1.13	Income from special levies retained by the utility: water supply (yes/no)
Pricing—annual bill	Annual bill (based on 200 kL residential water supplied)	P2	Annual bill based on 200kL/a—water (\$)
Pricing—annual bill	Annual bill (based on 200 kL residential water supplied)	P3	Typical residential bill—water (\$)
Pricing	Residential tariff structure	P4	Tariff structure: wastewater (text)
Pricing	Residential tariff structure	P4.1	Fixed charge: wastewater (\$)
Pricing	Residential tariff structure	P4.2	Usage charge: wastewater (\$/kL)
Pricing	Residential tariff structure	P4.3	Special levies: wastewater (\$)
Pricing	Residential tariff structure	P4.4	Income from special levies retained by the utility: wastewater (yes/no)
Pricing—annual bill	Annual bill (based on 200 kL residential water supplied)	P5	Annual residential bill based on 200 kL per annum: wastewater (\$)
Pricing—annual bill	Annual bill (based on average residential annual water supplied)	P6	Typical residential bill: wastewater

Indicator category	Indicator subcategory	Indicator Code	Indicator name
Pricing—annual bill	Annual bill (based on 200 kL residential water supplied)	P7	Total annual residential bill based on 200 kL per annum: water supply and wastewater (\$)
Pricing—annual bill	Annual bill (based on average residential annual water supplied)	P8	Total typical residential bill: water supply and wastewater (\$)
Water resources	Sources of water	W1	Volume of water sourced from surface water (ML)
Water resources	Sources of water	W2	Volume of water sourced from groundwater (ML)
Water resources	Sources of water	W3.1	Volume of water sourced from desalination of marine water (ML)
Water resources	Water transfers	W5	Total volume of water received from other service providers or operational areas within the urban water supply system
Water resources	Water transfers	W5.3	Volume of water, excluding recycled water, received from other service providers or operational areas within the urban water supply system (ML)
Water resources	Sources of water	W6	Volume of recycled water received from other service providers or operational areas within the urban water supply system (ML)
Water resources	Sources of water	W7	Total volume of water sourced (ML)
Water resources	Uses of water supplied	W8	Total volume of water supplied to residential customers (ML)
Water resources	Uses of water supplied	W8.3	Volume of water supplied to residential customers (ML)
Water resources	Uses of water supplied	W9.3	Volume of water supplied to non-residential customers (ML)
Water resources	Uses of water supplied	W9	Total volume of water supplied to non-residential customers (ML)
Water resources	Uses of water supplied	W10.1	Volume of non-revenue water (ML)
Water resources	Uses of water supplied	W11	Total volume of urban water supplied (ML)
Water resources	Production	W11.3	Volume of potable water produced for supply into the urban water supply system (ML)
Water resources	Uses of water supplied	W12	Average volume of residential water supplied per property (kL/property)
Water resources	Uses of water supplied	W13	Volume of water returned as environmental flows from outside of the water supply system (ML)
Water resources	Water transfers	W14.3	Volume of water, excluding recycled water, exported to other service providers or operational areas within the urban water supply system (ML)
Water resources	Uses of water supplied	W14	Total volume of water exported to other service providers or operational areas within the urban water supply system (ML)
Water resources	Uses of water supplied	W15	Volume of recycled water exported to other service providers or operational areas within the urban water supply system (ML)
Water resources	Wastewater collected	W16	Volume of wastewater, excluding trade waste, collected (ML)
Water resources	Wastewater collected	W17	Volume of trade waste collected (ML)
Water resources	Wastewater collected	W18	Total volume of wastewater collected (ML)
Water resources	Wastewater collected	W18.1	Volume of wastewater exported to other service providers or operational areas within the urban wastewater system (ML)

Indicator category	Indicator subcategory	Indicator Code	Indicator name
Water resources	Wastewater collected	W18.2	Volume of wastewater received from other service providers or operational areas within the urban wastewater system (ML)
Water resources	Wastewater collected	W18.3	Volume of wastewater taken through sewer mining (ML)
Water resources	Wastewater collected	W18.4	Volume of wastewater inflow to wastewater treatment plants (ML)
Water resources	Wastewater collected	W18.5	Volume of treated effluent outflow from wastewater treatment plants (ML)
Water resources	Wastewater collected	W19	Average volume of wastewater collected per property (kL/property)
Water resources	Uses of recycled water & stormwater	W20	Volume of recycled water supplied to residential customers (ML)
Water resources	Uses of recycled water & stormwater	W21	Volume of recycled water supplied to non-residential customers (ML)
Water resources	Uses of recycled water & stormwater	W23	Volume of recycled water supplied as environmental flows (ML)
Water resources	Uses of recycled water & stormwater	W25.1	Volume of recycled water supplied to managed aquifer recharge (ML)
Water resources	Uses of recycled water & stormwater	W26	Total volume of recycled water supplied (ML)
Water resources	Uses of recycled water & stormwater	W27	Recycled water as a percentage of total wastewater collected (%)
Water resources	Uses of recycled water & stormwater	W28.4	Volume of urban stormwater supplied to residential customers (ML)
Water resources	Uses of recycled water & stormwater	W28.5	Volume of urban stormwater supplied to non-residential customers (ML)
Water resources	Outflow from plant	W29	Volume of treated wastewater disposals (ML)
Water resources	Outflow from plant	W30	Volume of wastewater losses and spills (ML)
Water resources	Uses of recycled water & stormwater	W31	Volume of water returned to surface water or groundwater from the urban water supply system (ML)