

Osaka Gas in brief 2021

Gas Distribution / Safety

I. Outline of Gas Distribution Business

(1) Pipeline Length

(Unit: km)

FY	2012.3	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3	2019.3	2020.3	2021.3
High pressure ^{*1}	630	642	738	738	741	741	741	742	744	748
Middle pressure A ^{*2}	1,744	1,781	1,807	1,848	1,879	1,903	1,917	1,919	1,929	1,940
Middle pressure B ^{*3}	4,484	4,503	4,514	4,532	4,548	4,563	4,576	4,588	4,599	4,610
Low pressure ^{*4}	15,738	15,825	15,926	16,000	16,075	16,128	16,187	16,254	16,333	16,388
Total length of main pipes	22,597	22,751	22,984	23,117	23,243	23,335	23,421	23,504	23,605	23,686
Branch pipes	26,539	26,706	26,877	27,010	27,137	27,255	27,367	27,485	27,588	27,697
Total length of main/branch pipes	49,135	49,457	49,861	50,128	50,380	50,590	50,788	50,989	51,192	51,383
Supply conduit	10,750	10,819	10,892	10,950	11,011	11,077	11,132	11,187	11,234	11,289
Total	59,886	60,276	60,754	61,078	61,391	61,666	61,919	62,175	62,426	62,671

*1 Maximum working gas pressure of 1.0 MPa or higher

*2 Maximum working gas pressure of 0.3 MPa or more but less than 1.0 MPa

*3 Maximum working gas pressure of 0.1 MPa or more but less than 0.3 MPa

*4 Maximum working gas pressure of less than 0.1 MPa

II. Security and Safety Measures

(1) Diffusion of Computer-Controlled Gas Meters

FY	2012.3	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3	2019.3	2020.3	2021.3
Number of gas meters installed (1,000 units)	7,026	7,067	7,120	7,179	7,237	7,295	7,354	7,394	7,437	7,499
Number of gas computer-controlled meters installed (1,000 units)	7,041	7,082	7,133	7,196	7,252	7,310	7,368	7,408	7,450	7,486
Diffusion rate (%)	99.8	99.8	99.8	99.8	99.8	99.9	99.9	99.9	99.9	99.9

(2) Security Measures Prepared for Major Earthquakes (As of the End of April, 2021)

Number of seismometer installed	Approx. 3,300
Installed earthquake disaster prediction system	7 locations including Central Control Room in head office, its sub-center in Kyoto, and 5 business locations
Dividing supply areas into blocks for early restoration	Approx. 660 small blocks for low pressure network, 86 middle blocks for middle pressure network
Number of remote / automated shutoff devices installed	Approx. 3,600 / 3,000
Enhanced wireless communication systems	Established sub-center backing up Central Control Room; equipped 6 transportable satellite communication devices.
Earthquake-resistance piping rate	Ratio of earthquake-resistant pipelines to total pipelines: Approx. 88%
Use of PE pipes	Total length of such pipes reached to approx. 17,200 km. PE pipes are used for all new low-pressure pipes in principle.
Penetration of computer-controlled gas meters	Installed at 100% of residential customers. Installation rate for all customers is approx. 99%.
Backup of major in-house network systems	The backup center in Kyoto is in operation.