

Osaka Gas in brief 2018

Research and Development

I. R&D expenditure

(Billion yen)

FY	2009.3	2010.3	2011.3	2012.3	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3
R&D expenditure	8.0	8.8	9.3	9.1	8.9	9.2	8.8	8.6	7.7	9.7
Revenue	971.9	844.0	918.0	1,032.7	1,109.2	1,221.8	1,251.8	1,039.7	906.9	1,039.6
R&D expenditure/Sales ratio	0.82	1.05	1.01	0.88	0.80	0.76	0.70	0.82	0.85	0.93

II. R&D personnel

(Number of people)

FY	2009.3	2010.3	2011.3	2012.3	2013.3	2014.3	2015.3	2016.3	2017.3	2018.3
Researchers	190	202	202	187	187	180	180	180	179	183
Research assistants	65	42	61	46	45	43	42	39	34	25
Total	255	244	263	233	232	223	222	219	213	208

III. Awards for R&D in FY2018.3

Awarded in	Name of award, awarding organization	Details
July 2017	Engineering Commendation Award, Engineering Advancement Association of Japan	Urgent dike construction of PC LNG Tank at Senboku LNG Terminal
August 2017	Industrial Plaza Excellence Award, Japan Society for Food Engineering	Development of evaluation technique focusing on visualization of heat-transfer phenomena in food
September 2017	SICE Awards (Engineering award), Society of Instrument and Control Engineers	Development of super-low power-consuming MEMS gas sensor
November 2017	Kinki Region Invention and Innovation Awards (Japan Patent Office Commissioner's Award), Japan Institute of Invention and Innovation	Super power-saving gas sensor for battery-powered gas alarms
January 2018	Osaka Excellent Invention Awards, Osaka Institute of Invention and Innovation	Ene-Farm type S power-collector electrodeposition coating
February 2018	President's Award, Technological Development Division, Co-Generation Grand Prize	Development of 3kW-SOFC co-generation system for industrial use
March 2018	Society of Chemical Engineers Award	Development of super low power-consuming gas sensor