Contents Introduction Management Environmental Social Governance ESG Data

Research and Development/Intellectual Property

Principle and Outline

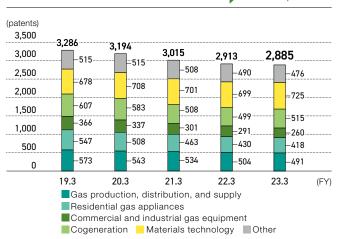
The Daigas Group consider research and development to be one of the most important growth strategies for the Group. In addition to ensuring and improving safety, we are conducting research and development aimed at improving operational efficiency and reducing equipment-related costs through the use of digital technology, improving customer convenience, and enhancing the sophistication of existing services. We are also engaged in research and development for the creation of new businesses and research and development that contributes to the realization of carbon neutrality.

Furthermore, we regard intellectual property rights as an important management resource and are actively working to secure and utilize the rights in conjunction with our business and technology development strategies. We are also actively promoting open innovation activities to accelerate and streamline development and create new technologies and products by actively integrating the Group's proprietary technologies with those of external parties and utilizing them.

Patent Portfolio by Business Type (Group)

Fiscal year ended March 31,2023

2,885 patents



Reward System for Inventors

Osaka Gas has an invention achievement reward system in which inventors who have made significant contributions to its business are rewarded in order to motivate employees to invent and encourage intellectual property activities.

We disclose the results of the review of achievement rewards on the internal portal site, and respond to inquiries and opinions from employees regarding the results of the review, in an effort to operate the system in a fair and transparent manner.

Open Innovation Activities



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Open innovation refers to an efficient approach used to seek solutions outside the company to technology development problems that Osaka Gas is unable to solve independently and to speed up technological development for higher efficiency. Osaka Gas has pioneered this approach since 2009. Our efforts have led to the building and expansion of a network of partnerships (Open Innovation Platform) with universities, public research institutes, small enterprises, large corporations, ventures and overseas companies.

To find outside partners to work with, we have revealed details of our technology to-do list, something we have rarely done in the past, in order to solicit promising technical ideas from outside parties. After we launched full-fledged open innovation activities in FY2010.3, we have achieved many matchmaking opportunities. Some cases have actually led to commercialization and practical applications.

For example, gas pipe patrols using technology that automatically recognizes the part requiring construction with an on-board Al camera, and the use of drone technology in facility inspections are examples of value-added products created by combining our technology with external technologies.

The task ahead is to introduce some of the efficient technologies that we obtained externally, and together with our alliance partners, actively promote the creation of new R&D themes and creation of new businesses through the Open Innovation Platform.

How Open Innovation Works

