Technological Development to Strengthen Competi

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tiveness

A cutting-edge hydrogen supply station developed for the NEDO project.

FAQ:9

Please explain the Company's R&D policy.

FAQ:10

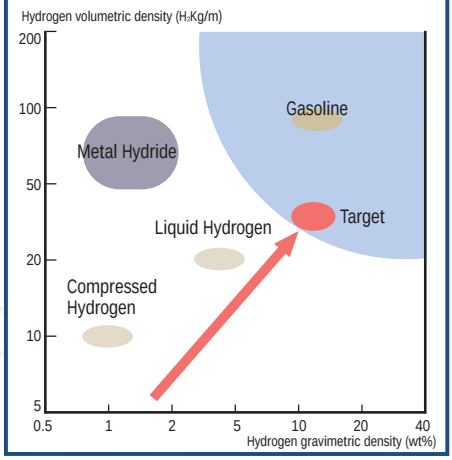
What role does technology play in the business strategies of Osaka Gas?

FAQ:11

What kind of new technologies does the Company plan to develop?

This gas reforming equipment extracts hydrogen from natural gas.

CNTs as Hydrogen Absorbing Materials



SELECTION, CONCENTRATION AND EFFICIENT TECHNOLOGICAL DEVELOPMENT

The ability to develop technology is essential to a corporation's long-term growth. Osaka Gas has positioned technology as an important management strategy. The Company is constantly innovating in fields ranging from materials technology to new product development, creating technologies that help improve efficiency, safety and services in the energy business.

9 In its research and development activities, the foremost policy of the Company is selection and concentration. Osaka Gas is highly selective, concentrating resources in R&D projects that promote its strategies of geographic business expansion and becoming a multiple energy services provider and projects that contribute to increasing its competitiveness in the non-energy business. Amid constant change in the operating environment, we believe that it is critical to precisely determine R&D projects and accelerate activities to produce results. **9 Our second priority is to improve efficiency in R&D activities. While thoroughly polishing our core technologies, we aim to shorten development times by forming alliances with partners who have strong technologies in complementary fields.**

COGENERATION TECHNOLOGY CONTRIBUTES TO GEOGRAPHIC BUSINESS EXPANSION

10 A cornerstone of our geographic expansion strategy in the field of commercial and industrial cogeneration systems is to increase competitiveness by raising the efficiency of power generators. For instance, we have recently completed the commercialization of a 1-MW class large-scale gas engine with a power generation efficiency of 41%. To introduce cogeneration systems that fulfill environmental needs, we are developing engines that use unconventional gases as fuel, including garbage decomposition heat gas and biogas. We were the first in the world in 2003 to succeed in the commercial operation of a garbage decomposition heat gas engine with a high efficiency of 37%.

DEVELOPMENT OF TECHNOLOGIES RELATED TO THE ELECTRICITY BUSINESS THAT CONTRIBUTE TO MULTIPLE ENERGY SOURCE STRATEGY

10 At the Company's Senboku and Himeji LNG terminals, Osaka Gas plans to construct large-scale power generation facilities using its natural gas infrastructure in order to realize cost reductions. Osaka Gas is examining an optimal power generation system by

combining its own generation capabilities with cogeneration systems installed at customer sites that have excess power supply capabilities for commercial retailing. The Company plans to develop technologies in a timely fashion that are needed to promote the electric power business.

TECHNOLOGICAL DEVELOPMENT THAT STRENGTHENS THE GAS BUSINESS

10 The residential gas cogeneration system ECOWILL is a ground-breaking product that allows for energy savings of approximately 20% and CO_2 reductions of about 30% with the use of efficiency improving devices such as demand profile self-learning functions. While contributing to lowering environmental impact, ECOWILL is a key product for expanding residential gas sales in the Company's gas business.

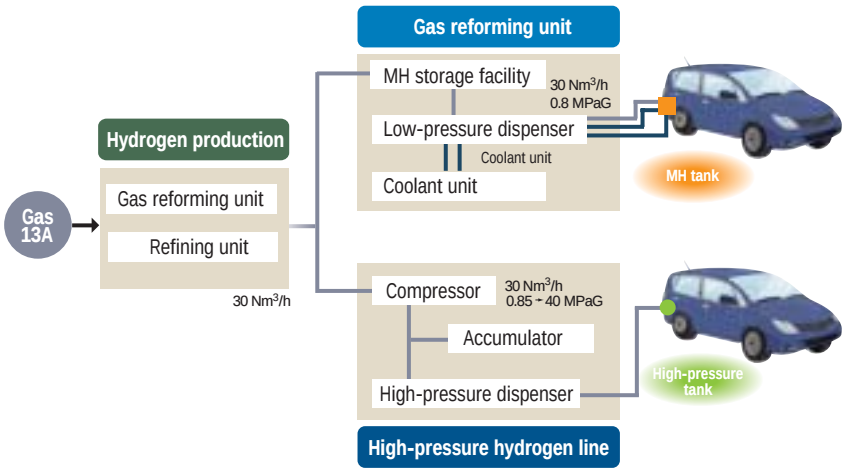
WORLD-CLASS HYDROGEN PRODUCTION TECHNOLOGY AND STRENGTHS IN RESIDENTIAL FUEL CELL DEVELOPMENT

Osaka Gas is developing fuel cells with a low 1 kW output but high 31.5% power generation efficiency. The resulting power generation system offers high energy savings with the ability to use waste heat. Of existing production methods for hydrogen, which is a key element of fuel cells, natural gas reforming is among the best methods from the perspective of cost and efficiency. **11 Osaka Gas has developed a natural gas fuel processor that reduces carbon monoxide density to less than 1 ppm. Carbon monoxide weakens the durability of fuel cells. Incorporating proprietary catalyst technologies, the equipment boasts a world-class heat efficiency of more than 82% (HHV) and exceptional durability, with no maintenance necessary for 90,000 hours.**

Osaka Gas shares this technology with leading development companies in Japan and overseas in an aim to commercialize fuel cells. With a joint development structure in place in 2003, the Company is proceeding with development toward commercialization planned for 2005.

Osaka Gas completed Japan's first natural gas reforming hydrogen supply station in January 2002, and aims to contribute to the hydrogen storage field by implementing and testing gas-reforming technologies.

Diagram of Natural Gas Reforming Hydrogen Supply Station System



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