

External Opinion and Evaluation

Expert Opinion



Possibilities offered through popularization of renewable energy supported by gas

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This report has been newly published as an Integrated Report. I would like to commend the company highly on the creation of shared value including, approximately one year ahead of schedule, achievement of the FY2018 goals set in the current Medium-term Management Plan (P.14) and the steady, ongoing reduction of CO₂ emissions of customers (P.37).

The company has also held a clear and persuasive vision for the expansion of share in total energy (P.23). The business model of unified development of gas and electricity will also certainly open a variety of possibilities. One such prospect is

the use of gas cogeneration to supplement the output fluctuation of renewable energy from solar and wind. The advanced energy system introduced at Minato AQUALS (P.28), and the establishment of Matsusaka Shin-denryoku (P.27) are noteworthy in this regard. I hope that the company will ensure that it remains firmly on-track in the utilization of gas to support the further popularization of renewable energy in Japan.

Meanwhile, it is believed that the time has come for energy suppliers to provide guidance on the effective use of gas and electricity, in the same way as automobile manufacturers have done in their efforts to spread eco-friendly driving. Toho Gas Group has a characteristically high share on gas sales for industrial use by volume (P.12), and currently these customers are leading the way in promoting zero emissions. It is expected that the company can exercise a conspicuous presence in leading efforts to achieve the 2°C goal of the Paris Agreement.

At the same time, climate change is already having an impact on our lives and lifestyles. I hope that the company will give consideration to appropriate perspectives on climate change in its safety and disaster measures.

Evaluation by External Organizations

MSCI Japan ESG Select Leaders Index	Toho Gas has been selected for two consecutive years since 2016.
MSCI Japan Empowering Women Index (Select)	Toho Gas has been selected for two consecutive years since 2016.
SNAM Sustainability Index	Toho Gas has been selected for seven consecutive years since 2012.
CDP Japan 500 Climate Change Report 2017	Toho Gas earned a B-rank evaluation (third ranking among eight levels).
21st Environmental Management Survey 2018	Toho Gas earned fourth place in the electricity and gas industries.

External Awards

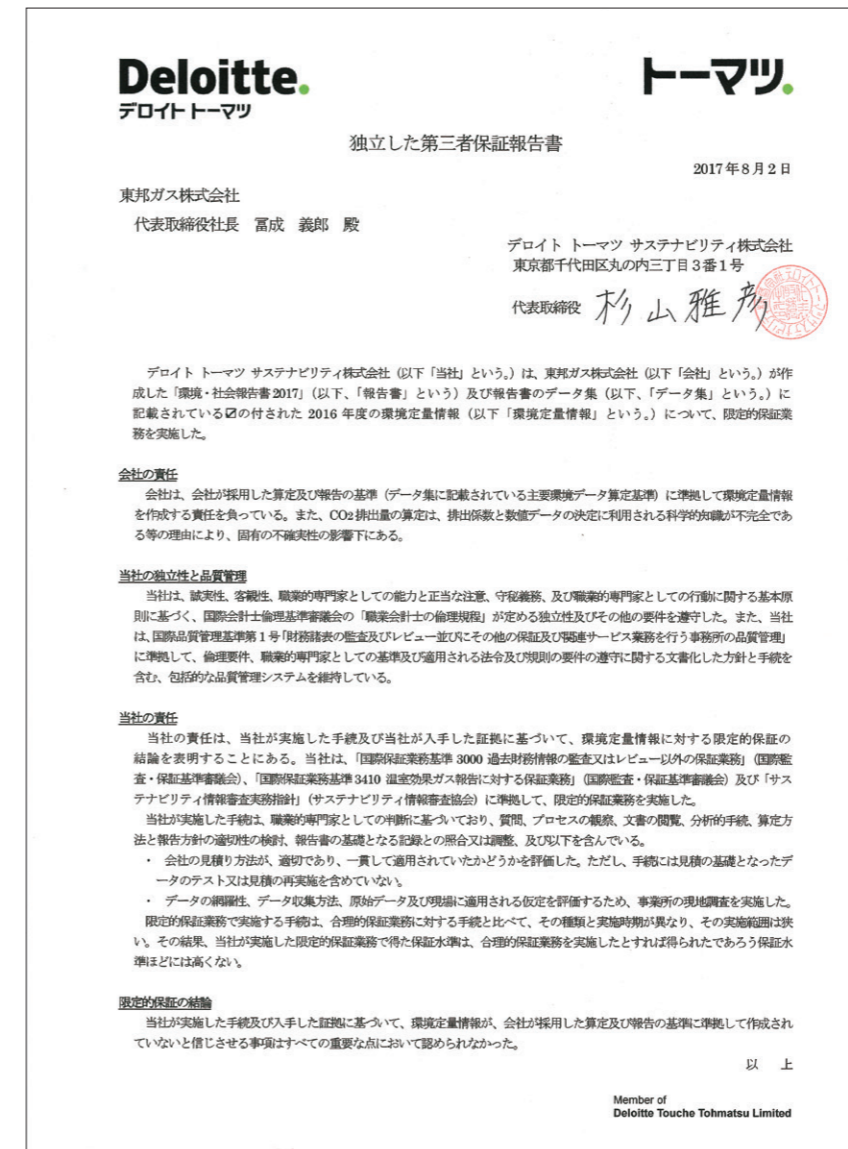
Major awards received in FY2017 are as follows.

Name	Main sponsor	Target	Joint award winner
Cogeneration Award 2017 Technology Development Division Chairman's Award	Advanced Cogeneration and Energy Utilization Center JAPAN	Achieved best-in-class power generation efficiency—Development of 3 kW-SOFC cogeneration system for industrial/commercial use	KYOCERA Corporation, NORITZ Corporation, Osaka Gas Co., Ltd., Tokyo Gas Co., Ltd., SAIBU GAS Co., Ltd.
Cogeneration Award 2017 Consumer Division Excellence Award	Advanced Cogeneration and Energy Utilization Center JAPAN	Multiplexing of heat sources and enhancement of energy conservation through cooperation between heat suppliers in the areas east and south of Nagoya Station	DHC Nagoya Co., Ltd.
Energy Conservation Award Energy Conservation Division Minister of Economy, Trade and Industry Award	Energy Conservation Center, Japan	Efforts for energy conservation through introduction of BOG direct reliquefaction equipment in Chita-Midorihamma Works	JFE Engineering Corporation

Third Party Guarantee of Environmental Data

Toho Gas Group has received third party guarantees of environmental data. Since first acquiring third-party guarantees in FY2002, Toho Gas has worked to improve the reliability of environmental data, expanding the scope of coverage and the data included.

Guarantees from Independent Third Party



[Third Party Organization]

Deloitte Tohmatsu Sustainability Co., Ltd.

[Scope of Coverage]

This booklet and the included environmental data has a mark appended to indicate data guaranteed by an independent third party, including data on CO₂ emissions of FY2017 and energy consumption (purchased electric power usage, gas usage, other fuel usage), waste material volume and water usage amount.

[Calculation Criteria for Major Environmental Data]

Major environmental data calculation standards are described in the Environmental Data online.

Acquisition of Guarantees

We took on-site surveys on energy usage, waste volume, and water usage at major business sites including city gas plants, district heating and cooling facilities, our headquarters, and at affiliated companies with significant environmental loads.

In the future, we will continue to improve our systems to further enhance data reliability.



Implementation of independent third party guarantee work