

**Financial Summary**  
**3<sup>rd</sup> Quarter of FY2018**  
**( April 1, 2018 – December 31, 2018)**

**January 30, 2019**

 **Tohoku Electric Power Co., Inc.**

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**3rd Quarter of FY2018  
Financial Results**

# Summary of Financial Results

- Even with a decrease in the volume of retail electricity sales, consolidated operating revenue increased to ¥1,582.4 billion (a year-on-year increase of ¥102.5 billion), mainly due to an increase in wholesale electricity sales beyond our franchise area and an increase in sales of power to other utilities and other companies through an active use of JEPX.
- Consolidated ordinary income decreased to ¥31.1 billion (a year-on-year decrease of ¥36.0 billion), due to an increase in fuel cost caused by a rise in fuel price and a decrease in operation of hydro power station caused by a lower-than-normal water flow rate, despite our thorough streamlining efforts.

\* Consolidated operating revenue includes 278.9 billion yen, total of grant under act on purchase of renewable energy sourced electricity and surcharge for promoting renewable energy sourced electricity based on Feed-in Tariff Scheme for renewable energy and the self-contracted portion due to introduction of the indirect auction.

(billions of yen)

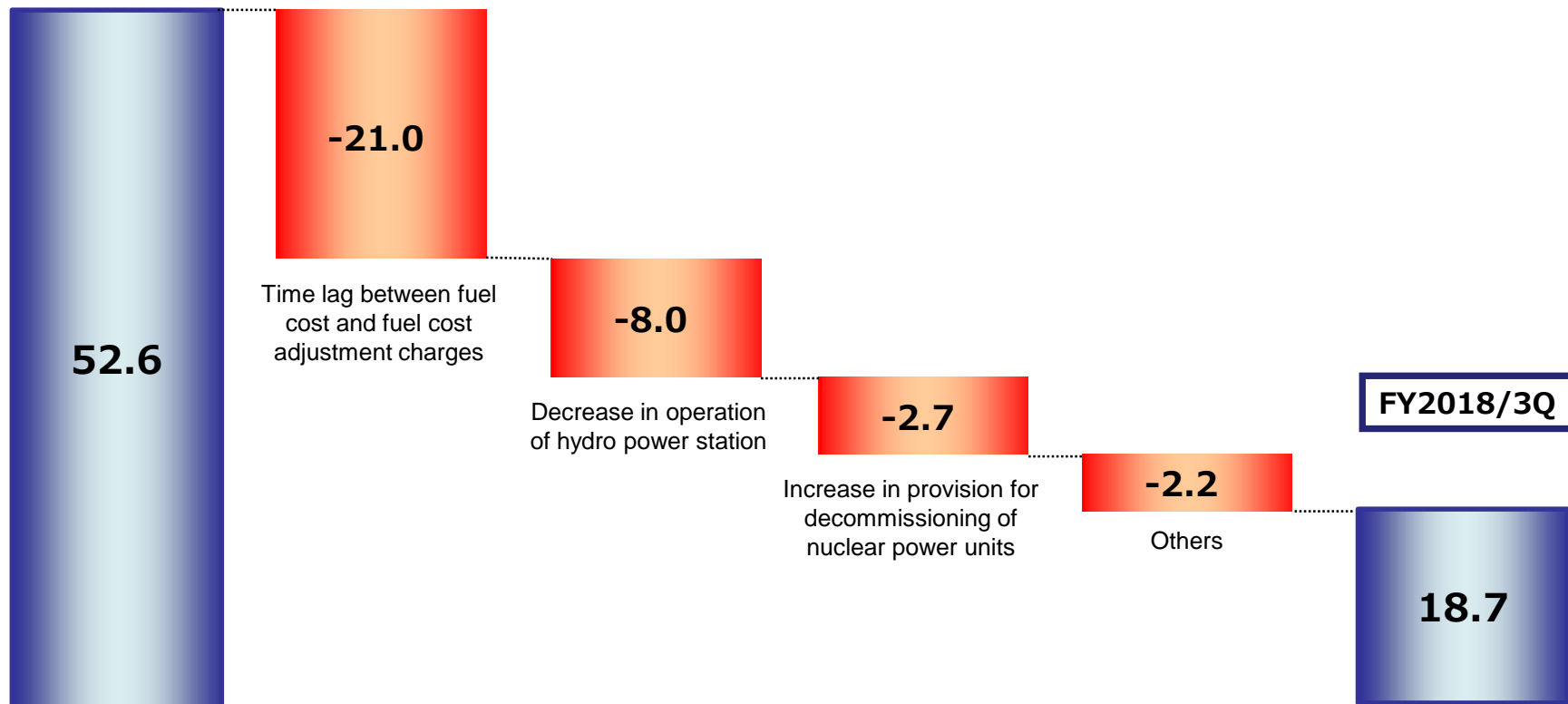
	Consolidated (A)			Non-consolidated (B)			(A) / (B) (times)	
	FY2018 3Q	FY2017 3Q	Change	FY2018 3Q	FY2017 3Q	Change	FY2018 3Q	FY2017 3Q
Operating Revenue	1,582.4	1,479.9	102.5	1,436.7	1,341.0	95.6	1.10	1.10
Operating Income	41.3	79.7	(38.3)	25.5	62.2	(36.6)	1.62	1.28
Ordinary Income	31.1	67.1	(36.0)	18.7	52.6	(33.9)	1.66	1.27
Net Income or Net Income Attributable to Owners of Parent	23.8	42.8	(19.0)	19.6	37.1	(17.5)	1.21	1.15

	Dec. 31, 2018	Mar. 31, 2018	Change	Dec. 31, 2018	Mar. 31, 2018	Change
Equity Ratio	17.7%	17.3%	0.4%	16.4%	16.3%	0.1%

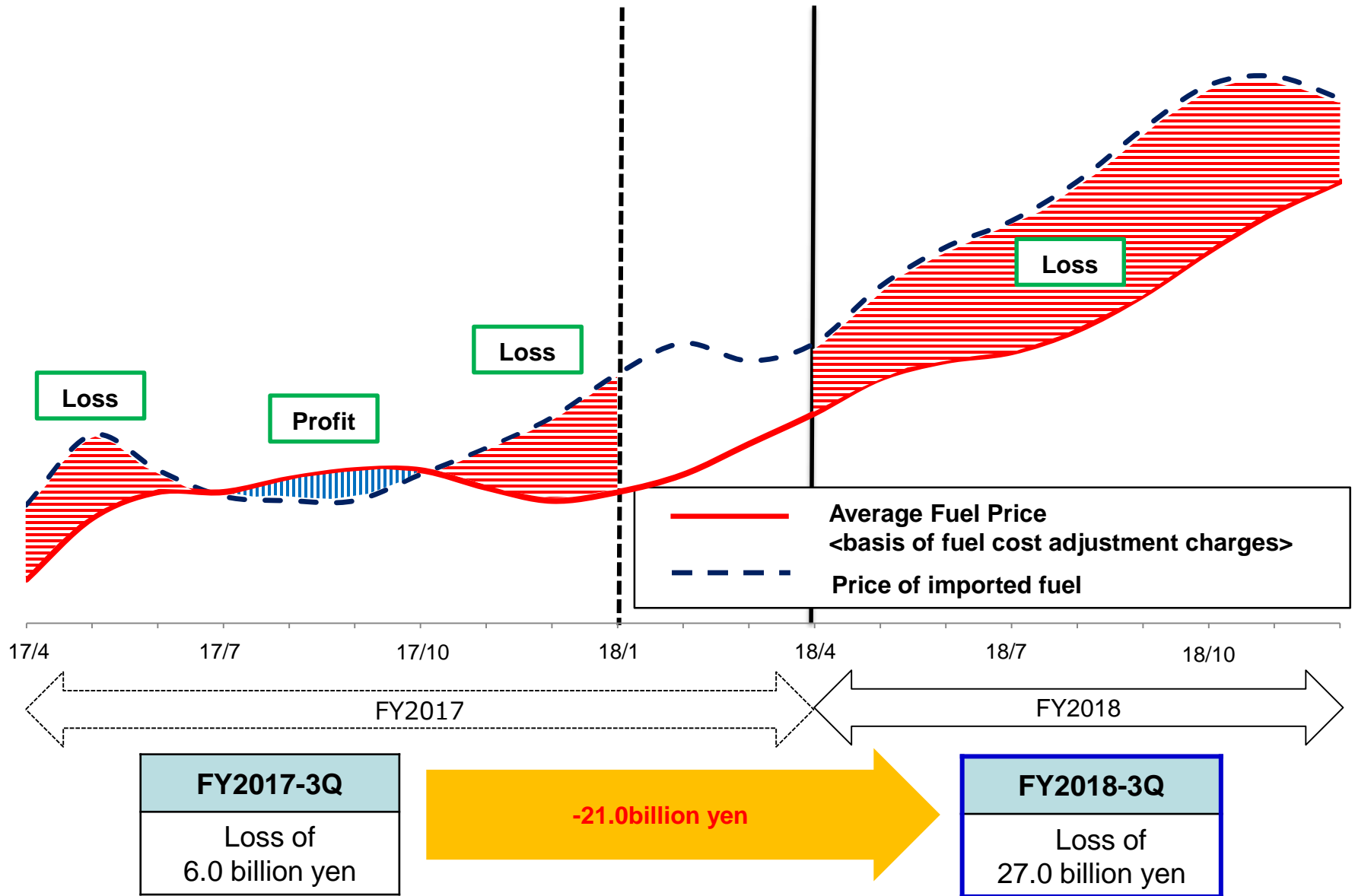
## Decrease of 33.9 Billion Yen (52.6 → 18.7)

(billions of yen)

FY2017/3Q



■ Image of Time Lag Effect



# Electricity Supply

(GWh)

<b>Electricity Supply</b>	FY2018/3Q (A)	FY2017/3Q (B)	Change (A) - (B)	Change (A) / (B)
Own Generated Power*1	44,316	44,941	(625)	98.6%
Hydro	5,511	6,411	(900)	86.0%
Thermal	38,412	38,148	264	100.7%
Nuclear	(151)	(156)	5	97.1%
Renewables	544	538	6	101.1%
Power Interchanges and Purchased Power*2, 3	25,496 (4,805)	24,747 (4,975)	749 170	103.0% 96.6%
Used at Pumped Storage	(62)	(60)	(2)	102.7%
<b>Total of Electricity Supply*2</b>	<b>64,945</b>	<b>64,653</b>	<b>292</b>	<b>100.5%</b>

\*1 "Own Generated Power" shows sending end.

\*2 "Power Interchanges and Purchased Power" and "Total of Electricity Supply" include projected volume.

\*3 As for "Power Interchanges and Purchased Power", the top is Received and the bottom is Transmitted.  
Received and Transmitted includes system operation.

# Electricity Sales & Major Factors

(GWh)

<b>Electricity Sales</b>	FY2018/3Q (A)	FY2017/3Q (B)	Change (A) - (B)	Change (A) / (B)
Lighting (Residential)	15,187	15,892	(705)	95.6%
Power	34,192	35,507	(1,315)	96.3%
Retail Electricity Sales	49,379	51,399	(2,020)	96.1%
Wholesale Electricity Sales*	12,348	10,051	2,297	122.8%
Total of Electricity Sales	61,727	61,450	277	100.5%

\* "Wholesale Electricity Sales" includes the volume of specified power interchange.

<b>Major Factors</b>	FY2018/3Q (A)	FY2017/3Q (B)	Change (A) - (B)
Crude Oil CIF Price (\$/bbl.)	75.0	53.9	21.1
Exchange Rate (¥/\$)	111	112	(1)
Hydro Power Flow Rate (%)	89.0	108.6	(19.6)
Nuclear Power Utilization Rate (%)	-	-	-



# Balance Sheets (Consolidated)

(billions of yen)

	Dec. 31, 2018 (A)	Mar. 31, 2018 (B)	Change (A) - (B)	Major factors for change
Total Assets	4,189.1	4,222.1	(33.0)	
Non-current Assets	3,582.1	3,557.4	24.7	
Current Assets	606.9	664.6	(57.7)	Cash and deposits : (55.2)
Total Liabilities	3,377.7	3,423.4	(45.7)	
Non-current Liabilities	2,349.4	2,411.1	(61.7)	Long-term loans payable : (82.4)
Current Liabilities	1,028.3	1,011.1	17.1	
Reserve for fluctuation in water levels	-	1.1	(1.1)	
Net Assets	811.3	798.7	12.6	
Interest-Bearing Liabilities	2,399.6	2,424.4	(24.7)	Loans : (72.0) Bonds : (29.7) CP : 77.0

# Statements of Income (Consolidated)

(billions of yen)

	FY2018/3Q (A)	FY2017/3Q (B)	Comparison	
			(A) - (B)	(A) / (B)
Operating Revenue	1,582.4	1,479.9	102.5	106.9%
Electric utility	1,427.9	1,331.0	96.9	107.3%
Other business	154.4	148.9	5.5	103.7%
Operating Expenses	1,541.0	1,400.2	140.8	110.1%
Electric utility	1,394.7	1,262.6	132.1	110.5%
Other business	146.3	137.5	8.7	106.4%
Operating Income	41.3	79.7	(38.3)	51.9%
Non-operating income	6.4	5.7	0.7	112.3%
Non-operating expenses	16.6	18.2	(1.6)	91.1%
Ordinary Income	31.1	67.1	(36.0)	46.3%
Provision or reversal of reserve for fluctuation in water levels	(1.1)	0.8	(1.9)	-
Extraordinary gain	7.9	-	7.9	-
Extraordinary loss	2.1	-	2.1	-
Income taxes	11.9	20.4	(8.5)	58.4%
Net income attributable to non-controlling interests	2.1	2.9	(0.8)	73.0%
Net Income Attributable to Owners of Parent	23.8	42.8	(19.0)	55.6%

# Segment Information (Consolidated)

(billions of yen)

	FY2018/3Q (A)	FY2017/3Q (B)	Change (A) - (B)
Operating Revenue	1,768.6 [ 1,582.4 ]	1,680.5 [ 1,479.9 ]	88.0 [ 102.5 ]
Electric Power Business	1,430.0 [ 1,427.9 ]	1,333.0 [ 1,331.0 ]	96.9 [ 96.9 ]
Construction Business	180.2 [ 85.2 ]	191.4 [ 86.1 ]	(11.2) [ (0.8) ]
Gas Business	29.1 [ 23.8 ]	25.4 [ 20.2 ]	3.6 [ 3.5 ]
Information Processing, Tele-communication Business	32.8 [ 14.4 ]	33.9 [ 14.3 ]	(1.0) [ 0.1 ]
Others	96.3 [ 30.9 ]	96.6 [ 28.1 ]	(0.3) [ 2.7 ]

[ ] : Operating revenue from external customers

(billions of yen)

	FY2018/3Q (A)	FY2017/3Q (B)	Change (A) - (B)
Segment Income [Operating Income]	41.7	80.3	(38.5)
Electric Power Business	29.4	63.3	(33.9)
Construction Business	3.0	6.8	(3.7)
Gas Business	0.7	0.8	(0.1)
Information Processing, Tele-communication Business	3.7	4.1	(0.3)
Others	4.7	5.1	(0.3)

# Balance Sheets (Non-consolidated)

(billions of yen)

	Dec. 31, 2018 (A)	Mar. 31, 2018 (B)	Change (A) - (B)	Major factors for change
Total Assets	3,857.3	3,906.4	(49.1)	
Non-current Assets	3,437.6	3,370.6	66.9	Deferred tax assets : 47.2 Construction in progress : 23.4
Current Assets	419.7	535.7	(116.0)	Short-term investments : (50.5) Cash and deposits : (50.4) Deferred tax assets : (50.2)
Total Liabilities	3,223.5	3,269.6	(46.0)	
Non-current Liabilities	2,286.4	2,337.0	(50.5)	Long-term loans payable : (84.9)
Current Liabilities	937.0	931.4	5.6	
Reserve for fluctuation in water levels	-	1.1	(1.1)	
Net Assets	633.7	636.8	(3.0)	
Interest-Bearing Liabilities	2,378.0	2,402.6	(24.5)	Loans : (71.5) Bonds : (30.0) CP : 77.0

# Statements of Income (Non-consolidated)

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(billions of yen)

		FY2018/3Q (A)	FY2017/3Q (B)	Comparison		Major factors for change
				(A) - (B)	(A) / (B)	
Revenue	Revenue from Electricity Sales	1,012.2	1,017.6	(5.3)	99.5%	
	Lighting (Residential)	395.3	394.7	0.5	100.1%	
	Power	616.9	622.8	(5.9)	99.1%	
	Sales of power to other utilities and other companies	212.3	147.9	64.4	143.6%	Increase in wholesale beyond our franchise area
	Grant under Act on Purchase of Renewable Energy Sourced Electricity	136.0	117.2	18.8	116.1%	Increase in purchased volume from solar
	Other revenue	85.0	66.4	18.5	128.0%	
	[Operating Revenue]	[ 1,436.7 ]	[ 1,341.0 ]	[ 95.6 ]	[ 107.1% ]	
	Total revenue	1,445.7	1,349.2	96.5	107.2%	
Expenses	Personnel	119.1	114.6	4.4	103.9%	
	[Amortization of actuarial gain or loss]	[ 15.1 ]	[ 11.0 ]	[ 4.0 ]	[ 136.7% ]	
	Fuel	298.7	240.3	58.3	124.3%	Increase in CIF price
	Maintenance	126.2	130.7	(4.5)	96.5%	
	Depreciation	148.4	151.7	(3.3)	97.8%	
	Power purchased from other utilities and other companies	410.4	332.2	78.1	123.5%	Increase in purchased volume from solar
	Interest	14.0	16.3	(2.2)	86.1%	
	Taxes, etc.	61.6	61.1	0.4	100.8%	
	Nuclear power back-end cost	7.0	5.5	1.5	127.3%	
	Levy under Act on Purchase of Renewable Energy Sourced Electricity	118.2	112.2	5.9	105.3%	
	Other expenses	123.0	131.4	(8.3)	93.6%	
	Total expenses	1,427.0	1,296.5	130.4	110.1%	
[Operating Income]	[ 25.5 ]	[ 62.2 ]	[ (36.6) ]	[ 41.1% ]		
Ordinary Income	18.7	52.6	(33.9)	35.5%		
Provision or reversal of reserve for fluctuation in water levels	(1.1)	0.8	(1.9)	-		
Extraordinary gain	7.9	-	7.9	-	Compensation income for damage	
Extraordinary loss	2.1	-	2.1	-	Loss on decommissioning of Onagawa Nuclear Power Station Unit 1	
Income taxes	5.9	14.6	(8.7)	40.3%		
Net Income	19.6	37.1	(17.5)	52.9%		

## ■ Financial Forecasts for FY2018

➤ Financial forecasts for FY2018 remain unchanged from the previous release on October 25, 2018.

### 【Consolidated】

(billions of yen)

	Operating Revenue	Operating Income	Ordinary Income	Net Income Attributable to Owners of Parent
FY2018 forecast	2,240.0	78.0	62.0	43.0

### 【Non-consolidated】

(billions of yen)

	Operating Revenue	Operating Income	Ordinary Income	Net Income
FY2018 forecast	2,040.0	52.0	40.0	35.0

## ■ Dividend Per Share

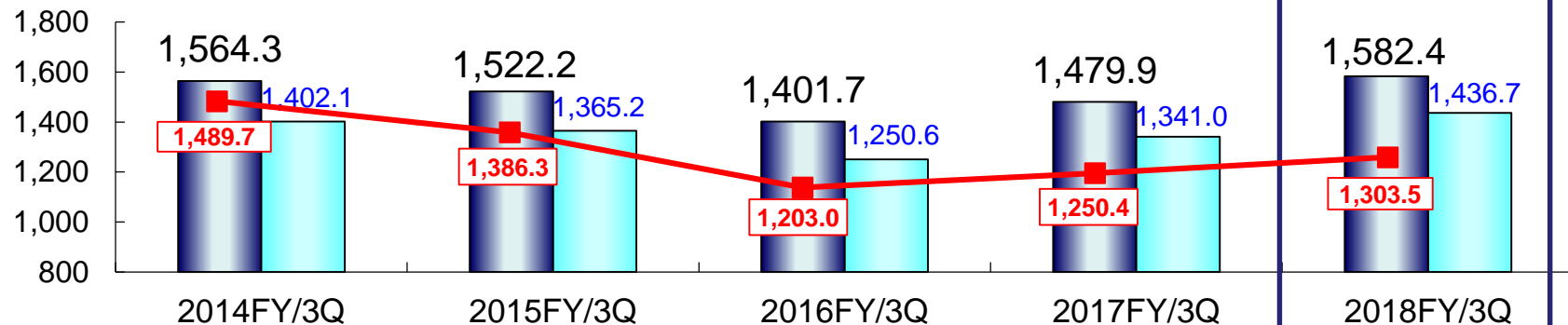
➤ The year-end dividend forecast for FY2018 remains unchanged from the previous release on April 26, 2018.

(yen)

	Interim	Year-end (Forecast)	Annual (Forecast)
Dividend Per Share	20	20	40

## Operating Revenue

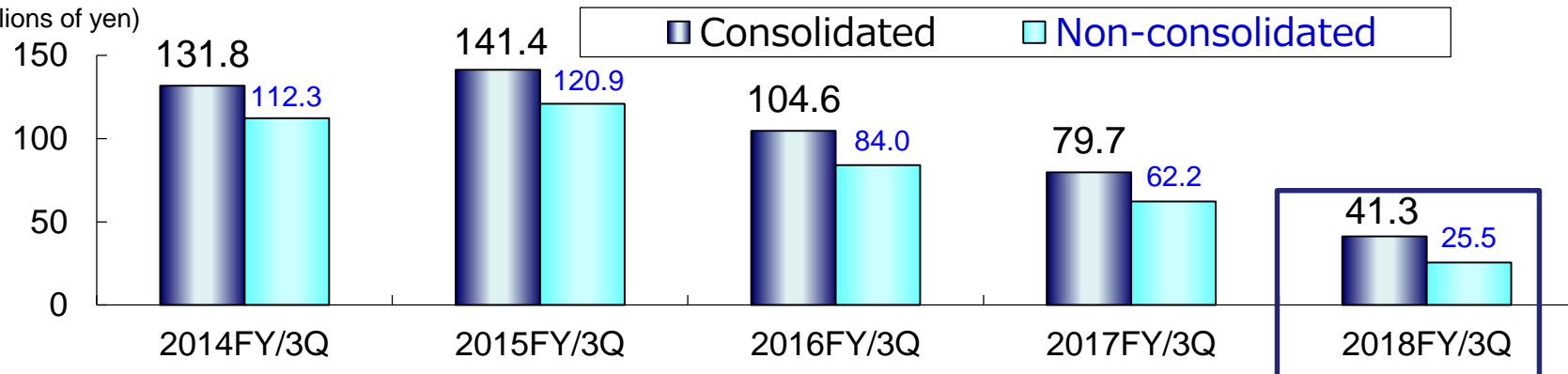
(billions of yen)



Note : Red line shows operating revenue (consolidated) excluding grant under act on purchase of renewable energy sourced electricity, the surcharge for promoting renewable energy sourced electricity, and the self-contracted portion due to indirect auction.

## Operating Income

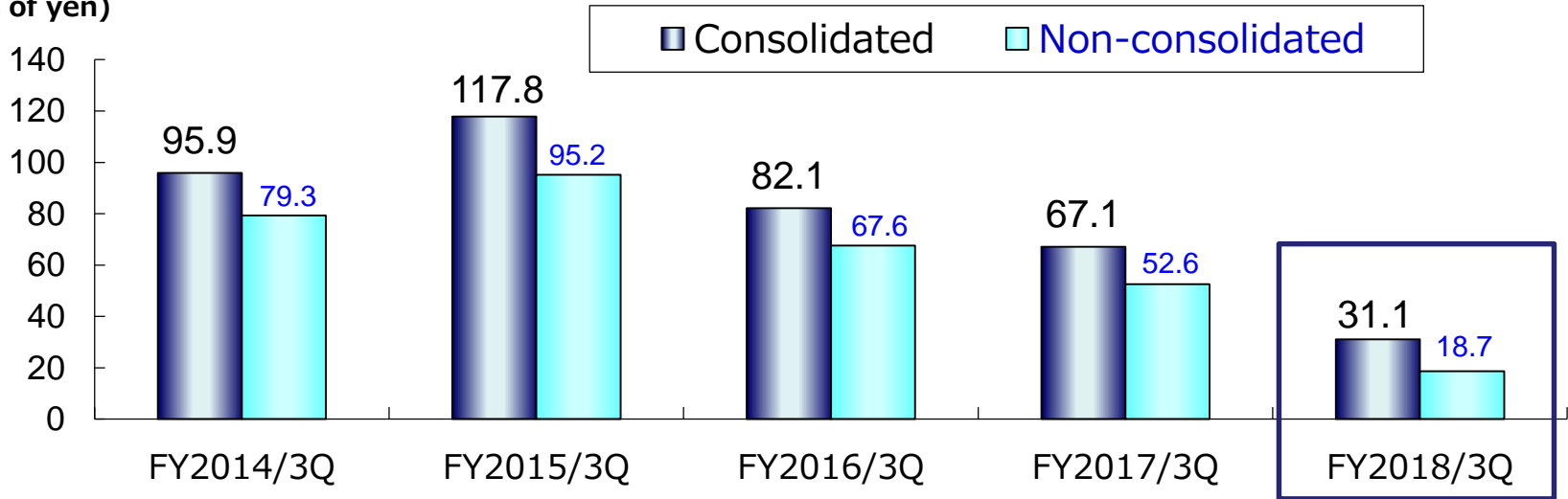
(billions of yen)



	2014FY/3Q	2015FY/3Q	2016FY/3Q	2017FY/3Q	2018FY/3Q
Operating Income on Operating Revenue Ratio (Consolidated basis)	8.4%	9.3%	7.5%	5.4%	2.6%
Operating Income on Operating Revenue Ratio using above red line (Consolidated basis)	8.9%	10.2%	8.7%	6.4%	3.2%

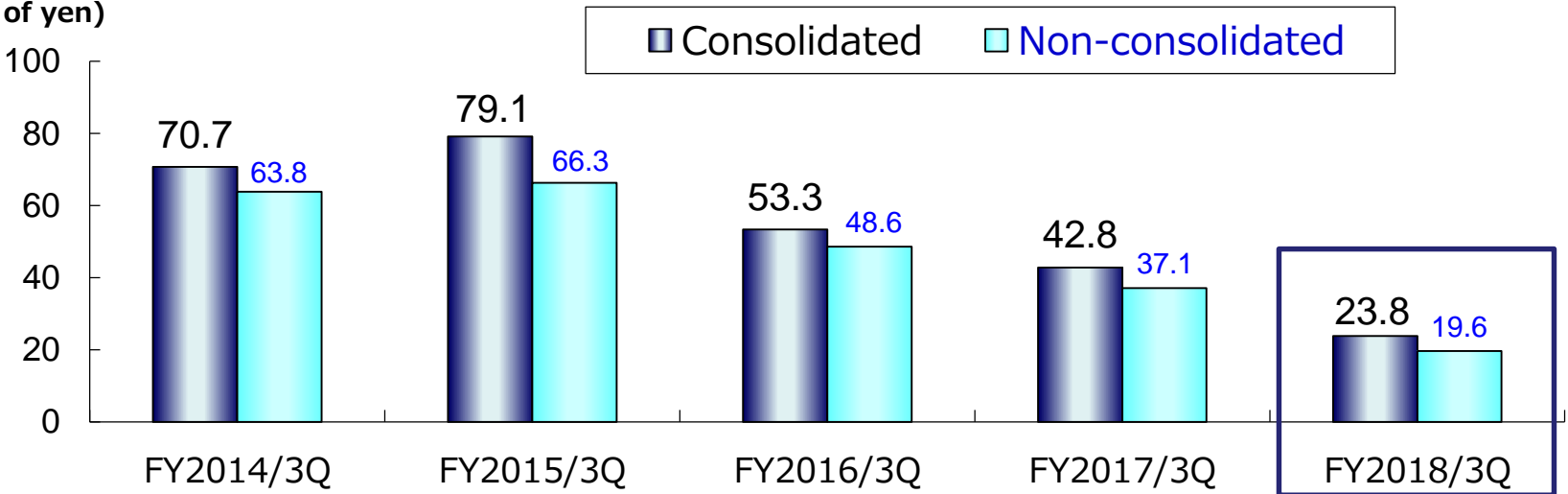
### ■ Ordinary Income

(billions of yen)



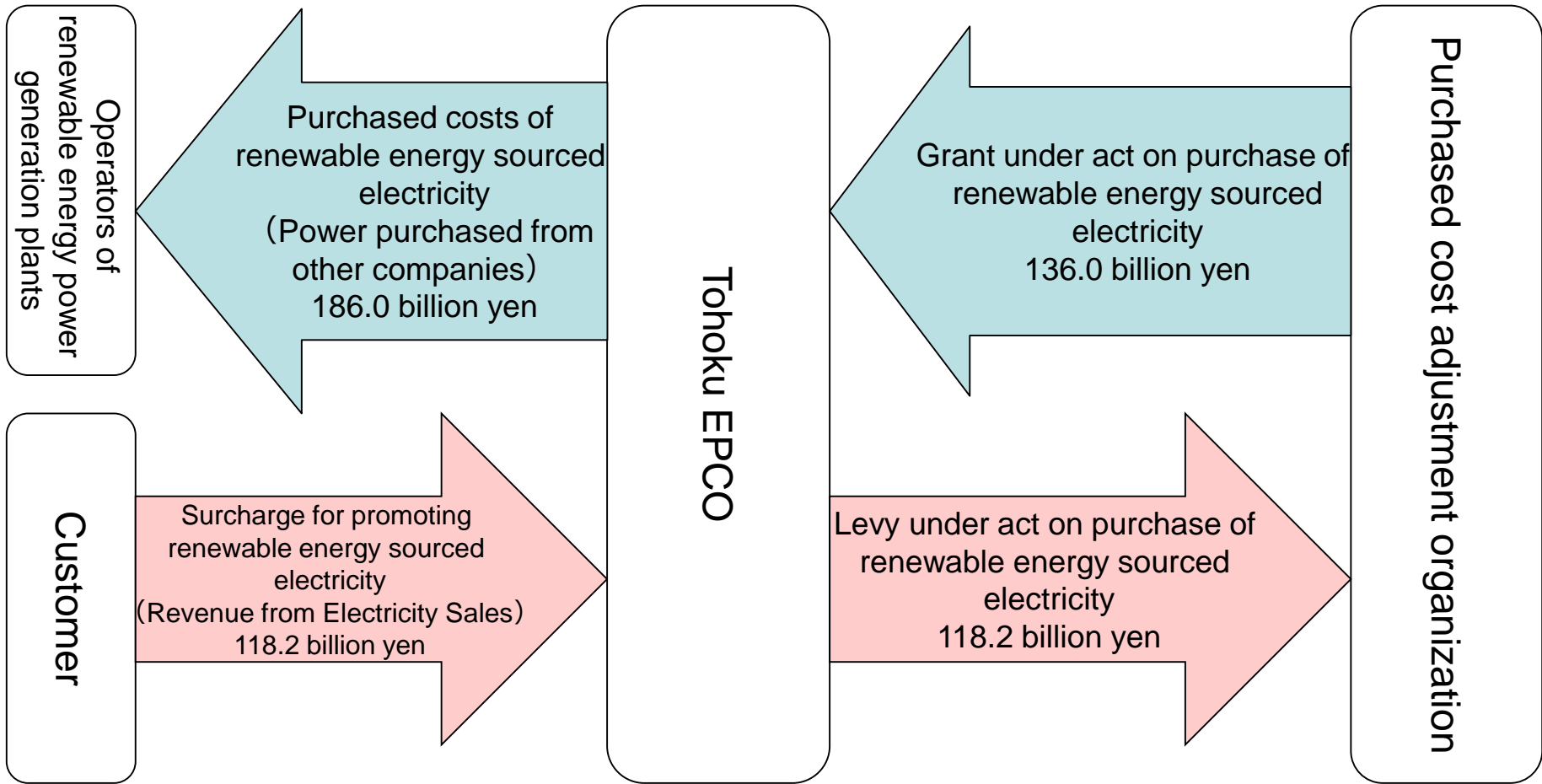
### ■ Net Income or Net Income Attribute to Owners of Parent

(billions of yen)





■ FY2018/3Q



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# Topics

In 2019, we will make all-out efforts to develop our business based on four focal points and pave the way to achieve our goal stated in “Tohoku EPCO Group Mid-Term Management Policies (FY2017 to FY2020).”

## 1. Thoroughly enhancing “ability to produce profits”

- ✓ Maximize profitability through making use of integrated operation of power generation and sales.
- ✓ Make steady efforts to restart nuclear power reactors.

## 2. Improving further “productivity and efficiency”

- ✓ Reduce cost and seek further efficiency
- ✓ Promote work-style reform “Mina, Osu, Chikara”

## 3. Challenging “New Business Opportunities”

- ✓ Expand renewable energy business [<Expand business to develop 2 GW>](#)
- ✓ Enhance gas business [<Cooperation with regional companies  
~ Business partnership with Ishinomaki Gas Co., Ltd.>](#)
- ✓ Encourage efforts for digital innovation, and expand overseas business.

## 4. Establishing robust “business foundations”

- ✓ Respond to legal unbundling and make further efforts to enhance our business foundations
- ✓ Promote CSR management
- ✓ Make consistent efforts to ensure safety and improve business quality, ensure stable power supply

Tohoku EPCO Group will make all-out efforts to pave the way for achieving the goal of Mid-Term Management Policies and seek further growth.

- For family users, we will further deploy **“Yori, Sou, Chikara+ONE”, which is the total service to widely support our customers’ lives.** For business users, we’ll provide **“exEMS”, our own unique energy management system.** Thus, we’re strengthening our sales activities both for family and business customers in terms of price and non-price.
- Beyond our service area, we will expand our sales in terms of both retail and wholesales supply, backed by our activities such as **sales through Synergia Power Co., Ltd.** and **wholesale supply to Tokyu Power Supply Co., Ltd.**

## Our Total Services for living

より、そう、ちから。



### Support for living

#### Makapuu Concierge

- Location-based service for kids (from November, 2018)
- Health Consultation Service (Now on trial, Start from January 2019)
- Yori Sou Smart Project (Now under verification, Start from July 2018)
- Proposals of IH cooking heaters and Eco Cute

### Rates and Plan

#### Yori Sou Plus    Yori Sou Denki

- Rates and Plan that suit customers’lifestyles, including families, singles, residents in metropolitan area and snowy area.
- Cheaper Plan combined with electricity

### Service for household solar power generation

#### Tsunagaru Denki

- Customers whose FIT scheme is to be expired.
  - Service to purchase surplus electricity
  - Proposals such as storage battery and Eco Cute
  - Service to keep surplus electricity

(Details are scheduled to be provided around June 2019)

### Web Service

#### Yori Sou e-Net

- Saving points
- Simple check of the amount of electricity usage
- Price simulation
- Cashless payment by using smartphone app. (from October 2018)
- Local information magazine “Nanabi”, etc.

## Our Own Unique Energy Management System



In order to realize further energy-saving and cost-saving, we visualize electricity usage by utilizing IoT and AI, and accurately predict change of demand through the system.

(Service is scheduled to be provided to the new customers from the end of February 2019.)



Functions will be expanded from April 2019.

- ✓ “exEMS with A”, which is capable of auto-controlling air-conditioner
- ✓ “exEMS Advance”, which is capable of auto-controlling multiple facilities including air-conditioner.

## ■ Constructing Advanced Thermal Power Plants

- Shin-Sendai No.3 series commenced full-scale commercial operations in July 2016.
- We started construction work for Noshiro No.3 in February 2016 toward the commencement of commercial operation in June 2020 and we are currently conducting construction work on mechanical and electrical equipment.
- We set up a local construction site for Joetsu No.1 in July 2018 toward the commercial operation in June 2023 and we are preparing for the development.
- In parallel with the development of advanced thermal power plants, we will close down aging thermal power plants with low economic efficiency, from the viewpoint of replacing with new power plants and streamlining power generation facilities.

### <Current Status of Thermal Power Stations>



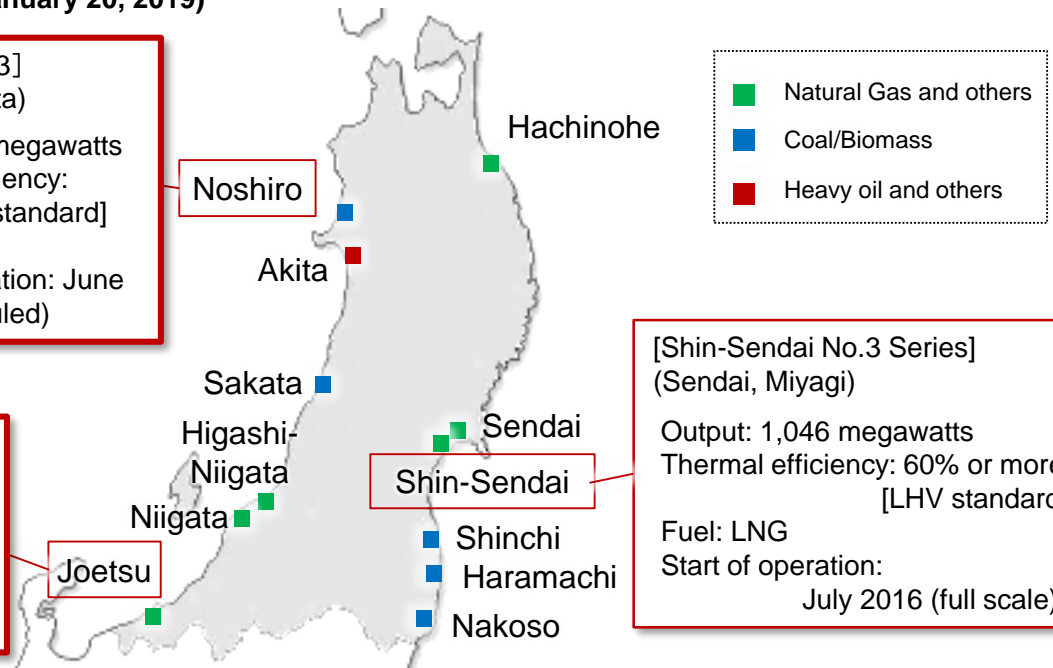
Generator and Turbine Assembly Status in Turbine Building

**[Progress of Construction]**  
80.7% (As of January 20, 2019)

**[Noshiro No.3]**  
(Noshiro, Akita)  
Output: 600 megawatts  
Thermal efficiency: 44.8% [LHV standard]  
Fuel: Coal  
Start of operation: June 2020 (scheduled)

**[Joetsu No.1]**(Joetsu, Niigata)  
Output: 572 megawatts  
Thermal efficiency: 63% or more [LHV standard]  
Fuel: LNG  
Start of operation: June 2023 (scheduled)

**[Shin-Sendai No.3 Series]**  
(Sendai, Miyagi)  
Output: 1,046 megawatts  
Thermal efficiency: 60% or more [LHV standard]  
Fuel: LNG  
Start of operation: July 2016 (full scale)

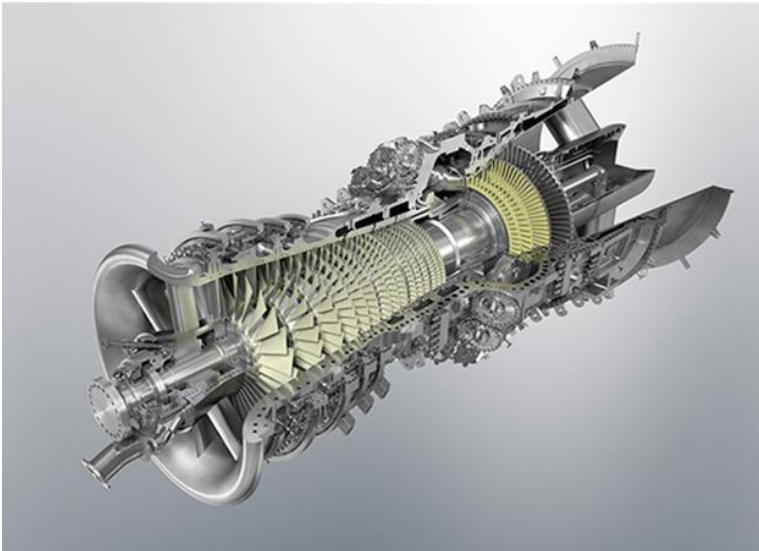


## Next-Generation Gas Turbine Won the Minister of Economy, Trade and Industry Award

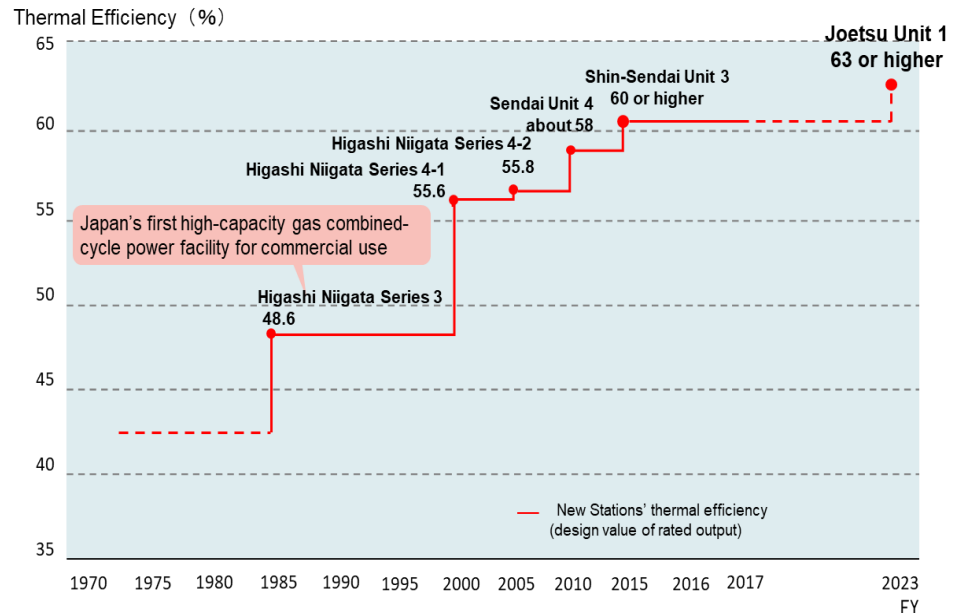
- It was decided that “next-generation gas turbine adopting forced air-cooled combustor system”, new gas turbine for natural gas thermal power plant that we and Mitsubishi Hitachi Power Systems, Ltd. jointly developed would receive the Minister of Economy, Trade and Industry award, which is the highest rank of excellent energy saving equipment or system award sponsored by the Japan Machinery Federation.
- This next-generation gas turbine is going to be introduced to our Joetsu Unit 1 which is scheduled to start commercial operation from June 2023. We aim to achieve thermal efficiency of 63% or more, which is the world's highest level for gas combined cycle power generation facilities.

### <Efforts to improve thermal efficiency by developing large gas combined cycle power generation system>

We have been constantly working to improve thermal efficiency and are trying to strengthen cost competitiveness with optimal power portfolio over the past 30 years since we introduced the first large-scale gas combined cycle power generation in Japan to Higashi Niigata series 3 in 1984.



New type gas turbine that won the Minister of Economy, Trade and Industry award



※ LHV standard : Based on the heating value without the condensing heat of moisture. Condensing heat is generated from moisture contained in fuels by combustion

## ■ Current Status of Onagawa Nuclear Power Station

- Concerning construction work of Onagawa Unit 2, we are working diligently to aim for completion in FY 2020.
- Concerning Conformity Assessments, full-scale assessments on plants and facilities have been being conducted. However, we expect that it will take a certain period of time before the completion of these assessments.

### <Efforts to improve safety>



Concrete casting work of the building for emergency measures

### <Current Status of Conformity Assessments>

Onagawa Unit 2	Assessment of earthquake and tsunami	<ul style="list-style-type: none"> <li>(1) The design-basis earthquake ground motions (Ss) , conceivable maximum tsunami, faults within and around the premises, and effects of volcanoes were judged appropriate.</li> <li>(2) Next agenda will be the stability evaluations of foundation and slope.</li> </ul>
	Assessment of plants (facilities)	<ul style="list-style-type: none"> <li>(1) We are explaining seismic design policy, tsunami resistant design policy, facilities for serious accidents, and facilities subject to design standards.</li> <li>(2) We explained that we designed to prevent subsidence through conducting soil improvement under the seawall and gained a certain degree of understanding.</li> <li>(3) We submitted NRA supplementary explanation materials to the application for permission to change the installation and a comparison table with other companies of the preceding plants. We also showed NRA overall pictures of our application to expedite the assessment process.</li> </ul>

## ■ Current Status of Higashidori Nuclear Power Station

- Concerning construction work of Higashidori Unit 1, we are working diligently to aim for completion in FY 2021.
- Concerning Conformity Assessments, our explanation that faults just below seismic critical facilities are inactive for the foreseeable future has been judged to be appropriate by the Nuclear Regulation Authority (NRA). However, we expect that it will take a certain period of time before assessments on the activity of faults within and around the premises and plants/facilities are completed.

### <Efforts to improve safety>



Power supply securing training by power supply car

### <Current Status of Conformity Assessments>

Higashidori Unit 1	Assessment of earthquake and tsunami	<p>(1) Our explanation that faults of f-1 and f-2 just below seismic critical facilities, such as the reactor building, are inactive for the foreseeable future has been judged to be appropriate.</p> <p>(2) Other faults within and around the premises are under assessment.</p> <p>(3) The conceivable maximum tsunami is under assessment.</p>
	Assessment of plants (facilities)	<p>We are in preparation for assessment incorporating the findings obtained from other plants that are in a more advance stage of assessment and from Onagawa Unit 2 in our work.</p>



## ■ Expand renewable energy business towards the development of 2GW.

- Even though renewable energy power generation including wind and solar power has some issues such as electricity output may change depending on natural conditions, it is a significant power source in terms of environment and energy security. Therefore, we believe that **renewable energy power generation would become one of the major power sources along with technology development.**
- In order to utilize renewable energy which potentially exists in Tohoku and Niigata area for long-term, **the Tohoku Electric Power Group aims to become responsible operating body for renewable energy and develop renewable energy power generation of 2GW mainly in Tohoku and Niigata area.**
- From the perspective of **the general life cycle of renewable energy,** we will **examine the business development including operation, maintenance, and replacement of power source.**
- In addition, we **will set up “renewable energy business task force” in July 2019,** and strengthen our system.

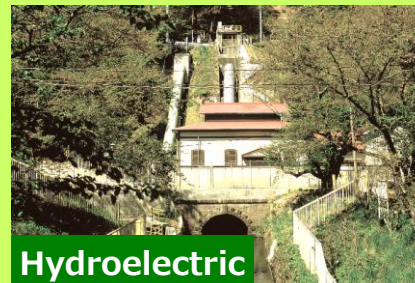
## Expand Renewable Energy Business <Aims to develop 2GW primarily by Wind power>



Wind  
Power



Solar  
Power



Hydroelectric  
Power



Geothermal  
Power

## ■ Strengthen collaboration with local gas companies

~ Conclude the basic contract regarding business partnership with Ishinomaki Gas Co., Ltd.

- Conclude the basic contract regarding business partnership of selling electricity and gas with Ishinomaki Gas Co., Ltd. on 30<sup>th</sup> January, 2019.
- Through our wide collaboration, we will jointly operate to **expand gas sales and propose services combined electricity and gas for business users** in the supply area of Ishinomaki Gas Co., Ltd.
- Through this business partnership, we will endeavor to meet our customers' needs. We will convert heavy oil into more eco-friendly LNG. Also, we will seek total energy solutions by optimizing the combination of electricity and gas.

## ■ Efforts to expand gas sales volume

We will further expand gas sales volume **by utilizing the LNG shipping facilities of Shin-Sendai Thermal Power Station, which started its operation in August 2018, as well as setting up “Gas Business Department” in Power Generation and Sales Company in July 2019.**



Ishinomaki Gas Co., Ltd.



Tohoku Electric Power Co., Inc.

- ✓ For business users, we jointly operate to expand gas sales volume and propose service combined electricity and gas.

Make further efforts to meet our customers' needs and contribute to the recovery from the 2011 disaster and development of industrial infrastructure in Ishinomaki area

Basic contract regarding business partnership between Ishinomaki Gas Co., Ltd. and Tohoku Electric Power Co., Ltd.



LNG Shipping Facilities of Shin-Sendai Thermal Power Station

## ■ Drive our initiative for digital innovation

- **We will set up “Digital Innovation Promotion Office” in July 2019.** Then, we will seek to create new business and new service, and reduce cost and increase income of the current electric business.
- **Through the Virtual Power Plant (VPP) Verification Project,** we will proactively take initiative to build new business model to improve customer service and expand future business field.

### Virtual Power Plant (VPP) Verification Project

(Verification Period: April 2018 to March 2021)

① Initiative to enhance regional disaster prevention system and reduce environmental burden by utilizing the VPP technology under cooperation with Sendai City

Our VPP Verification Project will not only seek to expand future business area, but also aim to take a win-win approach that benefits both customers (local community, corporates, and households) and our company.

<Our VPP Vision>

Local Community (Municipality) | Business Users | Family Users

↑ Win-Win ↓ | ↑ Win-Win ↓ | ↑ Win-Win ↓

Tohoku Electric Power (Applicator)

② V2G Verification Project

Power System | Charge | Discharge | Charging/Discharging Stations | Charge | Discharge | Electric Vehicle

Sendai Mayor Kazuko Kori, right, and President Hiroya Harada pose after signing the Master Agreement.

### Yori Sou Smart Project

(Verification Period: July 2018 to the end of August 2019)

We're now developing and verifying the following services with our customers' help

① Life assistance service offered through communication robot Bocco (developed by Yukai Engineering Inc.)

Multiple services will make use of Bocco's basic functions designed to assist communication between family members in different everyday situations and to provide our newly developed services, including air-conditioner control assistance.

② Energy conservation assistance service tailored to specific home appliances

Energy-saving advice delivered through our unique, newly developed system

## ■ Expansion of overseas business

- We will assess business viability and seek overseas business opportunities mainly in North Central America and South Eastern Asia by utilizing renewable energy such as high-efficient thermal and geothermal power generation based on our knowledge and experiences that we've gained in Japan.

In March 2018, we invested in the Rantau Dedap Geothermal Power Project which is our first overseas geothermal power project. Construction work is ongoing with the aim of starting operation in late 2020.

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# References

- On December 21, 2018, we submitted a notification of change of power generation business regarding decommissioning of Unit 1 of Onagawa Nuclear Power Station to the Minister of Economy, Trade and Industry.
- As for Onagawa Unit 1, it was decided to abolish on October 25, 2018, and the date of discontinuation was decided on December 21, 2018. As a result, the output of the Onagawa nuclear power station as a whole was changed from 2,174MW to 1,650MW (minus 524MW for Unit 1).
- We will continue to study and prepare for the application for approval of the decommissioning action plan, which is a procedure based on the Nuclear Reactor Regulation Law, and will continue to work on the decommissioning measures of Onagawa Unit 1 with the highest priority to ensuring safety.

**<Rated Output of Each Unit of Onagawa Nuclear Power Station>**

	Before the change	After the change
Onagawa Unit 1	524MW	- (abolished)
Onagawa Unit 2	825MW	825MW
Onagawa Unit 3	825MW	825MW
Total	2,174MW	1,650MW

# Current Status of Conformity Assessments (1/2)

(As of December 31, 2018)

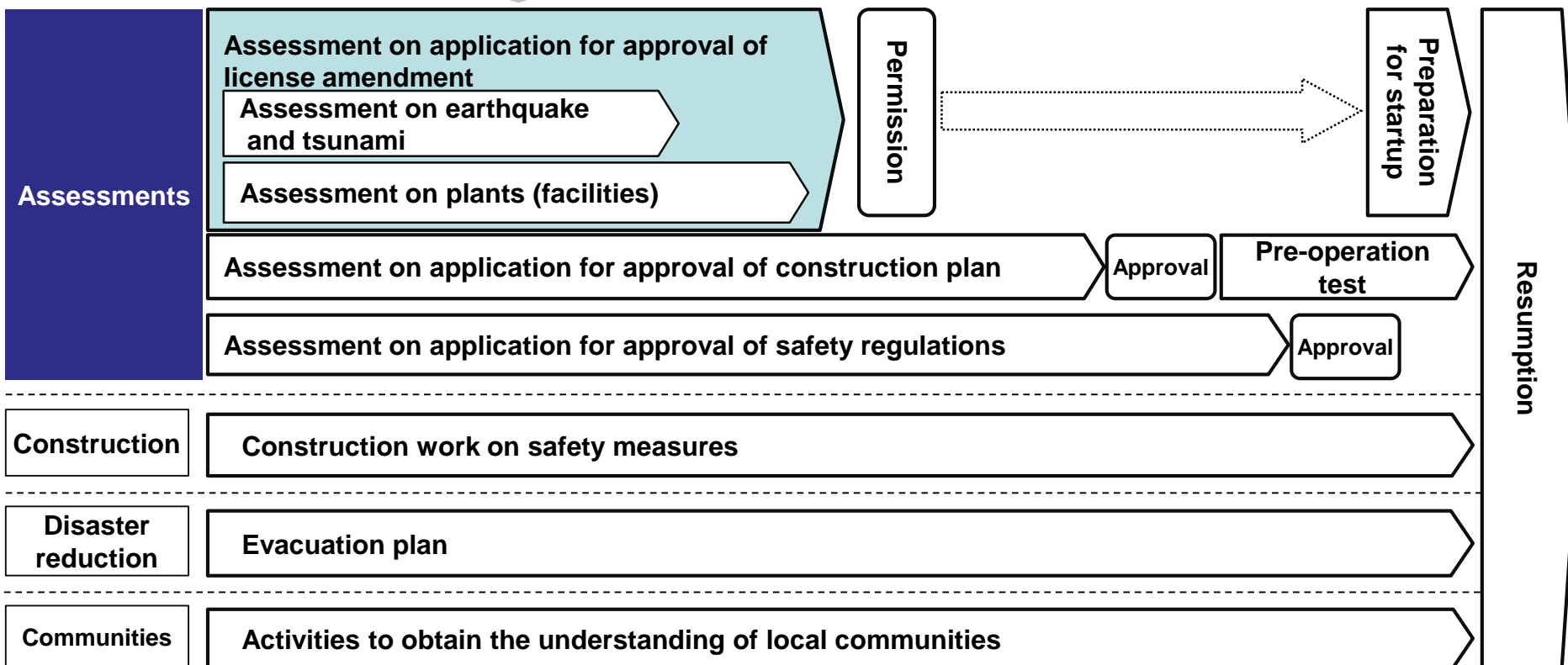
		FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Number of conformity assessment meetings
Onagawa Unit 2	Assessment of plants (facilities)		▼Application (Dec. 2013)				▼Full-fledged conformity assessment (from Oct. 2017) ▼On-site survey (Nov. 2017)	138
	Assessment of earthquake and tsunami			▼On-site survey (Jan. 2015)				
			Conformity assessment					
					▼On-site survey (Jun. 2016)			
			Conformity assessment					
Higashidori Unit 1	Assessment of plants (facilities)		▼Application (Jun. 2014)					17
	Assessment of earthquake and tsunami			▼Supplementary survey of faults in the premises (from Oct. 2015)	▼Additional supplementary survey of faults in the premises (from Apr. 2016)	▼On-site survey (Dec. 2016)	▼Additional survey of faults in the premises (from May 2017) ▼On-site survey (Nov. 2017)	
			Conformity assessment					
			▼Submission of report on additional geological survey (Jan. 2014)	▼Completion of experts' evaluation statement (Mar. 2015)			▼Our explanation that faults just below seismic critical facilities are inactive for the foreseeable future has been judged to be appropriate (May. 2018)	
		Experts Meeting on faults in the premises						

## ■ Conformity Assessments and Process of Resumption of Nuclear Power Reactors

(as of December 31, 2018)

- 27 units (11 companies including us) submitted applications for conformity assessments.
- Of them, 12 pressurized water reactors (PWR, 3 companies) were authorized permission of license amendment, and 9 of them were approved their safety and resumed operation.
- Concerning boiling water reactors (BWR), including our Onagawa Unit 2 and Higashidori Unit 1, Tokyo Electric Power Company Holdings, Inc.'s Kashiwazaki-Kariwa Unit 6 and 7 were authorized permission of license amendment in December 2017, Japan Atomic Power Company's Tokai No.2 were authorized permission in September 2018. (Construction plan of Tokai No.2 was approved in October 2018.)

Our Onagawa Unit 2 and Higashidori Unit 1

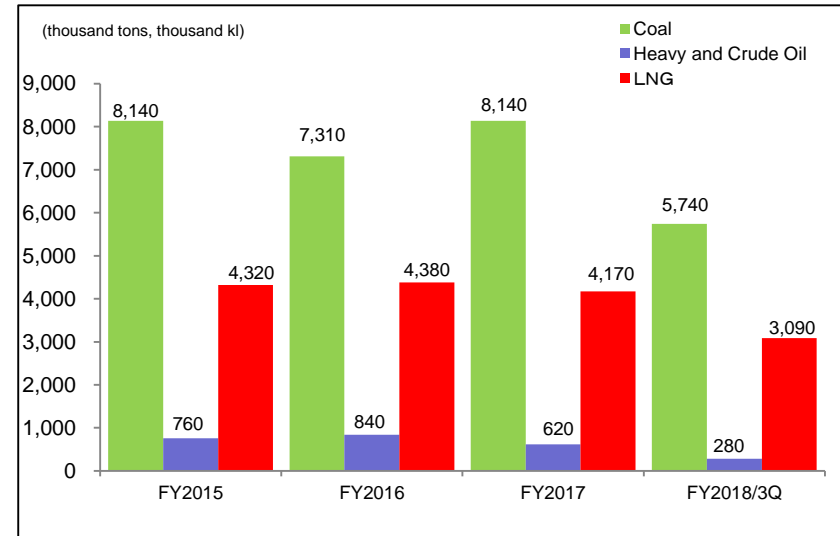


# Fuel Consumption Results

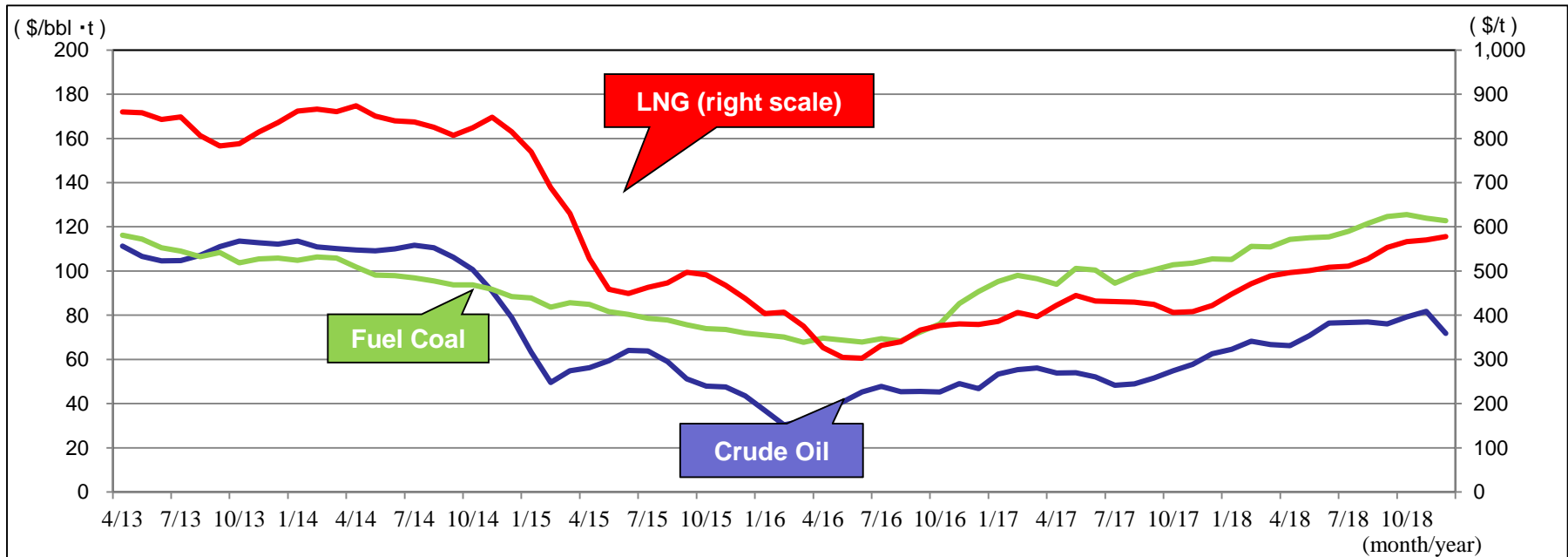
## Fuel Consumption

(thousand tons, thousand kiloliters)

	FY2018/3Q (A)	FY2017/3Q (B)	Change (A) - (B)	(Reference) FY2017
Coal	5,740	5,940	(200)	8,140
Heavy and Crude Oil	280	470	(190)	620
LNG	3,090	2,820	270	4,170



## [Reference] Historical CIF Prices of Crude Oil, Fuel Coal and LNG



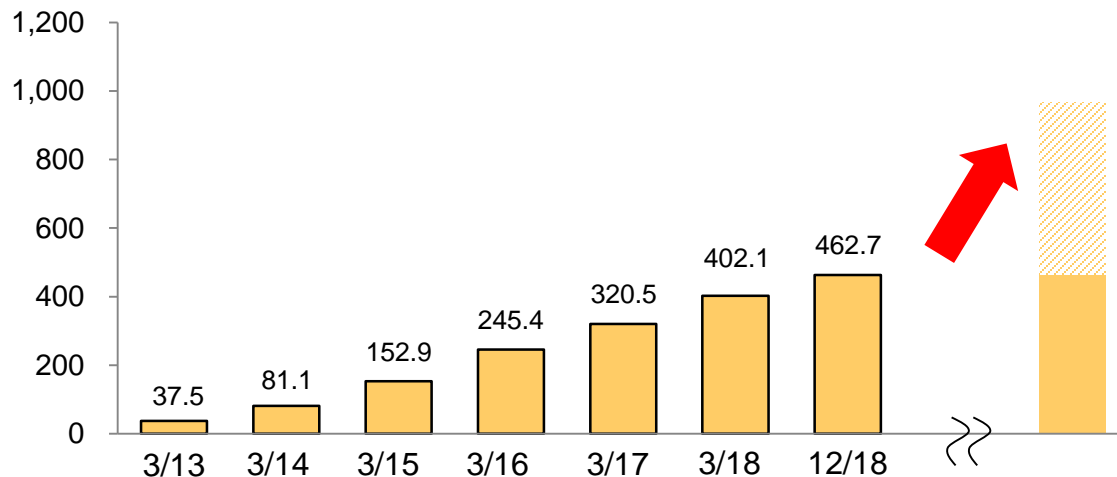


## ■ Current and Expected Grid Access Volume of Solar and Wind within our Service Area

(as of December 31, 2018)

### [Solar]

[10 megawatts]

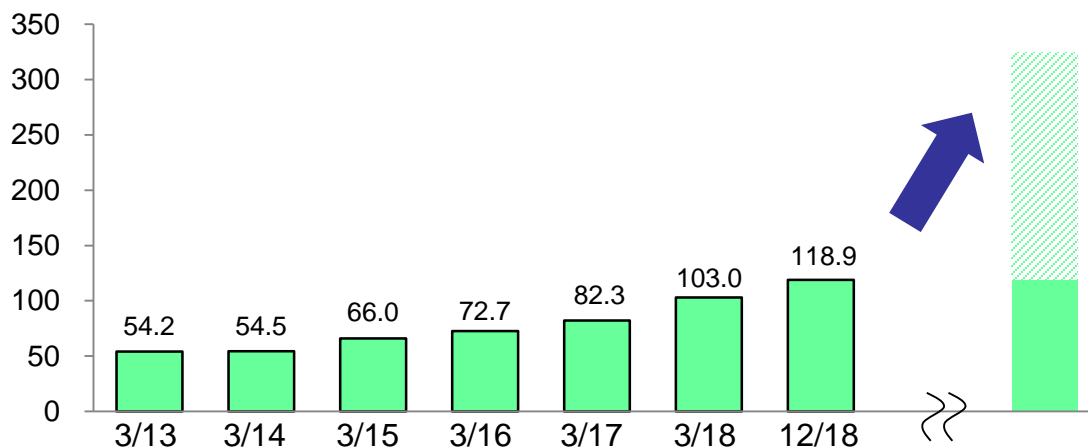


Expected grid access volume:  
5,023 megawatts

(Old rule: 2,039 megawatts  
New rule: 2,984 megawatts)

### [Wind]

[10 megawatts]



Expected grid access volume:  
2,059 megawatts

(Old rule: 1,184 megawatts  
New rule: 875 megawatts)

(Note)

This presentation solely constitutes reference material for the purpose of providing the readers with relevant information to evaluate our company.

The information contains forward-looking statements based on assumptions and projections about the future with regard to our company. As such, the readers are kindly asked to refrain from making judgment by depending solely on this information.

The forward-looking statements inherently involve a degree of risks and uncertainties. Consequently, these risks and uncertainties could cause the actual results and performance to differ from the assumed or projected status of the company.

Tohoku Electric Power Co., Inc. hereby disclaim any responsibility or liability in relation to consequences resulting from decisions made by investors.