

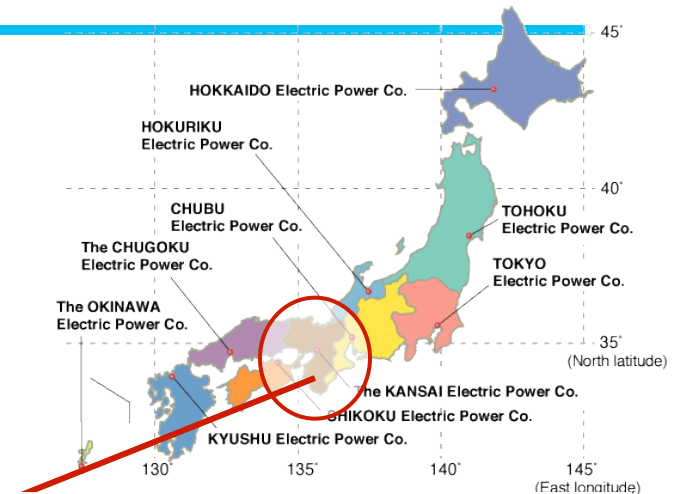
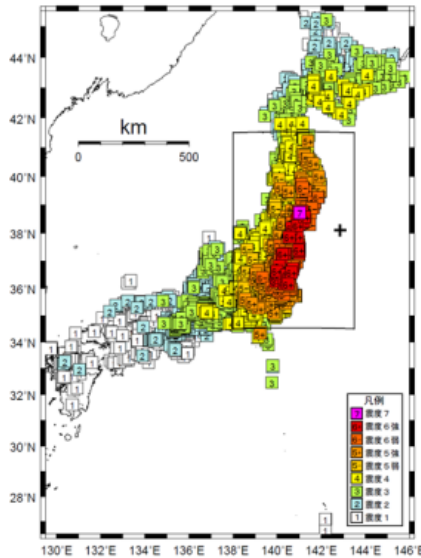
# Energy Saving Campaign and Its Effect After Fukushima Disaster in Japan

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## Background

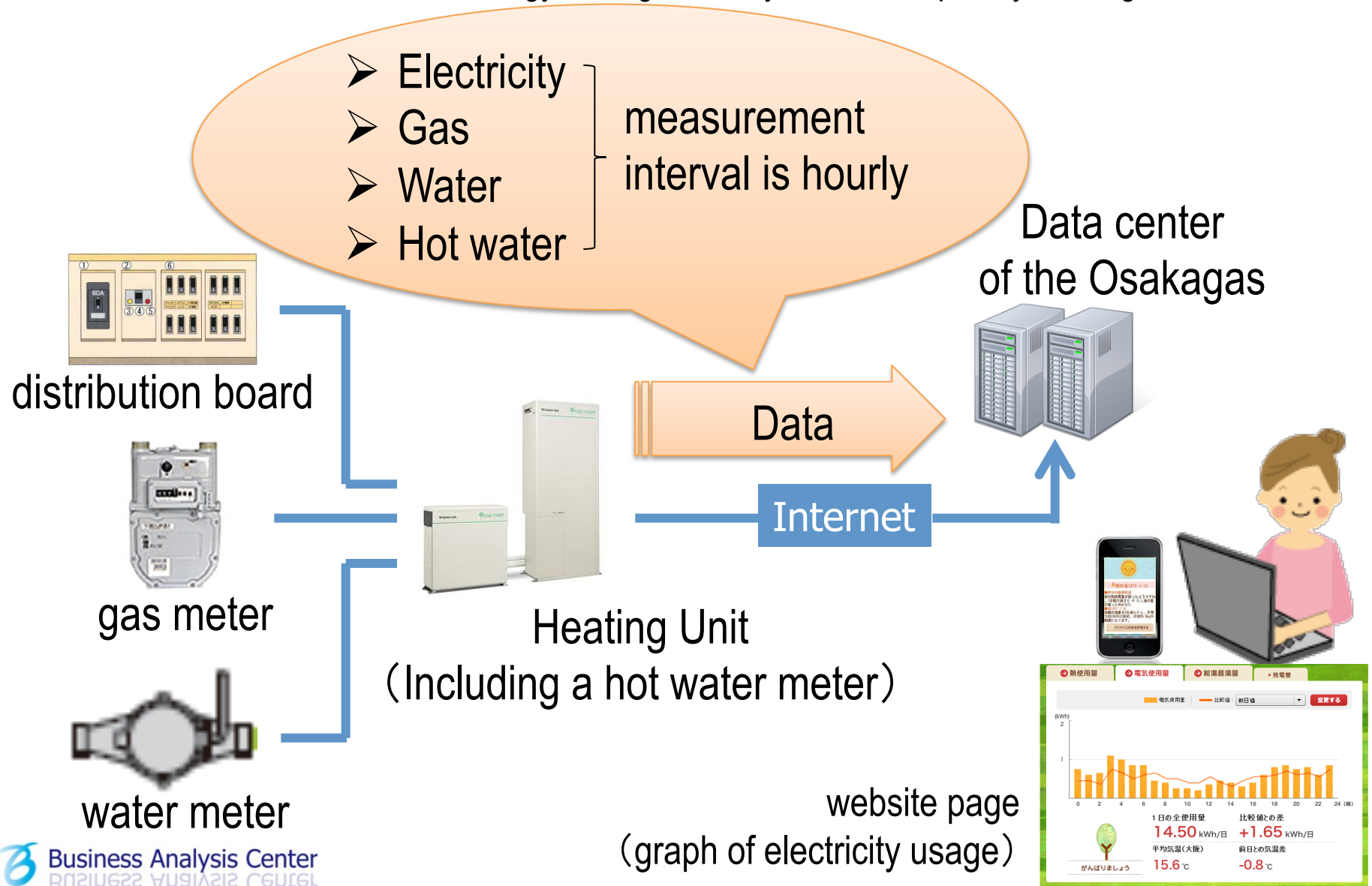


Electric power company	Energy saving volume	Energy saving period
Kansai Electric Power Company Inc. (KEPCO)	15%	July 1 to Sept. 22, 2011
	10%	Dec. 19, 2011 to Mar. 23, 2012
	10%	July 2 to Sep. 7, 2012

- Due to the incidents at the Fukushima nuclear power stations following the Great East Japan Earthquake of March 11, 2011, nuclear power stations across Japan suspended their operations.
- As the Kansai region is highly dependent on nuclear power generation, a 10% to 15% savings in electricity was requested by the electric power company.

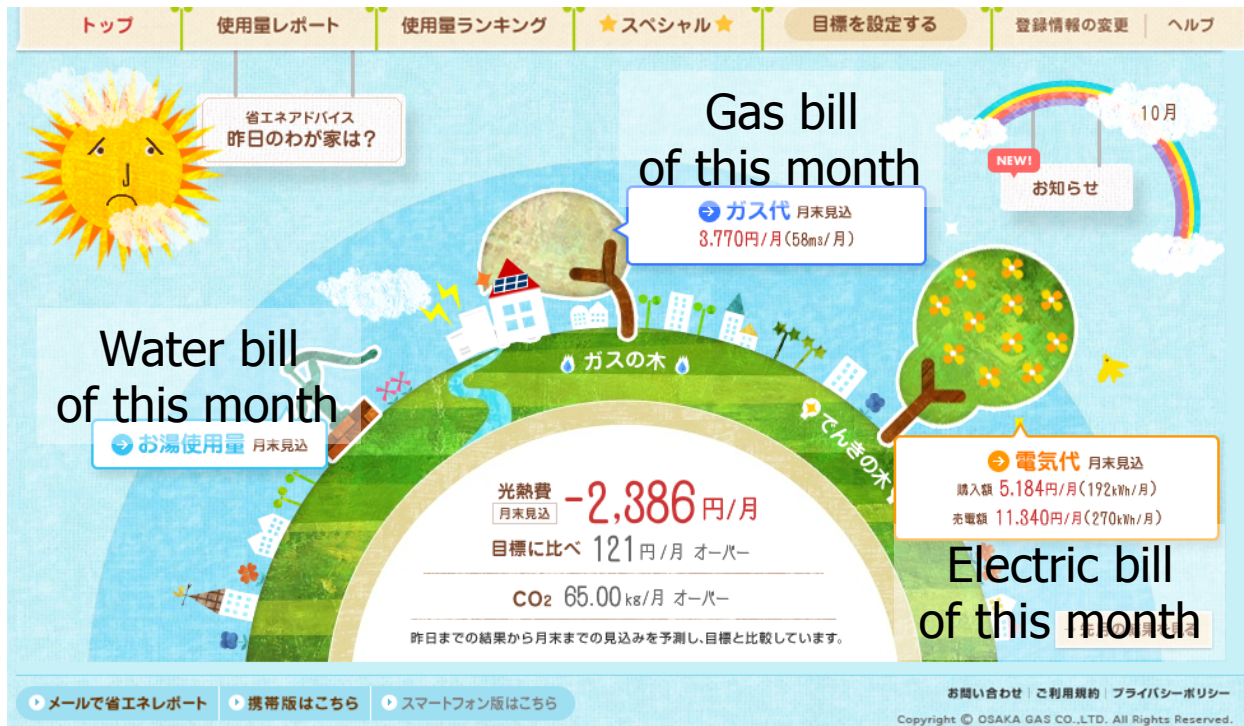
# Home Energy Management System (Ener-Look PLUS※)

※“Ener-Look PLUS” is Home Energy Management System developed by Osakagas Co., Ltd.



# Contents of the webpage

## Home Energy Management System top page



## ① Energy consumption per hour (gas, electricity, water heater's water volume)



## ② Energy consumption ranking display (Ranked in comparison with other households)



## ③ The more a customer checks this webpage, the more items the customer obtains for their green town.





## Planning for the Energy Saving Campaign

### ■ Objective:

- To cooperate with the energy saving request of the electric power company, we launched a limited time Energy Saving Campaign, which included incentives for households using Our Home Energy Management System and studied their changes in electricity usage activities.

### ■ Overview:

- **Subjects:** 165 households using Our Home Energy Management System
- **Period:** **Winter 2011**(Jan-Feb), **Summer 2011,2012** (Aug)
- **Incentive:** **a 1,000-yen gift** certificate for households saving over 10% from their estimated electricity consumption in August

### ■ Data Analysis:

- Household electricity and gas consumption per hour



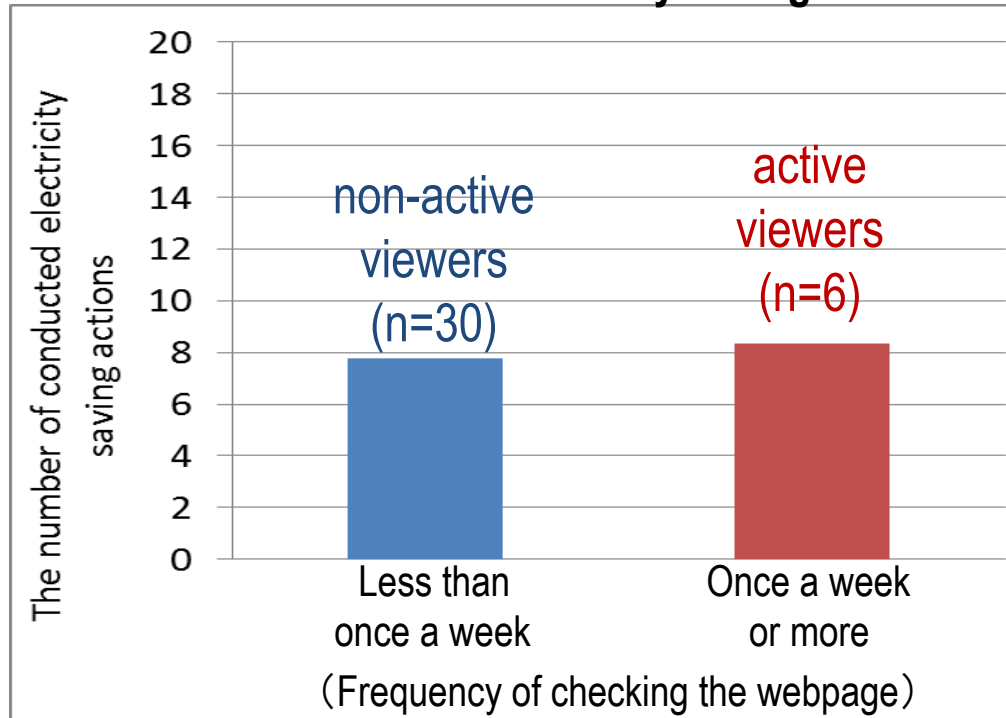
Flyer of the campaign

## Findings of the Energy Saving Campaign

- ① The difference in the actually achieved electricity savings between active viewers and non-active viewers of Home Energy Management System.
- ② The decay of the viewing frequency of Home Energy Management System after the campaign period.
- ③ The effect to gas consumption of the electricity saving campaign.

# The energy saving activities

## The number of conducted electricity saving actions



## Questionnaire about electricity saving actions

1. ☒ switching off electrical items more frequently



2. ☐ setting their air conditioners at a higher temperature than usual

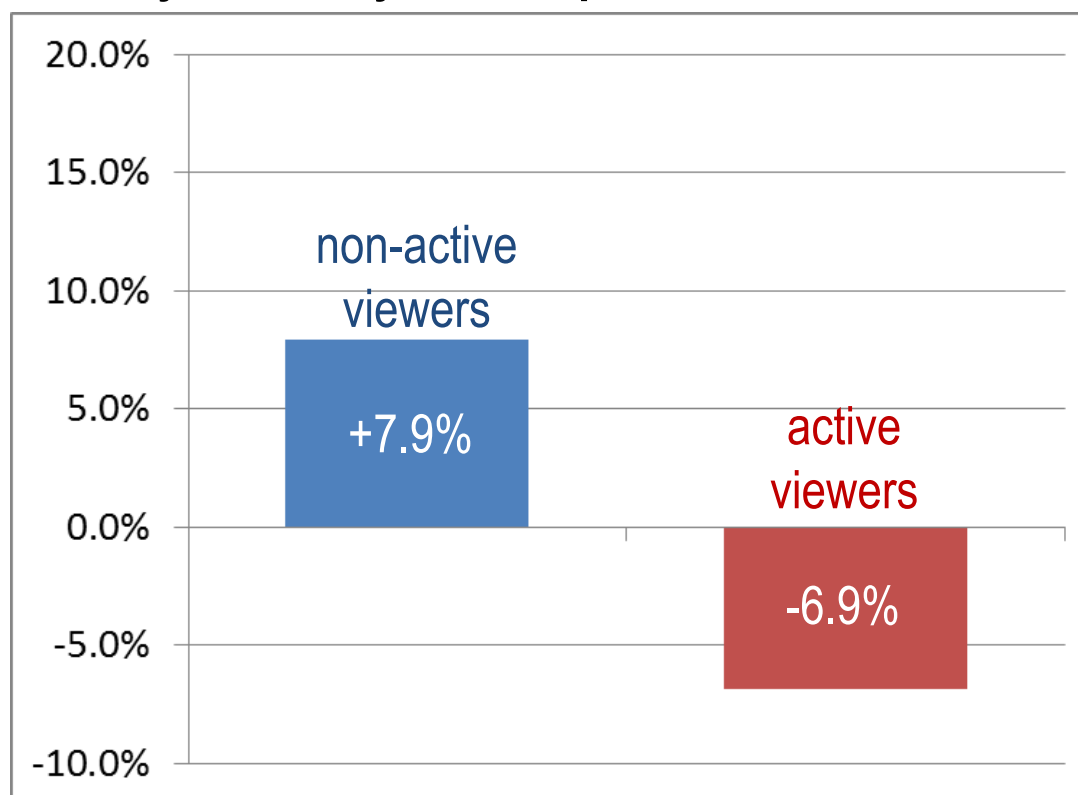


19. ☒ ...

- Before and after this campaign, we conducted questionnaire surveys about the energy saving activities, and there is no difference between two groups

## The actually achieved electricity savings

### Monthly electricity consumption reduction



Monthly electricity consumption of households using Home Energy Management System for both the summer of 2011 and 2012 (n=36).

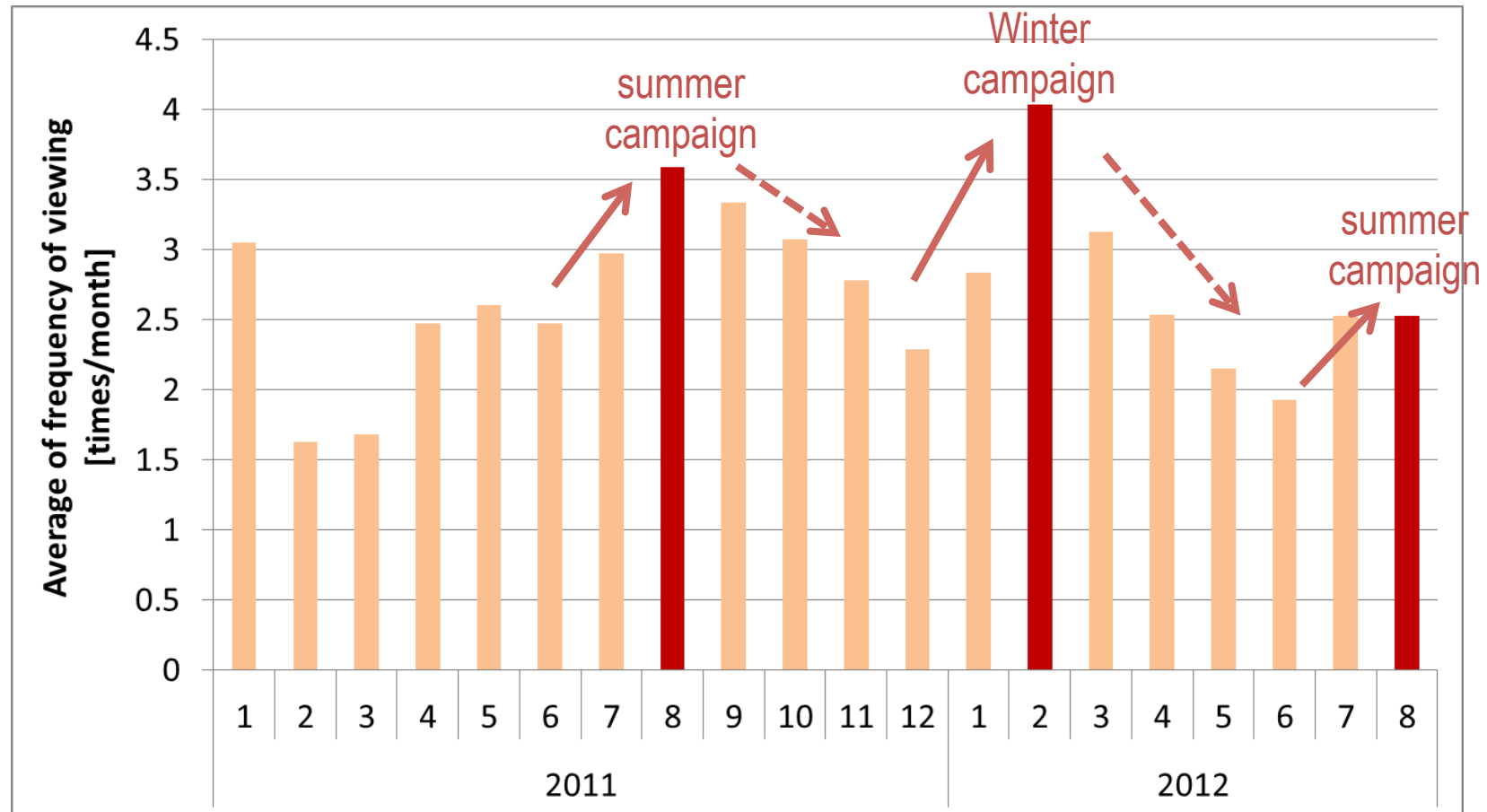
- Significant differences in energy saving results were directly related to the frequency with which the Home Energy Management System webpage was viewed.



## Findings of the Energy Saving Campaign

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## Effect of the campaign on the viewing frequency



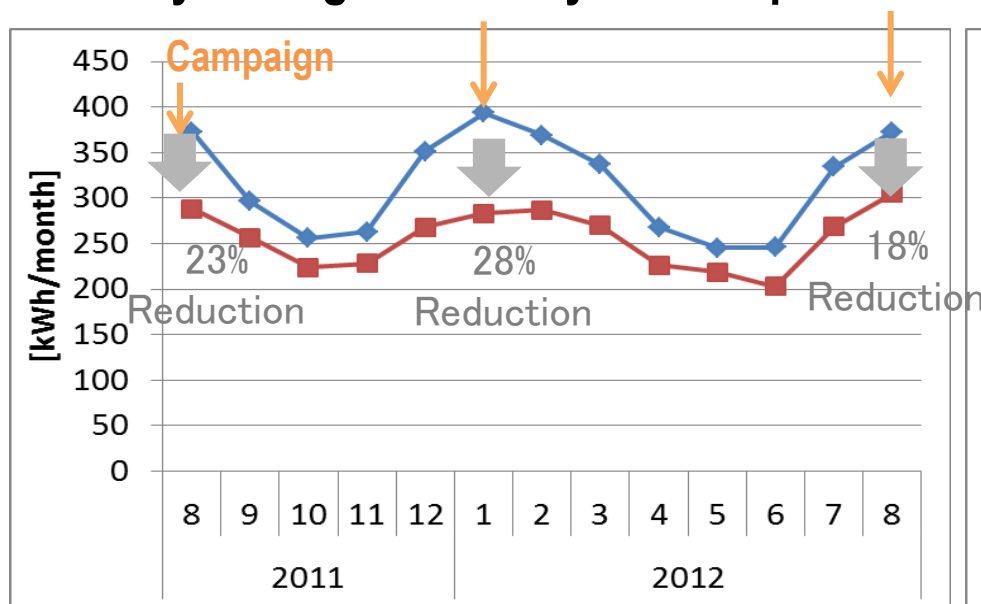
- Our Energy Saving Campaign was effective in the increase of the frequency of viewing.
- On the other hand, the effect of the campaign will not last long.

## Findings of the Energy Saving Campaign

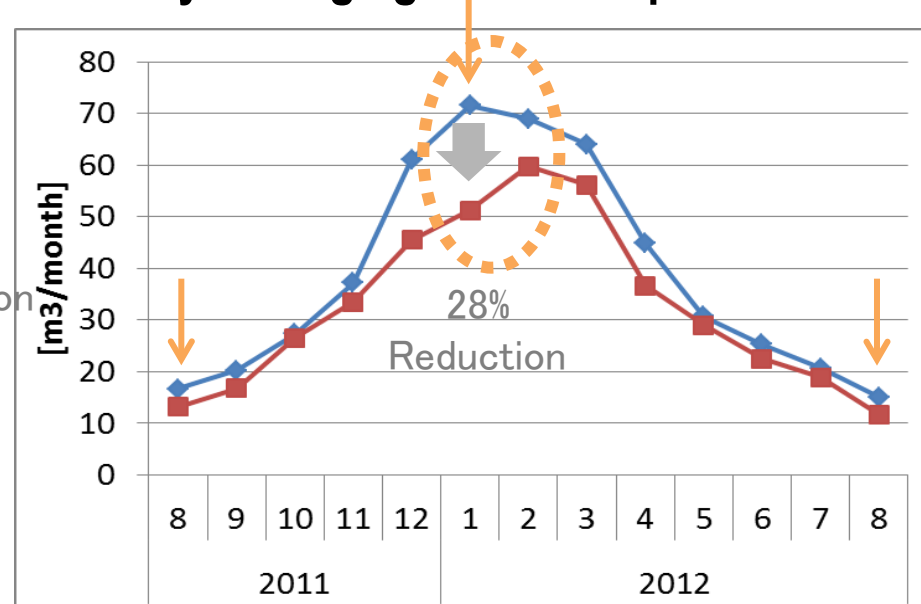
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## Results of the Energy Saving Campaign

### Monthly average electricity consumption



### Monthly average gas consumption



Frequency of checking Ener-Look PLUS webpage    ■ : Once a week or more    ■ : Less than once a week

- Households which checked the Home Energy Management System frequently were found to have consumed less energy, both electricity and gas.
- During our winter energy saving campaign, we found that gas consumption was also reduced.

## Conclusion

- Households which checked the Home Energy Management System more frequently achieved greater reductions in energy consumption, in comparison with those who visited the homepage less frequently.
- We found that the results of our Energy Saving Campaign affected not only electricity consumption, but gas consumption as well.

In the future, we would like to study the following in greater detail:

- The times of day when energy saving actions were especially significant for households which had greater success in reducing their electricity consumption.
- The relationships between the contents of the Home Energy Management System and energy consumption reduction volumes.



Thank you very much for your attention.

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**Aya Mikami**  
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