

## CR Activities (FY2012-2015): Targets and Results

Overall Theme	Task	KPI	FY2015 Targets	FY2015 Results
<b>Reduce global environmental footprint</b> <b>Establish a recycling society</b> Improve environmental performance (Achieve the LIXIL Group's medium term environmental goal)	Improve environmental management systems*1	Number of newly ISO14001 certified sites	・Prepare for the migration to FY2015 standards in FY2016 ・Expand the number of ISO14001 accredited Group company sites in Japan	・Completed preparations for migration ・12 LIXIL Logistics Corporation sites newly certified
	Establish a uniform method of evaluation of energy-saving products*2	Verified accuracy of evaluation methods	Assess global energy efficiency achieved from energy-saving products and set new targets	Established a new Environmental Vision 2030. Set KPIs considering the benefits from CO2 emissions reduction achieved through low-carbon and water-efficient products.
	Contribute to reduction of energy consumption by consumers in Japan through improving performance and reach of energy-saving products*2	Volume of energy efficiency (product energy efficiency achieved v. 1990 x sales volume)	2.0 times v. FY2010 level	1.37 times v. FY2010 level
	Reduce overall energy consumption across procurement, manufacturing, sales and disposal*1	Volume of overall energy consumption	Maintain 10% reduction v. FY2010	9.9% reduction v. FY2010
	Reduce CO2 emissions at operational sites in Japan*2	Volume of CO2 emissions	Maintain 50% reduction v. FY1990	55% reduction v. FY1990
	Reduce water use in manufacturing*1	Volume of water use	Assess level of global water use and set new targets	Created EHS performance reporting guidelines and developed definitions of clean and waste water volumes. Performance will be assessed globally from FY2016.
<b>Supply chain management*3</b> Establish a supply chain with considerate work environment and resource allocation	Share the LIXIL Group's procurement policy and guidelines with business partners	% in terms of transaction amount Japan: Procurement at Japan operational sites Overseas: Procurement at operational sites outside Japan	Japan: 85% (15% of companies) Overseas: 60% (15% of companies)	Japan: 88.9% (27.4% of companies) Overseas: TBA (42.2% of companies)
	Conduct questionnaire surveys and follow-up activities	% of conformance of surveyed items (%)	Japan: maintain 90% or above (46 questions) Overseas: maintain 90% or above (66 questions)	Japan: 96.3% Overseas: 98.6%
<b>Product safety*2</b> Establish a safe product manufacturing operation and a culture focused on product-safety	Incorporate lessons learned from previous accidents and product-quality issues in the design stage and in training to avoid recurrence and proactively prevent accidents.	Number of new significant product-related accidents resulting from or likely due to product defects	0 accidents	1 accident (A panel underneath the sink of a kitchen system dropped)
	Continuously review product safety activities and operations through regular dialogue with stakeholders	Number of product safety dialogues conducted	4 dialogues	4 dialogues 1. Held the 5th LIXIL Product Safety Dialogue with external industry experts 2. Engaged in 2 dialogues with consumer organizations 3. Engaged in 1 dialogue with a group of university professors
	Strengthen communication of information on maintenance, product safety and accident prevention	Number of communication activities to customers	6 activities	9 communications activities held: 1. Participated in 2 Product Safety Seminars held by the Ministry of Economy, Trade and Industry (Hokkaido and Okayama) 2. Participated in 2 Consumer Education Festa held by the Ministry of Education, Culture, Sports, Science and Technology (Oita and Gifu) 3. Presented at 3 industry organizations (Tokyo: 2, Fukuoka:1) 4. Issued 2 press releases on educational materials for primary schools
<b>Promote a healthy corporate culture, and efficient human resource utilization*2</b> Build a vibrant, diverse workforce as a solid platform for enhancing future performance	Discover, hire and nurture diverse talent	Percentage of female management staff	30% or above of managers appointed	30.1% of managers appointed
		Percentage of female regular new recruits	30% or above	37.4% of new recruits joining in April 2016
		Percentage of women participating in leadership training	20% or above	22.5%
	Promote understanding of and hold educational opportunities on diversity	Number of meetings held	12 or more meetings a year	276 meetings
		LIXIL Women's Network activities	Host events and expand network	1. Held 4 forums, 6 workshops and a national summit. Canvassed for examples of active female staff (41 entries) 2. Encouraged self-development and expanded the Women's Network significantly to include manufacturing sites
Enhance support systems to encourage work-life flexibility	Maintain and improve related systems and rules	Encourage use of the systems implemented and ensure that they take root. Explore other support measures.	1. Assessed the extent of the use of sport systems and promoted more active use 2. Explored various possible measures in the WLF Advisory Discussion	
<b>Partner with the society and local communities*1</b>	Hold dialogues with local communities	Number of locations in which dialogues are held	Hold dialogues at 22 sales locations and 5 stores	Held dialogues at 14 plants, 15 sales locations, 3 stores and 1 other operational site (some locations held more than 1 dialogue)
<b>Address global hygiene and sanitation issues</b>	Provide children with clean and hygienic environments. Cooperate with UNICEF WASH program to help achieve the 7th UN Millennium Development Goal.	Number of children receiving improvements to school toilets and educational support	Expand reach to facilities beyond schools (Numerical targets under discussion)	Improved school toilets and provided educational support to over 1.2 million children in China, the Philippines, Kenya, Vietnam, and India. Going forward, rather than limiting ourselves to supporting school toilets, we aim to improve sanitary environments for 100 million people by 2020, by expanding the simple pan-type SaTo toilet operations as a sustainable business that can be scaled up.

Scope of activities:

\*1 Excludes companies that are within three years from integration

\*2 LIXIL Corporation only

\*3 Suppliers to LIXIL Corporation and consolidated subsidiaries of LIXIL Group Corporation

## Medium-term Environmental Targets

To achieve the mission that we set forth in our Environmental Vision, we switched from reducing carbon dioxide emissions to reducing our energy consumption itself, setting ourselves the goal of reducing energy consumption across the entire life cycle of our products. In other words, we will strive to reduce not only the energy consumed directly by our business activities, but also the energy consumed indirectly across the entire spectrum of influence of our products, from procurement of raw materials for manufacturing to the use and eventual disposal of our products by our customers. From 2010 to 2015, we had set ourselves the following three medium-term environmental targets.

### Target 1

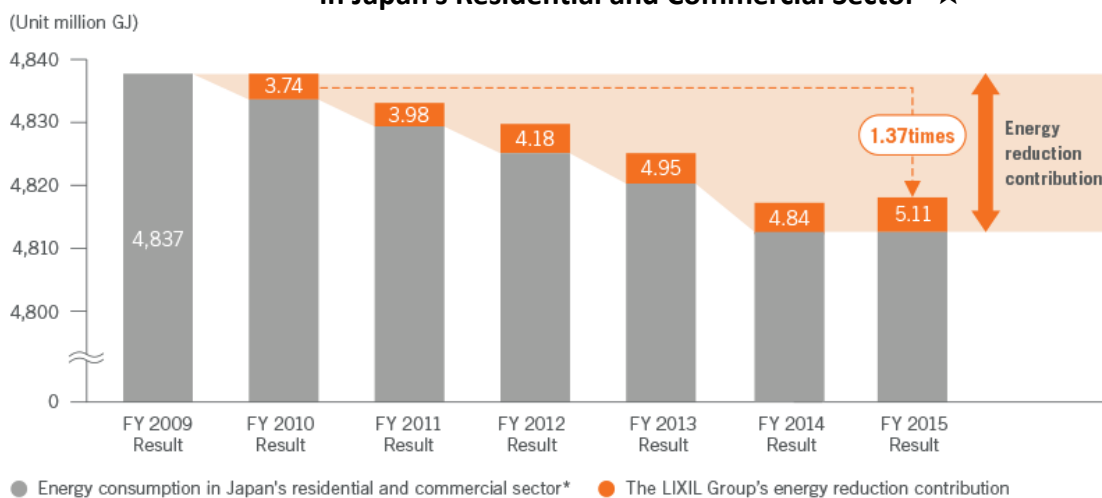
**To achieve zero energy balance in the residential and commercial sector, we have set ourselves the target of boosting our contribution to energy consumption reduction in Japan's homes, offices and commercial buildings for fiscal 2015 to double the level of fiscal 2010.**

Energy consumption in the residential and commercial sector in Japan has risen steadily, reaching 4.837 billion GJ in 2009. Poorly insulated houses with older fittings and equipment make up the majority of Japan's estimated 58 million existing houses, and are thought to account for most of the energy consumed by the residential sector.

Based on our assumption that the average energy efficiency of such houses stands at the 1990 level, we have defined the amount of energy that could be saved by replacing the products fitted in 1990 with the latest of our products as "energy reduction contribution," and use this as a measure of our efforts to reduce energy in the household sector. We aimed to boost our energy reduction contribution for fiscal 2015 to double the fiscal 2010 level through further raising product performance and broader use of those products in the market. Our energy reduction contribution in fiscal 2015 was 5.11 million GJ, a 137% increase against fiscal 2010.

Moreover, since energy generation/saving products and water-conserving products continue to reduce energy consumption until they are replaced or decommissioned, we estimate that our cumulative energy reduction contribution from fiscal 2010 to fiscal 2015 reached 26.8 million GJ. By applying our technologies to our growing overseas products business, we will also help to reduce energy consumption on a global scale.

### Energy Consumption and Our Energy Reduction Contribution in Japan's Residential and Commercial Sector ★



\*Source : Ministry of Economy, Trade and Industry 2010 Annual Report on Energy (Energy White Paper)

#### [The LIXIL Group's Energy Reduction Contribution Calculation Method]

Energy reduction contribution = (annual electricity/gas/water consumption reduction derived from all energy generation/saving products and water saving products\*1 sold in Japan each year compared with 1990 products) × (energy conversion coefficient\*2) × (number of each product type sold)

#### 〈For Windows〉

Window product energy reduction contribution = (reduction in annual HVAC electricity consumption through improved window insulation compared with 1990 windows\*3) × (energy conversion coefficient) × (number of windows sold annually (per home))

\*1 Applicable products: Detached home sashes, entrance doors (excluding those for prefabs), apartment/condominium sashes, house insulation panels, solar power systems, kitchen units, bathroom units, washstands, toilets, plumbing fixtures, humidity control building materials

\*2 Electricity, gas: heat value per unit per energy source as specified in Law Concerning the Rational Use of Energy Water: conversion coefficient calculated from Japan Environmental Management Association for Industry (JEMAI) Carbon Footprint Database Ver.1

\*3 Annual heating and cooling load for a standard home converted into electricity using a home heat load calculation program, called SMASH (Simplified Analysis System for Housing Air Conditioning Energy) for Windows, developed by Institute for Building Environment and Energy Conservation (IBEC)

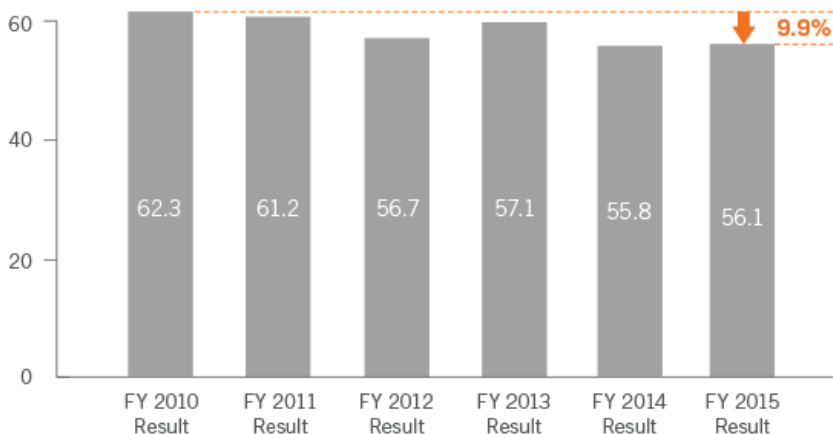
## Target 2

**We will reduce our total domestic and overseas energy consumption related to procurement, manufacture/sales, and disposal by 10% from the fiscal 2010 level by fiscal 2015.**

We will implement policies to manage the energy consumed at each product life cycle stage, including improving the ratio of recycled raw materials at the procurement stage, improving production efficiency and making greater use of renewable energy at the production and sales stages, improving the efficiency of the transportation stage through the use of returnable packaging and compact packaging and improving product recycling at the disposal stage. Our total energy consumption for fiscal 2015 was 56.1 million GJ, a 9.9% reduction from fiscal 2010.

### Total Domestic and Overseas Electricity Consumption

(Unit million GJ)



	FY 2013 Result	FY 2014 Result	FY 2015 Result
Procurement ★	38.0	38.1	39.2
Manufacture/ Sales ★	16.8	15.7	14.9
Transport ★	2.0	1.8	1.7
Disposal	0.3	0.3	0.3
<b>Total</b>	<b>57.1</b>	<b>55.8</b>	<b>56.1</b>

(Unit million GJ)

#### [Total Energy Consumption Calculation Method]

- Energy consumption (procurement)\*1 = (amount of purchased raw materials) × (energy conversion coefficient\*2) + (cost of purchasing parts/materials) × (energy conversion coefficient\*3)
- Energy consumption (manufacture/sales)\*4 = (electricity/fuel consumption, water intake) × (energy conversion coefficient\*5)
- Energy consumption (disposal) = (landfilled/incinerated quantity when products are disposed) × (energy conversion coefficient\*2)
- Energy consumption (transport) = (transported weight) × (transportation distance) × (energy conversion coefficient\*6)

\*1 .Energy consumption in procuring raw materials includes energy consumed in mining, sorting, blending, refining and other raw material processing including transport to Japan. Energy consumption in manufacturing parts/materials includes energy consumed in mining, refining and other raw material processing including transport to Japan and assembly/processing in Japan

\*2 .Conversion coefficient calculated from Japan Environmental Management Association for Industry (JEMAI) Carbon Footprint Database Ver.1

\*3 .Architectural Institute of Japan (AIJ) LCA Database (1995 Input-Output Table)

\*4 .Manufacture/sales energy consumption includes energy calculated by multiplying quantity of waste products processed during manufacture/sales by energy conversion coefficient\*2

\*5 .Electricity, fuel: heat value per unit per energy source as specified in Law Concerning the Rational Use of Energy  
Water: conversion coefficient calculated from Japan Environmental Management Association for Industry (JEMAI) Carbon Footprint Database Ver.1

\*6 .Conversion coefficient calculated from unit fuel consumption and unit calorific value using improved tons x distance method as specified in the Law Concerning the Rational Use of Energy (Measures Pertaining to Consigners)

#### [Scope of Data Coverage]

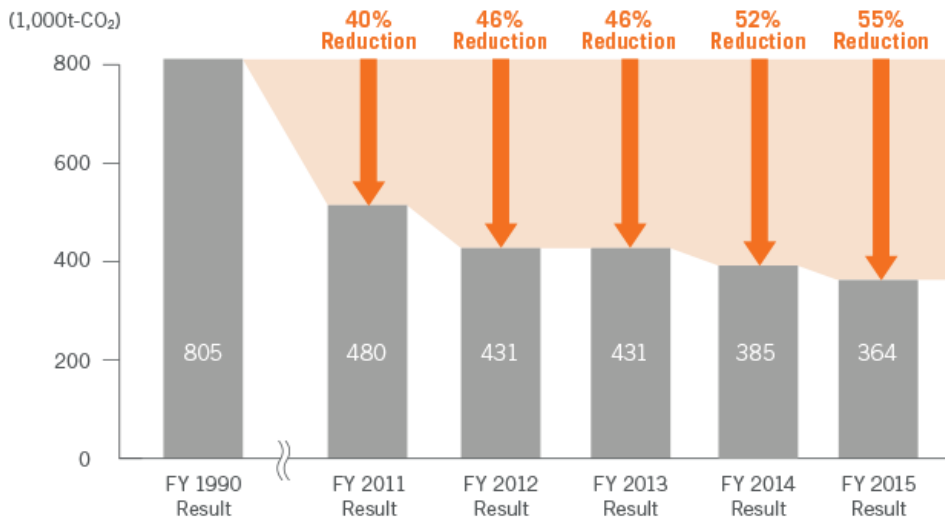
LIXIL Group operating companies in Japan and overseas, together with their consolidated subsidiaries and non-consolidated subsidiaries under the management of operating companies, as of April 2015

### Target 3

We will reduce the CO<sub>2</sub> emissions of our Japanese sites to 50% of their fiscal 1990 level by the end of fiscal 2015.

Reducing our energy consumption to achieve Target 2 will also help to reduce the direct CO<sub>2</sub> emissions from our business activities in Japan. Our total CO<sub>2</sub> emissions from Japanese sites in fiscal 2015 amounted to 364,000 t-CO<sub>2</sub>, a reduction of 55% from fiscal 1990 emissions.

#### Total CO<sub>2</sub> Emissions from the LIXIL Group's Japanese Sites ★



\*Cogeneration credit compensation amounts have been excluded since FY 2014. As a result, past data has been adjusted.

#### [CO<sub>2</sub> Conversion Coefficients Used to Convert CO<sub>2</sub> Emissions]

- Purchased electricity: Japan 0.378, China 0.764, Korea 0.489, Thailand 0.567, Vietnam 0.427, and Indonesia 0.653(kg-CO<sub>2</sub>/kWh)
- Natural gas: 2.108 (kg-CO<sub>2</sub>/m<sup>3</sup>)
- LPG: 3.002 (kg-CO<sub>2</sub>/kg)
- Kerosene: 2.492 (kg-CO<sub>2</sub>/L)
- Fuel oil: 2.71 (kg-CO<sub>2</sub>/L)
- Diesel : 2.624 (kg-CO<sub>2</sub>/L)
- Gasoline: 2.322 (kg-CO<sub>2</sub>/L)
- Purchased steam: 0.06 (kg-CO<sub>2</sub>/MJ)

Sources : Guidelines for Calculating Greenhouse Gas Emissions for Businesses (Ministry of the Environment), 2005  
GHG emissions from purchased electricity. Version 4.4 (World Resources Institute), 2012

★ : The LIXIL Group Corporation has received third-party assurance from the Deloitte Tohmatsu Evaluation and Certification Organization for the data in FY2015.