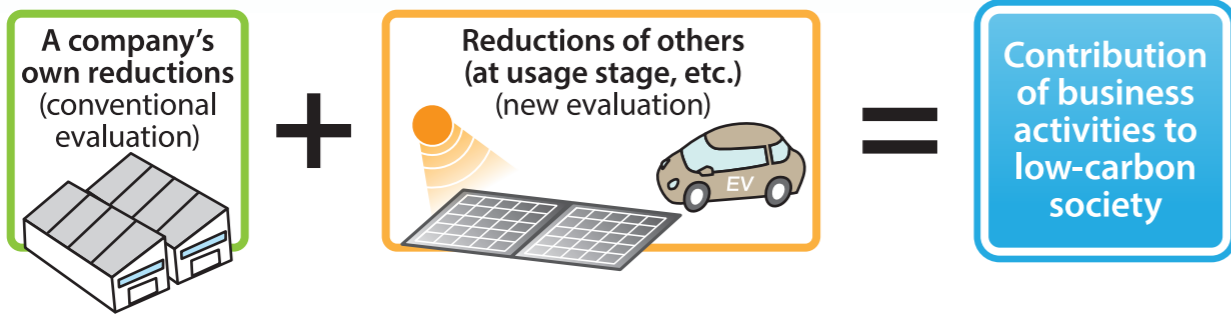


Quantifying Contributions toward a Low-Carbon Society

To create a low-carbon society, everyone knows how important it is to promote efforts to conserve electricity and be more energy efficient, but it is also important to develop and spread energy-efficient products to support those efforts.

Shiga Prefecture believes that business activities to contribute to the reduction of greenhouse gas emissions of users – such as through energy conservation at the product usage stage – fulfill an important role in creating a low-carbon society. Besides evaluating the reductions of energy consumption in their own business activities, we hope that by also evaluating efforts to contribute to reductions by others they will promote even greater progress toward the development and spread of products and services that will contribute to low-carbon society.



“GHG Action Plan Program for the Business Sector” and evaluation of contributions to low-carbon society

Under Shiga Prefecture’s Ordinance on Promoting the Creation of a Low-Carbon Society, enacted in March 2011, businesses over a certain size are required to prepare a Business Action Plan to reduce greenhouse gas emissions. As one of the categories to be indicated in the written plans, this “GHG Action Plan Program for the Business Sector” includes an evaluation of contributions to create a low-carbon society through the development, production, and promotion of energy-efficient products, and other means.

Companies that have submitted Business Action Plans (listed on Shiga Prefecture website)

The Shiga Prefecture website carries the Business Action Plans that have been submitted.



GHG Action Plan Program for the Business Sector based on Shiga Prefecture’s Ordinance on Promoting the Creation of a Low-Carbon Society
<http://www.pref.shiga.lg.jp/d/new-energy/jourei/jigyosha-keikaku.html>
 (In Japanese only)

In addition to the businesses introduced on pages 1 and 2, the website also shows “contributions” in the Business Action Plans for each of the following facilities of businesses located in the prefecture.

- IRIS Ohyama Inc., Amatsuji Steel Ball Mfg.Co., Ltd., AEON MALL Co., Ltd., AEON RETAIL Co., Ltd., ITOKI Corporation, SK-Electronics Co.,Ltd., NEC SCHOTT Components Corporation, NEC Lighting, Ltd., Oiles Corporation, OMI ORIMONO Co., Ltd., Ohmi Press Works and Forging Co., Ltd., Otsu Itagami Co., Ltd., OMRON Corporation, Kansai Best Foods K.K., Kansai Hoon Kogyo K.K., Kiraku Kougyou Co., Ltd., KOKUYO Product Shiga Co., Ltd., Komatsu Cabtec Co., Ltd., Saichi Industry Co., Ltd., SANYO Electric Co., Ltd., G-TEKT Corporation, Shinji Shumeikai, Showa Aluminum Can Corporation, Showa Denko Packaging Co., Ltd., Starlite Co., Ltd., Sumitomo Electric Wintec, Inc., Sekisui Chemical Co., Ltd., Sogo & Seibu Co., Ltd., Dai-ichi Kogyo Seiyaku Co., Ltd., DAIKI Aluminium Industry Co., Ltd., Dynec Corporation, Dainippon Screen Mfg. Co., Ltd., TKX Corporation, Tokai Carbon Co., Ltd., TOYO KAGAKU Co., Ltd., Toyo Sangyo K.K., Toyo Seikan Co., Ltd., Toyobo Co., Ltd., Toray Industries, Inc., Toray Precision Co., Ltd., Dowa Thermoengineering Co., Ltd., TOYOCOLOR Co., Ltd., Toppan Material Products Co., Ltd., Toyota Boshoku Shiga Corporation, NAS Stainless Steel Strip MFG. Co., Ltd., Mitsubishi Nichiyu Forklift Co., Ltd., Nitto Denko Corporation, Nippon Carbon Co., Ltd., Nippon Graphite Industries, Ltd., NSK Ltd., Japan Vilene Company, Ltd., PanaHome Corporation, Hitachi Construction Machinery Tierra Co., Ltd., Fukuda Metal Foil & POWDER Co., Ltd., FUJITEC Co., Ltd., HEIWADO Co., Ltd., Henkel Japan Ltd., Mitsubishi Belting Ltd., Miyagawa Kasei Industry Co., Ltd., Yanmar Casting Technology Co., Ltd., Yusui Kasei Kogyo K.K., Lithium Energy Japan, Rengo Co., Ltd.

Shiga Prefecture: Creating a Low-Carbon Society

Business Activities to Create Products and Services that Contribute to Greenhouse Gas Emission Reductions



Shiga Prefecture’s mascot, “Watan”

Shiga Prefecture is the home of many factories that manufacture solar panels and other renewable-energy and energy-efficient products, parts and materials. The production of these products emits carbon dioxide, but they also lead to major reductions in emissions at the time of use. Shiga Prefecture recognizes the positive “contribution” of business activities like these in reducing the greenhouse gas emissions of others, and is encouraging the use of ways to measure these contributions by calculating them quantitatively.

Examples of businesses in Shiga Prefecture that quantify their contributionsInside pages

Details about Shiga Prefecture’s ProgramPage 3

Shiga Prefecture: Creating a Low-Carbon Society
 Business Activities to Create Products and Services that Contribute to Greenhouse Gas Emission Reductions

Global Warming Issues Division, Department of Lake Biwa and the Environment, Shiga Prefecture
 4-1-1 Kyomachi, Otsu City, Shiga Prefecture, 520-8577, Japan
 TEL 81-77-528-3493 FAX 81-77-528-4844 E-mail ondan@pref.shiga.lg.jp

Many products and services helping to create the low-carbon society of the future come from Shiga Prefecture.

Efficient logistics equipment

UniCarriers Corporation
Develops and manufactures high-efficiency **battery-powered forklifts, hybrid container carriers**, etc.



No-cleaning option

Prince Hotels, Inc. (Otsu Prince Hotel)
For guests staying two or more nights who do not need sheets and towels changed, the hotel offers a **"no cleaning" option**. This reduces the amount of energy used for laundry services.

The energy saving by improving efficiency

Kansai Hoon Kogyo Co., Ltd.
Developments and manufactures **high-performance thermal insulation materials** for plant.

Environmental finance

The Shiga Bank, Ltd.
To preserve the environment and the ecological system of Lake Biwa, the Bank offers a **"Carbon Neutral Loan, Mirai-Yoshi (Bright Future)"**, which is designed to encourage customers to reduce emissions of greenhouse gas.

Energy-efficient room air-conditioning

Daikin Industries, Ltd.
A global leader in adopting R32, a new refrigerant with about one-third of the global warming potential compared to regular refrigerants. Manufactures highly energy-efficient **room air conditioners**.

Energy-efficient air conditioners, refrigerators, freezers

Panasonic Corporation
Manufactures energy-efficient **air conditioners, refrigerators, freezers**, etc.

Better insulation for homes

Asahi Kasei Jyuko Co., Ltd.
Manufactures **home building supplies with high thermal efficiency**, including wall and flooring components that use high-performance insulation.

Mobile phones, personal computers

Asahi-Schwebel Co., Ltd.
Manufactures **glass-fiber products** used in many electronic devices such as smart phones, personal computers, etc. Contributes to reduction of greenhouse gas emissions by production of thinner glass-fiber products.

Water-efficient plumbing products

TOTO Ltd.
Manufactures **water-efficient plumbing products** for toilets, bathrooms, kitchens, etc.

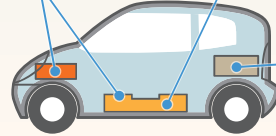
Improved fuel efficiency of transportation equipment

TB Kawashima Co., Ltd.
Develops, manufactures, markets **materials used in transportation equipment**, including automotive, rail, and aircraft, etc. Contributes to energy efficiency by making parts lighter (e.g., spring textile in seating).



Electric vehicles, hybrid cars

Nippon Electric Glass Co., Ltd.
Helps reduce vehicle weight by manufacturing **glass fibers** mixed with resin for engine parts, battery cases, etc.



Asahi Kasei E-materials Corporation
Manufactures **separators** for lithium-ion secondary batteries.

Oji F-Tex Co., Ltd.
Manufactures **polypropylene film** for capacitors.

Fuel-efficient cars

Daihatsu Motor Co., Ltd.

Develops and manufactures **fuel-efficient compact cars**.

Miyagawa Kasei Industry Co., Ltd.

Helps improve of fuel efficiency and reduce Greenhouse gas derived from raw materials by manufacturing **resinous bonnet for light car**.

Mitsubishi Motors Corporation

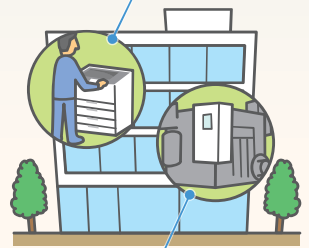
Manufactures light, compact **gasoline engines** using low fuel consumption technologies, and gasoline engines for plug-in hybrid vehicles.

Heian Mfg. Co., Ltd.

Manufactures lighter parts for **engines and transmissions**.

High efficiency printers

Nagahama Canon Inc.
Manufactures **parts and cartridges for commercial printers**. Aims to achieve industry's best environmental targets for energy efficiency.



High-efficiency gas-fired absorption chillers

Kawasaki Thermal Engineering Co., Ltd.
Manufactures **high-efficiency gas-fired absorption chillers** for building air-conditioning, and equipment for efficient use of waste from cogeneration facilities.

Printed materials, with greenhouse gas emission credits

EINS Corporation
Offers **carbon-offsets** for CO₂ emissions from the production and disposal of **printed materials**, using a Japanese carbon-crediting program.

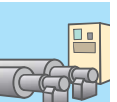
Automated warehouses

Daifuku Co., Ltd.
Manufactures energy-efficient **automated warehouses, distribution facilities**, etc.



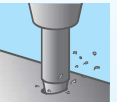
Induction-heated products for industrial equipment

TOKUDEN Co., Ltd.
Manufactures **heated rolls using induction-heat technology**. The energy efficiency is higher than that of conventional heated rolls. Used globally in paper, textiles, plastic film industries, etc.



Energy-efficient industrial cutting tools

Hitachi Tool Engineering, Ltd.
Manufactures energy-efficient **milling tools, drills**, etc.



Solar power

TKX Corporation
Manufactures **solar cells silicon wafer**.

Solar power, LED lighting

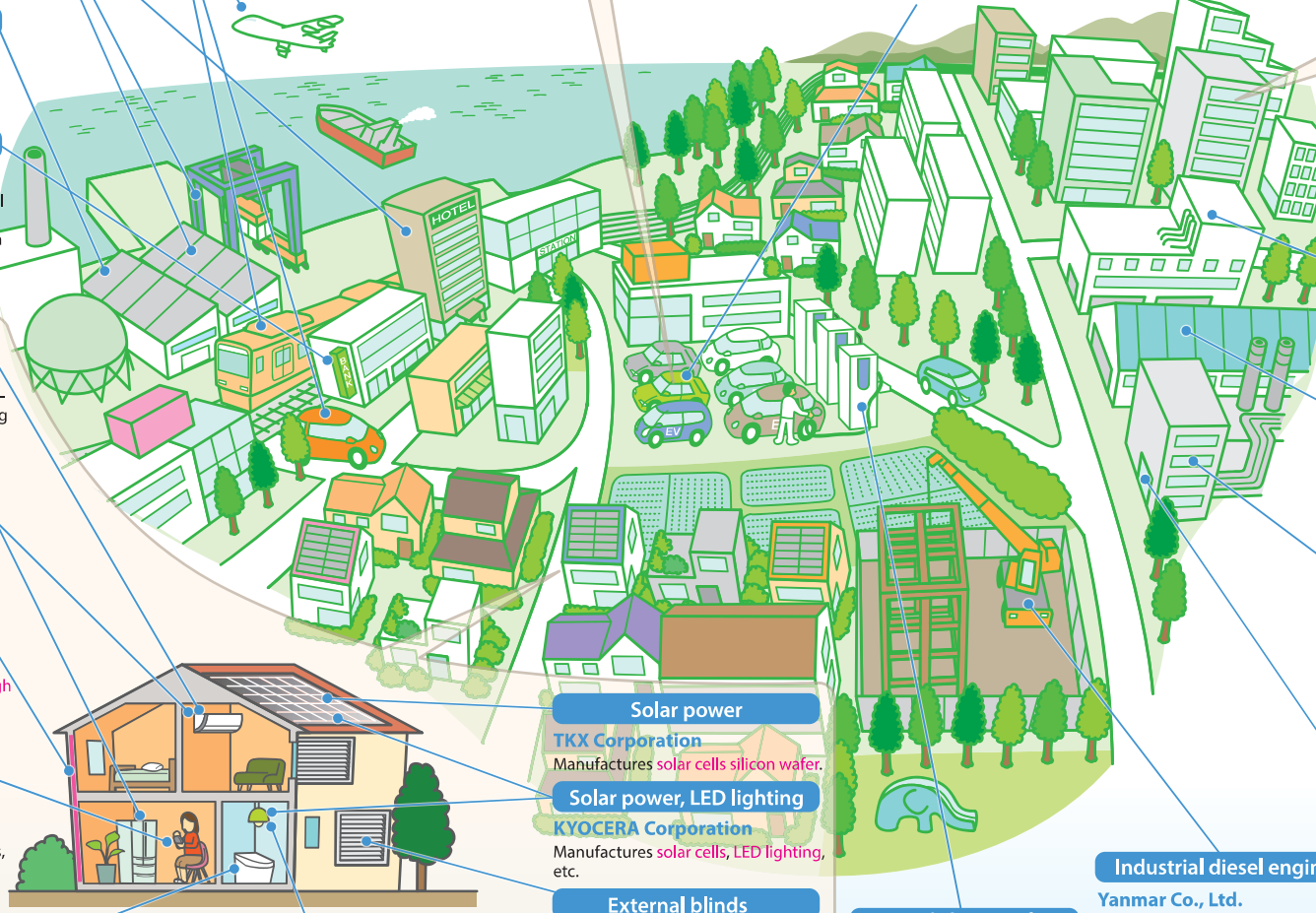
KYOCERA Corporation
Manufactures **solar cells, LED lighting**, etc.

External blinds

OILES ECO Corporation
Manufactures **external blinds** for homes, factories, office buildings, etc. Products reduce air conditioning demand in summer by shielding solar radiation outside the building.

Rapid chargers for electric vehicles

Nichicon Kusatsu Corporation
Develops and manufactures **rapid chargers for EVs**.



Note: Products and services on this page are listed based on the Business Action Plans and other materials submitted by the companies. CO₂ emission reduction effects have not been verified by Shiga Prefecture.