

EPSEL

Electric Power Saving Energy Laboratory

“Development of the Most Advanced LED”

**Venue of the Lecture : Conference Room D on the 5th
Floor of Saitama Kaikan**

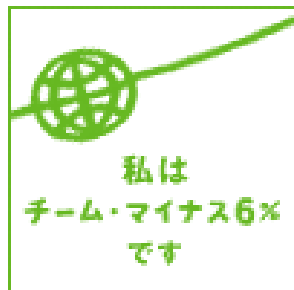
EPSEL Co., Ltd.



Our company, EPSEL Co., Ltd., has continued to develop successfully since its establishment in 2001.

As a countermeasure against global warming, the Kyoto Protocol has already come into effect, and while, at present, the specific standard for the emission of greenhouse effect gas has been materialized, we believe that our electrical power saving EPSEL LIGHT which utilizes sunlight effectively provides the most timely and necessary countermeasure required by our country.

This is the basic concept for our business.



September 20, 2007

Chozo Nasuno,
President and Representative Director

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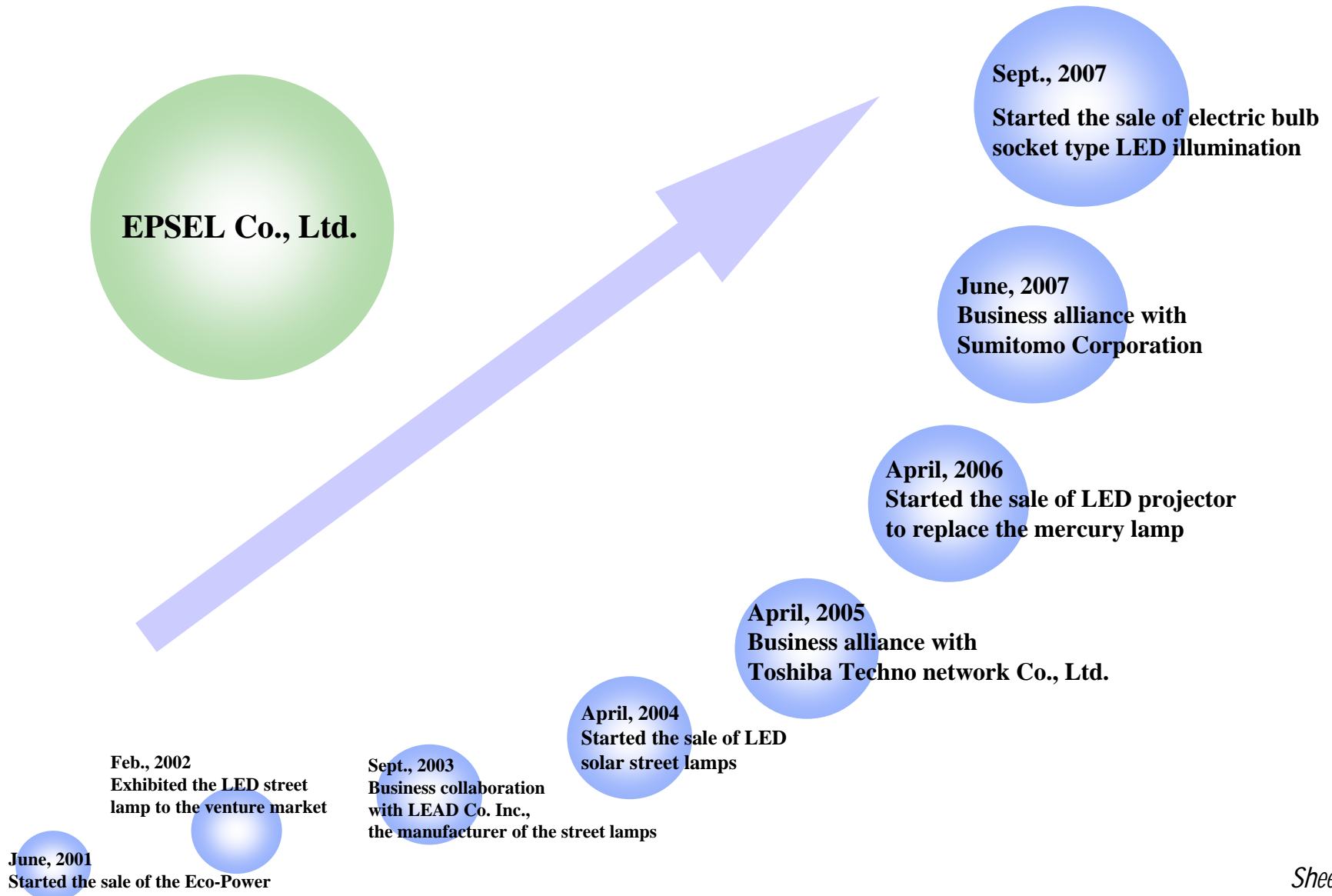


1. Corporate Profile

Corporate Name	EPSEL Co., Ltd.	
Location	Head Office: Room No.507, 3-12-18 Saitama industrial technical general center Kamiaoki Kawaguchi-shi, Saitama 〒330-0844 Plant: 2-25-16, Minamimaekawa, Kawaguchi-shi, Saitama 〒333-0846	
Established	June 18, 2001	
Capital	30,000 thousand yen	
Directors	President and Representative Director Senior Managing Director Director Director Director Director Corporate Auditor	Chozo Nasuno Hisako Higashi Hideshi Higashi Yozo Iida Kijuro Sugawara Toshikatsu Ueno Satsuko Sugawara
Number of employees	13 (including directors)	
Description of business	-Natural energy electric power generation; LED illumination-related products -Development, design, etc. of energy saving power supply stabilizing equipment	



2. Corporate History



3. Description of our Business and its Social Background

Description of business

- (1) Development, manufacturing and sale of energy saving products which contribute to the reduction of CO₂ gas emission;
Solar power generating LED illumination; LED illumination for commercial electric power sources;
Solar power generation equipment; Charge and discharge controller
- (2) Development / design as well as sale, installation, and maintenance of energy saving system;
Planning and operation of the comprehensive energy saving scheme for facilities;
Energy saving phase stabilizing electric power equipment; Demand controller

Social background necessitating this business;

Based upon the Kyoto Protocol which resolved the reduction of CO₂ gas emission that is said to cause global warming, obligation for the reduction of CO₂ gas emission will be allocated to major enterprises. Due to this reason, demand for power saving equipment has been created and the relevant system and equipment will be necessitated.

While fossil fuel energy is limited, natural energy is unlimited. Since solar power generation plays a key role in our products, they are required for the future.

4 . Superiority of Our Company

EPSEL

Technology

- Advanced electric design based on excellent comprehensive energy-saving technology
- Charge and discharge controller that brings out maximum life and efficiency of a battery
- Commercialization of LED carefully selected after studying and examining the features of LEDs of various manufacturers from our own point of view
- Always pursuing the potential for energy saving under the motto of thinking a great deal of 1mA

Business Partner

- As the business partner of Toshiba Techno network, we can respond to any request for installation work and maintenance service in cooperation with the nationwide network.
- We can manufacture reliable pole lamps on the strength of the business alliance with LEAD Co., Inc., the leading manufacturer of street lamps for shopping streets.
- We can improve the sales (recovery) efficiency on the strength of the business alliance with Sumitomo Corporation.



Electric bulb socket type LED illumination ~ Electric bulb socket type LED illumination for a cold storage warehouse ~

- Article that can be used only by the replacement of the existing lamp fittings -



Front face when not lit



Front face when lit



- **Comparison of brightness**

Same brightness as the 100W incandescent electric bulb (with wavelength that keeps insects away)

- **Smaller consumption of electric power**

About 1 / 10 that of an incandescent electric bulb in the consumption of electric power (smaller volume of CO2 emitted and reduced running cost)

- **Longer life**

When compared with a candescent electric bulb, the life is about 25 times longer.
(reduction in maintenance expenses for lamp exchange and so forth)

6. Main Product – EPSEL ECO LIGHT

EPSEL

LED illumination by the natural energy power generation ~ EPSEL ECO LIGHT ~

“**Future illumination**“, LED illumination by solar electric generation will continue to supply the “**light**” to any location where it is difficult to secure a commercial electric power source.

In an emergency evacuation site, it will provide a very effective electric power source.



Charge and discharge controller (small power generation plant)

Automatic lighting / extinction

This product, perceiving the generating power from the solar power generator, switches the light on / off automatically.



Prevention of over discharge / charge

This product, measuring the remaining battery charge, prevents over discharge / charge automatically. In the same way, when the power voltage exceeds a certain level, charging is suspended automatically. By monitoring the power voltage (remaining battery charge) in this way, **the reduction in the life of the battery is prevented.**

7. Main Product – Footlights/Projector

Epsel Footlights

Solar Power Generation Type LED Footlights Friendly to Global Environment

Easily installable at any location where it is difficult to supply power

Best suited to the emergency lamp / security lamp / garden lamp, etc.

LED Lamp / Projector is Equivalent to 200W Mercury Lamp

Low consumption of electric power: “20W” is equivalent to a 200W mercury lamp in lighting intensity. (In the case of the narrow-angle type lamp illuminating a spot immediately below)

As it does not become heated, it reduces heating by about 30% in comparison to the traditional product. (LED illumination with the traditional product involves a heating temperature of about 80°C.)

As it reduces heating which is a factor that shortens the life, **it has a longer life than the traditional product.**

It can be used with either AC / DC. As it consumes low electric power, even in the natural energy system with limited capacity, **it can supply sufficient brightness for an extended time.** (In the case of DC illumination, electric power consumption is 17W.)



Description of the Development of Illumination of E39 Socket

Mainly with MILED, by combining with power LED, high lighting intensity is secured. From there, with the technology unique to our company, a product will be developed, in which low electric power consumption / low heating / long life (10 years or longer) can be expected.

MILED is the LED module in which high lighting intensity has been obtained through the use of the reflector.

Main Markets

Physical distribution center in operation for 24 hours, subway / airport and so forth

This is the LED illumination that can replace the 200W mercury lamp usually used for illumination.

Wiring of the ballast circuit of the mercury can be easily exchanged only by switching a part of it.

Price Setting

The price is set at the place of 24-hour use at the level on which the depreciation can be completed with the electric power charge (¥15 / kwh) payable over 2 ~ 3 years.



**Projector which is our product:
Development is scheduled to be
conducted, based on this.**



Thank you for your kind attention.