# The Citizen Group's **Approach to Manufacturing:** Good for People and the Planet

We continue to promote manufacturing that is good to people and the planet and have stepped up our efforts to develop a wide range of products and components certified as environmentally-friendly products under the Citizen Group's in-house certification scheme. We conduct environmental product assessments from the development stages onwards and only certify products as environmentally-friendly products if they meet assessment criteria in seven categories. Having set ourselves the target of achieving a 100% certification rate for new models, we managed to achieve a rate of 99% during fiscal 2008. We are aiming to go all the way and achieve a rate of 100% in fiscal 2009. We also intend to develop and offer our customers Citizen Super Environmentally-Friendly Products, which will undergo even more rigorous assessments.

# **Eco Products by CITIZEN**

#### Citizen Watch Co., Ltd.



## Citizen: Powered by Light **Citizen's Eco-Drive**



We successfully achieved our shipment target for fiscal 2008, with Eco-Drive solar-powered watches accounting for 80% of all products shipped worldwide. This really goes to show that Eco-Drive is continuing to attract users from all over the world as a result of the public's growing desire to use environmentally friendly products.

The Eco-Drive radio-controlled watch is one of the products that encapsulate the concept of combining technology and beauty. It gives

us great pleasure to be able to

offer our customers a product that will always continue to work and tell the right time no matter where they are as there is light

To coincide with Time Day on June 10, 2009, we launched the H610 model equipped with a newly developed movement, using the slogan "Citizen: Powered by Light".

The Eco-Drive radio-controlled watch features a 1/5 second chronograph and user friendly world time capabilities, complete with the world's first disc-based city selection system

In 1996, Eco-Drive became the first watch to be granted Eco-Mark certification.

Citizen Watch will continue to make every effort to manufacture products that are good for people and the planet, now and in the future.



As this is ultra-low power consumption technology, the continuous standby time is more or less the same as a regular phone, even when equipped with a large display.

**Electronic Paper Cells** 

saving, high contrast and memory capabilities. They are used to create

image-based patterns for customizable mobile phones (Hitachi auW61H).

#### Electronic Paper Modules: Features

Citizen Seimitsu Co., Ltd.

- Power consumption 1/100th that of existing liquid crystal displays Ultra-low power consumption enables permanent display Bright, high visibility display (high reflectivity, high contrast, wide
- viewing angle) Slim, lightweight, unbreakable plastic display, making it highly shock resistant

#### Citizen Electronics Co., Ltd.

### Brightly shining eco products! Next generation energy saving light sources **LED** Lighting

#### A lifespan 20 times longer than incandescent light bulbs

LED lights have an extremely long lifespan of 40,000 hours, meaning that they last roughly 20 times longer than incandescent light bulbs, which have a lifespan of 2,000 hours. If used normally, there is no need to replace bulbs for around ten years.

#### Mercury-free environmentally friendly lighting

LED lighting is environmentally friendly because, unlike fluorescent lighting, it does not use mercury or contain other harmful substances such as lead. As there is no need for class tubing, as in the case of fluorescent lighting, there is also no danger of bulbs breaking in the event of an earthquake or other disaster.

#### LEDs are the clear winner in comparisons

Citizen Electronics has developed commercial LED lights with industry-leading luminescent efficiency. As a higher luminescent efficiency means that more light is produced per watt, this makes it possible to keep lights shining brightly whilst minimizing power consumption. LED lighting enables a substantial reduction in power consumption compared to regular incandescent light bulbs.



Bringing the Eco-Drive solar powered watch to our customers

Eco-Mark certification number

06 134 011