

# Realizing Energy Savings and CO<sup>2</sup> Reduction through World's First "Building With All-LED Lighting"

On March 6, 2008, IDEC completed a new building (the IDEC SALES OFFICE) that is entirely illuminated by LEDs in an eco-friendly move



to pursue and realize energy savings and CO<sup>2</sup> reduction. Many buildings that are partially lit by LEDs exist, but this is the first in the world in which all lighting is provided by LEDs\*.  
 (\*According to research by Kajima Construction Corporation, Ltd.)

## Accumulated Core Technologies and Technology Innovation

The completion of this All-LED building represents the implementation of "Technology Innovation," one of the "Four Beyonds" technology concepts that IDEC is advocating as business themes. It was realized through a combination of such IDEC technologies as photonics, optoelectronics, and advanced control technology that IDEC has cultivated over many years. This achievement has demonstrated the reliability of IDEC's super-bright, high-efficiency LED devices (the IDEC Sunshine Series) and their potential in lighting applications.

## LED Technology and Reduction of Environmental Impact

LEDs are known as an ecological light source that is friendly to the global environment, but the roots of IDEC's LED technology go back to the high-quality, super-bright, and highly reliable industrial LED illuminated control units that it began developing in 1981. During the 27

years since IDEC developed those devices, it has shipped 157 million LED illuminated control units and also contributed to a total reduction of about 470,000 tons in CO<sup>2</sup> emissions. In 2000, IDEC received The Japan Machinery Federation Chairman's Award for excellent energy-saving equipment from The Japan Machinery Federation.

## CSR Initiatives: Contributing to the Environment

IDEC's new building, which is based on the concept of "buildings that are friendly to the global environment," was aimed first at reducing environmental load starting with the reduction of CO<sup>2</sup> emissions. Through the development of entire buildings illuminated by LEDs, IDEC will help to mitigate environmental impact in the ways described below.

### Global Warming Countermeasures

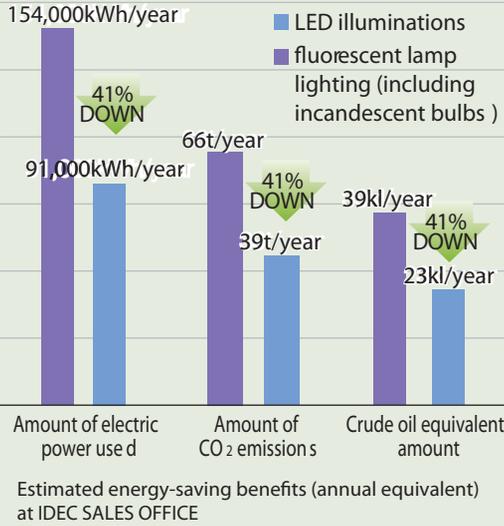
Compared to conventional lighting equipment, 41% annual energy saving will be achieved.

### Complete Elimination of Substances that Harm the Environment

IDEC will exclude the use of mercury, which is included in fluorescent tubes.

### Substantial Reduction in Waste

LEDs have a longer life than fluorescent lamps. As such, they substantially reduce the number of maintenance man-hours associated with replacing fluorescent tubes and equipment degradation while also realizing a substantial reduction in associated waste.



By leveraging its proven results in this area, IDEC intends to further enhance the efficiency of the Sunshine Series. Furthermore, while combining technological and environmental contributions, IDEC will continue to evolve further as a company that exemplifies the Japanese manufacturing tradition.