

# LCA Evaluation Report

Casio evaluated its Super Slim Projector using life cycle assessment (LCA).

## LCA Evaluation of the Super Slim Projector XJ-S30/S35, a Casio Green Product

### LCA evaluation case study

As a mobile projector, the XJ-S30/S35 has a super slim construction that makes it easy to carry around. It has a high-pressure mercury lamp with 2000 ANSI lumens. The lamp itself consumes 200 W of electricity, resulting in the use stage of the LCA data accounting for a large 82% of the overall environmental impact.

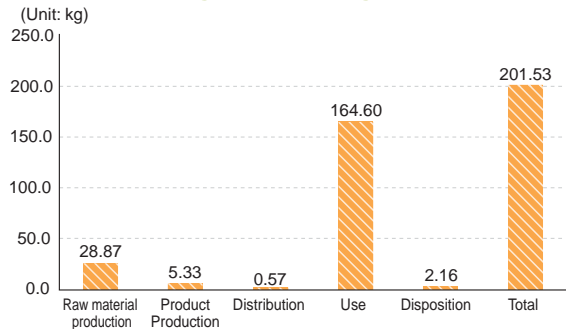
Accordingly, the product offers an Eco mode, which boasts lower energy consumption than the Normal mode. By switching from Normal mode to Eco mode, the projector is put into an energy conservation mode where the lamp is less bright and the high static pressure Sirocco fan runs quieter. The Eco mode is effective for use in quiet surroundings and when one wishes to adjust the brightness to create a better balance with the room lighting.

### Future challenges

Ways to lower the value for the use stage need to be studied in order to improve the projector's LCA data. Future challenges are to make further headway in reducing energy use by the light source, improving product parts, and reducing overall weight.

	Total for all stages
Global warming impact (CO <sub>2</sub> equivalent)	201.53 kg
Acidification impact (SO <sub>2</sub> equivalent)	0.28 kg
Energy use	4,313.63 MJ

### XJ-S30's effect on global warming (CO<sub>2</sub> equivalent)



#### \*ECO-LEAF Environmental Label:

An environmental labelling originating in Japan that displays quantitative LCA-derived environmental aspects covering the entire lifecycle of a product from the extraction of resources through production, distribution, use, disposal, and recycling.



## Super Slim Projector XJ-S30/S35

### Product characteristics

- Projection system: DLP®
- Brightness: 2000 ANSI lumens
- Display resolution  
True: XGA (1,024 x 768)  
Compressed: Maximum SXGA (1,280 x 1,024)
- Slim construction: 43 mm thick (32 mm at thinnest point)
- USB compatible, the XJ-S35 enables PC-free presentations



DLP, the DLP logo and the DLP medallion are trademarks of Texas Instruments.

### Green product technology points

- Energy conservation: Energy consumption can be reduced by switching the projector from Normal mode to Eco mode.
- Resource-saving: Compared to the predecessor XJ-360,
  - The body of this product has been
    - Reduced by 14% in volume
    - Reduced by 40% in thickness
  - The packaging (all made from paper except the soft case) has been
    - Reduced by 24% in volume
    - Reduced by 17% in weight
- Recyclability: The housing is made of a magnesium alloy and is easily recycled.
- Elimination of hazardous substances: The product does not contain substances prohibited by the RoHS Directive.



Packaging for XJ-S30/S35 (left) and their predecessor (XJ-360)