



Every year over **8 million** babies are born prematurely in developing countries. **50%** of those born 8 weeks early will die.

**75%** of these newborns could be saved with simple care such as warming.



# Sunflower

Helping newborns grow.

Many hospitals in the developing world lack access to basic warming technologies. They are reliant upon donated equipment, which is often unsuited to their context.

Typical incubators cost \$7,000 to **upwards of \$30,000**. They have complex controls which discourage use, since nurses are scared that they will **accidentally harm** the infant. **Frequent blackouts** and brownouts leave the busy staff scrambling to keep the infants warm. Many incubators require **single-use temperature probes**, which hospitals do not have the supply chain or funds to restock.



## Context-Aware Design

Ergonomic handles for comfortable transport between rooms

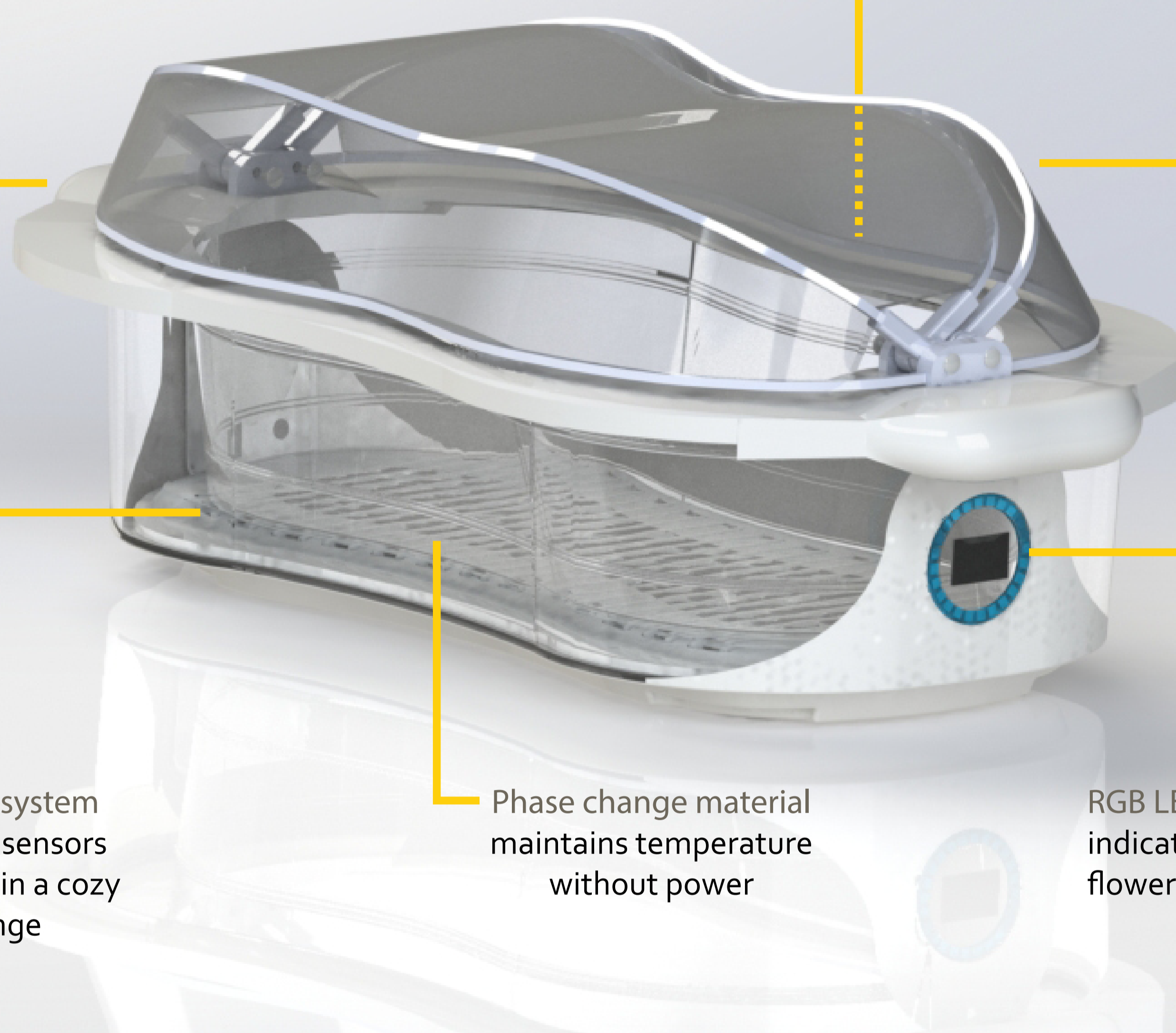
Kidney bean shape rests comfortably against hip or waist

Easy-open cover for fast access in case of emergency

Robust heating system with an array of sensors keep Sunflower in a cozy temperature range

Phase change material maintains temperature without power

RGB LEDs indicate when Sunflower is ready



### Simplicity

Clean user interface  
Color indicators and one-touch controls make Sunflower straightforward to use

### Portability

Lightweight and ergonomic  
Sunflower is easy to transport, even in hospitals without elevators

### Heat Retention

30 minutes of heat without power  
Sunflower continues to warm infants in hospitals with inconsistent power

### Accessibility

Transparent design  
Clear bassinet lets nurses and parents monitor the baby and is compatible with common jaundice treatments

## Layered Design



Clear cover minimizes heat loss while allowing proper ventilation. Cover

Smooth, easy-to-clean rim with comfortable handles for carrying.

Inner layer cradles the infant. This piece has no cracks, creases, or overhangs, making it easy to clean

Midlayer houses additional heating wires which raise the inner air temperature for cold environments

Nontoxic phase change material retains heat without power and clamps the temperature at a cozy 36°C

Base layer provides additional structural support and houses the electronics. The elevated platform in the center prevents scarring of the light-transmitting surface.

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