

# Philips Designs the 'Light Blossom,' an Intelligent Street Light Concept

October 17 2008, by Lisa Zyga

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The Light Blossom collects energy from the sun and wind during the day. At night, the device glows dimly when no one is around, and brighter when it senses motion, such as people walking nearby. Image: Pocket-Lint.

Designing nighttime lighting solutions for urban areas presents a challenge for city planners. Too much light results in light pollution - not just limiting the enjoyment of stargazers, but also interfering with the routines of plants and animals. On the other hand, having too little light threatens a neighborhood's overall safety.

One solution to the urban lighting problem is a new concept called "Light Blossom," designed by Philips Electronics. Light Blossom is an

intelligent LED lighting system that can provide bright light when it senses people walking nearby, and decrease its luminosity when people aren't around. The technology is also energy-efficient and operates off the grid, gathering solar and wind energy during the day to use for light at night.

During the day, Light Blossom works similar to a flower, opening its "petals" to collect solar energy. As the sun moves across the sky, the petals gradually reorient themselves so they're facing the sun head-on to operate at maximum efficiency, similar to a sunflower.

On cloudy days when the wind is strong, the Light Blossom automatically converts its petals into an upward, open position that allows them to catch the wind. As the petals rotate, they transfer the motion to a built-in rotor that converts the motion to energy.

The Light Blossom continuously switches between solar and wind modes depending on weather conditions. It also displays its energy-collecting flow on its "trunk," or pole, with a decorative light for passers-by to see.

When the sun sets, the Light Blossom's LEDs automatically turn on, illuminating the ground below it. Philips claims that the downward-facing lamp design minimizes light pollution enough to enable people to see the stars in some areas. When people pass by the light, proximity sensors detect their movement and the LEDs switch from dim stand-by mode to a higher-intensity light.

Philips says that the Light Blossom's energy-efficient LEDs use just half of the energy of a traditional street light to produce the same light output. Because the device doesn't require power infrastructure, rural communities without electricity could install Light Blossoms without investing in grid infrastructure. In urban communities, the devices could even supply power back to the grid when they generate an excess of

energy, making the Light Blossom a light pole that generates rather than consumes power.

Philips unveiled the Light Blossom concept earlier this week at its 2008 Philips Simplicity Event, held in Moscow, Russia.

More information: [Philips](#)

Citation: Philips Designs the 'Light Blossom,' an Intelligent Street Light Concept (2008, October 17) retrieved 23 April 2024 from <https://phys.org/news/2008-10-philips-blossom-intelligent-street-concept.html>

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