



Case Study Srinakarin Dam

Location | Kanchanaburi, Thailand
Philips Lighting | GreenVision



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APR / September 2012

PHILIPS



“EGAT achieved great results from the LED roadway project at Srinakarin Dam, both in financial and non-financial aspects. Our stakeholders are very happy with the results we’ve generated. EGAT benefited immensely from working closely with the Philips team.”

Rangsan Athamanolap
Assistant Governor for Corporate Social Responsibility
EGAT



Reliable Philips LED road solutions provide major power savings for Thailand’s hydro-electric power plant



Fast facts

Client
Electricity Generating Authority of Thailand (EGAT)

Project
Srinakarin Dam

Location
Kanchanaburi, Thailand

Project manager
Monnarit Tharapongsawas,
Philips Lighting

Philips solution
GreenVision

Background

Electricity Generating Authority of Thailand (EGAT) presently owns and operates 11 power plants and 14 power-generating dams across the country. Combined capacity of these power plants and dams provides almost 50% of Thailand’s total electricity generation. Among the power-generating dams EGAT currently operates is the Srinakarin Dam – named after the country’s Princess Mother – which has an impressive hydro-electric power plant that sits on the River Kwai Yai in the northeast part of Kanchanaburi, Thailand’s third-largest province.

The challenges

EGAT has set its sights on purveying cost-effective solutions to mitigate the use of excessive energy within its power plants and dams. Approximately, there are 10,000 pieces of conventional road luminaires installed all over the dam. EGAT believes that in order to meet its goal of achieving energy savings of not less than 7.4 million units a year (or 4,000 tons of reduced carbon dioxide emission), it has to adopt energy-efficient lighting solutions such as LED road lights.

On top of practicing energy-saving solutions within its organization, EGAT also eyes setting an inspiring example among other organizations through the use of sustainable lighting, which helps greatly lower power consumption all over the country.

The solution

To ensure that its vision to adopt sustainable lighting is realized, EGAT brought in Philips to meet its requirements for energy-efficient lighting. After surveying the location, the Philips Lighting team suggested the use of GreenVision LED solutions. Philips provided 107 units of GreenVision 55W for the renovation of the lighting system in Srinakarin Dam.

GreenVision is a LED-based road-lighting solution that delivers reliable performance and significant energy savings. It offers a variety of sizes to suit different applications, and has three optics for different road width and spacing configurations. Its attractive design adds a touch of style, while its modular concept allows easy upgrading of the LEDs. GreenVision also provides a choice of high system efficacy levels to meet different energy-saving targets.

“GreenVision is the frontline lighting innovation for roads, delivering significant energy savings and future-proof features. In addition, GreenVision’s related quality evidences are very solid and reliably prove its quality – safety, performance and EMC,” explains Monnarit Tharapongsawas, Project Manager, Philips Lighting.

Benefits

Philips’s recommended solutions allowed EGAT to reduce energy consumption within Srinakarin Dam, achieving up to 80% energy savings. The LED lighting solutions also improved the quality of light, creating better uniformity and visibility, and more importantly, safely guiding those who walk along the roads over the dam.

In recognition of its energy-saving efforts, EGAT received commendable acknowledgment from Thailand’s Minister of Energy and the public as well for being an innovative leader in promoting LED lighting solutions.

With the laudable results it generated from the Srinakarin Dam project, EGAT intends to implement the same LED energy-saving lighting solutions from Philips on its other power plants and dams, eyeing completion of the project by 2013.