MAN STEALS TO BUY ALCOHOL

NATION P.3

# Green hue to capital's streetlights

## ABU DHABI MUNICIPALITY TO RETROFIT EXISTING LAMPS WITH POWER-SAVING LED FIXTURES

By Derek Baldwin
*Chief Reporter*

**Abu Dhabi** The Municipality of Abu Dhabi is replacing 600,000 streetlights with new, low-energy Light Emitting Diode (LED) fixtures in a move that may save up to Dh500 million in energy costs, *Gulf News* has learnt.

As part of the newly approved Abu Dhabi Sustainability Public Lighting Strategy, work crews are retrofitting old high-pressure sodium lamps atop existing light standards with new LED fixtures.

The conversion across the entire emirate should take up to six years.

Led by Eng. Abdullah Al Shamsi, acting executive director of Infrastructure and Municipal Assets sector with the municipality, the new LED lighting project is expected to slash carbon dioxide emissions by more than 80 per cent.

Martin Valentine, municipality staff lighting expert, said full details of the sweeping lighting facelift will be officially rolled out next week at the World Future Energy Summit in Abu Dhabi from January 16-19.

Supplied picture

**Eco-friendly utilities**

*Newly installed Light Emitting Diode (LED) fixtures on Al Salam Street in Abu Dhabi (in the foreground) provide better visibility and use 40 per cent less energy than traditional high-pressure sodium streetlights shown emitting a more yellowish hue in the background. More than 600,000 streetlights will be retrofitted over the next six years in Abu Dhabi saving up to Dh500 million over 20 years.*

### Energy savings

"Over 20 years, we're talking about a potential savings of between Dh300 and Dh500 million," Valentine told *Gulf News* in an interview yesterday. "LED lighting is about 40 per cent cheaper than using current technology standards over the next 20 years."

The ecology-saving lighting has already been incorporated into high-profile projects in Abu Dhabi such as the Salam Street project and across the illuminated outer shell of Yas Hotel.

Valentine said untold millions more will be saved with additional replacement of old lighting fixtures in Abu Dhabi's public and commercial realms such as parks, squares and architectural monuments throughout the city.

Valentine said the implementation of LED lighting as a standard could lead to a national lighting code for others across the UAE to follow.

### Field trial in Al Ain

Dr Riad Saraiji, associate Professor of Architectural Engineering, UAE University, is currently conducting a six-month field trial in Al Ain comparing new LED fixtures to sodium as well as metal halide street lights.

In an interview with *Gulf News* yesterday, Saraiji said that new LED fixtures' lifespan is more than twice that of traditional sodium lamps.

Once installed, new LED fixtures are good for up to 50,000 hours of operation as compared to the 20,000 hours of sodium lamps which means the municipality will spend far less time dispatching staff and consuming fossil fuels to maintain the roads lighting network.

"It's good for the environment because it saves energy, maintenance and there is an absence of mercury [in the LED fixtures]," Saraiji said.

Some tests done at the university have already determined that "good quality LED and heat sync should be able to withstand the climate. My studies have all confirmed they will save energy."

Pieter Zijlmans, general manager of Dialight Middle East, said his firm has completed a long list of commercial LED lighting conversions in the UAE that will drastically cut monthly electrical bills for clients who made the switch.

Zijlmans told *Gulf News* that Dialight retrofitted a client's 50,000 square-metre warehouse in Jebel Ali and replaced 1,200 lights with LED fixtures. "Their yearly bill is about Dh2 million," Zijlmans said, "and now they will only have an electricity bill of Dh500,000."

Amid rising energy costs in the UAE, Zijlmans said demand is growing for LED lighting because of the substantial long-term savings. He noted that Dialight has recently secured five separate projects worth Dh2.57 million to install the low-energy lighting in oil-and-gas facilities, food storage and industrial warehousing.