

# BRIGHT SPARKS



THE SUSTAINABLE PUBLIC LIGHTING BULLETIN >>>

VOLUME 2, ISSUE 3, MARCH 2008

*In this issue:*

- > **Victorian Sustainable Public Lighting Action Group**
- > **Strategic RoadMap**
- > **Victorian News**
- > **Technical Update: Compact Fluorescents**

>>> *From the Editor*

Local governments across Australia have recognised the major contribution of public lighting to their greenhouse gas emissions, and the major role that installing efficient public lighting can make to reduce those emissions.

This issue of Bright Sparks Bulletin focuses on projects and actions being undertaken in Victoria by Regional Alliances, local Councils and Victorian State Government Departments.

I'm keen to include news of other projects and initiatives in future issues, so email me with details.

*Judy Bush*

*Coordinator Northern Alliance for Greenhouse Action*

[judy@mefl.com.au](mailto:judy@mefl.com.au)

## **Victorian Sustainable Public Lighting Action Group**

The Victorian Sustainable Public Lighting Action Group (VSPLAG), formed in mid 2006 to facilitate installation of energy efficient street lighting. VSPLAG brings together the Victorian Regional Alliances, their member councils, Municipal Association of Victoria (MAV), Sustainability Victoria, Essential Services Commission and the Distribution Businesses.

VSPLAG consists of 2 groups: the Pricing Group and the Technical Group. The Technical Group has been meeting throughout 2007 to progress technical and design issues with the 2 technologies under consideration: T5s and 42W CFL. As part of this process, Distribution Businesses have also been meeting with lighting manufacturers to work through design and maintenance issues.

The Technical Group is waiting for a production version of the T5 lamp holder (due imminently!) before final technical approval can be given. Following this, the VSPLAG Pricing Group will meet to table draft Operation, Maintenance and Repair (OMR) charge and bulk changeover charges. It has been agreed that an Essential Services Commission review will then be initiated; this review may take up to 9 months.

To add your name to the Bright Sparks Mailing List, forward your contact details to [publiclighting-anz@iclei.org](mailto:publiclighting-anz@iclei.org)

## >> **Strategic RoadMap Northern Alliance for Greenhouse Action**

Efforts to improve sustainability of streetlighting have to date focused on technologies; design solutions; changes to operation and maintenance, and purchase of GreenPower.

A *Strategic Roadmap* has been developed by NAGA to identify critical strategic needs:

- > consolidation of technical data, including final reports on demonstration trials;
- > costing/finance models;
- > strategies for fostering collaboration and involvement of distribution businesses, State Government agencies, and Councils;
- > key milestones, including timing, relationships and dependencies.

A risk management approach was used to identify major obstacles to sustainable public lighting provision and develop responses. As part of this process, the key stakeholders and their respective roles were identified, and risks were defined from their perspectives. Potential response measures were proposed:

- > **Financial:**
  - > Current cost formula clarified, tested and alternatives proposed;
  - > State-wide Business Case developed, including life-cycle costing
- > **Administrative:**
  - > Process for the technical approval for new technologies agreed by all parties
  - > Product range defined and overall costs (including O&M) agreed
- > **Strategic:**
  - > Stakeholder agreement regarding priorities and actions
  - > National co-ordination on action
- > **Technical:**
  - > Performance parameters clarified and agreed, applied to currently available SPL products
  - > Capacity building program underway

The **key activities** include:

- > The Victorian Sustainable Public Lighting Action Group (VSPLAG)
- > The development of a Victorian SPL Business Case
- > Technology review
- > MOUs between key stakeholders
- > Agreement with Federal Government with regard to roles and responsibilities

The Strategic Roadmap proposed that these measures are undertaken within a strategic framework that would be a formalised partnership between the Victorian distribution businesses, the State Government and local governments. DSE's Victorian Local Sustainability Accord Team considers the establishment of a high level group to be an appropriate vehicle to drive these actions and is currently discussing this option with the Victorian Government.

## >> **Lighting the Way in Western Port – Accelerating Efficient Public Lighting Western Port Greenhouse Alliance**

In 2006, six Western Port Councils, supported by Western Port Greenhouse Alliance prepared Sustainable Public Lighting Action Plans:

- > Key challenges to / opportunities for / and drivers of sustainable public lighting;
- > Internal and external barriers to implementation of sustainable lighting;
- > Solutions for overcoming these barriers;
- > Areas where better management of public lighting assets/stock is needed; and
- > Inefficiencies in councils' public lighting provision to their communities.

In 2007, these councils commenced the development of Sustainable Public Lighting Business Plans. This project is partly funded by the Department of the Environment, Water, Heritage and the Arts, under the Accelerated Action Grant program.

With the assistance of Ironbark Sustainability, the project is examining the environmental and financial implications of replacing existing lighting stock with efficient lights at the next available bulk changeover. As a result of the project and consultation with the distributors, participating councils will develop a detailed plan to finance and roll out the new lights over the next few years.

The project is poised to accelerate the environmental and financial benefits by embracing more efficient streetlights and enabling local governments to show leadership in an active climate change response.

For more information contact Daniel Pleiter, WAGA Project Officer, [dpleiter@casey.vic.gov.au](mailto:dpleiter@casey.vic.gov.au)

### >> **Walk the Talk Darebin, Banyule and Moreland City Councils**

The Cities of Darebin, Banyule and Moreland are conducting the *Walking the Talk with Sustainable Public Lighting* project. This project is partly funded by the Department of the Environment, Water, Heritage and the Arts, under the Australian Government's Accelerated Action Grant program. The project will be completed by May 08.

The project will enable the participating Councils to identify and retrofit inefficient metered public lighting (non-streetlighting) with more efficient options. The results and experiences will be written up as guidelines to benefit other Victorian Councils.

Energy efficient replacement will include:

- > 80W Mercury Vapour lights replaced with T5 Pierlite Greenstreets
- > potential use of LEDs
- > Active reactors.

More information: Stuart Nesbitt, Climate Change Officer, Darebin City Council  
[stuart.nesbitt@darebin.vic.gov.au](mailto:stuart.nesbitt@darebin.vic.gov.au)

### >> **Accord I Public Lighting Action Program Northern Alliance for Greenhouse Action**

Preparation of NAGA Councils' Sustainable Public Lighting Action Plans (SPLAP) and a NAGA Regional SPLAP has been completed; capacity building within Councils, and input to Victorian Sustainable Public Lighting Action Group is continuing. Upcoming milestones:

- Decision on technical approval of new lights.
- Draft Guidelines for new Developments
- Draft regional finance model - Group 1

More information: Paul Brown, Ironbark Sustainability, [ironbarksustainability@dodo.com.au](mailto:ironbarksustainability@dodo.com.au)

### >> **Accord II Public Lighting Stage 2 NAGA**

Testing of PE (photo-electric) cells' longevity and temperature sensitivity (particularly for summer months) is underway at Banyule City Council's test rig.

Preparation of the Statewide Business Case for lighting changeover will commence in February, using a similar model to that used by WPGA.

More information: Judy Bush [judy@mefl.com.au](mailto:judy@mefl.com.au)

>> **Municipal Association of Victoria** has urged the Victorian Government to subsidise installation of sustainable public lighting: <http://www.abc.net.au/news/stories/2008/01/25/2146811.htm>

>> **City of Whitehorse** is implementing an Urban Design project addressing the revitalisation of some Box Hill laneways, illuminating a building facade, walls and lanes with artistic lighting. The incorporation of energy efficient lighting into the design is being investigated. More information: Alicia Groves [alicia.groves@whitehorse.vic.gov.au](mailto:alicia.groves@whitehorse.vic.gov.au)

>> **Greater Bendigo City Council** has met with Dolphin Lighting, a supplier of LED streetlights, to investigate conducting trials of the lights shortly. For more information: Brett Martini [b.martini@bendigo.vic.gov.au](mailto:b.martini@bendigo.vic.gov.au)

>> **Alinta/United Energy** held a Sustainable Public Lighting Roundtable discussion in October 07 with representatives from Victorian Councils to assess Councils' levels of interest in installation of sustainable public lighting, and to discuss changeover strategies, including bulk changeover and negotiation of OMRs. For more information, contact Paul Johnson [Paul.Johnson@alinta.net.au](mailto:Paul.Johnson@alinta.net.au)

>> **Martha Cove, Mornington Peninsula.** Developers are hoping to install Toorak Alpha 42W compact fluorescent luminaires on internal roads at Martha Cove, a new development at Safety Beach, Victoria. The lights would draw around half the power of the standard 80W Mercury Vapour lamps and produce a similar light spread. It is estimated that this would save over 240 tonnes of greenhouse gases over a 20 year period per every 100 streetlights. <https://www.iclei.org/index.php?id=6668>

>> **Victorian cost sharing agreement:** According to the Municipal Association of Victoria, new legislation may cut Victorian local government's street lighting costs by about \$4 million annually. <http://www.iclei.org/index.php?id=7267>

### >> **PE Cell testing NAGA**

NAGA is undertaking ongoing testing of the accuracy of several different types of PE cells, also at Banyule City Council's test rig. More information: Judy Bush [judy@mefl.com.au](mailto:judy@mefl.com.au)

## Technical Update – Compact Fluorescents

Trials of energy efficient streetlighting have mainly focused on three different technologies:

- > Pierlite Greenstreet 2 x 14 W T5 (linear fluorescent)
- > Sylvania Suburban 42 W (compact fluorescent)
- > Sylvania Urban 50 W (high pressure sodium discharge lamp)

Detailed information on these technologies and results of field trials is available at the *National Sustainable Lighting Toolbox* website <http://www.iclei.org/index.php?id=6499>.

In this issue we highlight the 42W compact fluorescent technology, with information provided by the manufacturer; in future issues we will feature other efficient technologies.

### The Suburban Eco:



#### Features:

- > Electronic ballast operates energy efficient 26w, 32w & 42w compact fluorescent lamps
- > Universal twist lock lamp holder
- > Lamp support bracket
- > Reflectors optimised for street lighting
- > Three discreet weatherproof compartments
- > Replaceable control gear cassette
- > Aeroscreen option when full cut off required

#### Benefits:

- > Assists in minimising greenhouse gas emissions and energy costs compared to traditional Mercury Vapour street lighting
- > Precise optical performance with a rectangular type distribution
- > Optical system reduces glare & spill light
- > Tool free replacement of lamp & gear
- > Twist lock lamp holder & lamp support bracket ensures security even in the most arduous environments
- > Low mercury content

### Lamps:

- > Amalgam technology ensures consistent colour & high output throughout life
- > Average rated life is 20,000 hours (based on 12 hour switching cycle)
- > Excellent Lumen maintenance

### Decorative Lantern Options:

The range of Amalgam Compact fluorescent lamps are also suitable for use within Decorative type luminaires such as those displayed below.

- Features & benefits are as for the Suburban Eco.



*\*Bourke Hill range*



*\*Clip c/w cfl*

Sylvania Lighting Australasia is holding its **2008 Environmental Lighting Forum** at the Crown Promenade Hotel, Melbourne on 13/3/08. The Forum will include an informative discussion & presentation on latest trial data together with new innovations in product technology. Lunch will be provided. Numbers strictly limited. For more information contact David Hickey [davidhickey@sla.net.au](mailto:davidhickey@sla.net.au)