#### WHAT IT MEANS FOR AUSTRALIAN STREET LIGHTING

# **Background**

The *Minamata Convention on Mercury* (the Convention) is a global treaty to protect human health and the environment from the adverse effects of mercury through practical actions. The Convention acknowledges that mercury, while naturally occurring, is used or produced in many everyday objects and manufacturing processes and is released into the atmosphere, soil and water from a variety of sources. Even at low concentrations, mercury poses a risk of causing adverse effects to human health and the environment. Controlling releases of mercury from human activity is key to the Convention's obligations.

The Convention aims to protect human health and the environment by addressing releases of mercury through its lifecycle: mining, import and export; manufacture into products and associated emissions and releases; contaminated sites, waste management, and recovery and reuse.

The Convention came into force on 16 August 2017 and over 90 countries have so far ratified it.

### **Minamata Convention ratification**

Australia signed the Convention in October 2013 and is now considering ratifying the Convention and being bound by its requirements, with the Government consulting publicly on this in 2016 and 2017. Because becoming a full party would legally bind Australia to the Convention's obligations, the Government is currently finalising a Regulatory Impact Statement on the issue. A decision on whether Australia will ratify the Convention is anticipated in 2019.

### Mercury in lighting and implications of ratification for public lighting in Australia

Mercury is present in in a range of lighting including Compact Fluorescent Lamps (CFLs), linear fluorescent lamps and High Pressure Mercury Vapour (HPMV) lamps. Specifically, the **Minamata Convention calls for banning the import, export and manufacture of HPMV lamps by 2020**. Ratification of the Convention by Australia would therefore ban the import and manufacture of HPMV lamps here from **1 January 2021**. Ongoing use of existing lamp stocks already in-country would still be permitted. Research undertaken by the Institute of Public Works Engineering Australasia (IPWEA) estimates that up to 900,000 HPMV lamps are currently in use in Australia.

Global demand for HPMV lamps has significantly decreased as a result of countries ratifying the Convention: manufacturers in these countries are already switching to new lamp technologies. Australia does not manufacture HPMV lamps and some lamp importers are already reporting that sourcing these lamps is becoming challenging as a result of curtailed production overseas.

Reduced mercury levels for fluorescent lamps, including linear and CFLs, would also apply with ratification (as opposed to banning). The regulations (Greenhouse and Energy Minimum Standards Determinations) for CFL and linear lamps have already been amended to meet or set maximum levels lower than the Minamata levels. This came into effect in December 2017. The impact assessment of this change was low, as the majority of fluorescent products sold into the Australian market have mercury levels below the revised levels.

If Australia ratifies the Convention and bans the import of HPMV lamps, Distribution Network Service Providers, main road authorities and local government councils still relying on such lamps will need to amend their capital replacement practices, to manage the transition to newer lighting technologies.

To assist such planning, a *Model Business Case for LED and Smart Controls Upgrades* is being developed by the IPWEA, together with an accompanying financial model analysis tool.

In conjunction with the IPWEA *Model LED Public Lighting Specification* and *Model Public Lighting Controls Specification*, this will assist Australian public lighting providers to manage the transition and improve energy, environmental, economic and social outcomes.

# **Resources**

Minamata Convention: <a href="http://www.mercuryconvention.org/">http://www.mercuryconvention.org/</a>

Department of the Environment and Energy: <a href="http://www.environment.gov.au/protection/chemicals-management/mercury">http://www.environment.gov.au/protection/chemicals-management/mercury</a>

IPWEA Street Lighting and Smart Controls Program: <a href="http://www.slsc.org.au">http://www.slsc.org.au</a>