Australian HVAC&R is carbon-intense

According to the Cold Hard Facts 3 report published in 2018, Australian refrigeration and air conditioning was responsible for 13 per cent of total national CO₂e emissions, with more than 56 million individual pieces of equipment consuming more than 61,000GWh of electricity – about 24 per cent of all electricity used nationally. When you consider heating and ventilation usage, even more energy was consumed.

The HVAC&R industry consists of about 20,000 businesses nationally, employing 298,000 people across Australia. In 2016 the industry had overall expenditure of more than $38 billion, which represented 2.3 per cent of national GDP. These are big numbers, illustrating how deeply embedded HVAC&R is within every aspect of the Australian economy. As Australia and developed world acts to control and contain carbon emissions, it is clear that low-emission HVAC&R has an essential role to play. Future HVAC&R must therefore be low-impact and low-carbon.

PRIME patheways to low-emission HVAC&R

<table>
<thead>
<tr>
<th>Professionalism</th>
<th>Skills and training, licensing, professional registration, tertiary education and an industry council or forum to consider strategy, policy, information sharing, and industry practices.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulation</td>
<td>Work with government policy makers and regulators on industry codes and Australian Standards, including validation, regulatory data, and enforcement.</td>
</tr>
<tr>
<td>Information</td>
<td>Educate and inform end users, disseminate low-emission skills and knowledge, technologies, design practices, convert data to information.</td>
</tr>
<tr>
<td>Measurement</td>
<td>Measure and benchmark HVAC&amp;R performance using system rating tools, industry metrics, building tuning, system optimisation, validated efficiency claims and technology-comparison tools.</td>
</tr>
<tr>
<td>Emission abatement</td>
<td>Product stewardship, new technologies, work practice accreditation, incentivising low-emission interventions, maintenance for energy efficiency, and refrigerant containment.</td>
</tr>
</tbody>
</table>
PRIME directives

PRIME aims to bridge the gaps between stakeholders in the industry in order to change thinking and practices.

Future HVAC&R will be:

- Integrated with buildings and end uses to safely provide health, comfort and productivity.
- Innovative, flexible, lean, measured and controlled for high performance and low impact.
- Intelligent, responsive, and able to self-diagnose so that systems are optimally efficient.
- Supported by a specialist, skilled and respected industry workforce, and by education and research institutions.
- Low cost, low carbon, and low environmental impact.
- An attractive and engaging industry offering rewarding career paths.

The PRIME vision

“To have an Australian HVAC&R industry that is highly skilled and professional, safe, cost-effective and environmentally effective.”

This vision means:

- A professional workforce underpinned by education, training and licensing regimes designed for a low-emission future.
- Low-emission technologies, practices and processes embedded into the industry.
- The right low-emission HVAC&R information, in the right hands, at the right time.
- An HVAC&R industry that takes genuine, practical steps toward reducing carbon emissions in buildings, industry, agriculture, and within the cold chain.

PRIME delivers

- A long-term low-emission strategy and focus for the HVAC&R industry.
- Access to trusted data and information.
- Benchmarks and tools so industry can measure emissions performance.
- Technical and non-technical low-emission guides and information for end-users, technical service providers and related professions.
- Engagement with education providers to ensure industry training needs are met, and that HVAC&R is appropriately addressed in other vocations.

For more information on PRIME go to www.airah.org.au/PRIME