



Hydrogen readiness

Compliance and enforcement priority 2022–23

Why is hydrogen readiness a priority?	<p>ESV will implement measures and undertake activities to ensure that we achieve decarbonisation of the Victorian gas network without compromise to public safety. ESV will undertake this work in support of the Victorian Government Climate Change Strategy and the National Hydrogen Strategy, and is currently proving compliance guidance to:</p> <ul style="list-style-type: none">• The Hyp Murray Valley project, which was awarded funding by the Australian Renewable Energy Agency (ARENA) in 2021, for gas blending at Australian Gas Networks (AGN) Murray Valley Hydrogen Park in Wodonga. The project will supply hydrogen to be blended into the gas distribution network at up to 10% by volume.• Emerging technologies such as the LAVO system, hydrogen fuel cells and catalytic hydrogen oxidisers. <p>Safety risks associated with decarbonisation of the Victorian gas network need to be understood, and guidance on mitigation of identified risks needs to be provided to the community.</p>
Who has compliance obligation?	<ul style="list-style-type: none">• Gas companies.• Pipeline licensees.• Australian manufacturers, importers, and retailers of gas appliances designed to operate with 100% hydrogen or hydrogen blended natural gas.• Licensed and registered gasfitters for the installation, commissioning and servicing of gas installations (includes appliances).
How does the hazard or non-compliance occur?	<ul style="list-style-type: none">• Inappropriate design, construction and operation of new dedicated 100% hydrogen pipelines.• Lack of gas quality control at the point of injection of hydrogen to form a 10% blend.• Existing transmission pipeline integrity not managed.• Distribution network integrity, capacity and gas quality not managed.• Workforce not appropriately trained and competent.• Existing end use appliances not compatible.• Certification of appliances using new technology not covered in the current standards.
What compliance activities are ESV involved in?	<p>As an emerging technology we will:</p> <ul style="list-style-type: none">• liaise with Australian Gas Industry Group (AGIG) and the Australian Hydrogen Council, through working groups to identify and mitigate risks across the supply chain• accept safety cases, safety management plans and construction safety management plans to legislative requirements.
What do we want to achieve?	<p>A suite of established compliance activities informed by our understanding of the impact that hydrogen can have on:</p> <ul style="list-style-type: none">• existing and new dedicated transmission pipelines• existing distribution networks• gas quality• end use appliances.
Who will ESV work with?	<ul style="list-style-type: none">• ME093 Hydrogen Technologies Standards Committee.• Gas Companies and Pipeline Licensees.• Department of Environment, Land, Water and Planning (DELWP).• Future Fuels Cooperative Research Centre.• GAMAA (Gas Appliance Manufacturers Association of Australia).• Certification bodies.• The Victorian community.