

Fact Sheet:

Household hydrogen: Hype clouds the economic reality

Hydrogen is being promoted enthusiastically as the green alternative to domestic gas. If we look beyond all the hype, the arguments for this alternative fuel quickly evaporate in the face of the economic and logistical realities.

Hydrogen cooktops are not available for home use in Australia

Gas appliances cannot safely be used for pure hydrogen Consumers would need to replace all their existing gas appliances to use 100% hydrogen This switch would need to be coordinated for all consumers at the same time the network switches to hydrogen, presenting a major logistical challenge

Most Australian households can't access hydrogen or biomethane in their homes

Several demonstration hydrogen projects have blended only 3% hydrogen into localised gas networks Industry research shows 100% hydrogen is not feasible for all homes until the late 2040s, and will cost billions Biomethane is expensive and too scarce to supply Australian households at scale



Hydrogen and biomethane do not make financial sense for households

Efficient electrical appliances are cheaper to run than fossil gas, biomethane and hydrogen appliances

For each year Australian households choose to buy efficient electric appliances instead of gas appliances, they would avoid \$1.2 billion in lifetime costs

Hydrogen and biomethane are more expensive than fossil gas, and multiple times more expensive than electricity Induction cooktops are the most efficient type of cooktop, while being better for our health and easier to clean

Gas networks know they are unlikely to switch to hydrogen

Victoria's networks are charging consumers more now to compensate for the risk of their networks becoming redundant as households electrify



The networks are not investing meaningful amounts to prepare their networks for hydrogen

Victorian gas distributors put their money on electrification rather than a hydrogen future





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