

The gas is greener

One of the key commitments in the [Energy White Paper](#) is that government will work in partnership with industry to evaluate hydrogen as an option for heating homes and workplaces and will develop plans for a possible pilot hydrogen town before the end of the 2020s.

The UK is not alone. Hydrogen is among President Biden's new energy plans for the US - a clean energy revolution that aims to create 10 million new jobs - and EU member states have agreed to rapidly upscale the market for hydrogen at the EU level. [Canada](#) and [Australia](#) are amongst other nations also developing a hydrogen strategy.

China - already the world's largest producer of hydrogen (but 'grey' hydrogen made from coal and gas rather than 'green' hydrogen from renewable sources) - is [joint venturing with Shell](#) to build hydrogen refuelling stations in Zhangjiakou City, which will host part of the 2022 Beijing Winter Olympics. In [a report](#) published in the Green Belt and Road Initiative Center, authors Mengdi Yue and Christoph Nedopil Wang noted that between 2017 and 2020, China had established 61 hydrogen refuelling stations, developed the first fuel cell-powered tram, and successfully tested a manned aircraft powered by hydrogen. The indications are that [China could become the global leader](#) in renewable hydrogen.

Figures from the [International Energy Agency](#) reveal that global low-carbon hydrogen production is expected to reach 1.45 million tonnes in 2023 (up from just 0.04 million tonnes in 2010) based on new hydrogen plants opening around the world. The cost of producing hydrogen power is falling at a dramatic rate, with figures from the US Department of Energy predicting a fall from \$6-1kg in 2015 to \$2-1kg by 2025.

This significant decline falls neatly within the timeframe of environmental benchmarks such as the Paris Climate Targets, and there is hope within the hydrogen industry that the energy source will be integral to meeting these goals.