

HYDROGEN COST COMPETITIVENESS

CLOSER THAN YOU MIGHT THINK



The COVID-19 crisis has become a defining moment for the global clean energy transition.

Political and business leaders are now deciding how to reboot economies and will invest heavily in essential sectors such as energy and transport. During this pivotal moment, we have an opportunity to rethink our current systems and make wise choices for the decades to come. Hydrogen is ready to enable a more resilient, clean energy system for the future. Experts show that cost - previously considered a key obstacle for hydrogen - will go down more significantly and quickly than expected.



Cost is projected to decrease by up to 50% for a wide range of applications, making hydrogen competitive with other low-carbon alternatives and, in some cases, even conventional options.



Hydrogen applications including hydrogen boilers, compact cars, and industry heating become **competitive compared to low-carbon alternatives**, as cost of production and distribution continues to fall.



Because of its versatility, a hydrogen production and distribution system at scale will unlock hydrogen's competitiveness in at least 22 applications, comprising **~15% of global energy consumption**.



Hydrogen will be competitive for **long-range vehicles such as trucks and taxi fleets**. Investments in scaling up infrastructure, such as fuelling stations, will provide long-term gains.

BY 2025

BY 2030

Scaling up the hydrogen value chain will be the biggest driver to unlock further cost reductions from 2030 and beyond.



Hydrogen production



Hydrogen transport and distribution



Hydrogen storage



Hydrogen applications



HOW DO WE GET THERE?



1. INVESTMENT

\$70 billion - less than 5% of annual global energy spend - from private and public sources will enable hydrogen to reach scale.



2. REGULATION AND INCENTIVES

18 countries have already developed detailed strategies for deploying hydrogen energy solutions. Increased collaboration can kickstart a productive hydrogen industry.



3. STIMULATE DEMAND & SUPPLY

If we strive towards critical tipping points, **costs will fall sharply** and scale up will increase. For example: moving from 20 to 80% utilisation in distribution and refuelling networks can slash distribution costs by up to 70%.

COVID-19 has forced the world to drastically change course and think beyond the status quo. For recovery efforts to provide long-term value, we need investable solutions that kickstart a cleaner, more resilient world.

The scale-up of hydrogen technologies is one way to pave the road towards this reality.

#HYDROGENNOW

READ MORE IN THE FULL REPORT, PATH TO HYDROGEN COMPETITIVENESS: A COST PERSPECTIVE

Hydrogen Council