

# HYDROGEN – SCALING UP THE NEXT BIG OPPORTUNITY IN CLEAN TECH

## WHAT INVESTORS NEED TO KNOW

Hydrogen  
Council

## HOW BIG IS THE OPPORTUNITY?



**OVER 5,000 NEW HYDROGEN REFUELLING STATIONS** have been announced for 2030 – many of them are industry-government collaborations. China alone plans to ramp up to 1,000 stations (supporting up to one million vehicles!) over the next decade.



**FUEL CELL ELECTRIC TRANSPORTATION** can be applied to land transport (cars, buses, trucks and trains), maritime and aviation. As a result, by 2050, Fuel cell cars alone could replace 20 million barrels of oil per day in transport.



**ANNUAL CO<sub>2</sub> EMISSIONS FROM FEEDSTOCK** could be reduced by as much as 440 million tons in 2050. If hydrogen production were to be largely decarbonized through technologies such as electrolysis.

## THE TIME TO ACT IS NOW

The industry has developed a detailed roadmap to show how to get to scale. Read it [here](#) and contact the Hydrogen Council today to discuss specific opportunities with the group and its members.

## WHAT COULD HYDROGEN DO FOR YOU?

AIM HIGH. BECAUSE THE HYDROGEN FUTURE IS HERE, AND IT IS READY TO SCALE UP.

## WHY HYDROGEN MATTERS?

- ✓ In the clean energy space, first there was solar, then wind. Now, there is hydrogen.
- ✓ Hydrogen is the Swiss army knife of energy solutions: it is multipurpose, with the ability to store, transform, and transport energy while producing zero CO<sub>2</sub> emissions.
- ✓ The potential is massive. By 2030, the market is expected to reach up to \$150 billion.
- ✓ The revolution is already underway. Public-private initiatives, joint ventures, supporting policies and risk-sharing instruments are creating an environment ripe for mass market.

## HOW TO ADDRESS CHALLENGES

*The sector has developed initiatives to help overcome remaining innovation barriers*



**CHICKEN AND EGG:** Investment in hydrogen deployment must take place before vital infrastructure can be created. But, in order to justify the investment, the market must demonstrate a stable desire for hydrogen applications. How to solve this dilemma? Work together across the value chain and scale gradually.



**VALLEY OF DEATH:** Price comes down as volumes go up. As a first step, the cost of the technology and its key components can be reduced through large pilot deployments. Key is to create sufficiently strong partnerships that can carry the technology through this critical phase.

## GET IN TOUCH!

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