

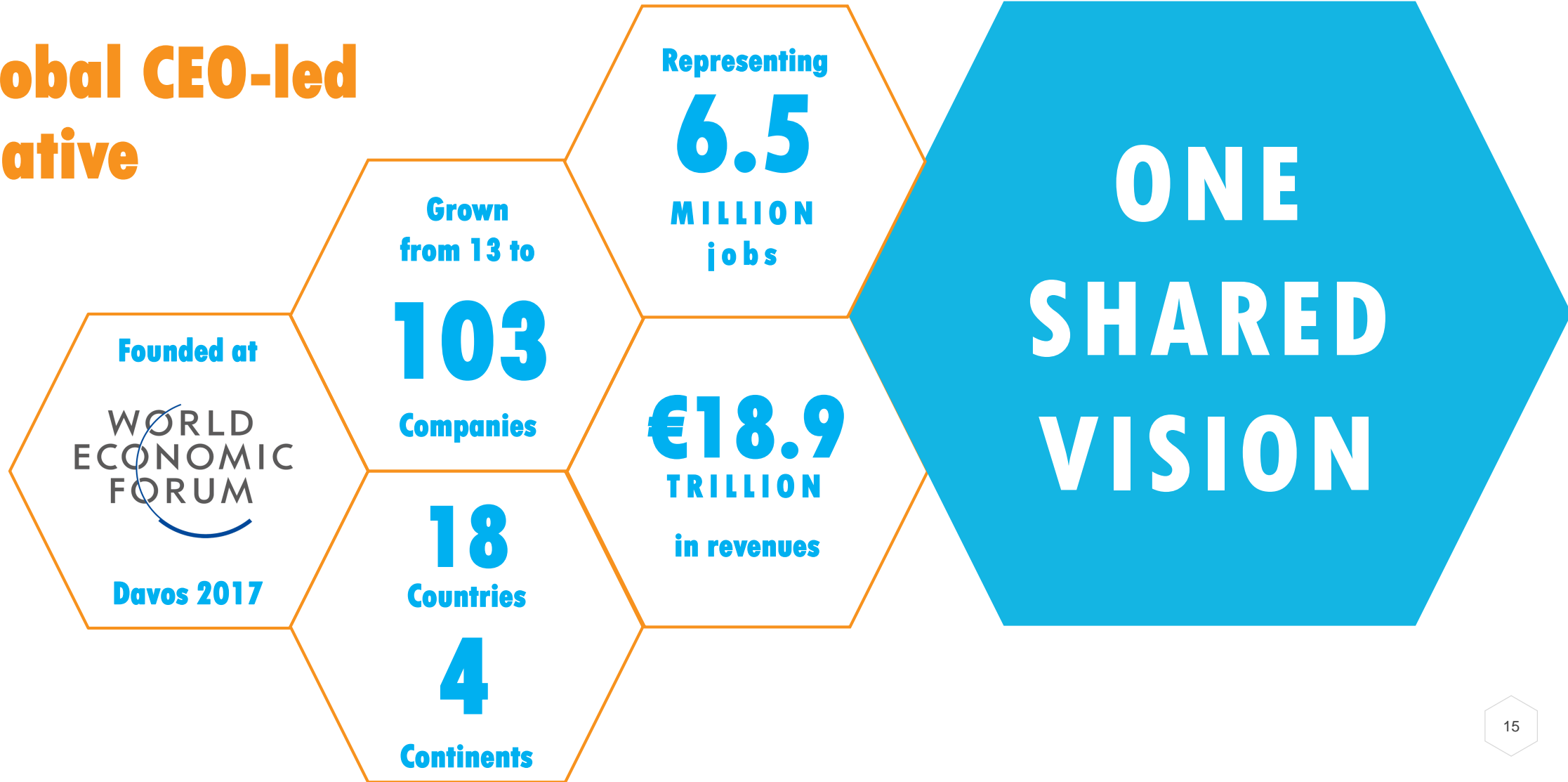
AN INTRODUCTION TO THE HYDROGEN COUNCIL

By Daryl Wilson, Executive Director

12 January 2021



A global CEO-led initiative



OUR OBJECTIVES



Unlock scale markets for hydrogen
by positioning the technologies
among key solutions for energy transition
and advocating for their uptake



Create significant business opportunities
along the value chain to ensure proper
industrial developments of key components
and comprehensive deployments



Accelerate massive investment
in the development and commercialization
of the hydrogen and fuel cell sectors



Encourage key stakeholders to back hydrogen
as part of the future energy mix with appropriate
policies and supporting schemes

Hydrogen has a key role to play in the energy transition



Sources:

[“Hydrogen, Scaling Up” report, 2017](#)

[“Path to Hydrogen Competitiveness” report, 2020](#)

Based on **real industry data**, the Council sees hydrogen as an enabler of the future energy system, growing its role over time and delivering tangible benefits:

By 2030

H₂ scales up to achieve competitiveness

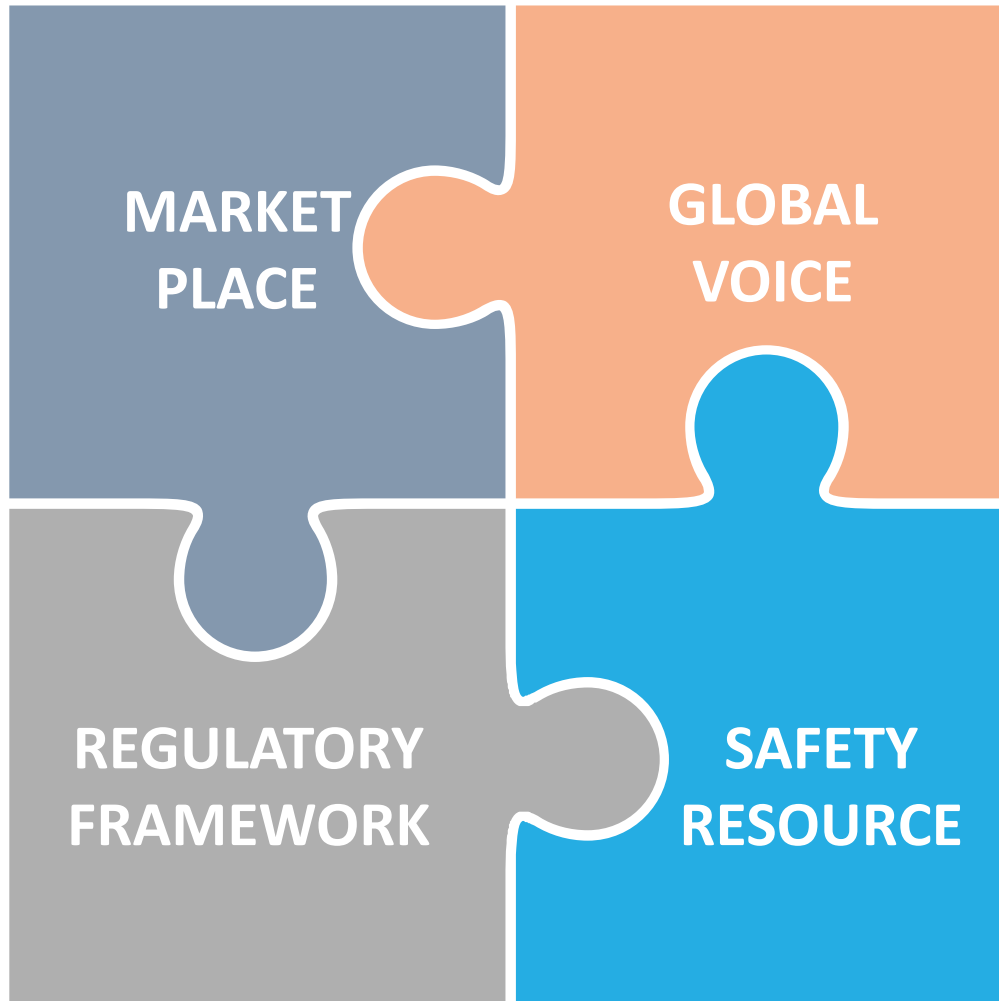
- ✓ Cost falls sharply, making hydrogen a competitive low-carbon option across 22 applications – equivalent to 15% of annual global energy demand

By 2050

H₂ reaches full potential

- ✓ 6 GT of CO₂ abatement annually
- ✓ 30 million jobs
- ✓ \$2.5 trillion market

OUR PRIORITIES



1. Bring together key stakeholders to enable investment & large scale projects

- Build a business marketplace
- Stimulate investment

2. Amplify the voice of hydrogen worldwide

- Understand hydrogen perception & challenges
- Address issues & leverage new/broader opportunities

3. Guide policymakers toward appropriate regulations

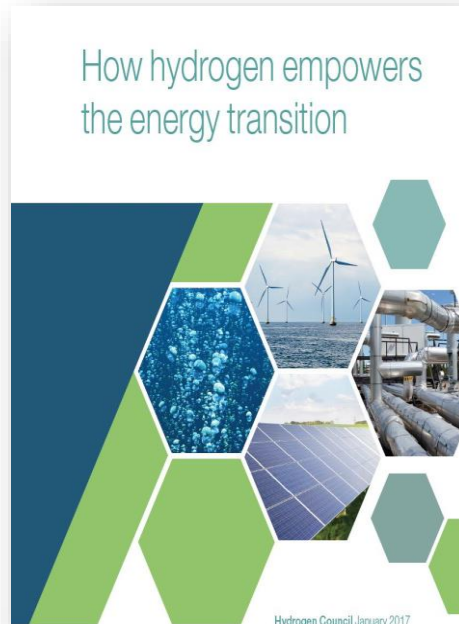
- Identify key policies & technical recommendations
- Influence through key organizations

4. Ensure transversal coverage of safety topics globally

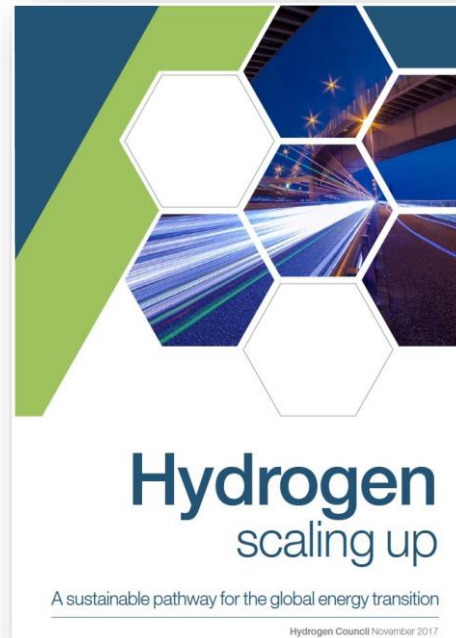
- Close safety/standards gaps
- Reputation management and crisis preparedness

MAKING THE CASE FOR HYDROGEN

The Council creates studies on the use, development and deployment of hydrogen across sectors and industries. These studies further our understanding of **how to make the hydrogen economy a reality through concrete data provided by Council members** and informed conversations with key stakeholders around the globe. All studies are available [here](#).



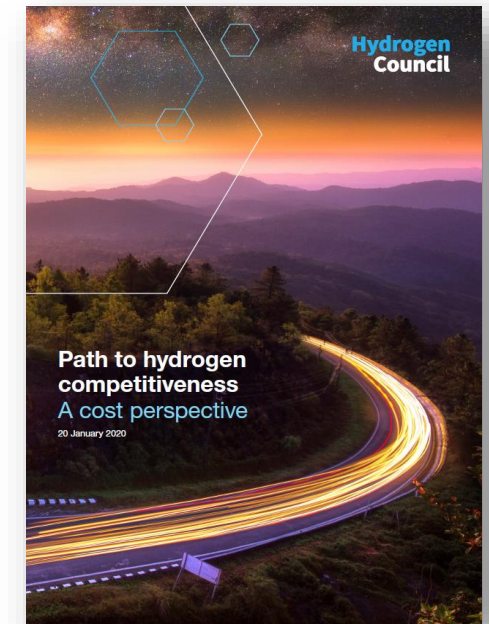
Explores the role of hydrogen in the energy transition and offers recommendations to help accelerate deployment | [LINK](#)



Discusses the feasibility of our 2050 hydrogen vision and proposes tangible steps to get there | [LINK](#)

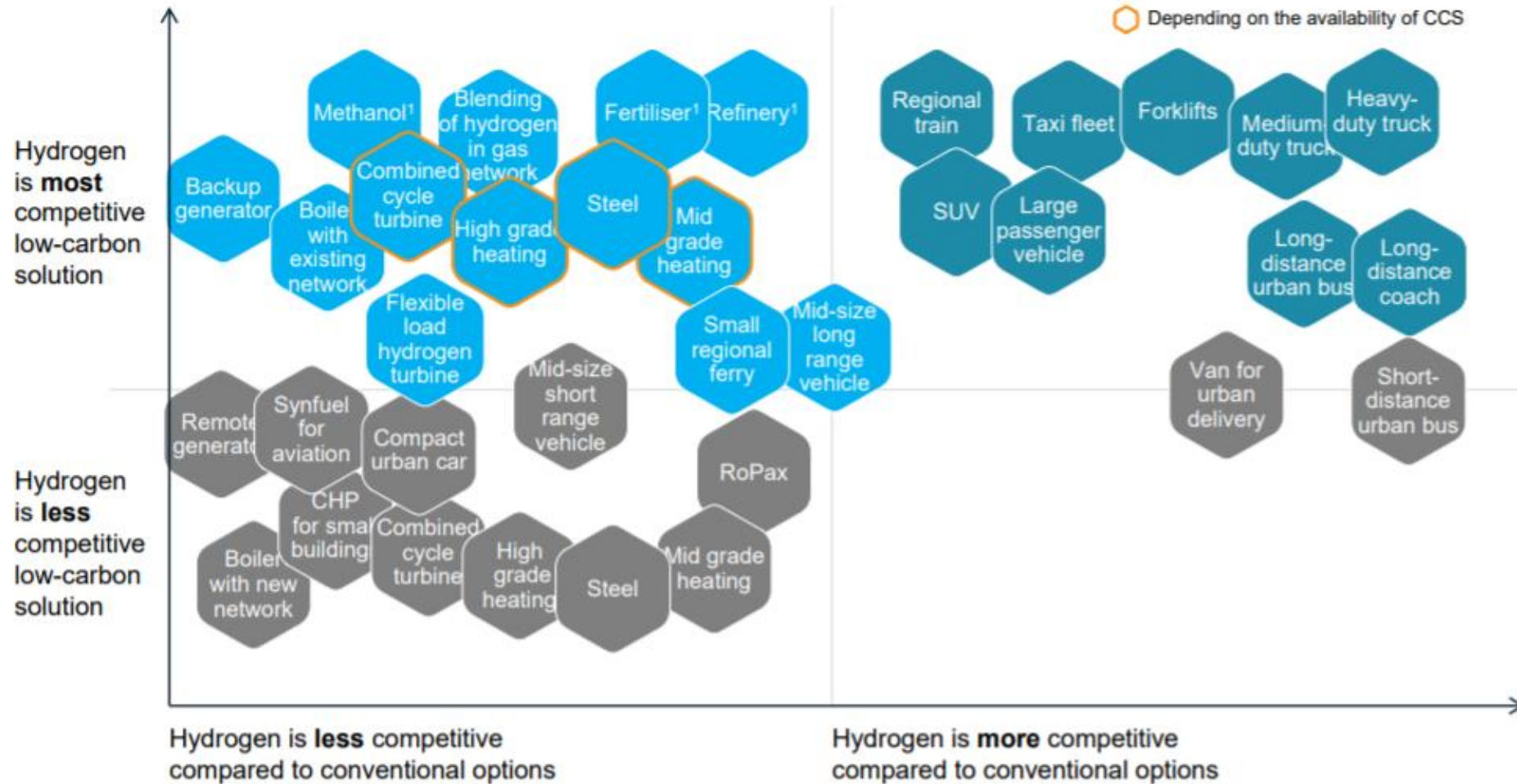


Considers how digitization and hydrogen could complement each other in the energy transition | [LINK](#)



Presents a cost trajectory for hydrogen to become cost competitive to other low carbon and conventional alternatives by 2030 | [LINK](#)

COMPETITIVNESS OF HYDROGEN APPLICATIONS



LEARNING RATES OF HYDROGEN APPLICATIONS

Learning rate

2020-30

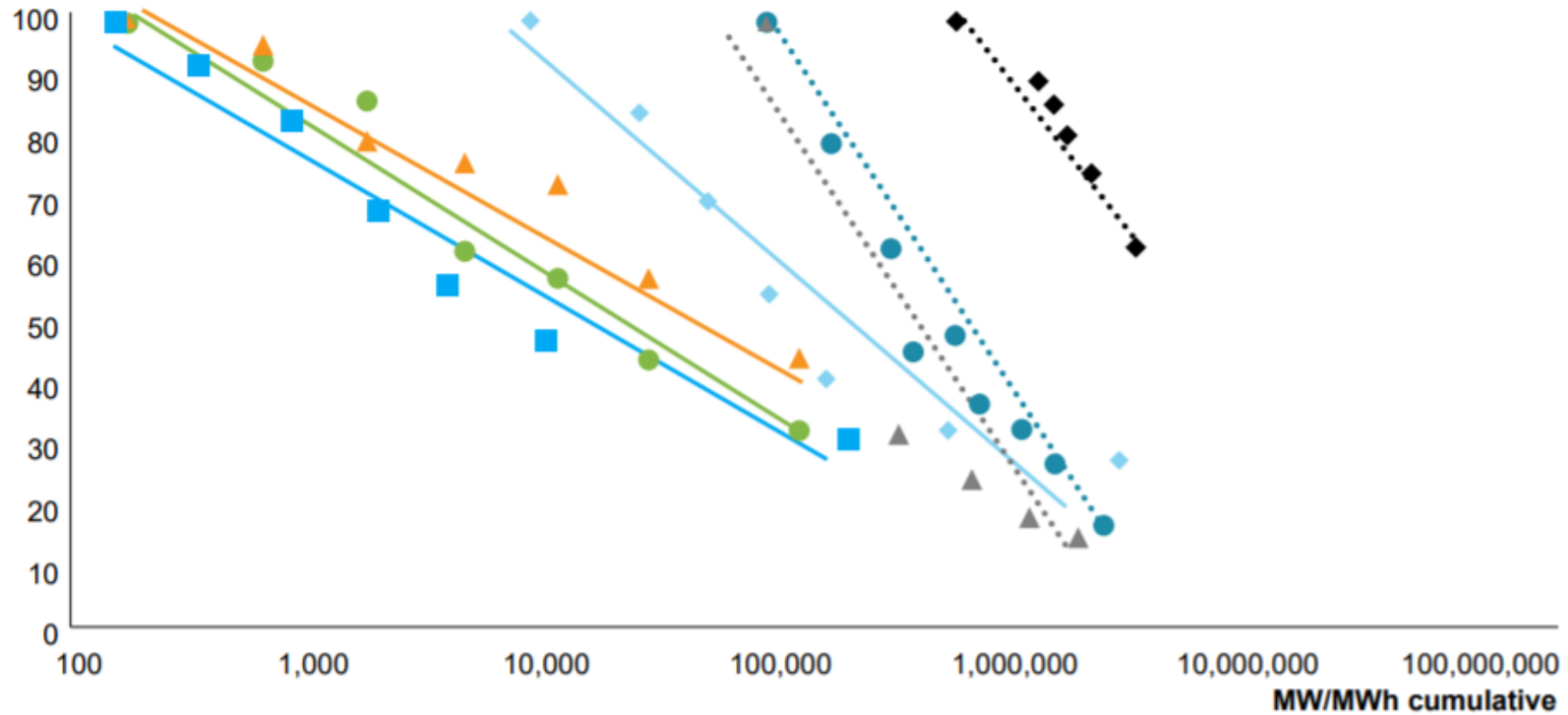
- 13% ● PEM electrolyzers
- 9% ▲ Alkaline electrolyzers

- 17% ◆ Fuel cell stack for passenger vehicles
- 11% ■ Fuel cell stack for commercial vehicles

Comparative technologies (2010-20)

- 35% ●● Solar
- 19% ◆● Wind onshore
- 39% ▲● Battery

Cost index



Thank you for your time!

www.hydrogencouncil.com

  @HydrogenCouncil
#HydrogenNow