



**HYDROGEN COUNCIL**  
- Recent Developments & Next Steps

30<sup>th</sup> IPHE Steering Committee Meeting  
South Africa, December 2018

# In this presentation:

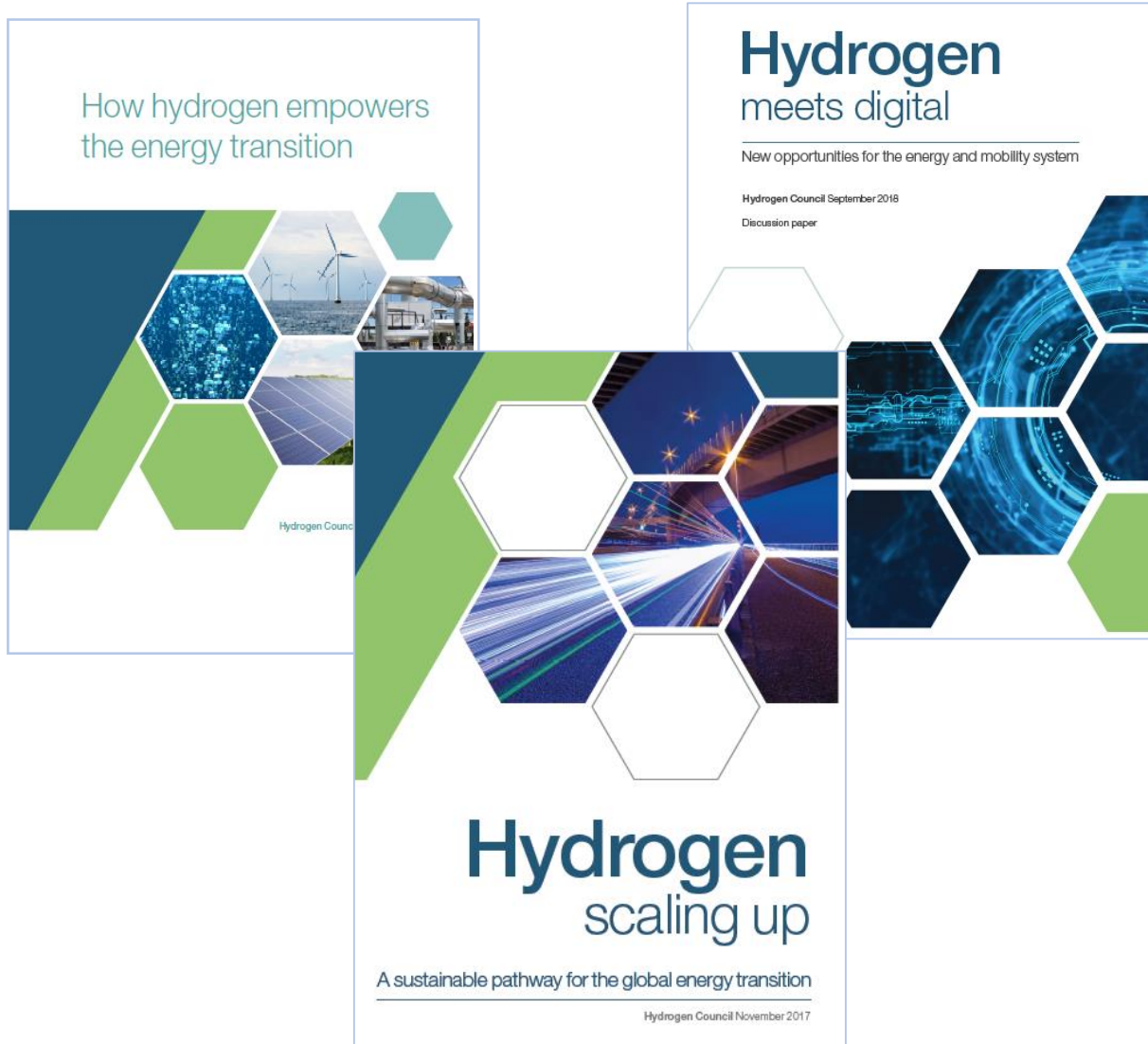
1. Today - Hydrogen Council results in 2018
2. What next – 2019 priorities
3. Ideas for collaboration with IPHE

# 1. Today - Hydrogen Council results in 2018

# MEMBERSHIP QUADRUPLED IN 18 MONTHS – CLEAR MOMENTUM



# DEMONSTRATED A JOINT VISION



SOURCE: Hydrogen Council; IEA ETP Hydrogen and Fuel Cells CBS; National Energy Outlook 2016

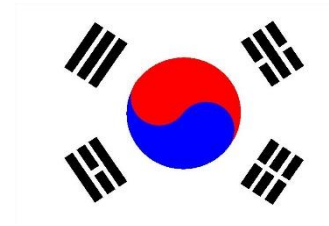
Delivered new **studies** to show the role of hydrogen technologies in the global energy transition and the benefits of hydrogen's scale deployment in a 2°C scenario.

# DELIVERED ADVOCACY RESULTS (1/2)

Launched significant collaborations & partnerships



Catalysed “scale up” studies across key markets



# DELIVERED ADVOCACY RESULTS (2/2)

## Shared vision in key fora & high level events



# RAISED HYDROGEN VOICE VIA MEDIA & SOCIAL MEDIA

FuelCellsWorks News Events Archives Contact

## Hydrogen Council

How hydrogen empowers the energy transition



### Hydrogen is firmly on the agenda of the Clean Energy Ministerial and Mission Innovation as Hydrogen Council participates for the first time

Added by FuelCellsWorks, May 28, 2018

Twitter LinkedIn GitHub

Malmö, Sweden -- The Hydrogen Council today joined the 9th Clean Energy Ministerial (CEM) co-hosted by Denmark and Sweden – the first such recognition for the group and the technology at multilateral government level. Council Co-Chair Dr Woong-chul Yang and Initiative Co-Secretary, Pierre-Etienne Franc attended roundtables hosted by both Mission Innovation[i] and CEM respectively, alongside high-level actors from international governments, organisations and businesses.

"We are witnessing a crucial moment for hydrogen," said Dr Woong-chul Yang, Hydrogen Council Co-Chairman and Hyundai Motor Company Vice Chairman. "Governments are recognizing the key role hydrogen can play in decarbonization and investors the value it can bring worldwide. The critical mass of support needed to drive scale deployment of the value chain is becoming a reality. On our side, industry is committed to growing and deploying hydrogen solutions while continuing to innovate the technology."

Hydrogen, Scaling Up!

## THE HYDROGEN FUTURE IS HERE



### SCALE UP

Because the hydrogen future is here, and it's ready to scale up.

MORE VIDEOS

Hydrogen Council @HydrogenCouncil · Mar 13

11 New members join the #HydrogenCouncil "This is corporate leadership at scale – multinationals are walking the talk when it comes to building better solutions to address the Paris Agreement climate goals" #energy #hydrogen



"We are delighted to welcome such impressive growth and the strong CEO-level commitment to hydrogen this demonstrates. This is corporate leadership at scale – multinationals are walking the talk when it comes to building better solutions to address the Paris Agreement climate goals and hydrogen has become an integral part of our strategies."

**DR WOONG-CHUL YANG**  
Co-Chair of the Hydrogen Council and Vice Chairman of Hyundai Motor Company.

Hydrogen Council

1 20 30

Hydrogen Council  
911 followers  
6mo

Some of our members have begun an "all-Japan" effort to promote #hydrogen as a next-generation energy source for vehicles. Cc [Air Liquide](#), [Iwatani Corporation](#), [Toyota Motor Corporation](#)...see more



Japan venture aims to build 80 hydrogen fuelling stations by 2022  
reuters.com

26 Likes

## Hydrogen Council

Home News Studies Resources Events Videos FAQ

### HYDROGEN COUNCIL MAKES CHINESE DEBUT AT HIGH-PROFILE FORUM IN BEIJING

Press Release

Read more

#### THE HYDROGEN COUNCIL – AN INTRODUCTION

The Hydrogen Council is a global initiative of leading energy, transport and industry companies with a united vision and long-term ambition for hydrogen to foster the energy transition.

Launched at the World Economic Forum 2017, in Davos, the growing coalition of CEOs have the ambition to:

- Accelerate their significant investment in the development and commercialization of the hydrogen and fuel cell sectors.
- Encourage key stakeholders increase their backing of hydrogen as part of the future energy mix with appropriate policies and supporting schemes.

As a group of leading global businesses, the Hydrogen Council invites policy-makers, investors and civil society stakeholders to acknowledge the contribution and potential of hydrogen as a key element of the energy transition. Together, we seek to define and implement a

#### – THE LATEST –

AUGUST 16, 2018  
60 Seconds With...Faurecia

JULY 24TH, 2018  
3rd Annual CEO Event



# CONVENED HIGH LEVEL DIALOGUE

CLIMATE  
WEEK  
NYC



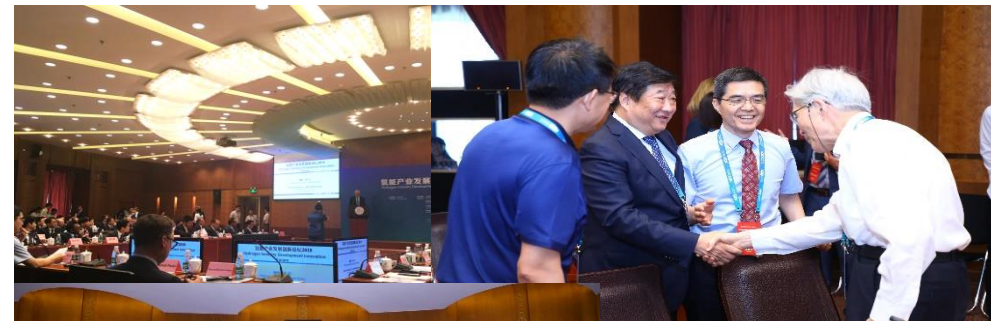
COP23 Climate Conference  
Bonn, November 2017



New York Climate Week  
NYC, September 2017



Hydrogen Council  
27th Annual CEO Event, COP23, Bonn, Germany  
Internal CEO meeting



Beijing, China,  
June 2018



COP23 | FIJI  
UN CLIMATE CHANGE CONFERENCE  
BONN 2017-18

# ANNOUNCED AMBITIOUS COMMITMENTS @ GLOBAL CLIMATE ACTION SUMMIT 2018



We call on governments to build a global alliance that will help us deliver on

**an ambitious goal of decarbonizing  
100% of hydrogen fuel used in  
transport by 2030.**

Transport may be our first target—but with the right level of support, we will see positive effects across many sectors.



**Hydrogen Council**



# 1. What next – 2019 priorities

# VISION & AMBITION

**2018**

Hydrogen part of key discussions and fora -> New markets tested

**2019**

“Hydrogen Package” in top markets -> Further deployment announced

**2020+**

New financing tools -> Massive deployments phase



A roadmap to competitiveness (scale & cost)

Policy tools (best practice)

Financing tools (best practice & innovative ideas)

Flagship projects ready to scaling collaboration

# PRIORITIES DEFINED BY CEOs FOR 2019

## 1. Show that Hydrogen Narrative is improving

- Strengthened messaging, especially on H2 distinct advantages/benefits
- Tangible results on cost/scale
  - Clear commitment on H2 pathways/timing

## 2. Put in place a strong “Global Alliance” with governments

- Dedicated regulations
  - Commitments
- Financing tools to enable massive deployments by 2020

### Supported by continued effort to grow and engage the ecosystem:

- **Expertise** (workshops, finance package, studies – e.g. cost-reduction)
- **Advocacy** (stakeholders & influencers, partnerships, associations)
- **Communication** (press office, speakers’ bureau, social media/digital)
- **Community building** (CEO engagement, vision alignment, B2B)

# GLOBAL ALLIANCE

- WHY WE NEED TO ACT NOW

## TODAY

- ✓ Hydrogen tech mature
- ✓ First flagship projects underway
- ✓ Financing tools emerging
- ✓ Best practice policy being identified
- ✓ Global industry united in Hydrogen Council

## Next decade 2020 - 2030

### Decisive shift to scale

Large flagships across segments/geographies

### \$300 bn investment need

Roadmaps ready JPN, KR, FR, EU + underway US, CN, AUS

## 2050

- ✓ Deep decarbonisation
- ✓ Energy transition
- ✓ Sustainable econ. growth

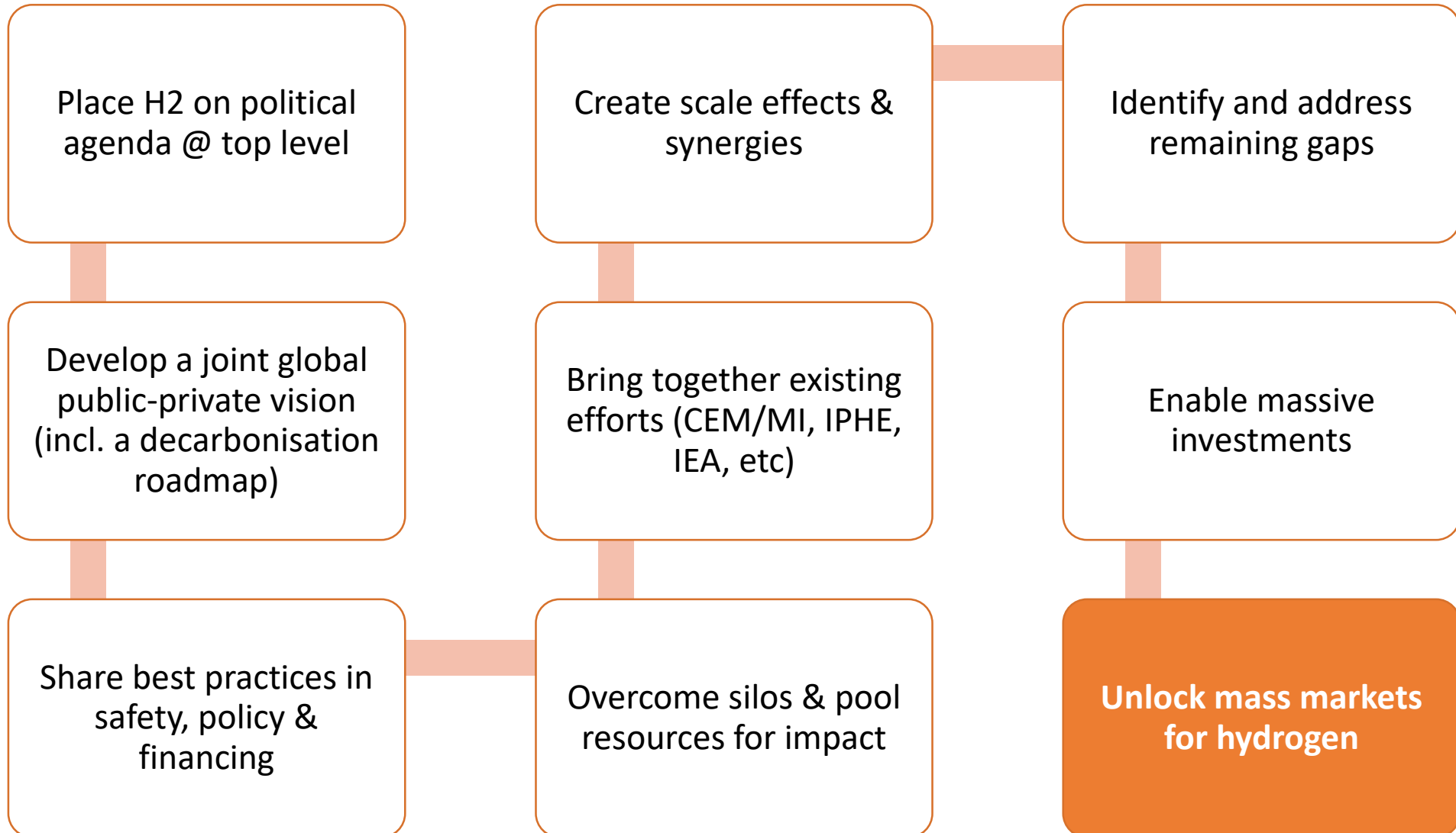
### H2 contribution:

- 18% energy demand
- 6gt annual CO2 abatement
- 30 million jobs
- \$2.5tr annual sales

-> global public-private partnership  
necessary to bridge the gap

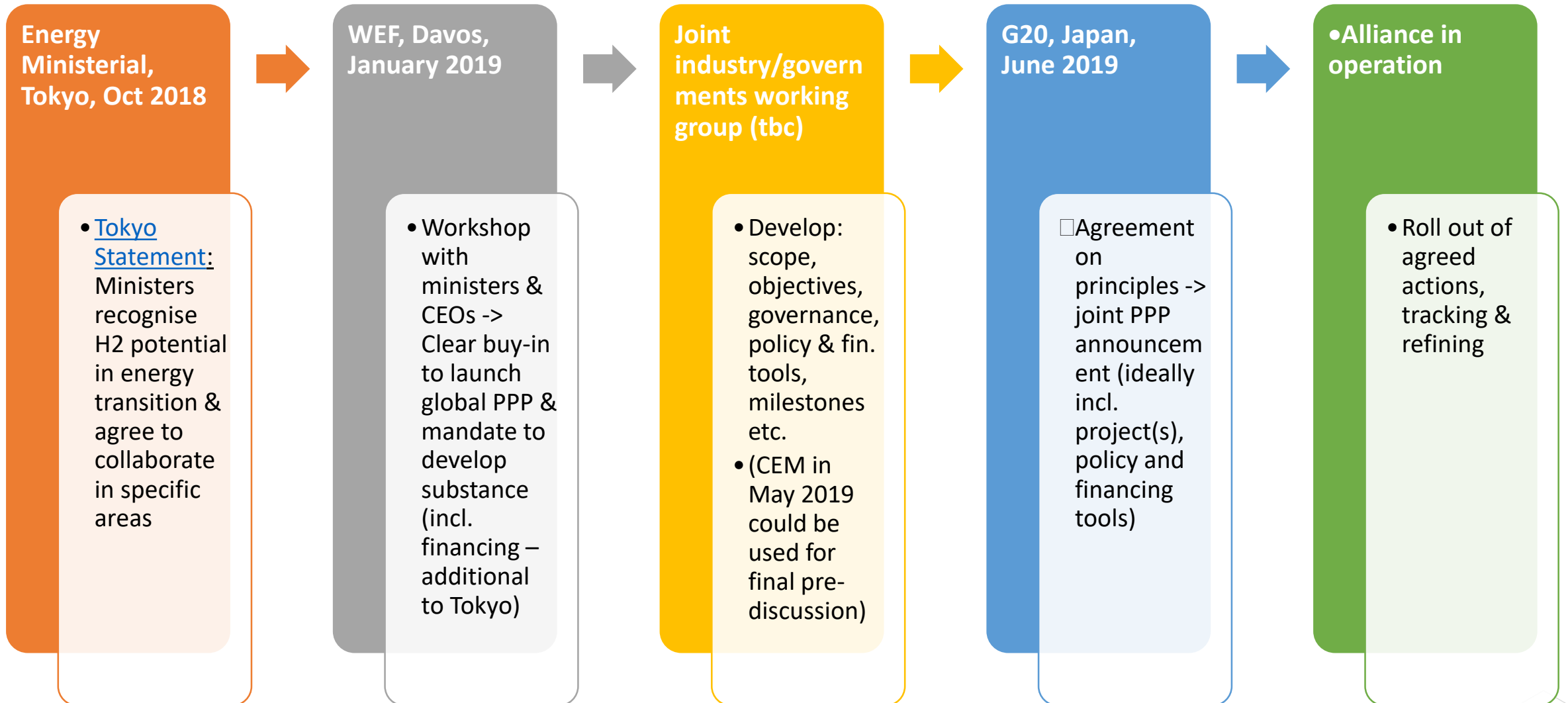
# GLOBAL ALLIANCE

- WHAT NEEDS TO BE DONE



# GLOBAL ALLIANCE

- HOW TO GET FROM IDEA TO REALITY





# 3. Ideas for collaboration with IPHE

# IMPLEMENTING TOKYO STATEMENT

## SAFETY

- New Council “project team” being set up
- Involvement in “Center for Hydrogen Safety” tbc

## POLICY & FINANCING TOOLS

- Council work on policy benchmarking & financial tools being finalised
- Results expected to be presented @ Davos

## REGULATIONS, CODES & STANDARDS

- Council aligned on basics (e.g. fuelling standards)
  - Further details to be developed to feed into IPHE discussions

## Next milestone: Private session between CEO & Ministers at World Economic Forum, Davos, 24 January 2019



Ministers confirmed to be in Davos invited via WEF (Toplink) and direct invitation letters co-signed by organisers WEF, IEA and Hydrogen Council.

**Thank you for checking your government is confirmed to be at the table  
for this important meeting!**

**THANK YOU!**



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[Hydrogen Council](https://www.linkedin.com/company/hydrogen-council)

[www.hydrogencouncil.com](http://www.hydrogencouncil.com)