



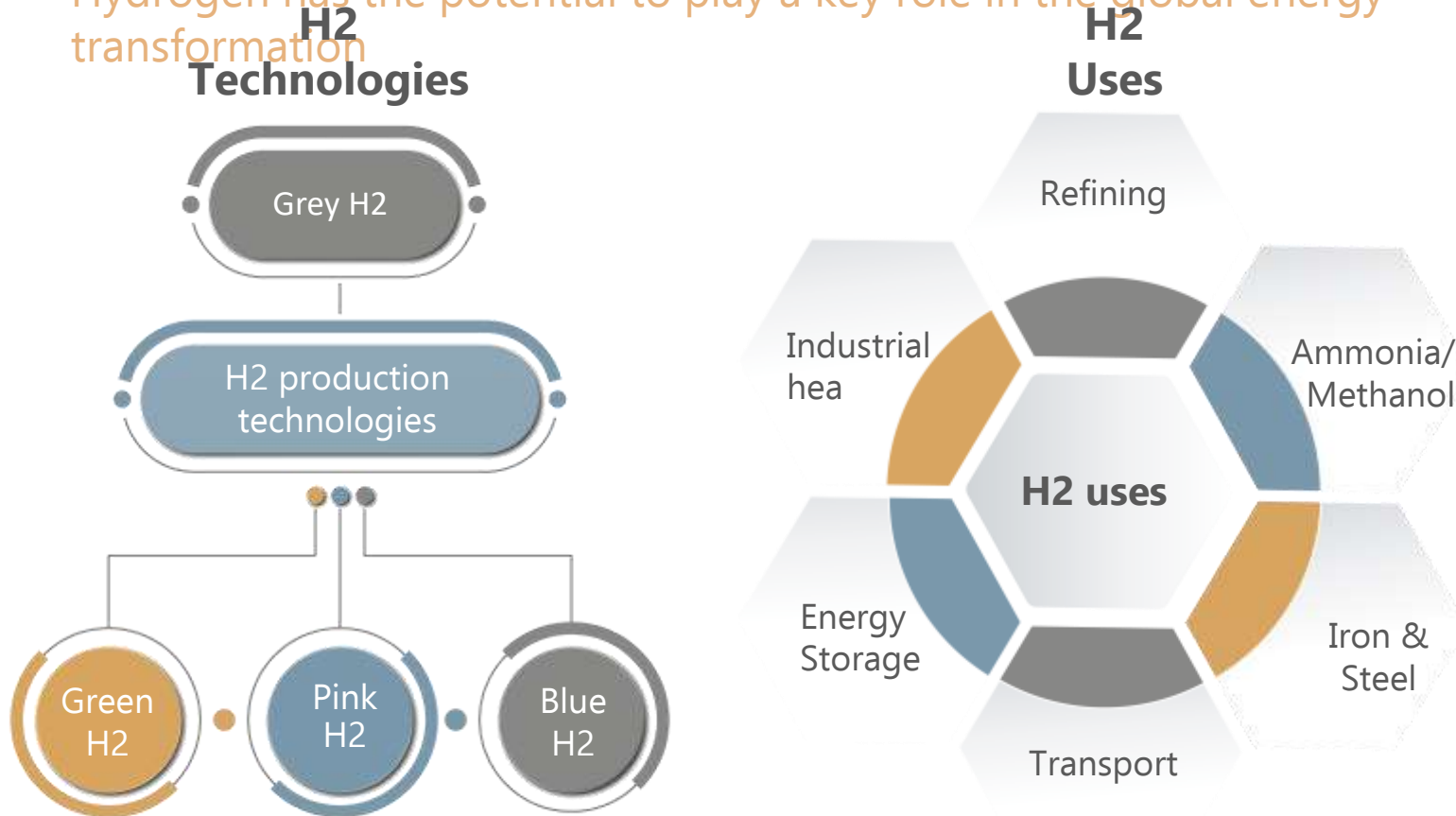
# Green Hydrogen Middle East

## DoE Policy and Regulatory Framework

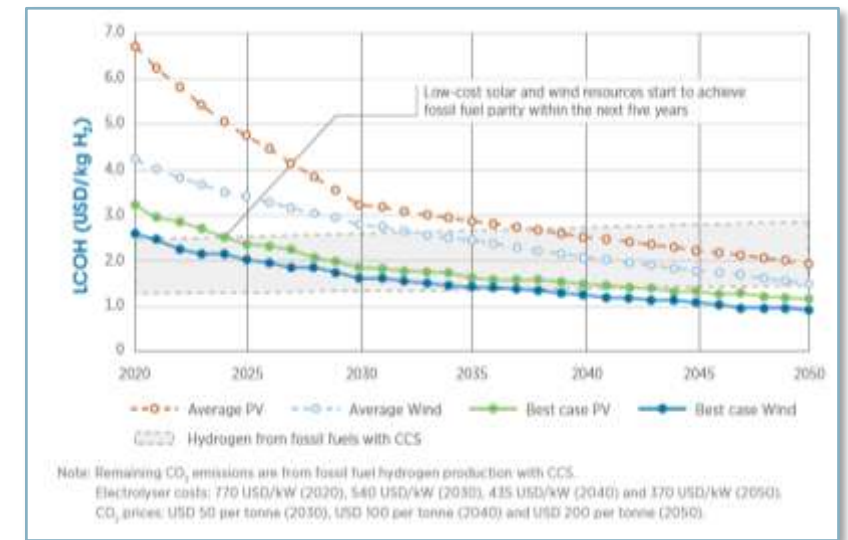
# Background (1)

Hydrogen is a clean energy carrier and can be used in most energy applications.

Hydrogen has the potential to play a key role in the global energy transformation

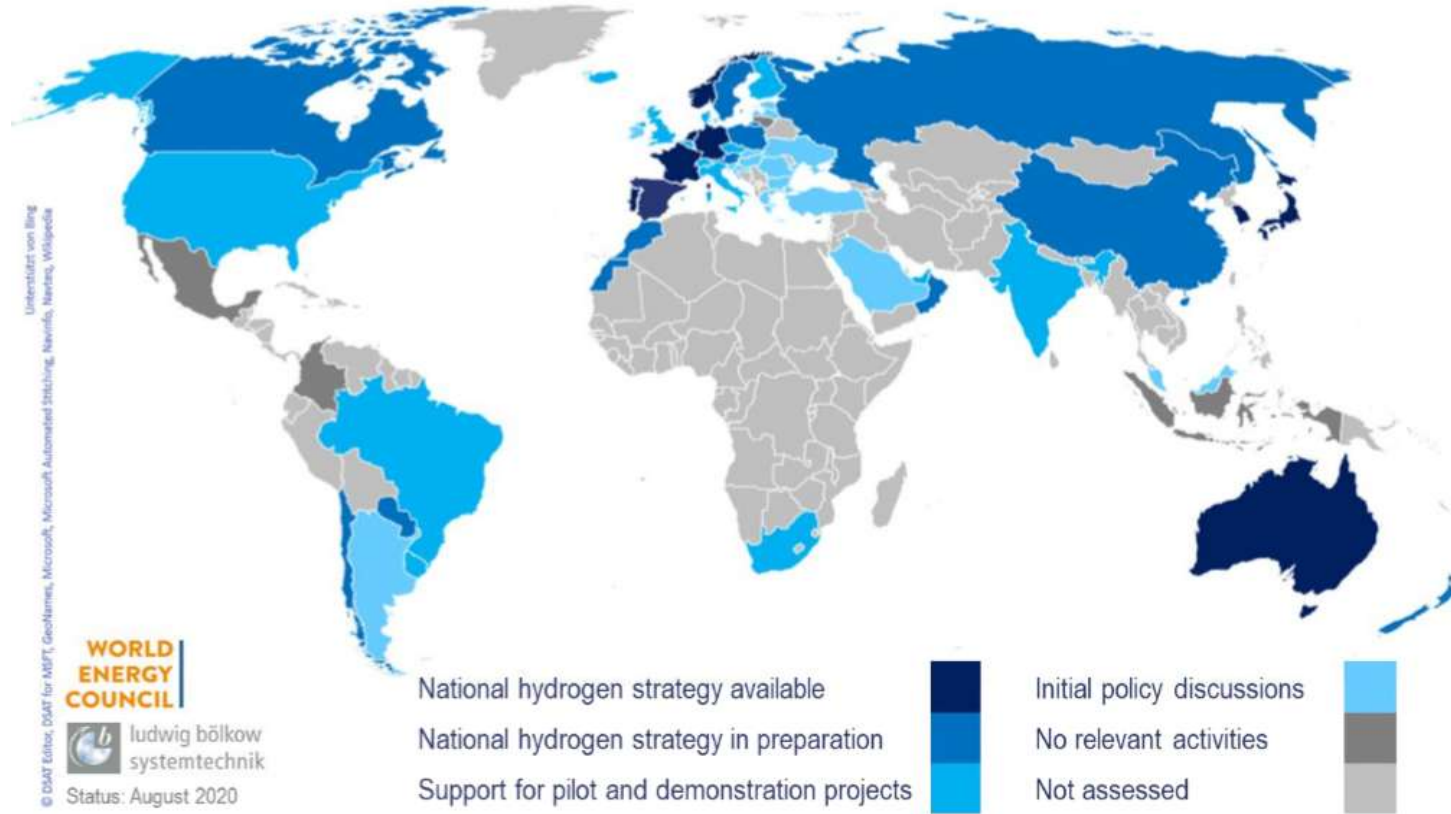


## H2 production Learning Curve



IRENA Hydrogen Analysis 2019

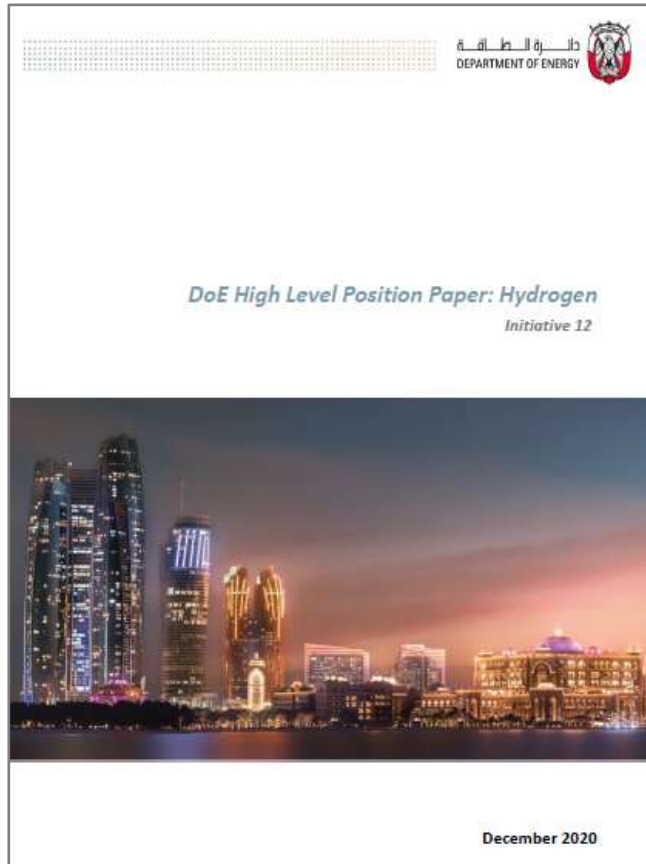
# Hydrogen momentum is growing globally



August 2020: 20 Countries / February 2021: 30 Countries

# Background (2)

## DoE Hydrogen Position Paper (December 2020)

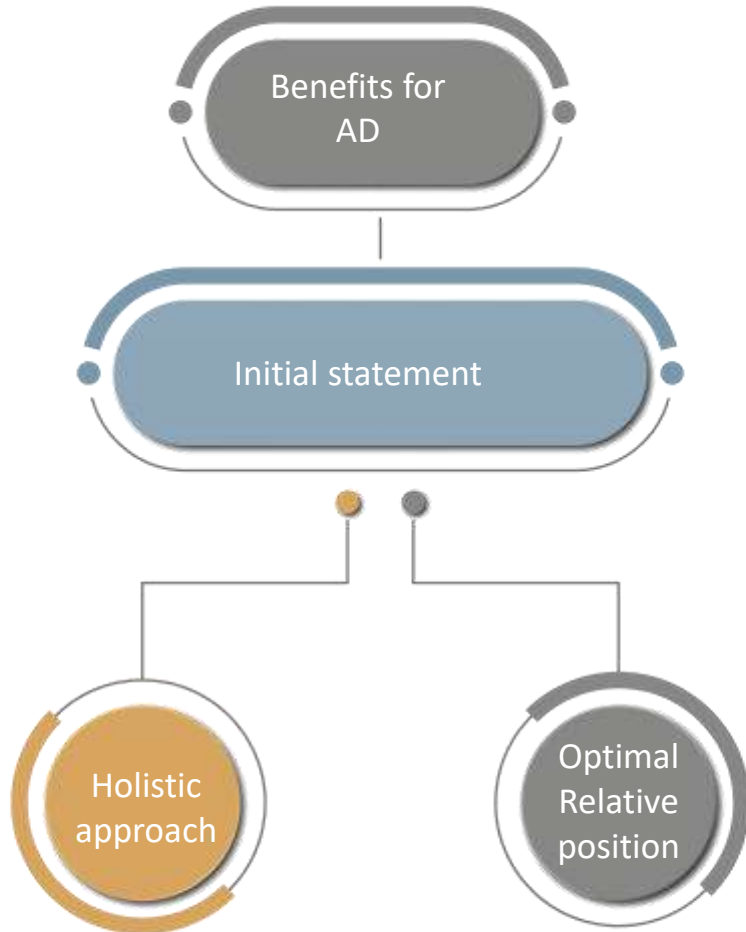


Building a cooperative mechanism between the commercial sector and the Government was one of the recommendations included in the DoE position paper.

### DoE Position Paper main findings and recommendations:

- Abu Dhabi is **well positioned to capture the hydrogen opportunity** and become a leading player in a growing global market.
- Abu Dhabi has to leverage its resources supporting a **holistic approach** to all the decarbonisation technologies (blue/green/pink hydrogen).
- Abu Dhabi needs to move forward in a **coordinated approach** between the academia, the industry and the Government, with the objective of **designing a Hydrogen Strategic Implementation Roadmap**.

# DoE Position paper: Initial statement for AD



- Abu Dhabi has to leverage its resources supporting a **holistic approach** to all the decarbonisation technologies.

H2 demand

Blue H2

Pink H2

Green H2

- The next step is to coordinate the efforts between the main actors.
  - The interaction between the Academia, Government and the Commercial sector is essential.



# Hydrogen regulatory policy framework

## A DoE holistic approach to Hydrogen

### Strategy Hydrogen strategy and implementation roadmap

- ✓ Develop a Hydrogen Vision for Abu Dhabi
- ✓ Examine Hydrogen forecasts and outlooks
- ✓ Analyze Hydrogen impact in the energy and economic systems

### Policy DoE initiatives for H<sub>2</sub> ecosystem

- ✓ Abu Dhabi Hydrogen target model
- ✓ Hydrogen targets (Transport, Industry, Power, Production) to foster Hydrogen demand
- ✓ Hydrogen Certification
- ✓ Electricity for Hydrogen production guidelines
- ✓ Hydrogen standards
- ✓ Licensing procedure for H<sub>2</sub> production, Transport & Storage

### Regulation Target model regulation development

# Hydrogen regulatory policy framework

Regulatory framework to support a Hydrogen Industry in Abu Dhabi.

## Commercial

- Regulations needed to provide a commercial framework for hydrogen use.
- Strategy to acknowledge domestic and export markets
- Hydrogen is not specifically referenced under energy regulations.

## Safety

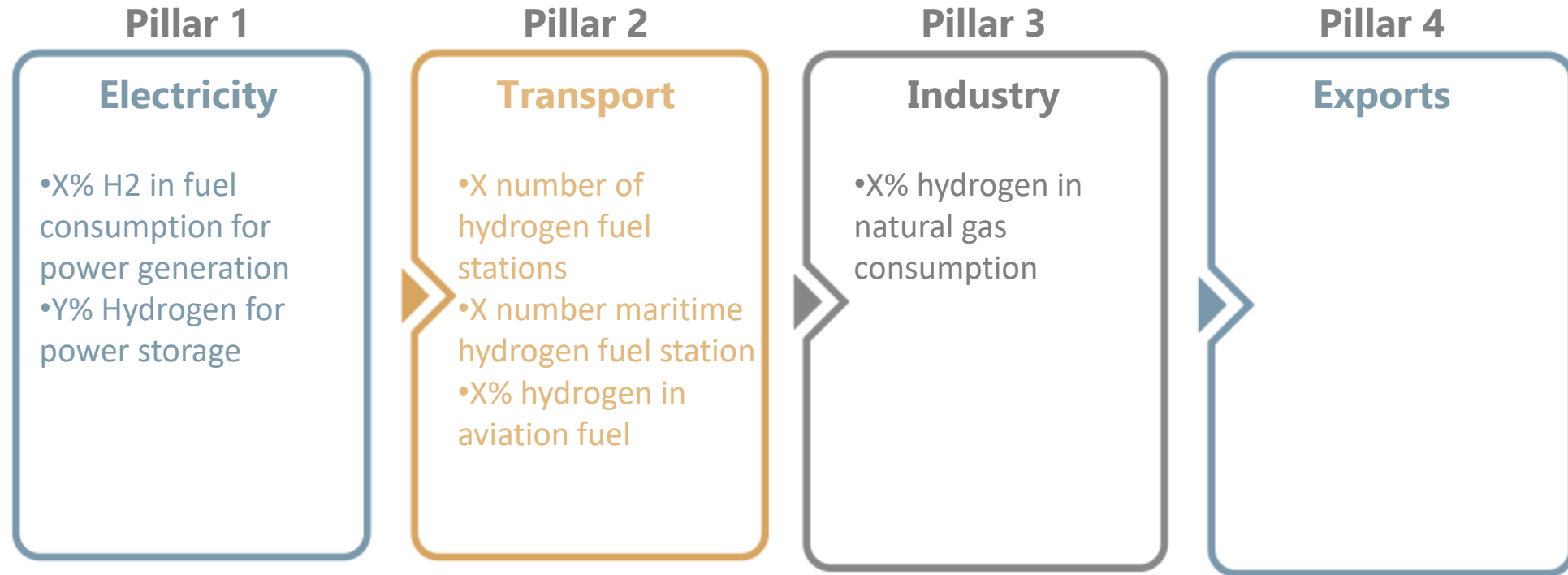
Regulations that ensure the production, transportation, storage and use of hydrogen is as safe as practicable.

## Functional

- Regulations that specifically reference and codify use of specific standards
- Best practice international standards will be referenced and implemented at Emirate level.
- DoE coordinated with the Emirates Authority for Standardization and Metrology.

# Hydrogen regulatory policy framework

## A DoE holistic approach to Hydrogen





Thank you