

## PERU

# Update on the APEC Policy Guidance to Develop and Implement Clean and Low-Carbon Hydrogen Policy Frameworks in the Asia- Pacific – Implementation Plan

April 1, 2026



# Role of Hydrogen in Energy Transition

## Decarbonization Sectors

Clean and low-carbon hydrogen can support decarbonization across multiple critical sectors:

 **Transportation**

 **Industry**


 **Chemicals**


 **Power Generation**

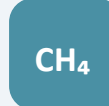
## Key Insight

Hydrogen is increasingly recognized as a **key energy transition vector** within the APEC region, offering pathways to reduce carbon emissions in hard-to-abate sectors.

## Hydrogen Derivatives

 **Ammonia**  
Key carrier for hydrogen transport and storage

 **E-fuels**  
Synthetic fuels for aviation and shipping

 **E-methane**  
Drop-in fuel for existing infrastructure

→ Increasingly viewed as key enablers of energy transition pathways in APEC



# Challenges in Hydrogen Development

## Current Market Status

Despite **growing global momentum**, hydrogen markets remain at an **early stage** in many APEC economies. Significant barriers must be addressed to unlock hydrogen's full potential.

## High Production Costs

Clean hydrogen production remains expensive compared to fossil fuel alternatives. Cost reduction through technology scaling and learning curves is essential for market competitiveness.

## Transport & Storage

Technical challenges in hydrogen transport due to low energy density and storage requirements. Solutions include compression, liquefaction, and chemical carriers like ammonia.

## Infrastructure Needs

Significant investment required in production facilities, pipelines, refueling stations, and distribution networks to establish viable hydrogen supply chains.

Coordinated policy frameworks and regulatory cooperation across APEC economies are essential to address these challenges effectively.





# Key Areas for Cooperation in APEC

## Policy Guidance Framework



The APEC Policy Guidance identifies **priority areas** for regional cooperation to support the development of clean and low-carbon hydrogen ecosystems across the Asia-Pacific.



### Standards & Certification

- ✓ Quality assurance



### Value Chain Development

- ✓ Market scaling



### Research & Innovation

- ✓ Tech advancement



### Finance & Investment

- ✓ Capital mobilization



### Public Awareness

- ✓ Social acceptance



Supporting development of hydrogen ecosystems across the APEC region through coordinated action





# Implementation Plan (2025)



## Priority Actions for 2025

The implementation plan outlines concrete steps to advance hydrogen deployment across APEC economies.

1

### Certification Mapping

Cross-economy analysis

2

### Regulatory Clarity

Policy harmonization

5

### Emissions Accounting

Carbon footprint tracking

3

### Information Exchange

Knowledge sharing

4

### Standards Cooperation

Technical alignment



### EWG Projects

9+

APEC hydrogen projects

Peru notes at least **nine APEC projects** related to hydrogen identified within EWG project cycles



Important step toward practical implementation of the Policy Guidance across the region





# Strengthening Cooperation



## Effective Implementation

Effective implementation of the APEC Policy Guidance will benefit from **cross-fora collaboration** within APEC and cooperation with leading international organizations.



## Cross-Fora Collaboration



### TPTWG

Transportation Working Group

Hydrogen in transport applications



### PPSTI

Policy Partnership on Science, Technology and Innovation

R&D and technology development



### SCSC

Sub-Committee on Standards and Conformance

Standards harmonization

AMONG OTHERS



## International Organizations



### IEA

Energy analysis



### IRENA

Renewables



### IPHE

Hydrogen partnership



### OECD

Policy guidance



### ISO

International standards development

AMONG OTHERS



## Coherent Frameworks for the Asia-Pacific

Supporting coherent and interoperable hydrogen frameworks across the Asia-Pacific region



# Thank you!