

# AEA Annual Conference 2024

## Safety and Regulations Track



November 12<sup>th</sup>, 2024

**Advancing Community Engagement: Real-World  
Case Studies on Public Perception and Education**



Institute for  
Sustainable  
Process Technology



# Institute for Sustainable Process Technology (ISPT)

- Open Innovation Platform
- >180 partners from industry and universities
- We connect partners and develop together expertise and insight for successful transition:

1. Energy
2. Materials
3. Food & Agri





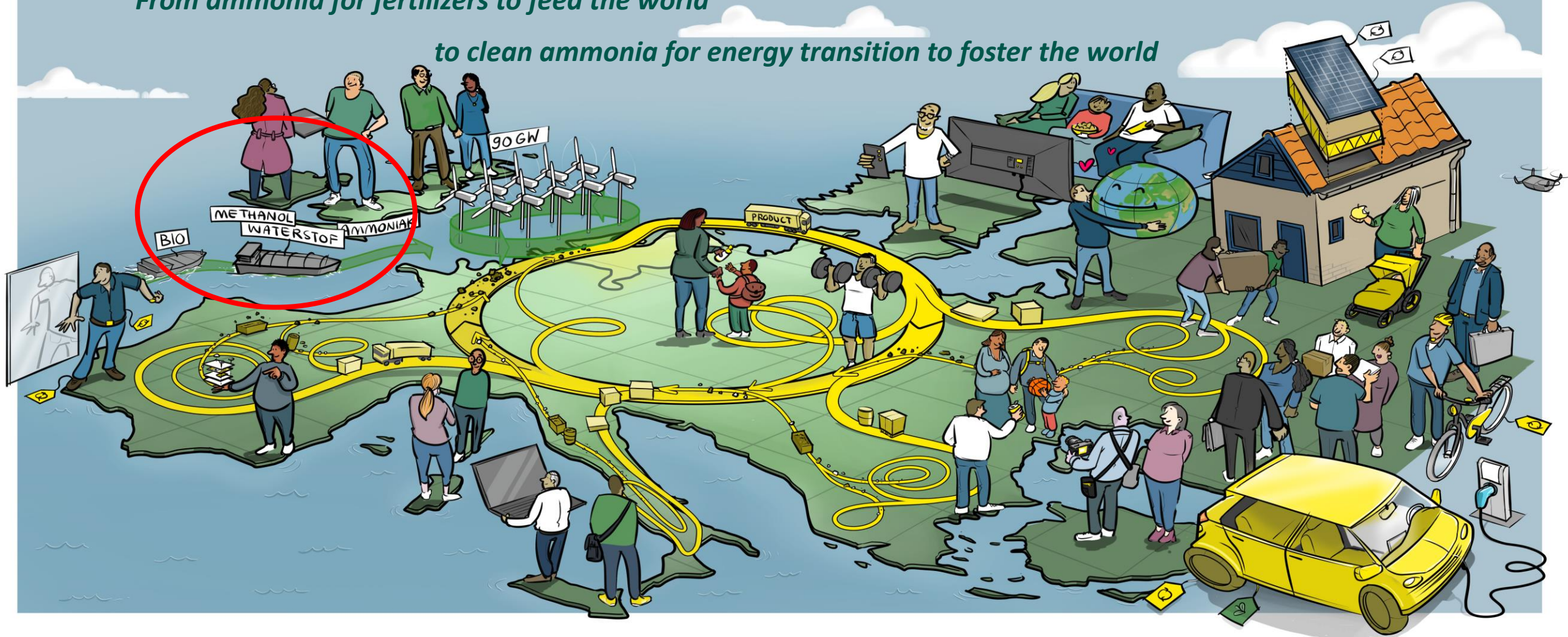
# ISPT Vision and Ammonia



Institute for Sustainable Process Technology

*From ammonia for fertilizers to feed the world*

*to clean ammonia for energy transition to foster the world*



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# Clean Ammonia Innovation Platform (CAI)



1. **Building a Clean Ammonia community** and network to exchange knowledge and align needs along the value chain, contributing to the energy transition.
2. **Developing innovation projects** that align with the mutual interests of our partners.
3. **Public Perception and Education of Clean Ammonia** as a viable energy and hydrogen carrier.



# Key enablers of clean ammonia development

## Economical

Analyzing ammonia/  
methanol and  
ammonia/hydrogen

Clean ammonia  
trade flow modelling

Use cases clean  
ammonia,  
infrastructure  
connections

## Technical

Clean ammonia as  
molecule (A-DRI)

Clean ammonia  
large scale cracking

Clean ammonia to  
heat and power

## Societal

Public acceptance

Clean ammonia  
and hydrogen to  
heat

Communication and  
stakeholder dialogue

Projects and Innovation  
identification from the strategy  
and recommendation from  
ISPT Clean Ammonia Roadmap  
and the partners.

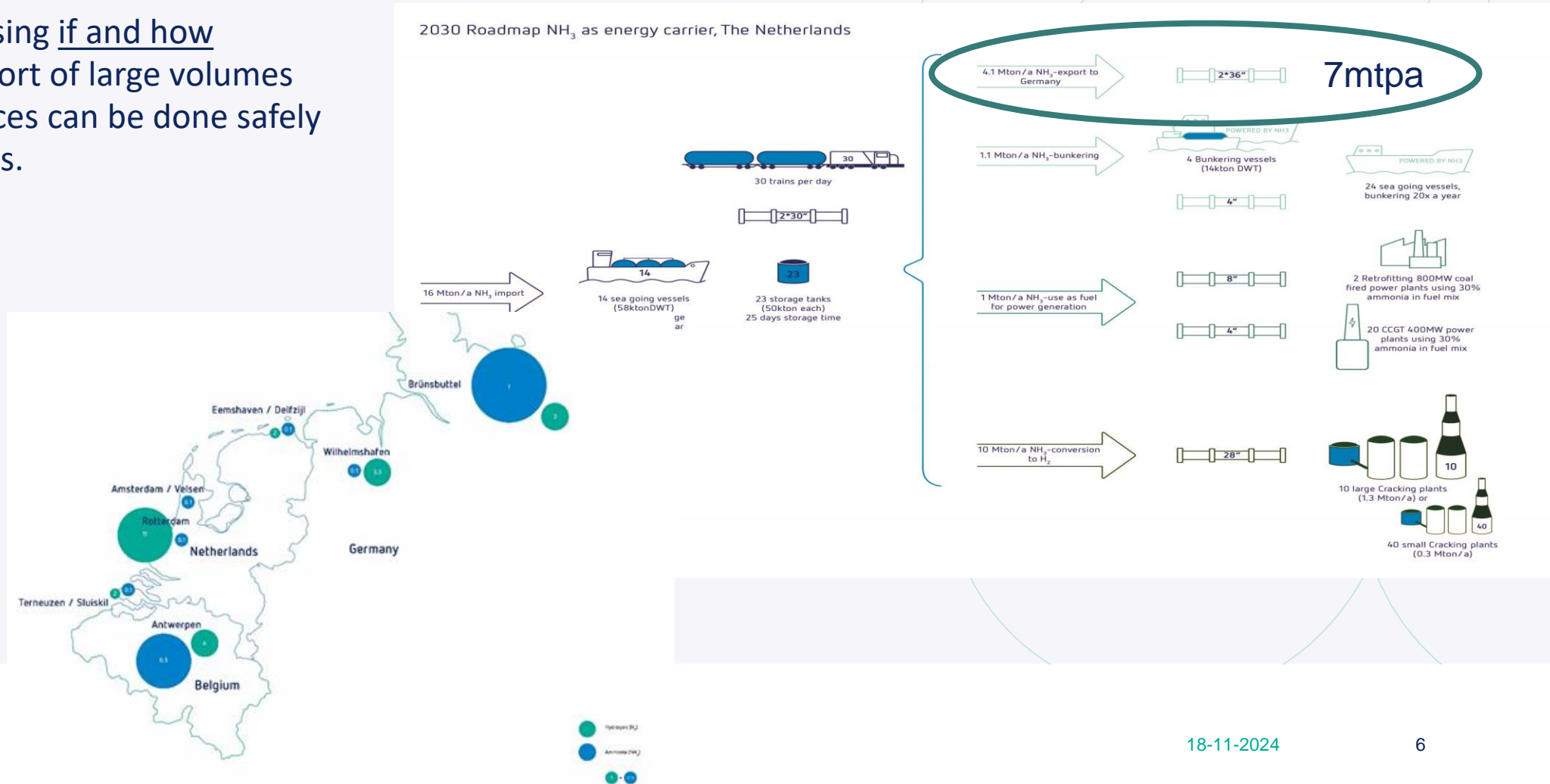


# Ammonia Pipeline Safety Study

The aim is assessing if and how ammonia transport of large volumes over long distances can be done safely through pipelines.

Approach:

- 1) Legislation
- 2) Design
- 3) Safety
- 4) Cost



# Scope of the ISPT Ammonia Pipeline Study

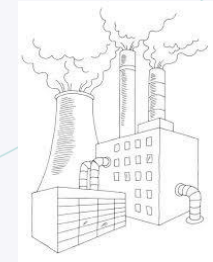
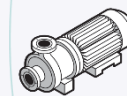
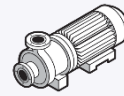
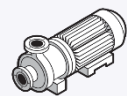
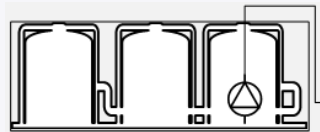
Result ready Q1 2025

Storage terminal interfaces

Pumping station

ESD section

Industrial consumer interface



Scope of other studies on NH3 pipeline safety



Scope of ISPT Ammonia Pipeline Project with the supply chain partners



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chane



Port of Rotterdam



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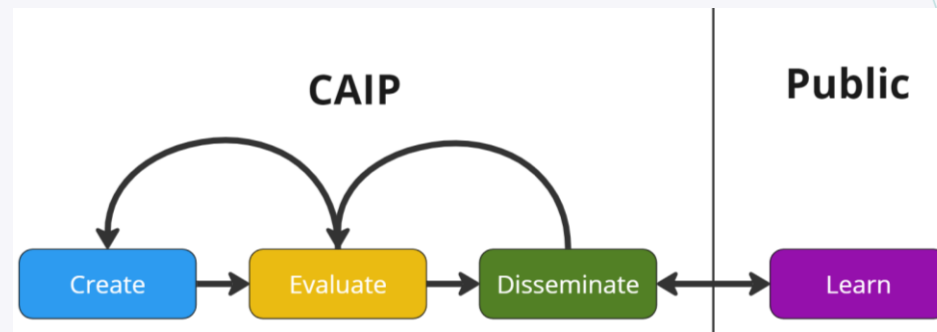
# Public acceptance/ stakeholder alignment

*follow up recommendation from Chane Terminals and knowledge other CAIP members*

Intensify **education among the public** at large about the ET in general (including NH<sub>3</sub> - positives and negatives)

Increase effective communication by using **one consistent message** uttered by all Key Actors

Build a **knowledge hub** that will be the centre for reliable NH<sub>3</sub> insights in the context of the ET



“**Outside-In**” approach with external stakeholders like government, NGOs, and industry





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### Q & A



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