


---



# Cluster 5 WP2026-2027

## Destination 3

# SET Plan Flagships Renewable Fuels



**Maria Georgiadou**  
**Senior Expert**  
**European Commission**  
**DG Research and Innovation**



**HORIZON-CL5-2026-11-D3-04:** De-risking renewable fuel technologies through transnational pre-commercial procurement of renewable fuel industrial value chains

PCP

40M€

40M€

Per topic

Per project

## Expected Outcome

- **De-risk essential** renewable fuel technologies that can contribute to domestic commercial fuel production beyond 2030 in a cost-effective way (overcome valley-of-death);
- **Lower** the de-risking cost by engaging several **competing** solution suppliers/technology providers in parallel
- **Boost transnational** public and private **investments** in de-risking renewable fuel technologies
- **Attract new players** to tackle supplier lock-in issues;
- **Open** market opportunities for **researchers** and **industry** active in **Europe**
- Create **benefits** for **public** authorities, **industry**, **technology** providers, **energy** producers, and **consumers** and **policy** makers
- **Support** implementation of the **SET Plan** Action of **Renewable Fuels and Bioenergy**
- **Accelerate permitting** procedures and increase the **public acceptance** of innovative and sustainable renewable fuel projects

## Main challenges remain

- High **capital** and **operational** costs, **supply chain** uncertainties and **regulatory** complexities

## Scope

- **Pre-commercial procurement (PCP)** of R&D, validation and possibly, first deployment of **industrial value chains** of **essential** renewable fuel technologies
- **Competitive development in phases** of entire industrial value chains built upon **existing knowledge** on technology and value chain readiness based on existing **EU projects** and **studies** thus **speeding up** de-risking, and possibly **other**
  - i. Production of advanced bioEthanol and further processing into ATJ-SPK
  - ii. Biomass Gasification and FT-Synthesis to produce FT-SPK
  - iii. Production of BioMethanol for further processing into MTJ
  - iv. Hydrotreatment of Lipids from marginal/contaminated lands to produce HEFA
  - v. Biomass Pyrolysis and Upgrading or co-processing to produce biokerosene and bio-heavy fuel oil
  - vi. Biomethane from AD and Gasification and Methanation to produce biomethane for shipping or further processing into methanol (methanolysis) for shipping
  - vii. E-Methanol production from CO<sub>2</sub> and renewable H<sub>2</sub> for shipping
- PCP of services to **design** and bring by the action end at **TRL 8** industrial value chains of essential renewable fuel technologies which are
  - a) based on **domestic** sustainable feedstocks
  - b) create synergies across **all end use** energy and transport sectors for **markets** and **production facilities**
- Make **aware** R&D providers on how to increase their **investment capacity** through **possible** combinations of the PCP contract with additional **Union** support for companies from e.g., EIC, InvestEU, regional funds or other

- Develop **plan** for **deployment** of successful solutions, through deploying some during the project and/or preparing **follow-up** procurement to purchase such solutions (larger volumes) after PCP
- Hydrogen production as end-product **is not** in scope

## Implementation

- **One project** developing and implementing the pre-commercial procurement of R&D services from **several providers** established in **any EU MS/AC** and **across national borders** encouraged
- Procurers are contracting entities which are primarily **concerned** in transport decarbonization to boost real take off for solutions in this area of public interest
- ‘Transnational buyers’ could be at least **two public procurers** from different MS/AC plus possibly **one or more private** procurers that provide similar services of public interest, e.g.,
  - EU **airport** and **port** authorities and their respective managing bodies,
  - **aircraft operators** and **shipping companies**,
  - other state, regional or local **contracting authorities** and bodies governed by public law or their associations
- **One joint call** for tender, one joint evaluation of offers, and a **lead procurer** awarding contracts
- Participation of public contracting authorities and entities managing or funding e.g., regional funds encouraged



**Thank you!**

**#HorizonEU**

**<http://ec.europa.eu/horizon-europe>**

