# Are the policy framework conditions conducive to scaling e-fuels production?



Marte van der Graaf Bodø, 24.04.2024







26 Countries

























































































































### What do we need to look at?

- Where has ReFuelEU got us and what still needs to be improved?
- How do we turn ReFuelEU from paper to reality?

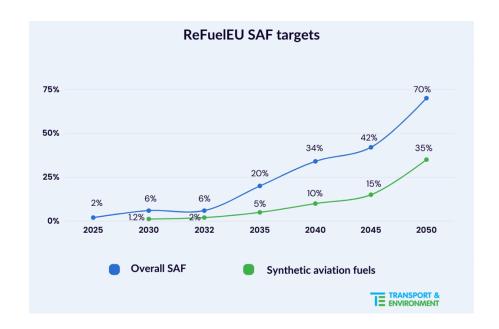
Are there risks in the European policy framework?





# What is good about ReFuelEU?

- Has an **e-fuels sub-target**
- Applies to all fuel sold in the EU → covers all departing flights
- Anti-tankering provision → requires airlines to uplift at least 90% of the jet fuel they require to perform flights within and from the EU from EU airports
- Establishes a secure European e-kerosene market



# Development of e-kerosene in Europe

- In a recent T&E analysis, we found 50 ekerosene projects in the EEA
  - 30 large scale industrial projects
  - 20 smaller pilot projects

T&E webpage for e-kerosene production updates: <a href="https://www.transportenvironment.org/discover/how-is-e-kerosene-developing-in-europe/">https://www.transportenvironment.org/discover/how-is-e-kerosene-developing-in-europe/</a>



# But why are there still no FIDs?

- None of the 50 projects have reached a Final Investment Decision yet
- The future of e-kerosene production in Europe is still uncertain
- How can we make sure this potential for e-kerosene in Europe actually materialises?

Forecasted e-kerosene production capacity in the EEA per advancement stage compared with ReFuelEU blending mandates





# How can we make sure European e-kerosene potential materialises?







# **Smart EU industrial policy**

### Net Zero Industry Act

 E-kerosene projects included in the list of strategic net-zero technologies

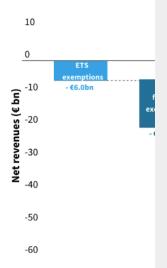
### Innovation Fund

- Prioritise EU funding for hydrogen use in hard-to-electrify sectors like aviation and shipping
- Introduce a Contracts for Difference scheme to bring the cost of ekerosene down





# Europe's aviation tax gap in 2022



# 2025 tax gap = €47.15 billion



Figure 7: Comp

Source: https://www.tra content/uploads/2023/0









### **Taxation**

### Energy Taxation Directive

- Opens up funds for e-kerosene development
- Addresses the cost gap between fossil fuels and e-kerosene

### Emissions Trading System

- More than <u>34 of European aviation emissions</u> aren't subject to a carbon price
- ETS must be expanded to include departing flights
- Member States should earmark 25% of national ETS revenues for development of e-fuels: If the ETS extended to all departing flights as of 2027, this would open up €18 billion to fund e-fuels production

#### National level

Higher ticket taxes, especially on business class seats and private jets



## What are we missing in ReFuelEU?

- Policy incentives for Direct Air Capture e-fuels
  - Almost all European e-kerosene projects are planning to use biogenic CO2
  - Not enough biogenic CO2 available to sustainably scale up ekerosene
  - Will be very difficult to produce DAC e-kerosene without policy incentives
- Lack of incentive to supply/purchase e-kerosene before 2030
  - What about national e-kerosene targets?





# Risks in the current policy framework

Watering down the ambition of ReFuelEU





# **Takeaways**

- Policy needs to go further to ensure that ReFuelEU actually becomes a reality
- Meaningful Direct Air Capture policy incentives need to be developed
- The money for the financing of the e-fuels market ramp up could be made available through the proper taxation of the aviation sector
- **₽**

The ambition of ReFuelEU must be maintained and cannot be risked by Big Oil failing to step up





### Thank you for listening.

#### **Contact:**

Marte van der Graaf Aviation Policy Officer, Germany marte.vandergraaf@transportenvironment.org



This presentation includes icons from Flaticon