

This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 763909



# **KEROGREEN**

"Production of Sustainable aircraft grade Kerosene from water and air powered by Renewable Electricity, through the splitting of CO<sub>2</sub>, syngas formation and Fischer-Tropsch synthesis"

Project No: 763909

# Deliverable D7.2 First newsletter and promotional leaflet

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Contributing partners: Coordinator: Project Partners: Start date of project:	Adelbert P H Goede, Dutch De Zaale 20, 5612 AJ Eindho Eindhoven (NL) DIFFER (NL), KIT (D), VITO (E 1 <sup>st</sup> April 2018	all Institute for Fundamental oven (NL). Postal address: 3), Cerpotech (N), HyGear <b>Project duration</b> :	l Energy Research (DIFFER) PO Box 6336 5600 HH (NL), INERATEC (D) 48 month

## DOCUMENT INFO

#### **Dissemination level**

Dissemination level			
PU	Public	x	
PP	Restricted to other programme participants (including the Commission Services)		
RE	Restricted to a group specified by the consortium (including the Commission Services)		
со	Confidential, only for members of the consortium (including the Commission Services)		

#### **Deliverable Nature**

Nature of Deliverable			
R	Report	х	
Р	Prototype		
D	Demonstrator		
0	Other		

#### Authors

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## Changes with respect to the DoA

Issue	Comments
Delay in submission	The delay is mainly due to the late finalization of the newsletter as
	we were waiting for more inputs to deliver (especially
	announcement of the first workshop).

### **Document Control**

Document version #	Date	Author	Comments
V1.0	19.09.2019	Sabine Müller	First version

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# 1 Introduction

The present deliverable reports on the production of both the promotional project leaflet and the first issue of the project Newsletter. Both documents have been produced by KIT based on the KEROGREEN Corporate Identity (Logo, Picture with plane and fixed green color). They have then be submitted to the coordinator for reviewing and after final approval to all partners for dissemination and use. In addition both documents are available on the project website.

# 2 Promotional leaflet

The major aim of the leaflet is to promote the project on events or during dedicated meetings with stakeholders. The goal is to render visible the project and raise interest of both specialised and more general audience. It contains general information on the project e.g partners, funding, project objectives and contacts – see annex 1.

Each partner will be able to print it and of course disseminate it as often as required.

# 3 First KEROGREEN newsletter

The major aim of this first newsletter is to give general information to the stakeholder about the project but also to inform them about our activities. Hence it includes links to the "news and events" side of the project webpage. But in addition main events are highlighted separately. It also give some news on the project progress (editorial part). Finally it includes an interview with the project coordinator in order to have some insights about the project background (see annex 2)

The Format of the next newsletters to be produced at least once a year or more often if required will remain the same. Of course we will add more details on the work progress as soon as available. Also it is planned to interview partner participants and, if possible, also advisory board members.

The newsletter is available on the webpage and has been also distributed to the project partners and advisory board members. Each partner is in charge of disseminating in its own network and make use of own dissemination channels.

# 4 Annexes

ANNEX 1- Leaflet

# **KEROGREEN** – towards sustainable and green aviation fuel production

## FUNDING

**KEROGREEN** has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 763909.



**Total funding:** 4 951 959 € within 4 years (1.04.2018 - 31.03.2022)

**Call Topic:** H2020-LCE-06-2017 "Competitive low-carbon-energy - new knowledge and technologies", H2020 Work programme "Secure, Clean and Efficient Energy"

#### **CONTACT / INFORMATION**

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# www.kerogreen.eu







Production of sustainable aircraft grade kerosene from water and air powered by renewable electricity, through the splitting of CO<sub>2</sub>, syngas formation and Fischer-Tropsch synthesis

# MISSION

## **OBJECTIVES**

**KEROGREEN**'s main goal is to develop and test an innovative conversion route for the production of sustainable aircraft grade Kerosene from water and air powered by renewable electricity.

The KEROGREEN conversion route is based on plasma driven dissociation of air captured CO<sub>2</sub>, solid oxide membrane oxygen separation and Fischer-Tropsch (F-T) kerosene synthesis.

**KEROGREEN**'s new approach and process reduces overall CO<sub>2</sub> emission by creating a closed carbon fuel cycle and at the same time creates long-term large-scale energy storage capacity which will strengthen the EU energy security and allow creation of a sustainable transportation sector.

- Achievement of an efficient, high yield plasma dissociation of CO<sub>2</sub> into CO and O<sub>2</sub>
- Development of solid oxide electrolyte cells with perovskite electrodes for O<sub>2</sub> gas separation
- Kerosene synthesis via water gas shift (WGS) and advanced Fischer-Tropsch (FT)
- System and heat integration of the plasmolysis reactor, the oxygen separator and the WGS-FT-Hydrocracking kerosene synthesis units
- Demonstration of an integrated system for the first time
- Produce a container sized unit producing 0.1 kg/hr of kerosene
- CO production yield of 0.2 kg/kWh, OPEX
  0.5 €/kg, lowered by thermal system integration and increased productivity
- Sustainability assessment comprising material flow based environmental and economic life cycle analyses and acceptability assessment
- Clarification of safety issues



PARTNERS



DE

DF



Cerpotech No



C

**INERATEC** 

ANNEX 2- First newsletter



# **KEROGREEN** Newsletter

#### Edition 08/2019

# Editorial



Dear Reader,

Welcome to the first edition of our KEROGREEN project newsletter!

Looking back it has been a busy first year with the start of several activities in the KEROGREEN project: work has started on plasma source development, CO purification, chemical pathway analysis and hydrocracking, whilst first dissemination and promotion activities produced a glossy brochure, a website, a number of conference contributions ... and a lot more to come! The newsletter will regularly provide interesting facts on the pro-

ject's research and development activities. Furthermore, it will collect and present information on relevant events within and outside of the project consortium.

We hope you'll enjoy reading our newsletter and look forward to your feedback!

Yours sincerely Adelbert Goede, on behalf of the KEROGREEN consortium

# **KEROGREEN** in brief

KEROGREEN is a Research and Innovation Action (RIA), financed by the European Commission under the Call Topic "Competitive low-carbonenergy - new knowledge and technologies" (H2020-LCE-06-2017) in the H2020 Work programme "Secure, Clean and Efficient Energy". The main goal of this 4-years project is the development and testing of an **innovative conversion route** for the **production of sustainable aircraft grade Kerosene** from water and air powered by renewable electricity. The KEROGREEN conversion route is based on plasma driven dissociation of air captured CO<sub>2</sub>, solid oxide membrane oxygen separation and Fischer-Tropsch (F-T) kerosene synthesis.

For more information on the KEROGREEN project please visit our <u>website</u>

#### Talking to Adelbert Goede (DIFFER, NL), Project coordinator

How did it come to the project and what is expected from it ? Questions to the project coordinator

To the interview

#### News and events

More than 8 presentations by project partners since project start.

Overview of past and upcoming project presentations and latest news here

## Save-the-date! KEROGREEN Workshop "Plasma catalysis for renewable Fuels and Chemicals"

The first KEROGREEN workshop will be held the **15<sup>th</sup> November 2019** at DIFFER (Eindhoven, NL)

More information available here

#### Do not want to miss our next newsletter?

SUSCRIBE to the KEROGREEN newsletter by sending an e-mail to kerogreen@for.kit.edu

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