

Solar-Based Membrane Reactor for Syngas Production

D1.3 Launch of project's website, protected acronym, electronic communications network and social media account.

WP1 – Project Management, Coordination and Dissemination

29.04.2024





SOMMER

Disclaimer

The work described in this document has been carried out within the framework of the SOMMER project, generously funded by the European Union. The views and opinions expressed herein are the sole responsibility of the author(s) and do not necessarily represent those of the European Union or the granting authority, the European Climate, Infrastructure and Environment Executive Agency (CINEA). The European Union and CINEA cannot be held accountable for any interpretations or applications of the information contained in this document.

Acknowledgement

The project SOMMER is funded by the European Union under Grant Agreement Number 101118293.

Grant Agreement No.	101118293		Acronym	SOMMER	
Title	Solar-based membrane reactor for syngas production				
Call Topic	HORIZON-CL5-2022-D3-02-06				
Type of action	HORIZON EUROPE, RIA - Research and Innovation Actions				
Start date	01.11.2023		Duration	48 months	
Project URL	https://www.project-sommer.eu				
Project Officer	Dr. Luca Bondi				
Project Coordinator	DLR - German Aerospace Center				
Deliverable	D1.3 Launch of project's website, protected acronym, electronic communications network and social media account.				
Date of Delivery	Contractual	30.04.2024	Actual	30.04.2024	
Nature	Report	Dissemination	level	Public	
Lead Beneficiary	DLR - German Aerospace Center				
Responsible Author	Elke Reuschenbach (DLR), elke.reuschenbach@dlr.de				
Contributors	Nicole Neumann (DLR), <u>Nicole.Neumann@dlr.de</u> Asmaa Eltayeb (DLR), <u>asmaa.eltayeb@dlr.de</u>				
Reviewers	tbd				
Final version approval date	30.04.2024				

Document Identifier



SOMMER

About the Project

SOMMER aims to develop and demonstrate an innovative carbon-neutral process for syngas production by directly integrating solar energy into a catalytic membrane reactor, facilitating the decomposition of H₂O and CO₂ (e.g., captured from carbon-emitting industries or through direct air capture). This approach enables SOMMER to overcome reliance on fossil-based energy for syngas production, utilizing CO_2 instead of natural gas as a feedstock. Syngas, a critical intermediate for the chemical industry, prompts SOMMER to encompass the entire value chain - from CO₂ provision in a cement plant to syngas formation and further processing into valuable products like DME or methanol. The core of SOMMER's technology is the optimized energy integration of a novel thermochemical conversion process of CO_2 and H_2O in a single step. This process is supported by highly selective catalysts, a dual-phase composite membrane, and a concentrated solar-thermal plant fulfilling the thermal energy demand. The key outcomes of SOMMER involve the experimental demonstration and evaluation of the innovative solar-powered membrane technology. Additionally, it focuses on developing high-performance, cost-effective membranes as pivotal components, elevating the technology to new heights. SOMMER's strategy involves advancing membrane manufacturing through slip-casting, a more mature approach, and additive manufacturing to optimize the effective membrane surface area in the reactor. The concept anticipates future advantages, allowing prolonged and flexible operation by seamlessly switching between two operational cases: I) Purely solar approach at 1500 °C and II) a biogas-supported approach at 900 °C. Furthermore, SOMMER aims to identify the technological, ecological, and economical potential for flexible and highly efficient solar syngas production, contributing to the formulation of a detailed roadmap and providing a foundation for precommercialization through subsequent R&D development activities.

DLR	Deutsches Zentrum Für Luft - und Raumfahrt e.V.	DE	
FZJ	Forschungszentrum Jülich GmbH	DE	
IREC	Fundacio Institut De Recerca De L'Energia De Catalunya	ES	IREC ⁹
HTE	HTE GmbH The High Throughput Experimentation Company	DE	hte 📕
CSIC	Agencia Estatal Consejo Superior De Investigaciones Científicas	ES	CSIC
MAM HW	Morgan Advanced Materials Haldenwanger GmbH	DE	Morgan Advanced Materials
TITAN	TITAN Cement Company S.A.	GR	
BASF*	BASF SE	DE	D • BASF We aroze charrison

*Associated Partner





Document Summary

The present document comprises Deliverable "D9.3" of WP1 of the project SOMMER, funded by the European Union. It provides documentation on the following tasks: "Launch of project's website, protected acronym, electronic communications network and social media account". The SOMMER Website and LinkedIn account are the key communication channels to inform the relevant scientific and technical communities about the scope, ambition and innovative prospects of the SOMMER project. They will also serve to promote the project among opinion-makers and the wider public by highlighting its scientific, industrial and social relevance and to stimulate the interest of potential future industrial partners.

Changes with Respect to the DoA

There are no changes with respect to the DoA.



SOMMER

Table of Contents

Disclaimer	1
Acknowledgement	1
Document Identifier	1
bout the Project	2
Document Summary	3
Changes with Respect to the DoA	3
. Project website	5
1.1. Website Structure	5
1.2. Content	5
Protected Acronym and Logo	7
2.1. Acronym	7
2.2. Logo	7
B. Electronic Communication Network	8
I. Social Media Account	8
6. Conclusion	8



SOMMER

1. Project website

1.1. Website Structure

The project website is in English. It has a clear main navigation bar that allows site visitors to get a quick overview and to easily find the solicited information:



1.2. Content

On the home site, the visitor will find a short profile of the project. The title picture of a father with his child on his shoulders, standing in a grain field creates emotions and expresses the vision of the project to contribute to a better world.







Below the Picture the user finds a teaser that explains the project in just one sentence with a link to the subsite "Project". Further down an animated graphic illustrates the process flow from concentrating solar energy to green chemicals as output.



Below this, a teaser block presents the latest News&Events with links to the respective subsite.



A team photo at the foot of the page concludes the Home page. The foot of the page refers to the EU funding organization.



SOMMER

2. Protected Acronym and Logo

2.1. Acronym

The acronym SOMMER is derived from the abbreviation of the reactor's full name, which is "Solarbased Membrane Reactor for Syngas Production." Given that SOMMER is the German word for the season summer and a widespread family name, there are currently 181 protected trademarks which include the word SOMMER.

The risk that a protected trademark SOMMER exists for a solar reactor or for a research project is considered to be very low. The project has therefore refrained from protecting the acronym SOMMER.

2.2. Logo

The Logo of the SOMMER project consists of the project name, a graphic element in the accent colour yellow and two sublines giving a very brief statement of the key component of the project.

The colours that have been chosen match with the accent colour yellow. The colour green is a natural reference point for the sustainability of the process and the green chemicals that can be produced with the SOMMER reactor.



Colour Code	
RGB: 252, 176, 64 #FCB040	
RGB: 89, 89, 91 #59595B	
RGB: 0, 110, 96 #006E60	
RGB: 223, 224, 223 #DFE0DF	





3. Electronic Communication Network

A team site has been set up as the main communication platform for the exchange of information between all project participants.

4. Social Media Account

A LinkedIn channel has been set-up for the SOMMER project to reach out to the relevant target groups from industry, research and EU administration. The channel will be used to actively inform the followers and to interact with them. By increasing the number of followers over time the project aims to raise the public awareness of the project.

https://www.linkedin.com/company/project-sommer



5. Conclusion

The logo, the project's website and the social media account have been designed with the intention to give the project a unique and esthetic appearance. The utilisation of the logo and the specific colour scheme in all communication channels and materials will facilitate the association of presentations and communication material with the SOMMER project. The Website and the LinkedIn Channel will serve as the main communication channels to reach the main target groups including the general public.

All deliverables, project internal publications, the D1.3 and presentations are created with document templates including this SOMMER branding kit. The SOMMER project's homepage, accessible at https://www.project-sommer.eu, is designed to work seamlessly on smartphones, tablets, and desktops. The main page "Home," gives a very brief and easy to understand summary of the project with a link to a longer project profile. An animated graphic on the home page illustrates the projects process to produce syngas as a basic material for other green chemicals. For more detailed insights into the project, such as its timeline, news, project results, links to participants information can be found on the subsites of the website. All project participants will actively use the project's LinkedIn account to engage with and to inform our target groups. All project-relevant press releases, public reports, project reports, scientific publications, and public deliverables can be found in the "Reports" section.

