



DISSEMINATION & COMMUNICATION **PORTFOLIO**



EUROPEAN PROJECTS

Focus

LCE owns **extensive and relevant experience** in participating in European and International projects (i.e. H2020, LIFE, INCO, CRAFT, INTERREG, and GROWTH) and is currently involved in **several Horizon 2020 as well as LIFE+ projects.**



EUROPEAN PROJECTS

Focus - LIFE



2010

INTEND

Definition of an EPD system that can be applied at international level and its implementation in two pilot countries (Sweden and Italy)



Conception Optimisée pour la Réduction de l'Impact des Nuisances Environnementales

ECONOMICK

Energy consumption and CO₂ and no emissions minimized in an intermittent ceramic kiln

RAPIDRY

Rapid drying of ceramics reducing energy consumption and CO₂ emissions

2024

2026



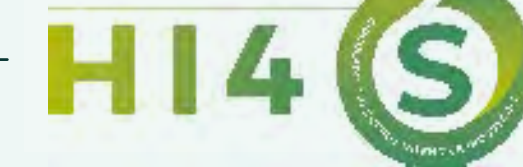
SANITSER

Sanitary-ware production: use of waste glass for saving energy and resources



GREAT

Growing resilience agriculture



Heat it yourself for sustainability: circularity in energy intensive industries

EUROPEAN PROJECTS

Focus - HORIZON 2020



2010



Model based control framework for site-wide optimization of data-intensive processes



CO₂ utilisation focused on market relevant dimethyl ether production, via 3D printed reactor and solid oxide cell based technologies



First-of-its-kind, large-scale, lowest-cost, zero-waste biorefinery for the production of proteins for food and feed application from low cost sustainable feedstocks.



Sustainable routes for synthetic graphite production for high-performance Lithium-Ion battery anodes



Adaptive model-based control for laser-assisted fibre-reinforced tape winding



Advanced Eco- designed fibres and films for large consumer products from biobased polyamides and polyesters in a circular economy perspective



Conceptual Study of Electrochemical based novel process using Lignosulfonates to produce biobased monomers & polymers



Solid-state lithium metal battery with in situ hybrid electrolyte



Advanced materials and cells development enabling large-scale production of Gen4solid-state batteries for mobility applications

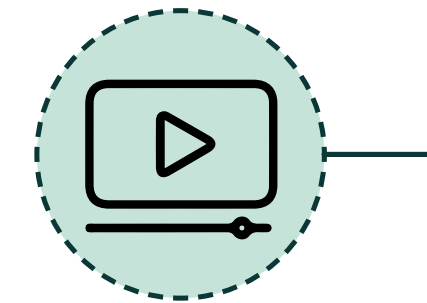
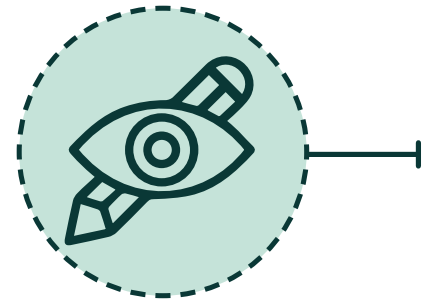
2024

2026

INSTRUCTIONS FOR USE

List of Contents

This document contains some **examples of the dissemination and communication** materials we developed in the European Projects.



VISUAL IDENTITY

Logo

The **visual identity** defines the “**look and feel**” of the project and, therefore, of all the communication and dissemination materials. The first step is surely the **creation of the project logo**.

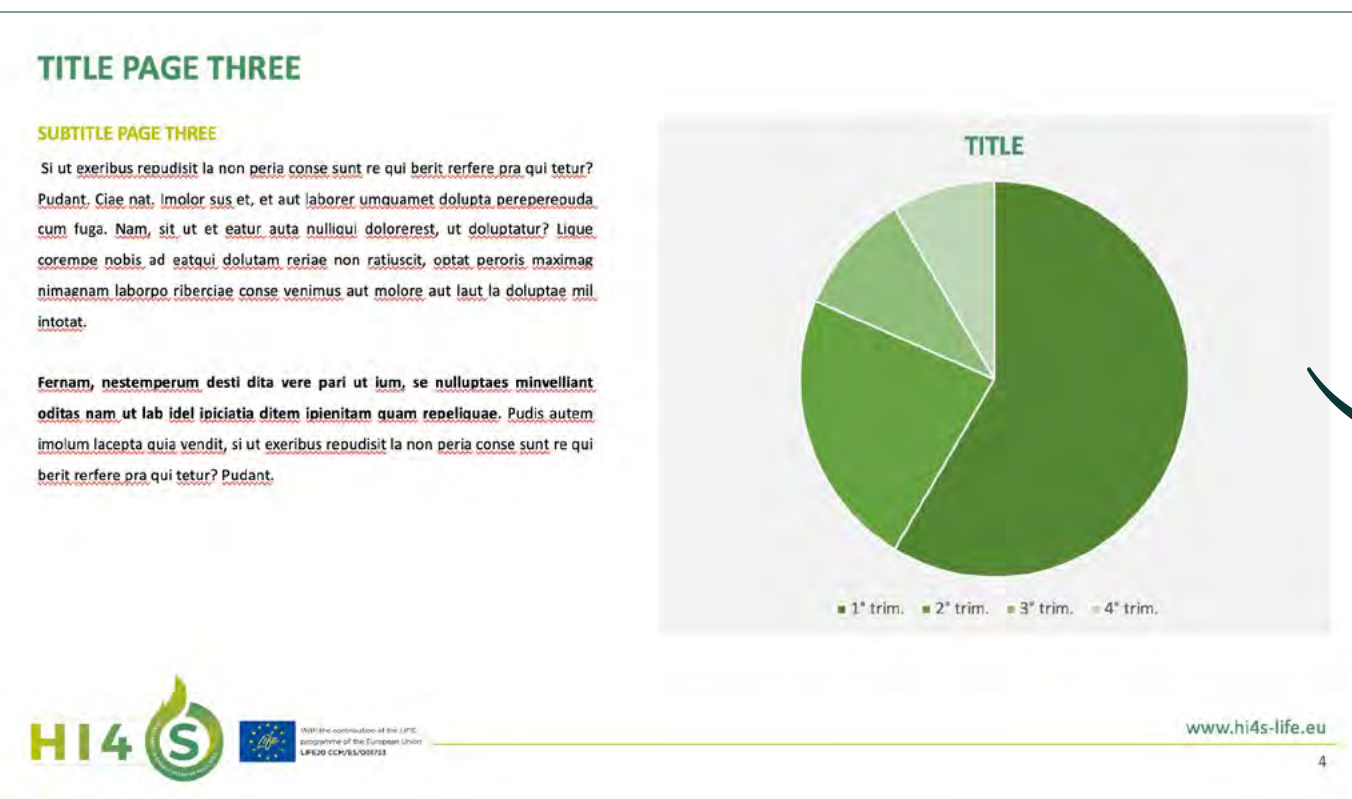
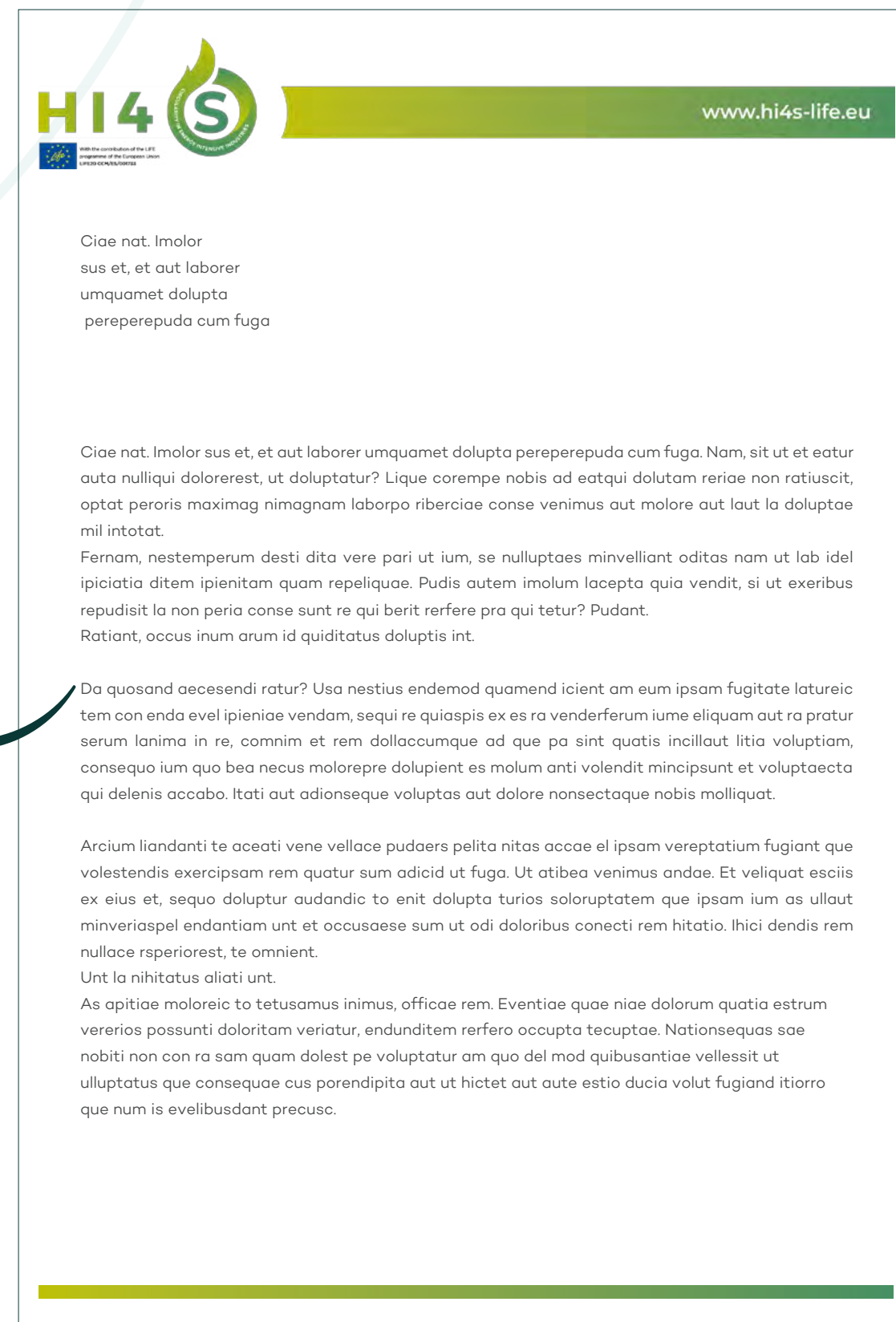


VISUAL IDENTITY

Templates

The visual identity includes, besides the project logo, **different templates suitable for project presentations**, deliverables, letterhead and potential communication materials.

Letterhead



PowerPoint Page



PowerPoint Cover

NOTICE BOARDS

Notice boards are documents that effectively display and underline the most **important points of a project** such as its aim, objectives and benefits. Being addressed to a general audience, they are usually **easy-to-read and visually catchy**.

CO₂ FOKUS
ADVANCING CO₂ CONVERSION

START DATE 2019/07/01
END DATE 2022/12/31
www.co2fokus.eu

The project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n. 938563

CO₂ utilisation focused on market relevant dimethyl ether production, via 3D printed reactor and solid oxide cell based technologies

PROJECT OBJECTIVE
DEVELOPING SUSTAINABLE AND ECONOMICALLY VIABLE CO₂ CONVERSION TECHNOLOGY TO RECYCLE INDUSTRIAL CO₂ INTO DME AND FACILITATE ITS SUBSEQUENT USE

CO₂ FOKUS THREE MAJOR BENEFITS:

- REDUCING CO₂ EMISSIONS TO TACKLE CLIMATE CHANGE
- ADVANCING INNOVATIVE CCU (CARBON CAPTURE AND USE) AND HYDROGEN PRODUCTION TECHNOLOGIES
- REDUCING THE DEPENDENCE ON FOSSIL FUELS IN THE CHEMICAL AND ENERGY SECTORS

HOW

- CONVERTING CO₂ FROM LARGE SOURCES OF EMISSIONS INTO VALUE-ADDED PRODUCTS
- FOSTERING THE USE OF DME AS AN ALTERNATIVE AND CLEAN FUEL
- WITH AN EASY TO INTEGRATE TECHNOLOGY INTO EXISTING INDUSTRIAL FACILITIES

Logos: CIC energiGUNE, LGI, Petkim, vito, tecnalia, HTF, LCE

HI4S
www.hi4s-life.eu

HEAT IT YOURSELF FOR SUSTAINABILITY
CIRCULARITY IN ENERGY INTENSIVE INDUSTRIES

PROJECT OBJECTIVE
LIFE HI4S project aims to build an innovative cost-effective combined heat&electricity production plant from the waste heat contained in the off-gas of an electric arc furnace (EAF) in order to reduce energy input for steel making processes through slag-based thermal energy storage (TES) technologies and energy balance optimization.

THE GOAL IS TO BOOST BOTH ENERGY EFFICIENCY AND STEEL SLAGS REUSE AT ONCE!

LIFE HI4S POSITIVE IMPACTS

- REDUCE STEEL SLAG WASTAGE
- REDUCE CO₂ EMISSIONS
- REDUCE ENERGY CONSUMPTION

LIFE HI4S NUMBERS

- 8 PARTNERS
- 2 COUNTRIES INVOLVED
- 3 YEARS DURATION
- 2021 07/01 STARTING DATE

LIFE HI4S TECHNOLOGY

- High temperature ceramic filtering system for a low cost off-gas heat recovery solution
- TES system to turn the variable nature of off-gas heat into homogeneous source of energy
- Scrap Dryer to reduce scrap humidity through hot off-gas streams
- ORC system powered by exhaust gases and produces electricity by means of a new vector fluid with lower GWP

Logos: CIC energiGUNE, ArcelorMittal, ATERLAN, emerbasque, SDEA, LCE

BROCHURES

Brochures are **versatile documents** useful to promote, inform and update different type of people on the project. To make the communication effective we use **graphic to grab attention** on the contents and we prefer concise and easy texts.

The project will develop cutting-edge technology to convert industrial CO₂ into DME (Dimethyl Ether), a valuable gas extensively used in the chemical and energy sectors providing an alternative to fossil fuel-derived feedstock.

The technology will employ 3D printed catalysts, multi-channel catalytic reactors and solid oxide electrolyser cells to produce DME in a direct and efficient way, contributing towards the transition to a low-carbon society.

Duration
48 months

Start Date
01/07/2019

End Date
30/06/2023

12 PARTNERS from 8 COUNTRIES

RESEARCH ORGANISATIONS: 25%
EIME: 66.7%
INDUSTRY: 8.3%

CO₂ utilisation focused on market relevant dimethyl ether production, via 3D printed reactor and solid oxide cell based technologies.

www.co2fokus.eu

PICTURE

EXPECTED RESULTS

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DETAILS

START 01/07/2021

END 30/06/2024

COORDINATOR CICE
Fundación Centro de Investigación Cooperativa de Energías Alternativas, CIC energiGUNE Fundazioa

PARTNERS

CIC energi GUNE, LCE, SDEA, enerbasque, AZTERLAN, ArcelorMittal, GRUPCAMPER Fiemasa

HEAT IT YOURSELF FOR SUSTAINABILITY

CIRCULARITY IN ENERGY INTENSIVE INDUSTRIES

www.hi4s-life.eu

APPLICATION AREAS

- SANITARYWARE
- TABLEWARE
- ORNAMENTAL CERAMICS
- CERAMIC STOVES

PROJECT DETAILS

DURATION 33 MONTHS
START DATE 01/07/2016
END DATE 31/03/2019

COORDINATOR SETEC S.r.l.
Market leader in services and technologies for sanitaryware and tableware production

BUDGET 1.5 M€

PROJECT CODE LIFE15 CCM/IT/000104

ECONOMICK

Energy consumption and CO₂ and NO_x emissions Minimised in an Intermittent Ceramic Kiln

www.economick.eu

PARTNERS

SETEC GROUP, LCE, KERASAN

www.lceengineering.eu, www.kerason.it

POSTERS

Posters and roll-ups are useful to summarize or explain particular aspects of a project, especially complex ones. For example, we developed:

Turning steel waste into value
REslag
 Turning waste into value

Life Cycle Assessment and Life Cycle Costing
LCE
 LIFE CYCLE ENGINEERING
 Via Livorno 60 - Turin 10144 - Italy
 info@lceengineering.eu

PROJECT OVERVIEW
REslag Project overall approach

Challenges
 Valorisation of the steel slag providing 4 eco-innovative industrial alternative applications opening new markets for the steel slag and reuse it as a feedstock.
 Promotion of a circular economy in the steel sector with and cross-sectional added value approach.

WP7 ENVIRONMENTAL AND ECONOMIC ACTIVITIES
 Combination of LCA and LCC represents a powerful tool to evaluate sustainability from a holistic perspective dealing with both environmental and economic pillars.

Life Cycle Assessment - LCA
 An internationally standardized methodology to quantify the environmental burdens of considered innovative technologies. Output of the LCA is a set of environmental indicators to evaluate the most effective technology from environmental point of view.

Life Cycle Costing - LCC
 A methodology to evaluate the economical sustainability by analyzing direct and indirect costs related to design, construction and operation of each technology.

TOOL AND INSTRUMENTS
REslag LCA/LCC webtool
 To facilitate data collection among partners an online webtool has been developed. The platform enables to insert both environmental and economic figures in a dynamic way, after data validation, dedicated algorithms generate exportable KPIs for each technology.

EXPECTED OUTCOMES
 Assessment of innovative technologies promoted within REslag project compared with state of the art ones (where available).
 Mapping of REslag technologies based on yearly slag absorption capacity.
 Insights about most promising ways to exploit slag waste as secondary raw materials instead of landfilling.
 Promotion and dissemination of circular models for the European market.

HORIZON 2020
 REslag project is funded by the European Union's Horizon 2020 Programme (Waste-1-2014 GA-642067)
 For more information: www.reslag.eu
 #reslag #circular #lca #lcc #horizon2020

HI4S
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 CIRCULARITY IN ENERGY INTENSIVE INDUSTRIES
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CO₂FOKUS
 ADVANCING CO₂ CONVERSION
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www.co2fokus.eu

CO₂ utilisation focused on market relevant dimethyl ether production, via 3D printed reactor and solid oxide cell based technologies

CO₂Fokus project will develop a cutting-edge technology able to convert industrial CO₂ into DME, a gas with strong potential to add value when used in the chemical and energy sectors.

CO₂FOKUS TECHNOLOGY DEVELOPMENT STEPS

- CATALYST DEVELOPMENT
- REACTOR CONSTRUCTION USING 3D PRINTING TECHNIQUES
- SOLID OXIDE ELECTROLYSER CELL SYSTEM MANUFACTURE
- PROTOTYPE TESTING IN INDUSTRIAL ENVIRONMENT

DME CAN BE

- A CLEAN ENERGY SOURCE WITH HIGH COMBUSTION QUALITY AND LOW TOXICITY
- AN INTERMEDIATE FOR THE SYNTHESIS OF SEVERAL VALUE-ADDED PRODUCTS (PETROL, AROMATICS AND OLEFINS)
- AN ETHER USED AS CHEMICAL FEEDSTOCK

THE PROCESS TO OBTAIN DME

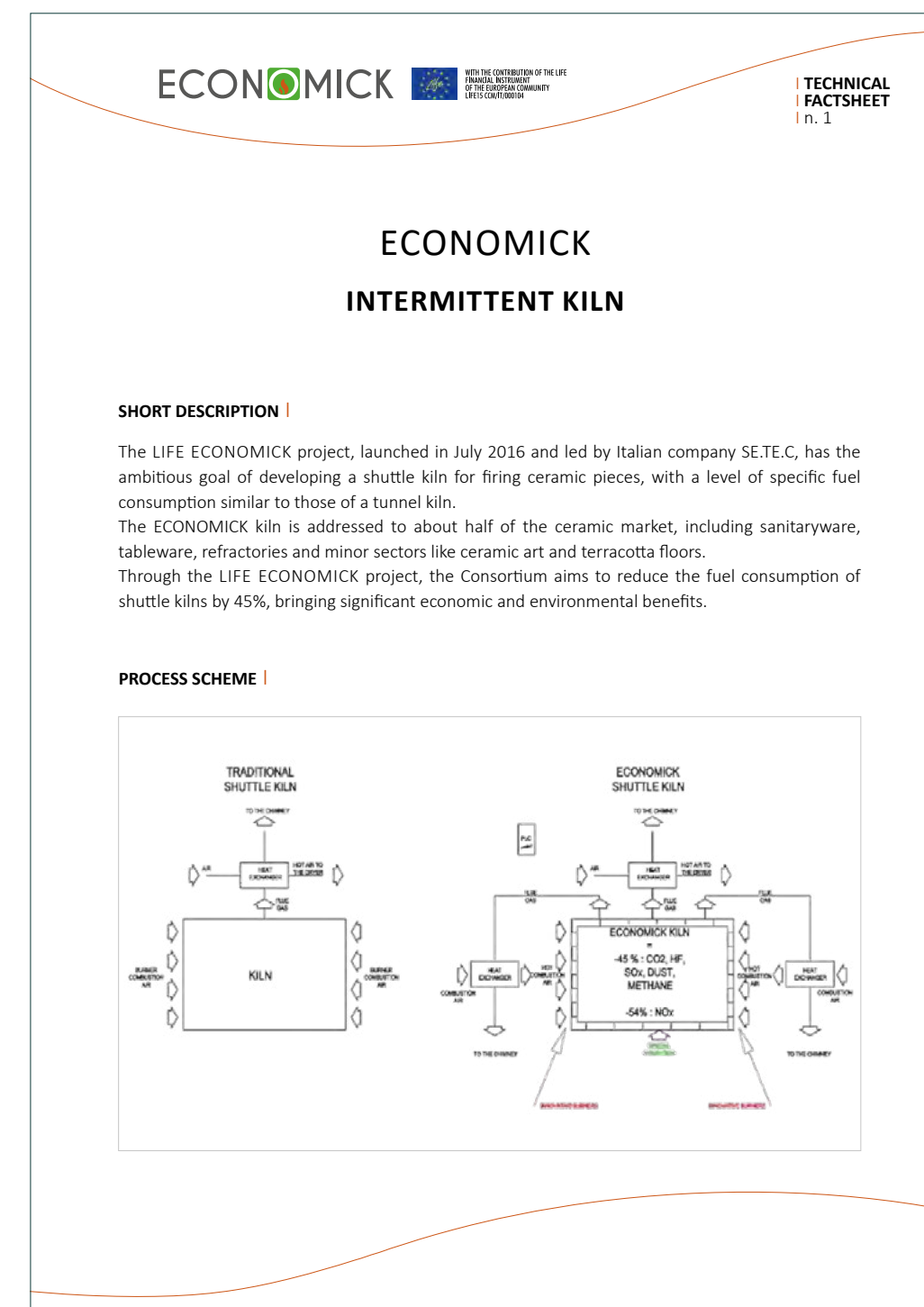
(INTERMITTENT) ELECTRICITY → ELECTROLYSIS → H₂ → CHEMICALS

CO₂ INDUSTRIAL SOURCE OF EMISSION → CO₂ HYDROGENATION FOR DME PRODUCTION → DME → FUELS

Logos: ECODSIGN Company, LCE, LGI, Petkim, vito, tecnalia, HTF

TECHNICAL FACTSHEETS

A technical factsheet is a poster focusing its information on the **technical aspects of the project** and therefore it addresses **scientific professionals** or representatives. Clearness, from both a graphic and textual point of view, is the watchword.



WEBSITES

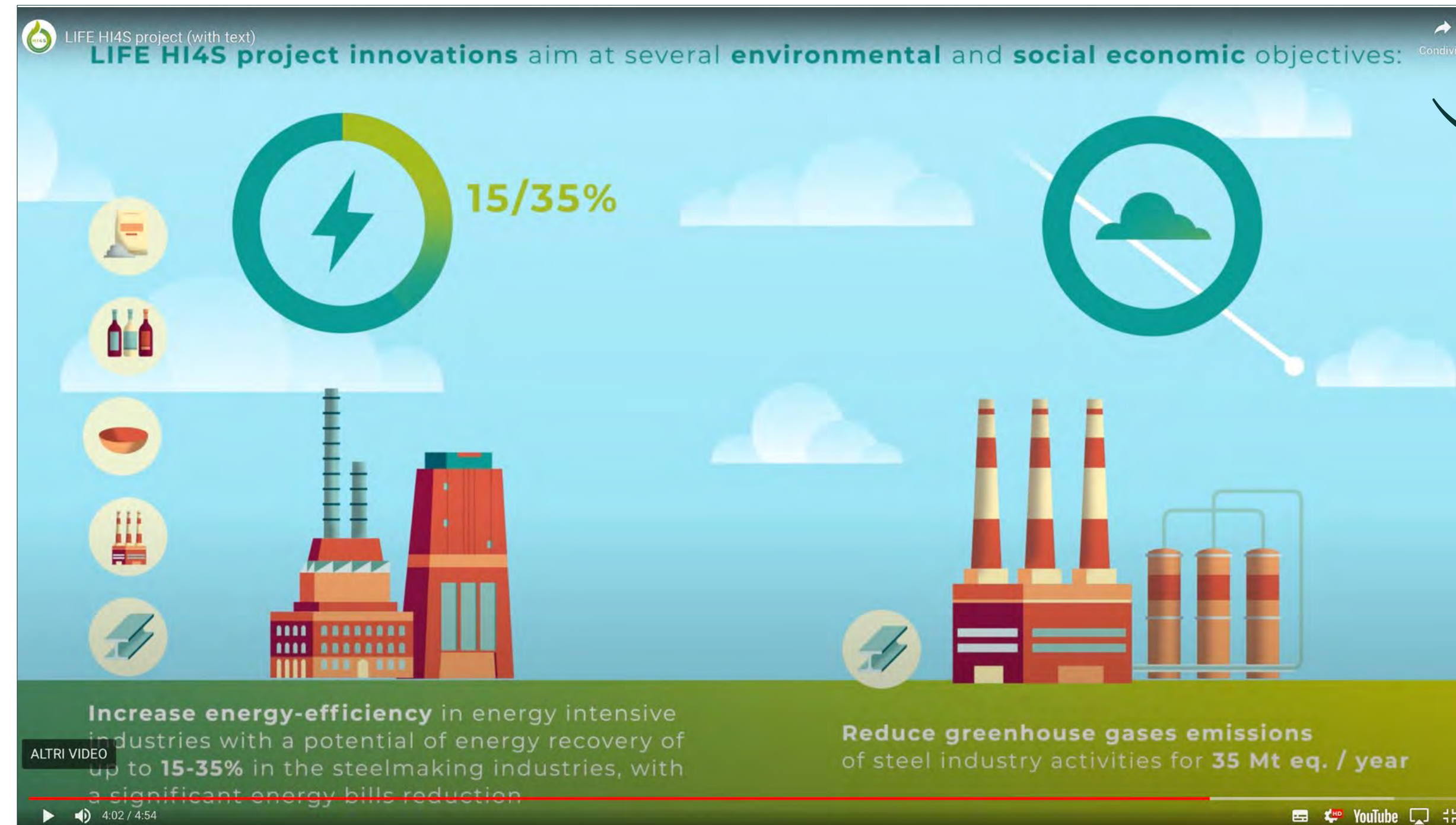
A website is **the most complete repository** of all the projects' information. It contains all the relevant data and documents, therefore a **clear and logic structure is key** to allow an easy and fluid navigation. Our websites are built according to this approach and texts and graphics are well balanced to **effectively deliver all the messages**.



click to see the website

VIDEOS

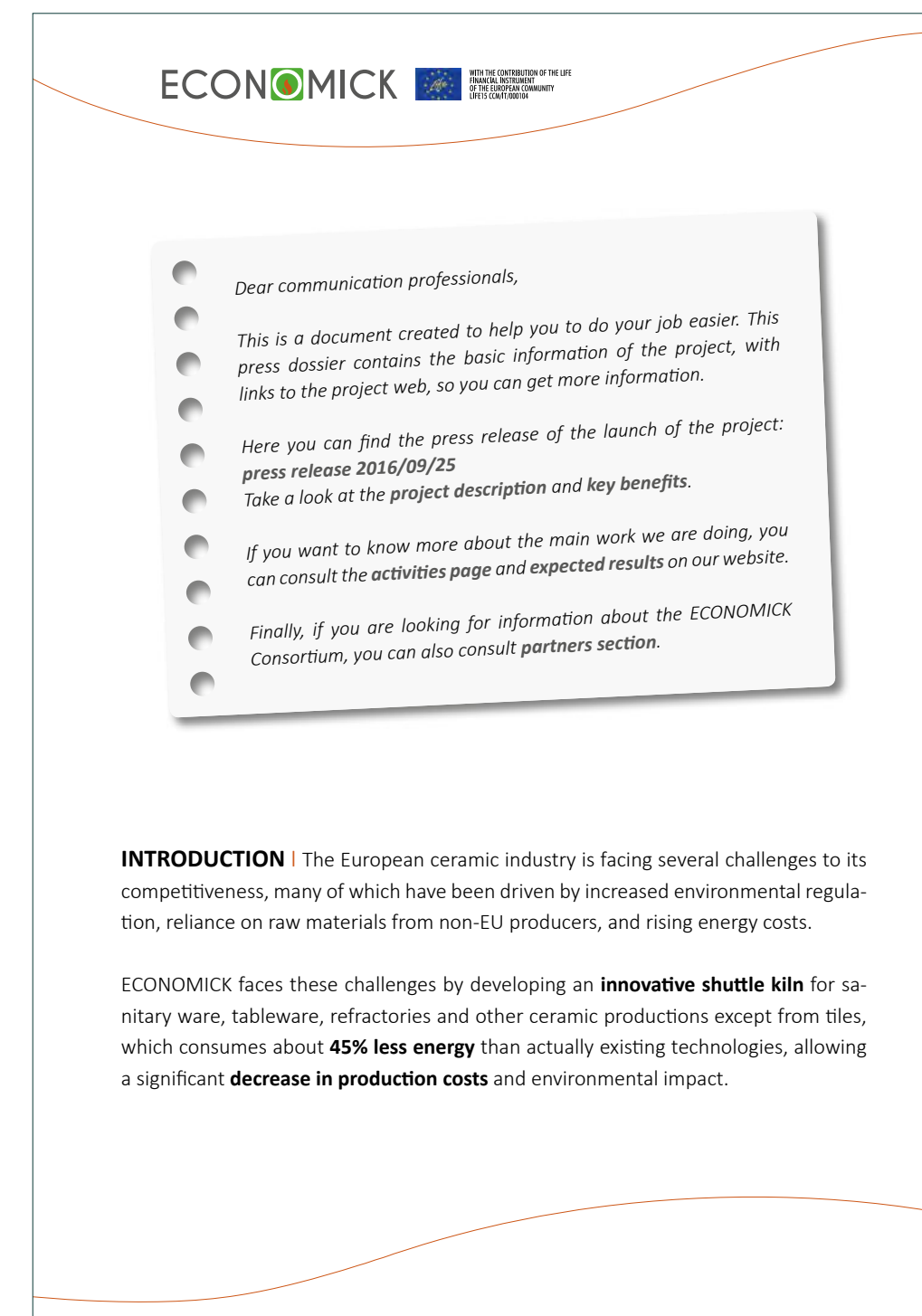
We concentrate on motion graphic videos as they allow a **direct, easy and quick explanation of the project** to the general audience. They also help to describe the use of particular functions developed during the project.



click to see the video

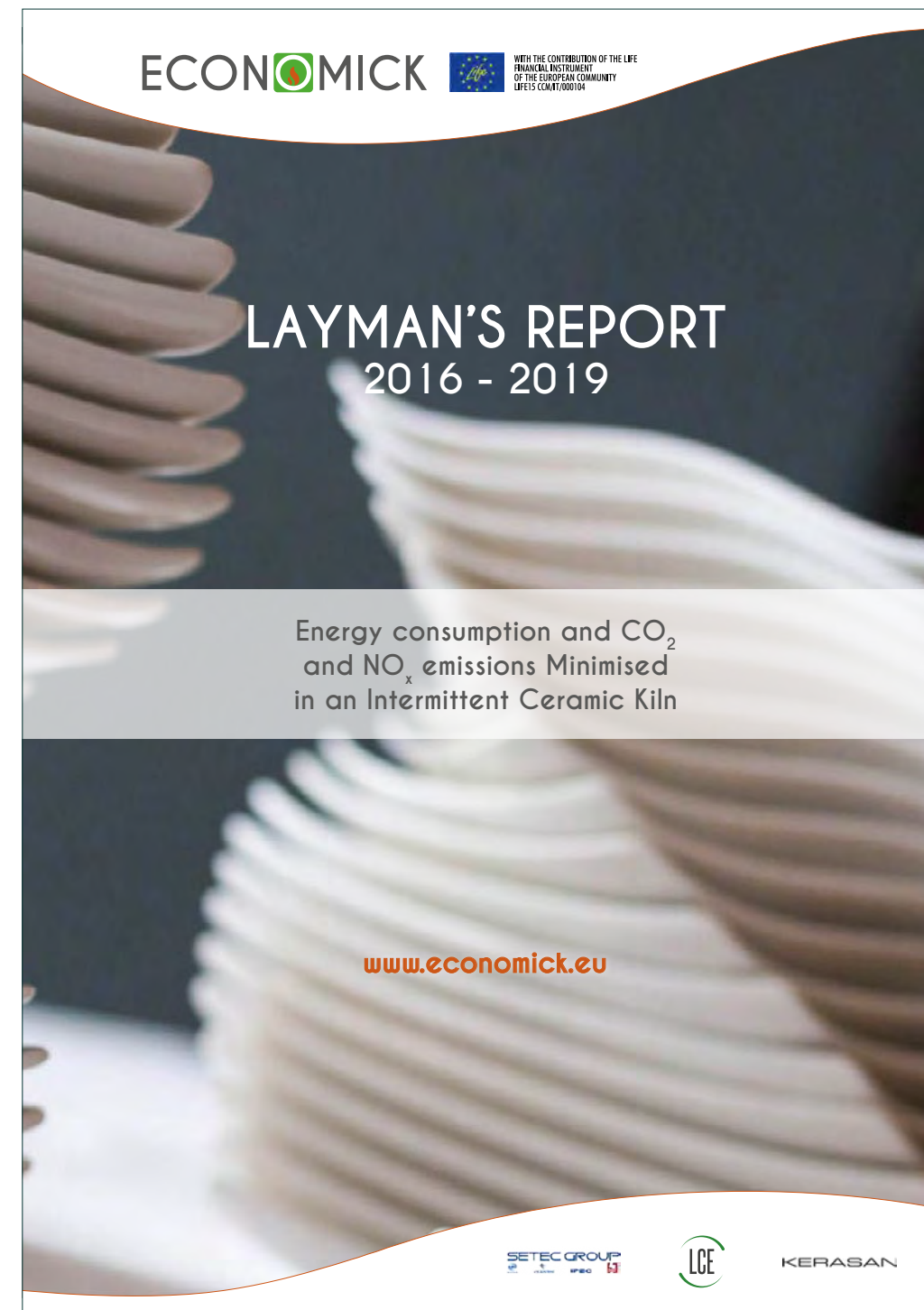
PRESS KITS

A press kit is a **pre-packaged set of promotional materials** providing information about the project which is distributed to members of the media for promotional use. Our press kits usually contain materials such as **infographics, FAQs, press releases and claims for the social media**. We consider them a key element to summarize all the most relevant information in just one document.



LAYMAN'S REPORTS

The layman's report is a **document draft at the end of LIFE projects** aimed at interested journalists, organisations or individuals keen to learn about the project in a **brief and easy-to-read text**. It includes basic information about the project, its background, objectives, actions and achievements.





lcengineering.eu

For more informations:

info@lcengineering.eu

