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ReSilex

D8.1 – Communication, Dissemination, Exploitation and awareness raising plan



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Executive Summary

This document traces the strategy for the dissemination and communication activities of the RESILEX project. The document starts with providing an overview of the RESiLEX 's visual identity. It then lists the key project objectives and the target audiences relevant for RESiLEX activities. The Key messages relevant for the project communication are presented in detailed, followed by a list of dissemination and communication tools to be used, accompanied by a set of Key Performance Indicators. The document ends with a detailed schedule of activities to be carried out in the period M6-M18

Project's visual identity

The present section provides a general overview of the RESILEX visual identity, comprising logo, fonts, colour palettes and graphic elements. These will be used by all partners in the project's related publications and dissemination and communications actions.

Figure 1 Project logo



Figure 2 Project logo on white/blue screen



Figure 3 Colour codes and fonts



Dissemination & Communication material: preview

The following pictures provide a preview of how the Dissemination and Communication material will look like. Further elaborations and types of material will be elaborated during the project's lifespan.

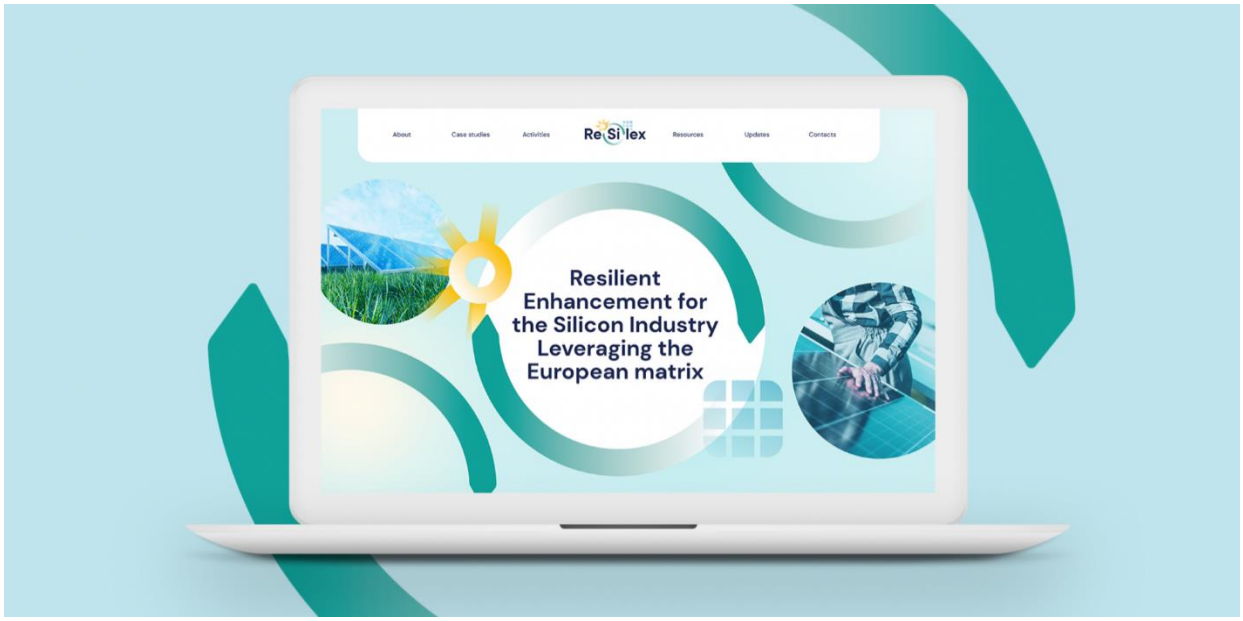
Figure 4 Social media card



Figure 5 Covers for publications/deliverables



Figure 6 Website preview



Objectives and key messages

The EU's industry is highly dependent on imported (critical) raw materials to satisfy the local demand and maintain its competitiveness, especially for strategic sectors such as renewable energy, mobility or aerospace. Electrification and industry 4.0 are increasing the needs for specific and rare elements becoming critical for the entire EU.

In line with the action plan "Critical Raw Materials Resilience: Charting a Path towards greater Security and Sustainability", there is an urgent need to create sustainable and resilient value chains in the EU.

This explains the need for transformative technologies and processes to develop more resilient and circular value chains in Europe. Exploration, extraction, processing and recycling of critical raw materials are the key enablers to help secure and diversify supply from both primary and secondary sources and contribute to the EU's long term industrial resilience. In this critical context, the RESILEX project seeks to find new solutions to ease the position of the EU regarding the supply of Critical Raw Materials (CRMs).

The RESILEX dissemination and communication (D&C) activities have the objective of maximizing the impact of the project's results by reaching the identified target audiences. This shall be done by promoting and showcasing the 8 technological solutions demonstrated by RESILEX during its lifespan:

- Circular CRM recovery process for waste streams in the mining industry
- Aluminothermic slag reduction using different secondary silicate and aluminium raw material
- Crystalline nano-powder production with thin carbon-coating layers from purified kerf & end-of life solar cells
- Solar cells using wafers made from revalorized silicon waste
- Indium-free and Silver-free solar cells with passivated contacts
- PV modules with bio-sourced encapsulant and recycled frame
- Froth flotation of Silicon from end-of-life PV modules
- Development of Silicon composite material for Lithium-ion battery cells

Given this framework, the communication and dissemination activities will stream from an initial set of key messages, able to make people understand the urgency of the situation, but also the many opportunities that could arise from a successful implementation of the project's solutions. The RESILEX key messages are:

- Critical raw materials are essential for the green transition, RESILEX can show how to reduce the EU dependency from the import of such resources
- Critical raw materials dependency can be solved by innovative technological means
- Reducing the environmental footprint of PV modules? It's possible!
- Recovery of waste materials is essential for making the energy transition more sustainable.
- Give a second-life chance to silicon to facilitate the energy transition
- Cheaper and more sustainable PV modules are possible

Target audience

The table below identifies the main target audience groups deemed relevant for the RESILEX project. It also provides a provisional list of specific stakeholders in each category. In parallel, WP7 and WP8 have been working on an extensive stakeholders database which can be used both for clustering and dissemination activities. This list will be duly employed by WP8 members.

Table 1 Target audience groups

Group	Specific subjects
Research Community	Members of the EIT Raw materials community, Universities, Research clusters.
Private Stakeholders	European Raw Material Alliance (ERMA), CRM Alliance, Euromines, Members of Solar Power Europe, Public/Private clusters in the mining sector. Energy producers interested in PV innovations, Euroalliages - Association of European ferro-Alloy producers, European Battery Alliance.

Other stakeholders	Policy makers at EU/National level, similar projects and initiatives (RESILEX will aim for joint-activities), ERA-NET Cofund on Raw Materials, Water Europe and the BATT4EU, European Solar Initiative.

Communication tools

To convene the key messages to the target audiences and grant the maximum outreach of the RESILEX technological solutions, WP8 will rely on wide array of communication tools, detailed in the table below.

Communication tool	What	KPI
Project website	Fully functional website containing key and easy-to understand information on the project scope updates partners. Dedicated pages will focus on the 8 technological solutions	1000 visits per year
Social media	RESILEX will use LinkedIn as the main social media, capable to better interact with the desired target audience and spread news and visual materials	150 followers every year and 1000 interactions per year
Newsletters	Classical newsletters will periodically provide a wrap-up of the project activities at regular intervals	2 Newsletters per year

Visual material	A wide array of promotional cards, infographics and factsheets will be published to boost the project's communication and let the audience to clearly understand RESILEX activities	16 factsheets published by M48 8 infographics published by M48 36 cards published by M48

Dissemination tools

Dissemination activities will convene more technical and information dense-content, targeting highly specialized audiences in specific venues/events. The table below shows details the Dissemination tools to be used.

Dissemination tool	What	KPI
Scientific publications	Articles to be published in scientific journals, made available following the Open-access approach	10 articles published
Outreach articles	Dissemination articles destined to a wider public, published in European online magazines (example: PV magazine, Solar Energy)	10 articles published by M48

Webinars	Online webinars organised in conjunction with the release of specific project Deliverables or achievement of significant results	6 webinars by M48
RESILEX events	Organisation of topical RESILEX event addressing specific audiences selected from Table 1 (example: event in Brussels with policy makers, focussing on CRM sourcing)	3 events by M48
Participation to external events	Participation given in professional conferences/fairs such as the IMARC conference, PV forms landscapes, Intersolar, EU Raw Materials Week, Mining and Minerals Hall	12 presentations during external events

Relevant events

It is essential to keep track of large European conferences and fairs, relevant for the activities and topics addressed by RESILEX . For this purpose, the following table lists the most relevant events taking place between M6 and M18. This can serve to guide partners' participation in such event or to keep track of these events for eventual participation after M18. The (?) means that the period is not confirmed yet, at the time of writing.

Event name	Period
Mining and Minerals Hall	October 2022
EU Raw Materials week	November 2022
International Conference on Renewable Energy Technology	January 2023
International Conference on Advanced Batteries and Energy Systems	January 2023
Solar power summit	March 2023 (?)
Agrivoltaics conference	April-May 2023
The battery show Europe	May 2023
Intersolar Europe	June 2023
International Conference on Solar Energy Photovoltaics	July 2023
International Conference on Solar Energy Photovoltaics	July 2023
PV Forms landscapes	September 2023
EU PVSEC	September 2023

Exploitation & Scale-up plan

In this part, a preliminary statement of the exploitation plan will be discussed to pinpoint the main targets that will be addressed during the course of the project. A more concrete assessment will be made once the new technologies developed in RESiLEX reach a higher maturity, enough to have exploitable results.
The main objective of the exploitation plan is to assess all 8 pilots' scalability and replicability of some processes to other CRMs. In fact, 5 replication sites for the Recovery Treatment Train were identified (Cobre Las Cruces, San Telmo, La Zarza, and other mines from ISMC's network). Furthermore, a scale-up plan of the resulting technologies will be established during the project targeting the 3 years after the end of the project. This plan will include the scale-up of: the eco-designed solar cells and modules by Enel (and potentially others); the nanopowders for battery applications; the PV dismantling line in Toulouse by Comet, Recma and Envie2E.

Scale and significance of the project

RESiLEX ' contribution to expected outcomes and impacts	Scale and Significance
Increase the circularity, cost-effectiveness and sustainability of the EU mining industries	Significance: 80% acid wastewater discharge reduction and 3.40€/kg recovered CRM. Scale: 10 replication sites 3 years after the project's end to reach TRL8, 100 sites by 2035
Develop a sustainable and circular Silicon production in Europe	Significance: 80% carbon footprint reduction and 13% yield increase Scale: potential new standard by 2040
Develop CRM-free solar cells and modules with composite materials produced from locally recycled PV panels (increasing supply capability, and lowering dependency on third country and high volatile market price)	Significance: 25% cost reduction, >25% efficiency Scale: 10 replications 3 years after the project, precommercial phase by 2028
Enhanced circularity of reused Silicon from end-of-life PV panels to new	Significance: recovery rate of PV modules up to 97% by 2030, 80 kg/day of Si production in 2024

feedstock for high-performance solar cells and battery cells	Scale: Commercial level by 2030 for the French market (ENV will open a new PV recycling factory in Toulouse in the next three years)

Schedule of activities

The table below provides the schedule of dissemination and communication activities that WP8 shall enact in the run up to M18 and the first revision of the present document. The next releases of the Dissemination and Communication plan will update this table, providing a schedule for the next period ahead.

Activity	When
First press release of the RESILEX project	M6
Posting social media cards on the Linkedin account	M6-M18
First project Newsletter	M12
First project webinar	M15-M16
Preparation of RESILEX factsheets	M10-M18
First RESILEX event organised	M18

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