



Project Deliverable D2.1: Dissemination and Communication Plan

TEMPÈST

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TEMPEST Project

next generation MultiPle architEcture battery Systems for IndusTry

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- Clarification

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1.0	23/10/2023	Rocío García Ramírez	Initial Version
1.1	23/10/2023	Jeremy Warren	Minor revisions for formatting and context.
1.2	30/11/2023	Jeremy Warren	Changes Requested by Project Officer: <ul style="list-style-type: none"> • Update of formatting for coherence across all deliverables. • Addition of project full title on pg. 2. • Removal of redundant paragraph on pg 9, §4. • Addition of update frequency to §1. • Addition of captions to figures throughout document. • Update of due date for MS7 on pg.18.
1.3	20/12/2023	Jeremy Warren	Changes requested by Project Officer: <ul style="list-style-type: none"> • Addition of disclaimer regarding similarity to other project deliverables, notably that of GIGAGREEN.

Configuration Management: Document Location

The latest version of this controlled document is stored on the private TEMPEST storage platform.

NOTE: This document has been prepared by Sustainable Innovations Europe using their own internal templates and methods. As it is based upon their own internal templates, the document may display similarity to certain Dissemination, Communication, and Exploitation Plans from other projects (most notably GIGAGREEN) in which Sustainable Innovations Europe is similarly responsible for the same activities in said projects.



TEMPEST Deliverable

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1. DEFINITIONS

KPI	Key Performance Indicator	OA	Open Access
WP	Work package	LIPLANET	Network of battery cell Pilot Lines in Europe
CINEA	European Climate Infrastructure and Environment Executive Agency	EMMC	European Materials Modelling Council
WP	Work Package	ERMA	European Raw Materials Alliance
KER	Key Exploitable Result	ADVISE	Advanced Inspection of Complex Structure
HE	Horizon Europe	SIMPLIFY	Sonication and Microwave Processing of Material Feedstock
DC	Dissemination and Communication	NDTonAIR project	Training Network in Non-Destructive Testing and Structural Health Monitoring of Aircraft structures
SIE	Sustainable innovations	P	Partners
M	Month	IND	Industry
KPI	Key Performance Indicators	SC	Scientific Community
R&I	Research and Innovation	SH	Stakeholders
RM	Raw Materials	SB	Standardisation Bodies
AM	Active Materials	EE	Education Entities
CMEM	Cell manufacturing & equipment manufacturers	CL	Clusters
BPS	Battery Packs & Systems		
OEM	Application & Integration		
RSL	Recycling/Second Life		
SC	Scientific community		
PM	Policymakers		
STC	Standardisation Technical Committees		
GP	General Public		
TM	Trade Media		
OS	Open science as		
NiMH	Nickel Metal Hydride		
Pb	Lead		



2. EXECUTIVE SUMMARY

The TEMPEST Project brings advanced, module-free battery systems, optimized using artificial intelligence algorithms through three different demonstrator battery types (compact and large-scale batteries for mobile applications in automotive, aircraft, maritime and rail sectors, and stationary energy storage batteries), showcasing a TRL5 and using two different cell chemistries, LIC and SSC. To date, most modern, off-the-shelf battery designs targeting lightweight applications use lithium-ion technology.

This is because other existing technologies such as NiMH and Pb: Acid are often too heavy, leading to energy densities inferior to those of Li-Ion technologies. New technologies must improve upon energy density, whilst also employing green, recyclable designs and avoiding the use of critical raw materials. In addition, the rapid increase in the number of electrified vehicles, especially those employing fast-charging systems, has led to an increasing load on energy generation systems.

During periods of mass travel (for example, during the summer vacation season), this can lead to severe loading. It is therefore important to consider the whole of the electric vehicle system – not only at the vehicle level but also at the infrastructure level. Europe is very strong in terms of its capacity to produce final products (such as EVs and stationary storage systems) but is weaker when considering its capacity to produce and use raw materials, advanced materials, and equipment for manufacturing cells.

The overarching goal of the TEMPEST project is to develop and mature a new generation of safe by-design, recyclable, high-performance, and lightweight batteries for the largest possible swath of transport and stationary energy storage applications.

This document contains a detailed Dissemination and Communication Plan that outlines the project's audiences and communication channels for dissemination. It also answers the questions WHO? WHAT? WHEN? HOW? and provides an integrated, accurate, and efficient dissemination strategy. In addition, it highlights potential audiences, roles and responsibilities, and methods of communication to be used for the TEMPEST promotion.

Task 2.1 aims at proactively promoting the TEMPEST project and its results by providing targeted information to various audiences. The promotion activities will be part of the dissemination and communication plan, and this document presents the first step in achieving the partial objective.

All tasks expected for the period were accomplished on time: social media online (M1), templates and promotional materials (M1), first press release (M1), website released (M2) and first newsletter (M3, clustering activities (initiated M5 an ongoing).

This deliverable will be updated at M24 and M36.

3. INTRODUCTION

This document describes the Dissemination and Communication Plan to be adopted by the TEMPEST project, whose main objective is to ensure that the project's outcomes (concepts, scientific results, validated work, problem awareness) are consequently disseminated to appropriate target communities.

It, first, presents the objectives of the communication and dissemination plan, and the main target audiences to follow with the tools and channels. Within these tools and channels, different means, and platforms, such as the website, social media channels, printed materials, newsletters, press releases, scientific journals, and trade media are explored. In addition, it is also commented on the participation in conferences, workshops, and events. The stakeholders' engagement is also explored, to then proceed to evaluate which indicators and targets are set to evaluate the communication efforts.

The communication and dissemination will involve different levels (European level, international level, regional level, etc.) and it will work both externally and internally. These realms are also considered in the plan below.



A timeline with the main three communication phases is presented, to finish with an overview of the actions carried out from M1 to M6.

The main goal of TEMPEST's dissemination and exploitation plan is to ensure that the project results and outputs are effectively and efficiently disseminated and protected to guarantee its replicability and exploitation. This involves the implementation of dissemination and exploitation activities, as well as knowledge and IP management activities. TEMPEST is committed to establishing cooperation with the projects funded under the same topic and to contribute to the objectives of the Battery partnership to establish a world-leading sustainable and circular European battery value chain to drive the transformation towards a carbon-neutral society. This cooperation shall materialize in the coordination, monitoring communication and dissemination activities of mutual interest, and any other type of collaboration that may occur during the conduct of this project, based on mutual benefit.

3.1 Context of WP2

The main aim of WP2 is to coordinate the project consortium in the performance of dissemination, communication, and exploitation activities, including IP management. Following the OS approach of the project, partners will maximize the openness of results and the interaction with sectoral stakeholders in a balanced way with IP protection measures established where necessary to ensure the proper exploitation of project KERs. The Consortium will contribute, upon invitation by the CINEA, to common information and dissemination activities to increase the visibility and synergies between HE/H2020 supported actions.

3.2 Objectives of D2.1

A detailed Dissemination and Communication Plan (D&C) was produced by SIE at the beginning of the project (M6), based on the preliminary indications given in Section 2.2 and in collaboration with all the consortia. It outlines the project's audiences, key messages, and communication channels for dissemination, including roles and responsibilities. The different updates of the plan will offer the monitoring of the different dissemination and communications activities carried out by all partners, evaluated against its KPIs.

3.3 Objectives of the D&C Plan

To deliver and achieve the outcomes and impacts of the project, TEMPEST has set a specific plan for the dissemination, usage, and valorization of research and innovation results. This document includes outreach efforts to inform the public about the utilization of European funds for R&I projects, social issues, and the results of a sustainable and cutting-edge cell and battery manufacturing sector in the EU. Thus, improving the communication between science, business, and society. WP2, "Dissemination, exploitation, and communication," will take the lead on these efforts, liaising with the other partners to ensure the greatest impact is made, and delivering a comprehensive Dissemination, exploitation, and communication Plan by M6. Here is a brief explanation of the main components of this proposal.

3.4 Target Audiences

A sizable list of stakeholders has been initially established by TEMPEST for whom the distribution and communication tools and materials will be intended. Target audiences in the battery and cell manufacturing sector. TEMPEST aims to engage a diverse audience that spans across academia, industry, government, and the general public with an interest in advanced battery solutions for transport applications (automotive, aircraft, maritime, rail, and stationary).

The dissemination will target industrial partners, especially through the participation of consortium members who are involved in Batteries 2030 (NIC), BEPA (TEK), and EMIRI (TEK, ABEE). A list of selected journals for publication is provided and span a diverse set of different specialties. Training will be assured by several partners, including those certified to deliver diplomas in their specialties (RSC), as well as through the educational links of university partners. The consortium will further engage with the public to improve confidence in the new battery technologies and increase awareness.

European SMEs and large companies, either as end users or technology providers. Manufacturers of battery modules, their support systems, manufacturing equipment, and end-use applications which use LIC or SSC



battery technology. Further scale of impact will be assured through the identification of further use cases during the project, through clusters such as Aerospace Valley, EMIRI, and BEPA.

The TEMPEST project will develop technologies for batteries in the automotive, aircraft, naval, and maritime sectors, as well as developing battery designs for large-scale stationary systems for buffering at fast-charging stations. Although the vehicle manufacturing sector is an established industry, the electric vehicle one and the associated deployment of the cell manufacturing ecosystem in Europe is not. This justifies the value chain strategy used in the project, which is typical of fast-expanding industries. According to the [European Battery Alliance](#), the following table lists the key players in the value chain along with the key findings that will be shared with them throughout the project.

TEMPEST has identified a significant list of target groups to which the dissemination and communication materials and tools will be directed to, as outlined in Table 1 “Target groups and activities.”

Table 1 summarizes how the different stakeholder groups will benefit from the project’s results. The dissemination and communication strategy will conduct a thorough value chain analysis to better understand the influence and stakeholder interests, and to better adjust the key messages to deliver and how to do so, increasing the likelihood that the project’s findings will be disseminated and used.

Table 1. Target Groups and Activities

Target Audience	Activities	What to disseminate?
Patents, Industry, Education Entities, Clusters	Internal seminars and training and formative lectures in events	Keys to use project results and knowledge
Scientific Community, Industry, Stakeholders, SO	Project Events/Workshops	Project results, benefits for the target markets
Scientific Community, Industry	Scientific and technical articles	Project results, specifically knowledge and fundamentals
Scientific Community, Industry, Clusters	Presentations, lectures, posters in conferences	Results, features and performance of technologies
Industry SH	Trade fairs	Performance and applications
Scientific Community, Clusters	Clustering and engagement	Shared interests
Standardisation Bodies	Collaboration Standardization bodies	Input from the project, standardization needs and gaps
Industry, Stakeholders	EU initiatives and associations events	Project, development, and results
Scientific Community	Open Research outputs	Project, development, and results
Industry	Patents	Project, development and results

TEMPEST consortium members have preliminary identified a list of key associations and organizations that will allow to enhance the project’s results dissemination through mutual collaboration: [LiPLANET](#) (Network of battery cell Pilot Lines in Europe), [European Battery Alliance](#), [EMIRI](#), [ALISTORE](#), [EMMC](#) (European Materials Modelling Council), [BEPA](#) - BATT4EU Partnership, [BATTERY 2030+](#), [European Digital SME Alliance](#), and [ERMA](#) (European Raw Materials Alliance).

Consortium partners are a good reflection of the European battery value chain, including research centers, manufacturers, producers, and academia. Nevertheless, TEMPEST’s intention is to widen its collaboration with other relevant actors from the industry. Thus, a preliminary stakeholder list was prepared, including more than



300 organizations. This list will be regularly updated, and stakeholders will be informed of the project's regular outcomes.

Likewise, similar European and international projects have been identified to seek synergies: [RE CREATE](#), [ALMA](#), [iModBatt](#), [GW4SHM project](#), [ADVISE](#), [SIMPLIFY](#), [NDTonAIR project](#), [CREATOR](#), [DEFACTO](#), [GIGAGREEN](#), [HYSTRAM](#), TEMPEST has created a dedicated section on its website, so stakeholders can easily access all their information.

Finally, a set of trade media contacts was listed, including the most relevant magazines: [Autobuild](#), [Autofacil](#), [Automotive news](#), [Autopista](#), [Autovolt](#), Batteries and Energy Stories News, [Batteries International](#), [Battery Power Magazine](#), [Car and driver](#), [Charged electrical vehicles magazine](#), [Clicacoches.com](#), [Electrek](#), Electric and hybrid world, [Electric cars report](#), [Electric Hybrid vehicles magazine](#), [Electrical India](#), [Energy Magazine Australia](#), [EV Magazine](#), [Inside EVS](#), [KM 77](#), [Motor 16](#), [Motor authority](#), [Motortrend](#), Also, project partners are expected to generate at least 8 peer review articles targeting journals like [Journal of Materials Chemistry](#) or [Journal of Power Sources](#), as well as the open access site from the EC [Open Research Europe](#).

4. KEY MESSAGES

The TEMPEST project will produce a significant amount of knowledge across five technical WPs, sparking interest across the value chain for cell batteries as well as the vehicle industry. The outputs and messages from produced WPs, as well as the suitable instruments and channels for distribution, must be identified. The essential messages from each WP are displayed in Table 2 below. Additionally, the primary target group(s) and distribution channels are established. The consortium group will keep spreading information about its overall goals and partnership engagement in anticipated activities. This includes private business meetings, presentations to possible clients, and scientific materials, milestones, etc.

Table 2. Key messages

WP	Key message	Target group
Management and Coordination	Next-generation battery system technologies for electrification of a broad range of transport and mobile applications (including road, waterborne, airborne, and rail transport, as well as non-road mobile machinery).	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers
Demonstrator Specifications and Circularity Models	Demonstrating increased performances (energy density, power density, lifetime) and safety of battery systems, to improve the competitiveness of the European battery industry in the transport market.	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers
Demonstrator Specifications and Circularity Models	Novel design and process to reduce manufacturing, refurbishment, dismantling and recycling costs of battery systems.	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers
Cell/Pack Design and Optimization	Increased global competitiveness of the European battery ecosystem through	End users in the automotive, aircraft, space, rail, maritime,



	generated knowledge and leading-edge technologies in battery materials, cell design, manufacturing and recycling;	and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers
Materials, Modeling, Testing, Standards, and Verification	Accelerated growth of innovative, competitive, and sustainable battery manufacturing industry in Europe	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers
Manufacturing	Accelerated roll out of electrified mobility through increased attractiveness for citizens and businesses, offering lower price, better performance and safety, reliable operation of e-vehicles. Increased grid flexibility, increased share of renewables integration and facilitated self-consumption and participation in energy markets by citizens and businesses;	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers, plus citizens and businesses
Recycling and Reuse	Increased overall sustainability and improved Life Cycle Assessment of each segment of the battery value chain. Developed and established innovative recycling network and technologies and in line with the March 2020 European Circular Economy Action Plan, accelerated roll-out of circular designs and holistic circular approach for funded innovations	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers
Materials, Modeling, Testing, Standards, and Verification	Increased exploitation and reliability of batteries through demonstration of innovative use cases of battery integration in stationary energy storage and vehicles/vessels/aircraft (in collaboration with other partnerships).	End users in the automotive, aircraft, space, rail, maritime, and urban mobility (including bicycles), as well as battery manufacturers, cell technology suppliers, BMS suppliers, and battery recyclers, as well as the public in general

5. TOOLS AND CHANNELS

The actions carried out by TEMPEST and its results will be disseminated and communicated using a variety of methods and means. The Communication and Dissemination Plan will be more effective since each instrument and channel will be used effectively to speak to various target groups at various stages of the project execution. Table 3 shows the connections between the target audiences, the tools and channels, and the anticipated outcomes.

Table 3. Tools and channels

Channels	Tools	Target group	Expected impacts
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Printed materials	Brochure	All target groups	Create awareness about the project goals and expected impacts
	Leaflet		
	Poster		
	Rollup		
Online	Website	All target groups	Keep the audience engaged on the project objectives and outcomes, as well as on achievements, and news.
	Newsletters		
	Social media		
Publications	Scientific papers		Guarantee knowledge transfer
	Articles	All target groups	Generate interest in the cell battery production and the state-of-the-art technologies developed by TEMPEST
	Press releases	Public in general	Regularly inform trade media on the project outcomes and how this impact positively in European lives in terms of employment, technology development, improvement of environmental footprint, etc
Events organized by TEMPEST	Project Events/Workshops	Project results, benefits for the target markets	Create awareness about the project goals and expected impacts
Events attended by TEMPEST	Conferences	All target groups	Keep the audience engaged on the project objectives and outcomes, as well as on achievements, and news.
	Tradeshows		

The project website, articles written for both a lay and technical readership, press releases, e-newsletters, scientific papers and booklets, social media presence, and attendance at workshops and conferences are some of the methods and channels proposed to be employed in this plan.

The dissemination plan described in section 2.2 of the Grant Agreement serves as the foundation for all efforts involving communication with stakeholders outside the project consortium. The goal of journal articles is largely to inform the academic and scientific communities of current discoveries. To spread new pertinent solutions to more potential end consumers, the project will also publish in key trade publications and magazines. The same audience is targeted for project presentations at technical conferences.

The European logo will be displayed along with the disclaimer that the project has received funding from the European Union's Horizon Europe initiative in all dissemination efforts and publications, including the project website. The European emblem will be given the proper prominence when shown alongside a logo.



3.5 Project Identity

To build a visual brand, a distinctive project identity has been created. It provides a set of templates that will make it easier to gain a solid look and feel as the project progresses. This involves developing the project's logo and the related style guide. Additional communication materials have been developed and made available on the project website. This includes the project logo, templates, roll up, posters, factsheet, brochures, and presentation.

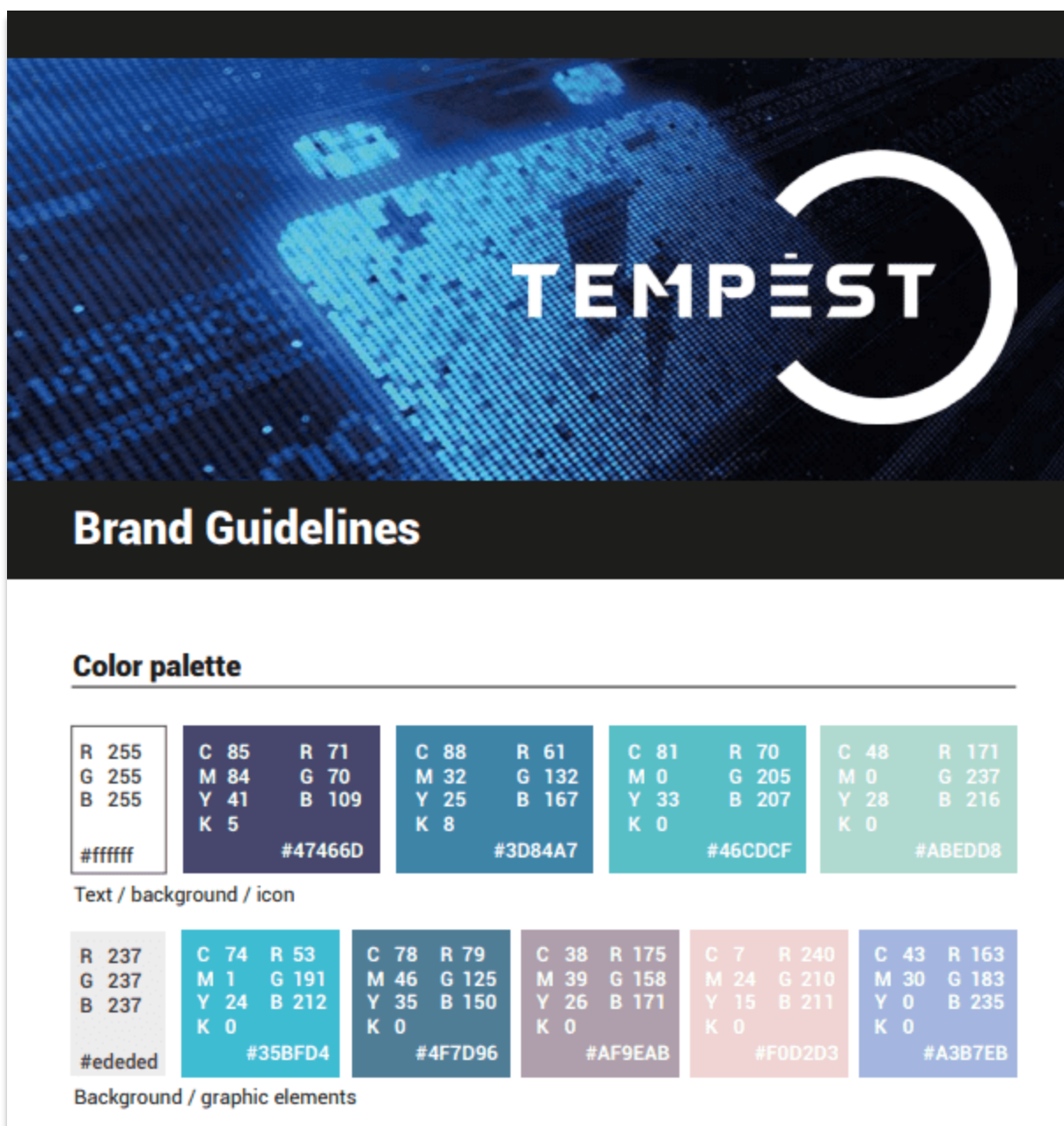


Figure 1: TEMPEST Brand Guidelines



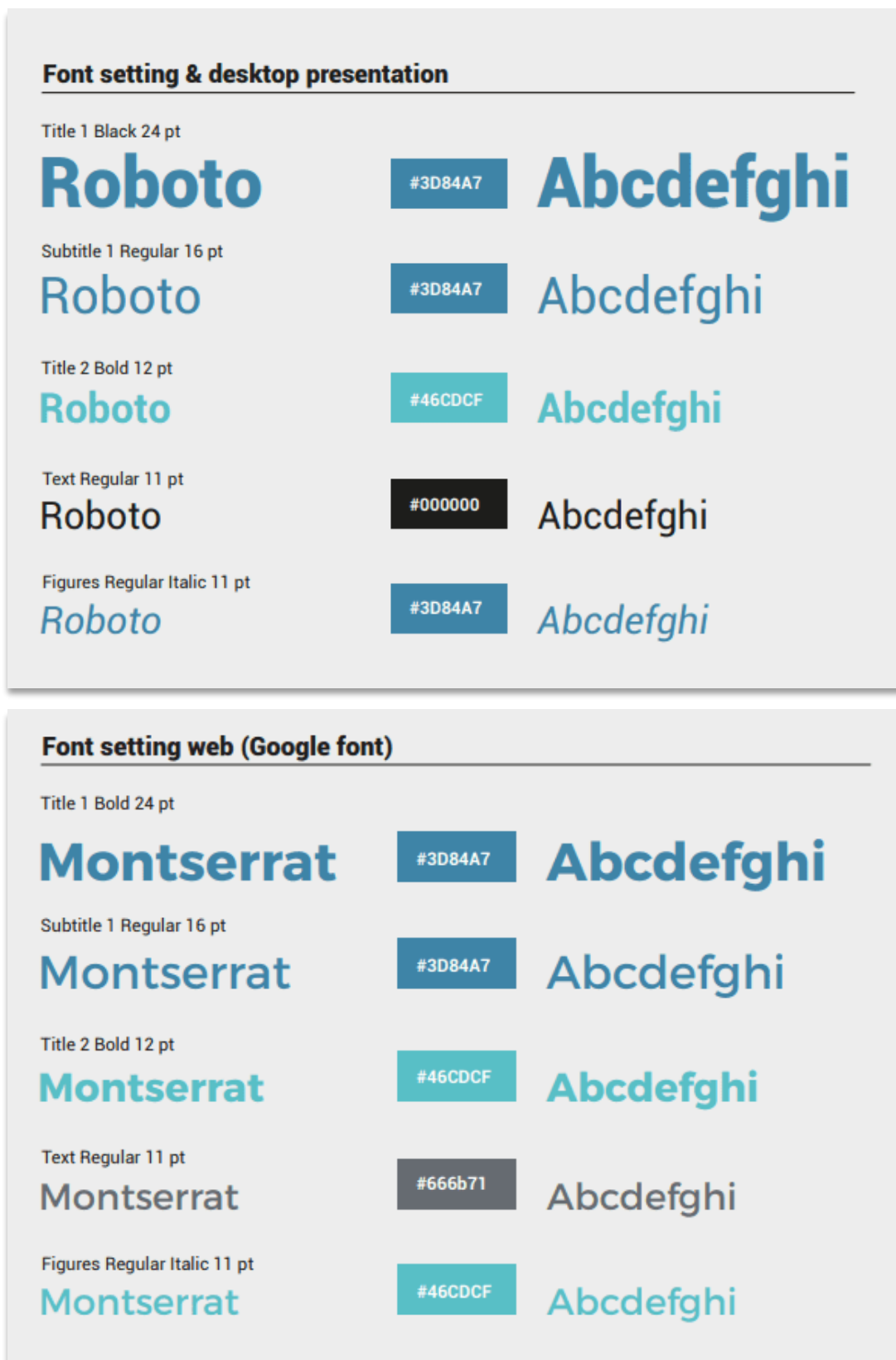


Figure 2: Font selection for the TEMPEST project



Iconography style



Photography style



Figure 3: TEMPEST Iconography and Photography Style

Logo



Figure 4: TEMPEST Logo Styles

3.6 Project website

The [TEMPEST project website](#) has been created and it will be continuously updated to be appealing for visitors. It was made available on M2 of the project life and serves as the main repository of the project information and outcomes.

For the time being, it has four main sections:

1. **About.** This tab contains information on the project goals and objectives, impacts and technology. It also counts on TEMPEST's partners' logos and description, as well as the most relevant related initiatives.
2. **Documents.** [TEMPEST](#) has made available the main resources till today: [presentation](#), [brochure](#), [roll-up](#), [poster](#), [factsheet](#) and [logo](#). There, visitors can also find the first [press release](#) and [newsletter issued](#).
3. **News.** In this section, the project will inform stakeholders about the latest updates on the project progress, interviews, and events at where partners will disseminate TEMPEST.
4. **Contact.** Whoever might be interested in reaching out TEMPEST; here they can simply fill out the form and contact.
5. **Privacy policy, cookies policy, and legal terms** to comply with general data protection regulation (Regulation (EU) 2016/679) on the protection of natural persons about the processing of personal data and on the free movement of such data.

The project website is set up by SIE and will be managed, maintained, and hosted for the duration of the project and a further two years after the completion of the project. Statistical data will be collected about the website visitors that subsequently will be analyzed by Google Analytics software and included in the project reports. The website will be responsive to work on a variety of devices and screen sizes, such as smartphones.



Figure 5: TEMPEST Web Site Preview, Part 1

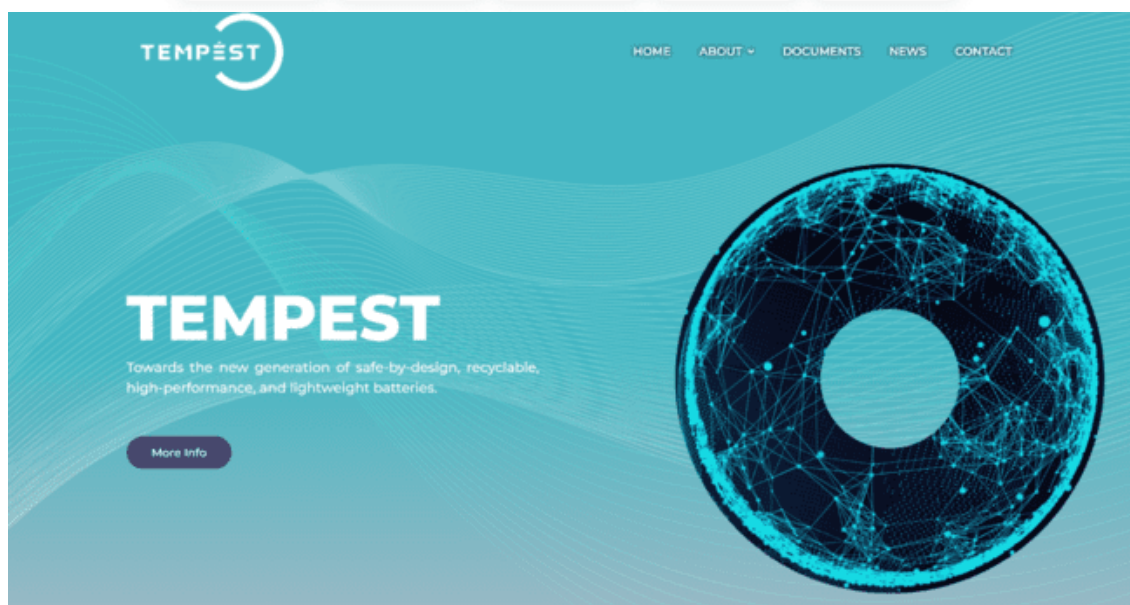
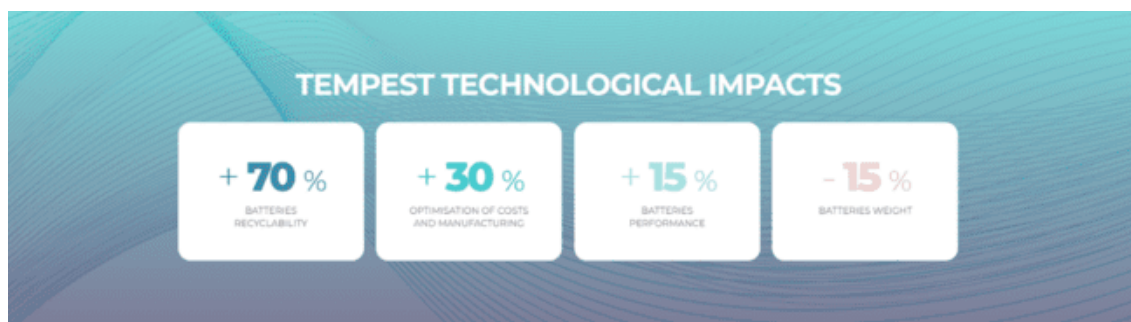


Figure 6: TEMPEST Web Site Preview, Part 2

5.1 Social media

To ensure greater diffusion to various target audiences, TEMPEST will have a social media presence on [Twitter](#) and [LinkedIn](#). Social media should be utilized to promote project updates and, most significantly, to increase website traffic.

To broaden reach, TEMPEST-related content has been posted often starting in M1 on Twitter and LinkedIn. When the project has video content, a YouTube channel will also be made available.

To create an audience for the project results, social media accounts will distribute updates about the project scope and promote events where TEMPEST will be showcased throughout the first phase of the project.

Online media platforms will be supervised to gather data on the metrics, sources, content kinds, and people or organizations who support or spread project messaging. This information will enable communication to be

targeted and optimized for maximum reach of news or results. The final dissemination report and interim reports will both include these findings. SIE will be responsible for the social media profiles, assisted by partners.

SIE will track partners' activities through [dissemination tables](#). Consortium members will follow and participate as much as they can in the project's social media platforms. The partners will frequently share posts on their own corporate websites and social media platforms. SIE can advise them on the most effective ways to do so if they require support and will communicate the project's progress through milestones without breaching the confidentiality of the milestone.

Table 4 Milestones suitable to be communicated

Milestone	WP	Lead partner	Date
DMP and Risk Management Plan	1	1-RSC	M6
Project progress and risk management evaluation	1	1-RSC	M6
Roadmap for DEC, training & post-project activities	3	8-SIE	M36
Definition of demonstrator technical requirement & KPIs	3	11-ALBI	M2
Assessment of implementation of ESAAS in demo cases	3	4-UPAT	M36
Completed, optimized battery system designs	4	11-ALBI	M5
Definition of materials and construction of the test matrix	5	4-UPAT	M3
Virtual optimization of manufacturing processes and virtual testing of parts and demonstrators	5	4-UPAT	M30
Experimental program completed	5	4-UPAT	M30
Verification of demonstrators	5	11-ALBI	M36
TRL 3 Validation	5	1-RSC	M18
TRL 4 Validation	5	1-RSC	M24
TRL 5 Validation	5	1-RSC	M36
Final Assessment of demonstrator KPIs	6	11-ALBI	M36
Final Assessment of recycling strategies	7	5-NIC	M36

5.2 Printed material

To be distributed at conferences, exhibitions, and other events, as well as to partner networks, a [poster](#), a [roll-up](#), a [factsheet](#), a [project presentation](#) and a [brochure](#) have been created. General information regarding the research activities, participants, and anticipated outcomes is included in the initial project poster and brochure version. Later in the project life, other materials could be created to publicize findings.



Image 2, 3, 4 TEMPEST brochure, poster, factsheet

TEMPEST

AUTOMOTIVE

AIRCRAFT

MARITIME

RAILWAY

STATIONARY

TEMPEST brings advanced, module-free battery systems, optimised using artificial intelligence algorithms through three different demonstrator battery types (compact, large-scale, and stationary).

SAFETY

- Guided-wave Structural Health Monitoring for defect detection.
- Flame retardant/resistant materials & coatings.
- New thermal management techniques and Battery Management Systems.
- Impact resistant all-composite housings.

PERFORMANCE

- Cell-to-pack architectures
- Next-Gen Lithium cells & Solid State cells.

SUSTAINABILITY

- Reversible joining to facilitate repair and separation of bonded components.
- H₂-based recycling methods for extracting, recovering and transforming the components of the cells.
- Digital tools for develop synergistic gains in performance and efficiency.

CONSORTIUM

@TempestBattery

www.tempestproject.eu

TEMPEST Project

Funded by the European Union under grant agreement 101103681. Views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them. This project also contributes to the objectives of the Batt4EU Partnership under call topic ID: HORIZON-CL5-2022-D2-01-05 - Next-generation technologies for high-performance and safe-by-design battery systems for transport and mobile applications (Batteries Partnership).

Figure 7: TEMPEST Poster



TEMPEST brings advanced, module-free battery systems, optimised using artificial intelligence algorithms through three different demonstrator battery types (compact, large-scale, and stationary).



TEMPEST Technological Impacts



+70%

BATTERIES
RECYCLABILITY

+30%

OPTIMISATION OF
COSTS AND
MANUFACTURING

+15%

BATTERIES
PERFORMANCE

-15%

BATTERIES
WEIGHT

TEMPEST Environmental Benefits



Up to 78.7 tons
CO₂ removed per
battery pack and
year



Reduction of
energy loss and
range increasing
up to 52%



Reduction of
greenhouse and
aerosol production
by 62%



Reduction of
energy loss and
range increase of
up to 57%



Reduction of
overall energy load
up to 72%

www.tempestproject.eu

@TempestBattery

TEMPEST Project



Funded by the European Union under grant agreement 101103681. Views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them. This project also contributes to the objectives of the Batt4EU Partnership under call topic ID: HORIZON-CL5-2022-D2-01-05 - Next-generation technologies for High-performance and safe-by-design battery systems for transport and mobile applications (Batteries Partnership).

Figure 8: TEMPEST Factsheet



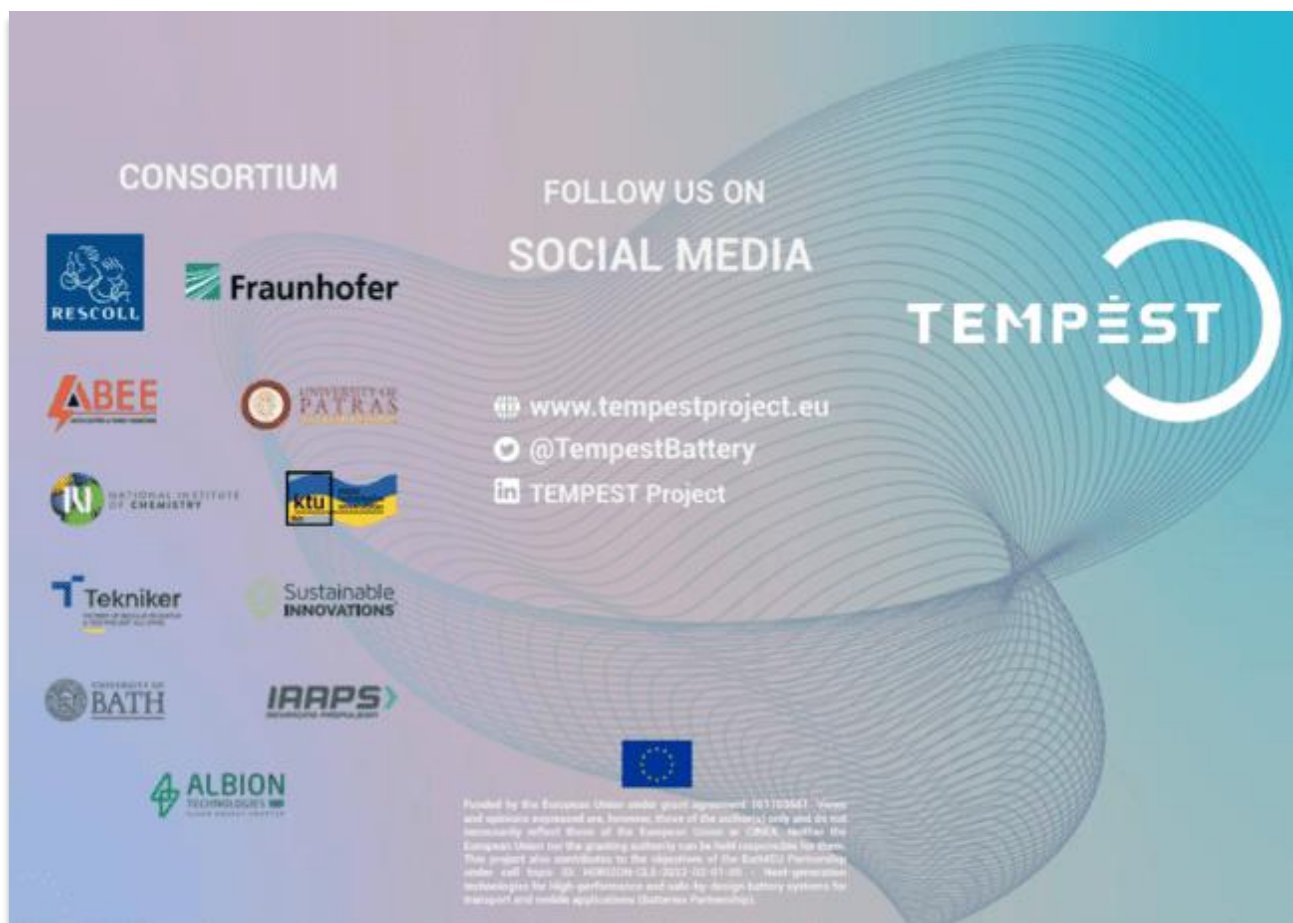


Figure 9: TEMPEST Brochure

5.3 Newsletters and press releases

Every six months, electronic newsletters containing project updates, news, interviews, and other TEMPEST-related information will be created. These newsletters will be sent to stakeholders and partner networks as well as uploaded on the project website.

Additionally, project updates could be included in the partners' own newsletters, which are sent electronically to the contacts they have within the relevant industries.

Press releases will be released to announce noteworthy project advancements as they happen. With the support of the project partners, they will be written in English and distributed to the national media and the European press.

5.4 Peer-reviewed articles and Open Access

The technical and academic partners will create at least 8 scientific papers and 5 other technical publications, bringing additional benefits like greater transparency in the research process, better opportunities for new scientific collaborations, and increased efficiencies in research. The project's findings will be disseminated both internationally in international journals like [Journal of Materials Chemistry](#) or [Journal of Power Sources](#), as well



as nationally, primarily in the Member States where the partners are based. Open Research Europe is an open access, free of cost alternative as well for partners.

Likewise, the project website will compile public publications and make them available for free download.

All articles will be published through Open Access (online access to research outputs provided free of charge to the end user) compatible journals that allow to offer free, without embargo period, access to both the article and the research data that allows other groups to validate the results - except those that compromise the IP and exploitation rights.

In addition, publication in journals will adhere to EC Open Access principles, targeting Gold and Green access journals, and articles will always be made available through open access platforms such as arXiv and ChemRxiv.

Preference will be given to journals which also adhere to the principles of Open Peer Review. Also, all partners should be encouraged to put preprints of their articles on the web earlier (early sharing).

5.5 Conferences

To meet target audiences, other stakeholders, public authorities, and the scientific community, project partners will attend sector-related events, conferences, and workshops. They will also spread the word about the project's goals and outcomes. Access to target audiences at the local, national, European, and worldwide levels will be made possible by these events.

SIE will keep the list of conferences and identified that are updated every month through the dissemination tables.

6. INDICATORS AND TARGETS

The accomplishment of targets for various indicators will serve as a gauge for how well the Dissemination and Communication Plan is being implemented.

Table 5 Communication and Dissemination KPIS

Tools/channel	What to communicate?	To Whom?	KPI
Visits, media and didactic materials	Impacts brought by TEMPEST results on European daily lives.	EU Citizens	+35.000 people reached
Press releases, articles, radio and TV, web, social media	Impact on jobs, energy, environ. & life quality	Public in general	+30.000 reached
Visibility and participation in Women in Science, STEM	Career opportunities	Women	Involvement in 3+ campaigns/campaigns
Industry events	Impact in construction, naval, aerospace, and automotive industries	Standardization Bodies	+4 Presentations
Standardization	Conclusions about gaps and needs	Standardization Bodies	+2 Presentations
Presentation in events	Industry and society impact	All	+2 presentations
Internal seminars and training and formative lectures in events	Key to use project results and knowledge	Partners, Industry, EE, Clustering	At least 6 seminars, +20 participants per seminar, + 2 online materials
Project Events/Workshops	Project results benefits for the target markets	Science Community, Industry stakeholders, SO	2 events, ~40 attendees/event



Scientific and technical articles	Project results, specifically knowledge and fundamentals	Science Community, Industry	+8 Open Access articles, +4 other publications
Presentations, lectures, posters in conferences	Results, features and performance of technologies	Scientific Community, Industry	+5 lectures and posters
Trade fairs	Performance and applications	Industry, stakeholders	+6 events, +500 people reached
Clustering and engagement	Shared interests	Scientific community, Clustering	+3 act. 10 entities
Collaboration Standardization Bodies	Input from the project, standardization needs and gaps	Standardisation Bodies	1 recommendation report + engage with at least 2 WG
EU initiatives and associations events		Industry, Stakeholders	+6 presentations at EU Level
Open Research outputs	Project Development and results	Scientific Community	Publish in Open Research Data
Patents	Project Development and results	Industry	+ 5 files patents filed

7. LEVELS OF DISSEMINATION

The geographic levels at which the main target groups operate will affect the communication methods and media used.

The project's findings will be regularly shared with the European Commission (EC) through various means such as midterm reviews, minutes from periodic meetings, and updates to this document. This ongoing communication will enable the EC to make any necessary adjustments to relevant regulations and explore opportunities for collaboration with other ongoing projects focused on dissemination efforts. Furthermore, the project's results will also be disseminated to relevant international organizations.

The valuable scientific knowledge generated will be transformed into practical information, regulations, and guidelines. To enhance public awareness, electronic resources will be distributed directly to specific organizations and stakeholders.

In addition to this, for the transmission of knowledge, both within the research and industrial sectors, a multifaceted approach will be adopted. This includes publishing findings in technical journals, participating in conferences and workshops at both national and international levels, engaging in industry meetings, and actively participating in industrial forums.

This comprehensive approach ensures that the project's outcomes reach a wide audience and have a meaningful impact on both the scientific and industrial communities.

8. METHODOLOGY

To make sure that the TEMPEST outcomes are effectively and efficiently conveyed to the project partners, stakeholders, and wider audiences, the following internal and external communication activities will be carried out throughout the project's duration and afterwards.

5.6 Internal Communication

To effectively share information and guarantee that the deliverables are met, effective internal communication is essential. Therefore, to exchange project information, update progress, and share outcomes, frequent meetings and conference calls will be held. Two times a year, consortium and technical meetings will be held, and WP collaboration will be facilitated using Microsoft Teams and/or teleconferencing tools.



Apart from individual emails, taking advantage of the project monthly conference call, SIE will ask partners for their support on the upcoming dissemination and communication activities and events to update the Communication & Dissemination Plan and expedite a content curating process. As a result, the partners will be better able to communicate and report on the project while also adopting a more methodical and focused approach. Each TEMPEST consortium partner will send a representative to this meeting.

Applus+ RESCOLL has also set up a Stockage Platform, which will host the project materials for internal use, including regular updates on the project development, meeting documents (agenda, minutes, and presentations), and project reports. This will help partners communicate effectively with one another.

A login name and password will be required to access this exclusive area.

5.7 External communication

The consortium will make every effort to spread the word about its activities through the media, journals, conference presentations, trade shows, workshops, the Commission, and industry associations. The project's findings will be published in reports, academic publications, and articles. To encourage scientific collaboration, all public communications and scientific publications shall be made open access.

The partners will send SIE the text whenever a translation is required, and SIE will take care of modifying the design.

9. COMMUNICATION PHASES

As the project has different development phases, the communication focus would be different across each of them.

5.8 Phase 1: Awareness phase

In this phase, TEMPEST will prioritize the generation of a community of interested stakeholders and of suitable channels. It will comprise from months 1 to 12.

5.9 Phase 2: Scientific Cooperation Phase

This second phase will consist of knowledge management for the cooperation of TEMPEST with similar projects and initiatives and ensuring the availability of research outputs to targeted audience. It will start in M6 and will last for the project duration.

5.10 Phase 3: Exploitation-focused phase

This phase will cover the support to the actual exploitation of project results via marketing towards final end users (commercial results) or workshops and roadmaps (non-commercial results) and will comprise the final stages of the project (M24-M36).

10. ACTIVITIES M1-M6

5.11 Project identity and materials

During the initial stage of the project, TEMPEST's visual identity was developed. It contained the project's logo and the brand guidelines (typography, colors). A project presentation, a roll-up, a poster, and a variety of other communication tools were also created. The partners were provided with a template for the deliverables, a Word document template, and a PowerPoint template.

As soon as the website was online, the first brochure, poster, factsheet, roll-up, and project presentation were uploaded:





Figure 10: TEMPEST Word Template



5.12 Press releases

A [press release](#) was launched at the beginning of the project. It was sent to more than 200 local and trade media by SIE and several consortium partners.

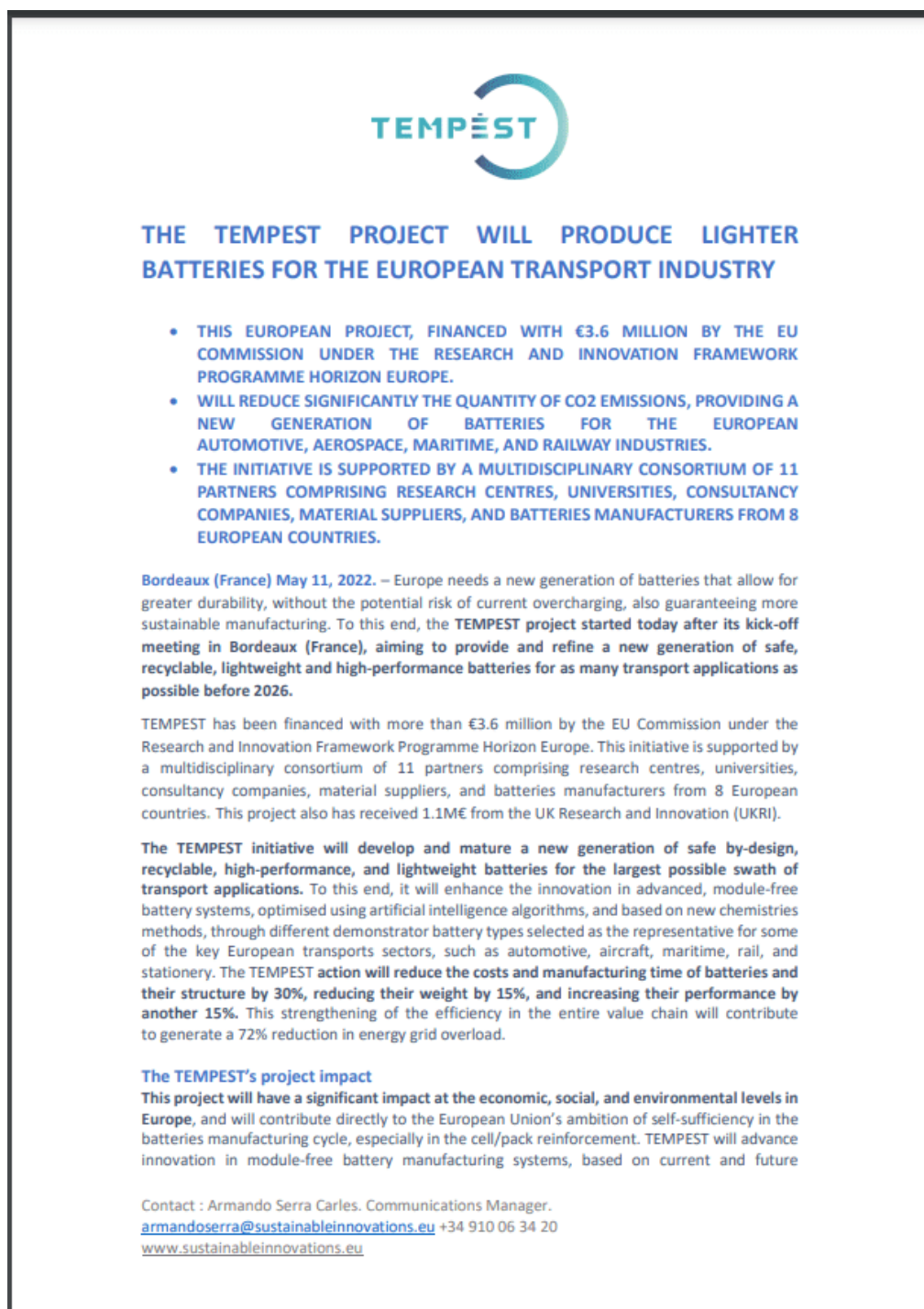


Figure 11: TEMPEST's First Press Release

The total impacts for this type of communication reached more than 200 media outlets in total, including media, consortium partners and related projects portals, as shown in Annex 1.

11. IMPACT ON MEDIA OUTLETS AND OTHER RELEVANT WEBSITES M1-M6

- KAUNAS - University of Technology
<https://en.ktu.edu/projects/next-generation-multiple-architecture-battery-systems-for-industry-tempest/>
- SIE - Sustainable Innovations
<https://sustainableinnovations.eu/es/tempest-baterias-ligeras-industria-transporte/>
- Bristol and Bath, Regional Capital
<https://x.com/BristolBathRCap/status/1658079014936772608?s=20>
- IAAPS: Propulsion systems research
https://www.linkedin.com/posts/bath-iaaps_batterytesting-batteryresearch-batterycells-activity-7062071574039801857-AKqX?utm_source=share&utm_medium=member_desktop
- ADI Nouvelle-Aquitaine
<https://www.adi-na.fr/wp-content/uploads/2023/07/Bulletin-318.pdf>

5.13 Website

The website <https://tempestproject.eu/> was launched on M2 with essential information of the project and will be updated constantly with progress and news from the project and partners.

Apart from the sections mentioned above, regarding the News section, 6 posts about the project scope, participation of the consortium partners in events and interviews have been uploaded:



Figure 12: TEMPEST Website Analytics

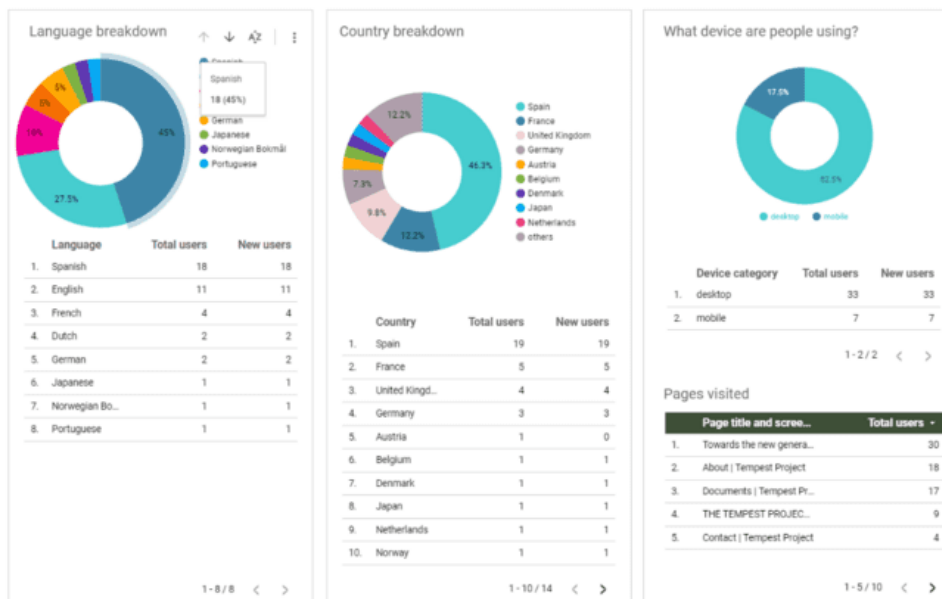


Figure 13: TEMPEST Website Analytics, Part 2

5.14 Social media

The LinkedIn account: <https://www.linkedin.com/company/tempest-project/> and the Twitter account: <https://twitter.com/TempestBattery> were created and updated with content on a regular basis since the project's kick off.

During this period, 20 publications were shared, reaching up to 22 followers, and our publications received a total of 1,800 impressions on Twitter. On LinkedIn, with 93 followers, there were 175 reactions, 2 comments, and 17 reposts, through September 21.

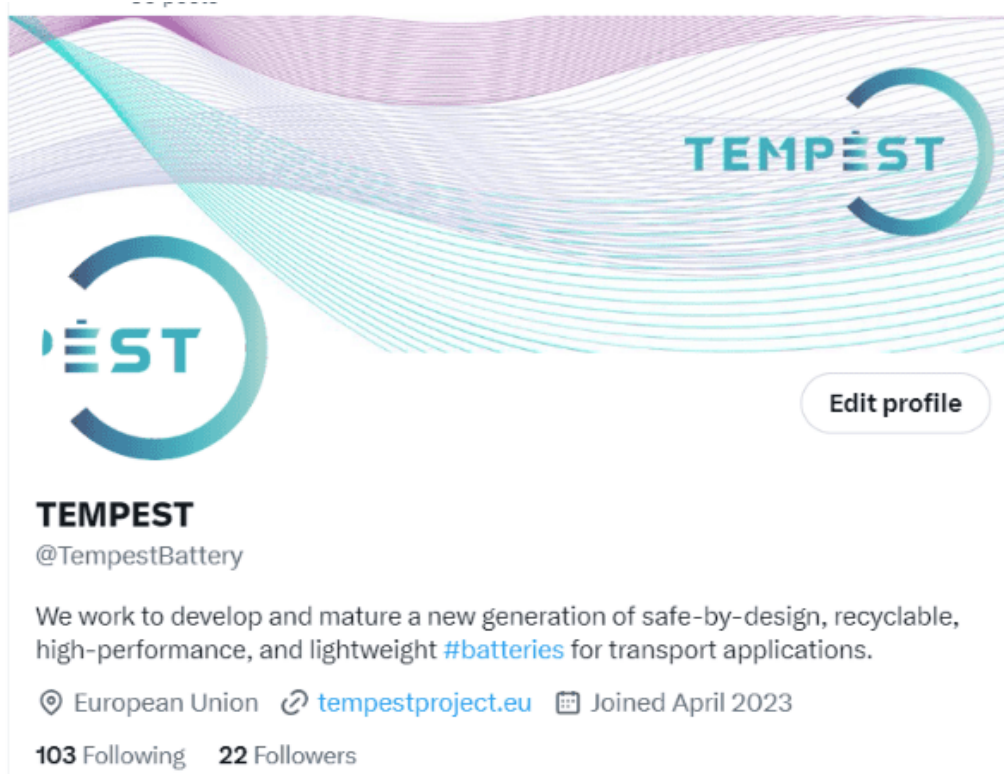


Figure 14: TEMPEST Twitter Account



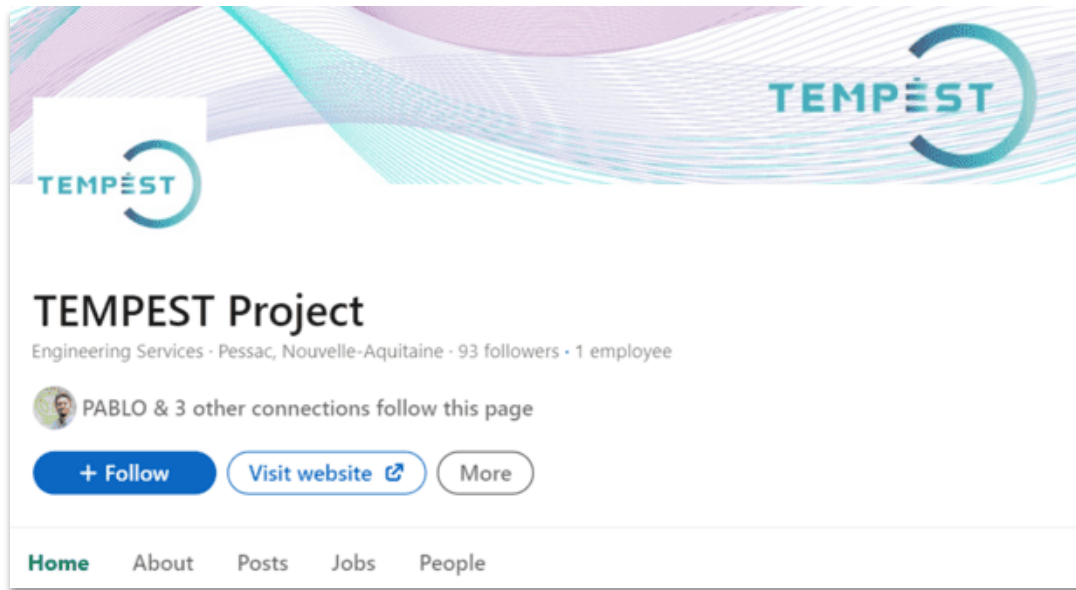


Figure 15: TEMPEST LinkedIn Account



5.15 Newsletter

In M5, the first newsletter was released as shown in Image 10.



Figure 16: TEMPEST Newsletter

5.16 Events attended

SIE has compiled a roster of potential events and will actively track all partner participation by utilizing dissemination tables.

5.17 Interaction with other EU initiatives

TEMPEST has already established contact with the projects under the same topic and a first meeting was held in January 2023 to discuss about possible future actions to carry out together.

Engage in a cross-follow campaign with associated projects such as RE CREATE, ALMA, iModBatt, GWSHM, ADVISE, NDTonAIR, SIMPLIFY, CREATOR, DEFACTO, GIGAGREEN and HyStrAM. This involves sharing and reposting content, following each other on social media platforms, subscribing to newsletters, and more.

Related Initiatives



Figure 17: TEMPEST Related Initiatives

Visits, media and didactic materials	Impacts brought by TEMPEST results on European daily lives
Press releases, articles, radio and TV, web, social media	Impact on jobs, energy, environ. & life quality
Visibility and Participation in Women in Science, STEM	Career opportunities
Industry events	Impact on construction, naval, aerospace, and automotive industries
Standardization	Conclusion about gaps and needs
Presentation in events	IND and society impact

12. CONCLUSION

In this Communication and Dissemination Plan deliverable, we have outlined the communication strategy for the project's life cycle, established key performance indicators (KPIs) to track results, identified relevant events and related projects, and described the activities conducted from month 1 to month 36. The performance during the reported months demonstrates a functional, valid, and positive work-flow for effectively communicating key messages to various audiences.

13. DISSEMINATION TABLES

The dissemination tables are stored on the private TEMPEST project file sharing platform.

14. APPENDIX 1: REFERENCES AND RELATED DOCUMENTS

ID	Reference or Related Document	Source or Link/Location
1	Project folder	https://stockage.rescoll.fr/index.php/apps/files/?dir=/TEMPEST&view=-TEMPEST
2	Project Handbook	https://stockage.rescoll.fr/index.php/apps/files/?dir=/TEMPEST/03%20Execution/Work%20Packages/WP1&fileid=3047661#
3	Communications Management Plan	https://stockage.rescoll.fr/index.php/apps/onlyoffice/2851790?filePath=%2FTEMPEST%2F02%20Planning%2FHandbook%20%26%20Management%20Plans%2F16.Communications_Management_Plan.TEMPEST.7-2-2023.v1.0.docx
4	Grant Agreement	https://stockage.rescoll.fr/index.php/apps/files/?dir=/TEMPEST/02%20Planning/Grant%20Agreement&openfile=2991610
5	Consortium Agreement	https://stockage.rescoll.fr/index.php/apps/files/?dir=/TEMPEST/02%20Planning/Grant%20Agreement&openfile=2991610
6	Risk Management Plan (This Document)	https://stockage.rescoll.fr/index.php/apps/files/?dir=/TEMPEST/03%20Execution/Work%20Packages/WP1&openfile=7147460
7	Stakeholder Matrix	https://stockage.rescoll.fr/index.php/apps/onlyoffice/2832993?filePath=%2FTEMPEST%2F02%20Planning%2F05.Project_Stakeholder_Matrix.TEMPEST.(30-1-2023).(v1.0).xlsx
8	PM ² Communications Management Artefact (the template for this document)	https://www.pm2alliance.eu/wp-content/uploads/2020/11/16.I.PM2-Template.v3.Communications_Management_Plan.ProjectName.dd-mm-yyyy.vx_x.docx

