D8.2

NAIMA Website

875629

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 875629

D8.2	Work Package No.	WP8	Task/s No.	Task 8.2
Work Package Title	Dissemination, Communication and Explotation			
Linked Task/s Title	Subtask 8.2.1 Development of the Project website			
Status	Final	(Draft/Draft Final/Final)		
Dissemination level	PU-Public			
Due date deliverable	2020-02-29	Submission date		2020-02-28
Deliverable version	NAIMA Website			

Document Contributors

Deliverable responsible		ZABALA Innovation Consulting	
Contributors	Organization	Reviewers	Organization
Susana Garayoa	ZABALA Innovation Consulting	Cristina Catalina	ZABALA Innovation Consulting
Carla Sala	ZABALA Innovation Consulting	Sofía López de Aguileta	ZABALA Innovation Consulting
		Leonardo Casado	ZABALA Innovation Consulting

Document History

Version	Date	Comment
1.1	2020-02-24	
1.2	2020-02-28	

Table of contents

List of figures

1. Executive Summary

The present report describes the website (www.naimaproject.eu) and delineates the motivation behind their concepts.

The NAIMA website is the main Dissemination and Communication tool of the project, which will reflect news, advances, and results of the investigation of this project, and the rest of communication actions and the exploitation of the results. Therefore, its design, management, maintenance and generation of content are key activities. It will showcase the content of sections and defines the expected impacts for the project consortium and the final aim of the investigation of this project.

This website is an informative page and a Media Hub for all the public interested in the subject of the project. According to this strategy, messages will be shaped and delivered in an effective manner using Digital Marketing strategies: SEO, creation of content and Social Media channels will be the three pillars to achieve the best results.

2. Website structure

2.1. Introduction

The NAIMA platform has been created to serve as a project content management system. With this aim, the website provides the following content, guidelines and recommendations of the European Commission:

Main menu:

- Home (access)
- THE PROJECT – general information about the project: Description, Operational Objectives and Consortium.
- BUSINESS SCENARIOS – information about the demosite and how is the progress working on the implementation of the new technologies.
- NEWS AND EVENTS: News about main results, milestones, linked policies and initiatives.
- MEDIA CORNER: Press releases, Newsletter, Resources (communication materiales, videos), Documents and Gallery. All will be focused scientific and non-scientific public, general audience and Media.
- DOCUMENTS: public deliverables and scientific papers.
- CONTACT

Footer:

- Appropriate acknowledgment and reference to the funding by European Union's Horizon 2020 Framework Programme.
- Privacy policy, cookie policy, terms and conditions in compliance with the EU General Data Protection Regulation (GDPR).
- Subscription to our newsletter.
- Social Media Icons

2.2. Main pillars of the Digital Marketing Strategy

NAIMA's goal is to demonstrate that the new generation of high-competitive and safe Na-ion cells developed and tested during the project is one of the most robust and cost-effective alternatives to unseat the current and future Li-based technologies, nowadays controlled by Asian industry. This disruptive technology is already supported by a solid European Battery value chain (industry partners of the consortium) through their solid commitment of substantial investments in the manufacturing of all components of a battery, preserving the ownership and industry strength around European countries.

For that NAIMA will be:

- Maintaining a **dynamic website**, all kind of contents will be periodically updated. The website will count with technical articles, investigation papers, public deliverables, pieces of news and policies of the sector, initiatives related to the European Commission, events created by this project or other projects with the same objective, workshops, etc. With this methodology it will improve positioning in Google searchers, and while sharing the content through social networks and the newsletter, more visitors will be attracted to the website.
- The NAIMA website is the **main communication and dissemination tool** of the project. To maximize the scope of the project, different strategies of digital marketing will be established.
- **SEO** – (Search Engine Optimization): the traffic of visits to the NAIMA website will increase progressively throughout the course of the project thanks to the implementation of strategies oriented to organic traffic, always considering the keywords identified for it.
- **Social networks**: the information hosted in the NAIMA website, will be used in the social media channels in a way to increase visits and attract newcomers to the project.
- **Newsletter**: A **quarterly newsletter** will be distributed between the consortium and the public including achievements and innovations of the project that redirect to the website. Newsletter will be also uploaded to the website in a specific section just for them.
- **Linkbuilding**: It will be able to create synergies between the NAIMA website and the partners' websites, as well as with other relevant agents of the sector, Horizon 2020 projects in the same field encouraging the exchange of links. Instruction to the rest of the partners will be offered with this aim.

3. Technical characteristics

1.1.1 Full responsive content website

Responsive web design allows the NAIMA website to be visible in all devices and platforms (desktops, tablets and phones). The incorporation of the state-of-the-art techniques in design also creates a quick and intuitive user experience while browsing the website.

1.1.2 CMS WordPress

This is the more used platform when creating the websites. It allows:

FLEXIBILITY
Every system needs to be able to handle custom demands from the customer without the development period extending to the extreme.

EASY TO USE
The website is easy to use. The website works and can be easily worked. Its completely customizable and maintainable by the customer concerning the content. None the less, it has a lot of resources that are easy reading, fact that invites the user of the webpage to stay browsing for a longer time.

PERFORMANCE
A website always needs to work properly. To guarantee a good performance we take all possible issues into account from the start. Everything needs to work as it should. And this website has the correct HTML and CSS to make the maintenance easy and the visualization attractive and practical.

1.1.3 Images Optimized for a better load

Website compression makes it possible to reduce the file size of a web file to about 30% or less of its original size before these files get sent to the browser of a user.

This compressed file is then served to the browser of the user which decompresses it automatically to load the full original file in the browser again. Enabling compression is great for improving page speed because the visitors will need to download much smaller web files as the original ones when browsing web pages, which speeds up the download process of these files.

1.1.4 Connection and Data Exchange protected under SSL certificate

SSL stands for Secure Sockets Layer; this is a global standard security technology that enables encrypted communications between a web browser and a web server. It is utilized by 1 million online business and individuals to decrease the risk of sensitive information.

To create this secure connection, an SSL certificate is installed on a web server and serves to functions:
It authenticates the identity of the website. It encrypts the data that’s being transmitted

1.1.5 SEO Friendly site and Content

At a fundamental level, a SEO-friendly site is one that allows a search engine to explore and read pages across the site. Ensuring a search engine is the first step to establish NAIMA visibility in the search engine results page.

A disclaimer with the information related to the GDPR compliance will be adhere the contact questionnaire and at the footer of the webpage.

3.1. Structure of the website

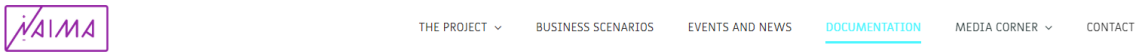
NAIMA project is the main online tool to present and disseminate all the results and events under the framework of the project. It will be regularly updated to provide the latest news with the collaboration of all the partners, relevant results and breakthroughs.

The website is carefully designed to address the public and the people interested in the research activities this project is going to do, in the most effective way. It is the easiest way to ensure the visibility of the project for the EU as well for all the public.

NAIMA website was designed as an interactive tool, as well as a training and learning one, for public information and communication among the partners and the people invested in the project. It will also be a repository for public documents, materials and useful information related to the project.

The structure and design of the website used during the lifetime of NAIMA might be modified to be adapted to needs and the future outcomes of the project. This is the NAIMA website structure:

3.1.1. Menu



3.1.2. Home

The homepage is designed to attract the attention of the viewer with the firs visual impact. The users get an overview of the project and of the whole consortium. The project logo is clear and visible, and everything is designed with the same colours theme. In this first page the user will find a short and sharp description of the project (What is NAIMA), a clear presentation of the specific goals, information about the battery and latest news.

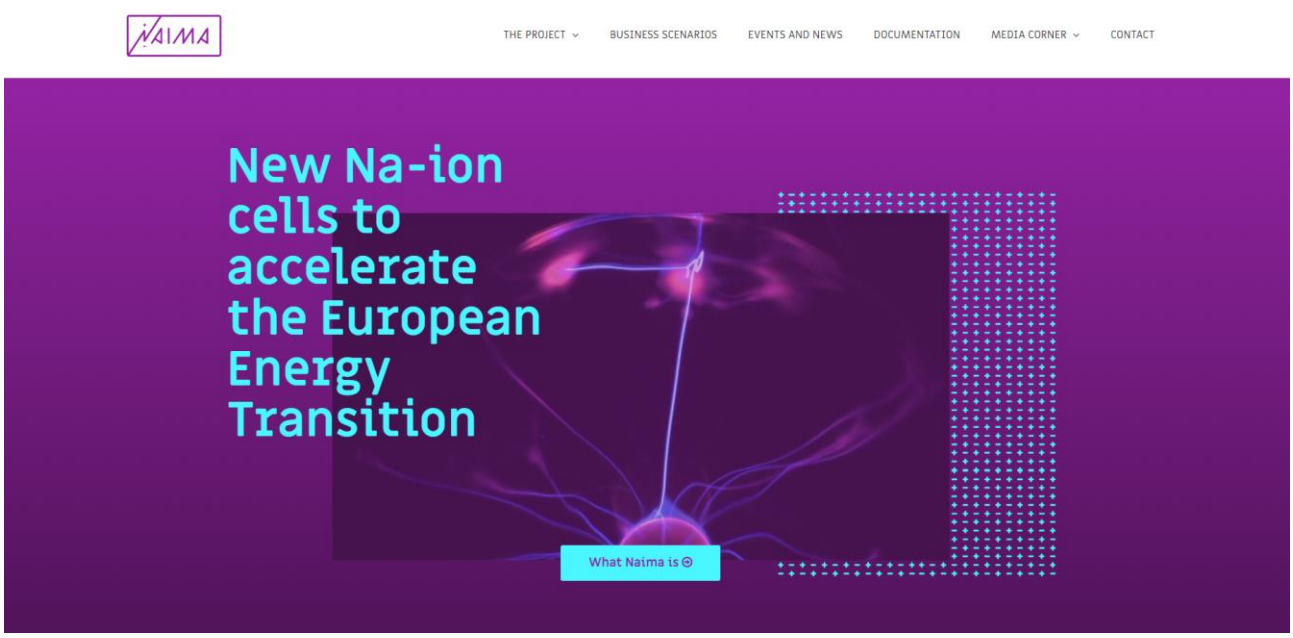


Figure 1 Homepage view

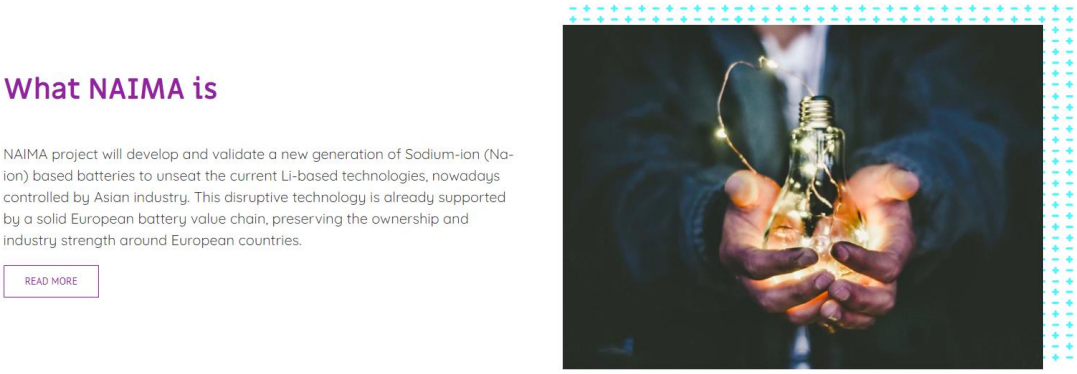


Figure 2 Homepage view

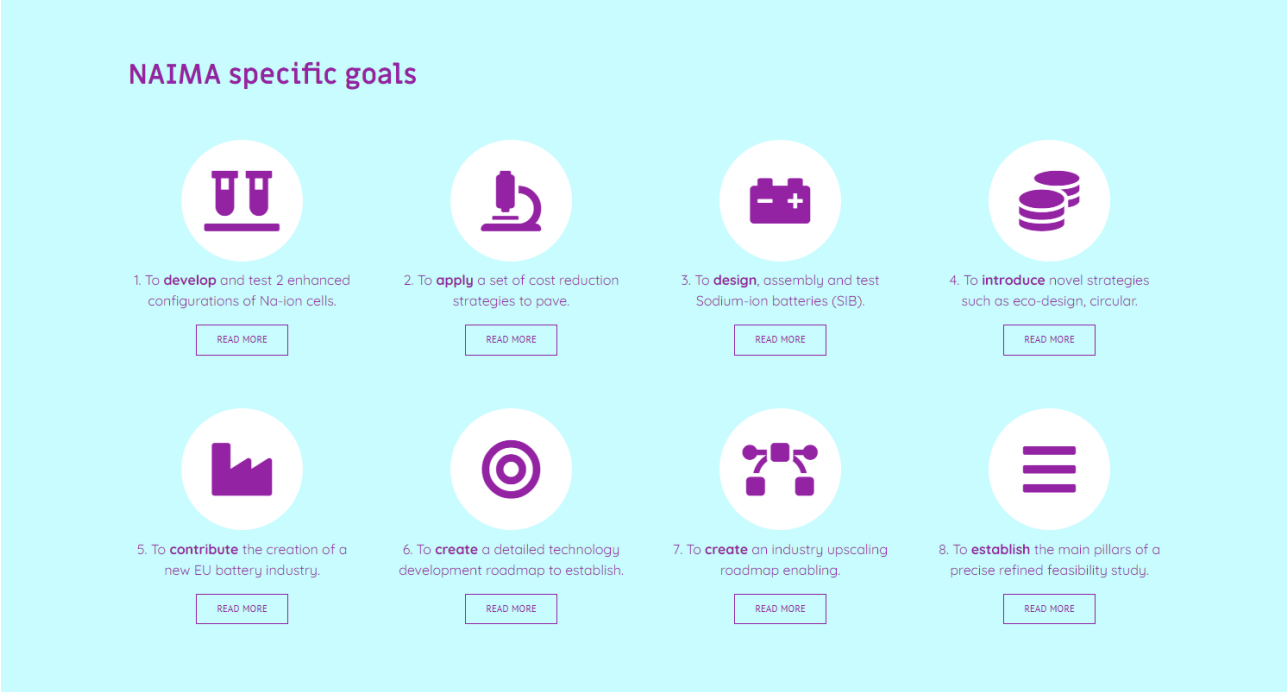


Figure 3 Homepage view

Figure 4 Homepage view

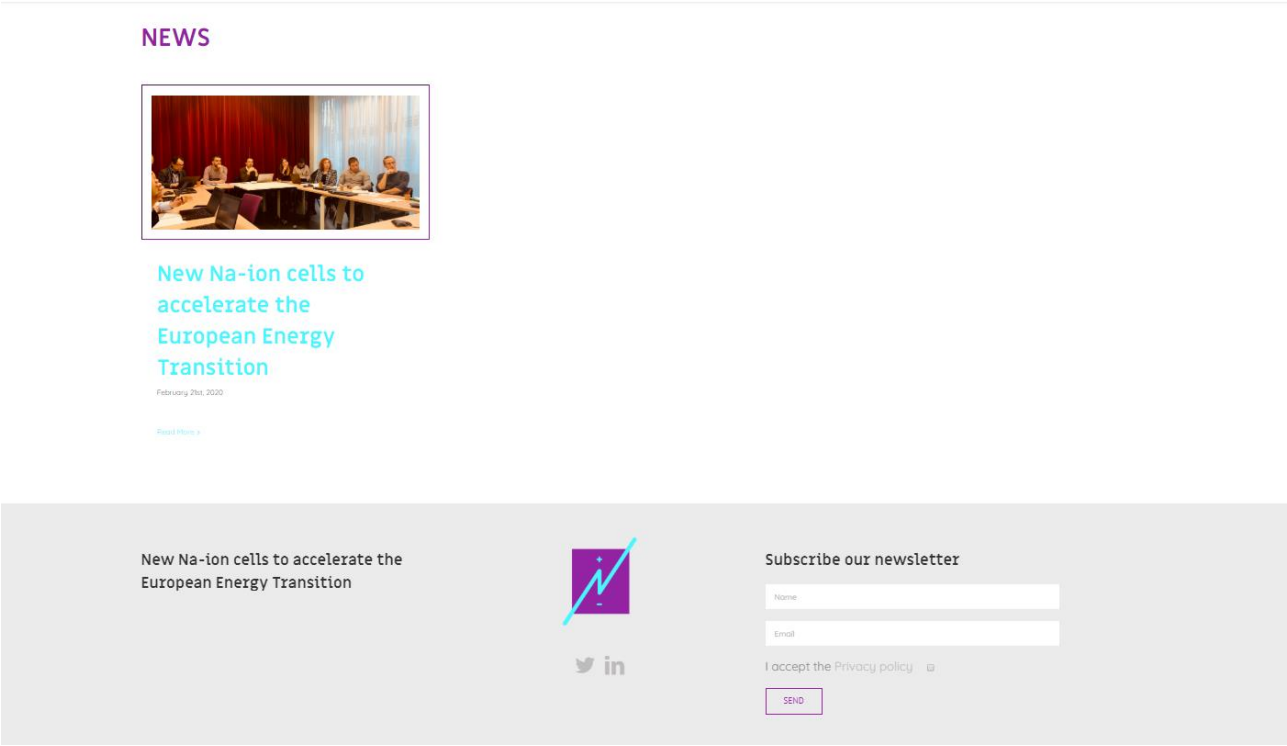


Figure 5 Homepage view and Footer

The reference to Horizon 2020 Programme and the **fulfilment with the GDPR is shown on every page of this website in the footer.**

3.1.3. The Project

This part is where the project it's explained in detail. It distributes itself in different topics:

- Description
- Management Structure
- Consortium

3.1.3.1. Description

This section provides a full description of the project and its main objectives in a more focused way, laying out the details that were missed in the general description found in the main homepage. And, explains the importance of the work packages and its main goal and key results.

What NAIMA is

NAIMA project will develop and validate a new generation of Sodium-ion (Na-ion) based batteries to unseat the current Li-based technologies, nowadays controlled by Asian industry. This disruptive technology is already supported by a solid European battery value chain, preserving the ownership and industry strength around European countries.

The European Union is transitioning to a secure, sustainable and competitive energy system based on renewable sources. The non-dispatchable renewable generation requires a higher flexibility in the energy system, where the weight of much more decentralised installations grow day-to-day.

In fact, the flourishing of a wide portfolio of renewable energy installations is allowing the deployment of large to small scale industrial electricity grids, and an increased share of electricity produced in private households.

In the whole of these business scenarios, without any exception, the role of energy storage technologies is crucial.

At present, the European industry depends on the import of Asian Lithium-ion batteries. The EU share for cell manufacturing is only a 3%, while the Asian share of cell manufacturing is an 85%. For this reason, it is mandatory to create a new industry value chain capable to ensure the production and supply of 100% European batteries.

NAIMA project will demonstrate that a new generation of high-competitive and safety Na-Ion cells is one of the most robust and cost-effective alternatives to Li-based batteries.

Within the framework of the project, Na-ion batteries prototypes will be tested in 3 multi-scale Business Scenarios to provide solid evidences about the competitiveness of the technology in 3 real Energy Storage Systems environments (renewable generation, industry and private household).

With an overall budget of 8 million euros funded by the European Commission through the Horizon 2020 programme, NAIMA, which began on 1st of December 2019, will gather 15 partners working together until 30 November 2022.

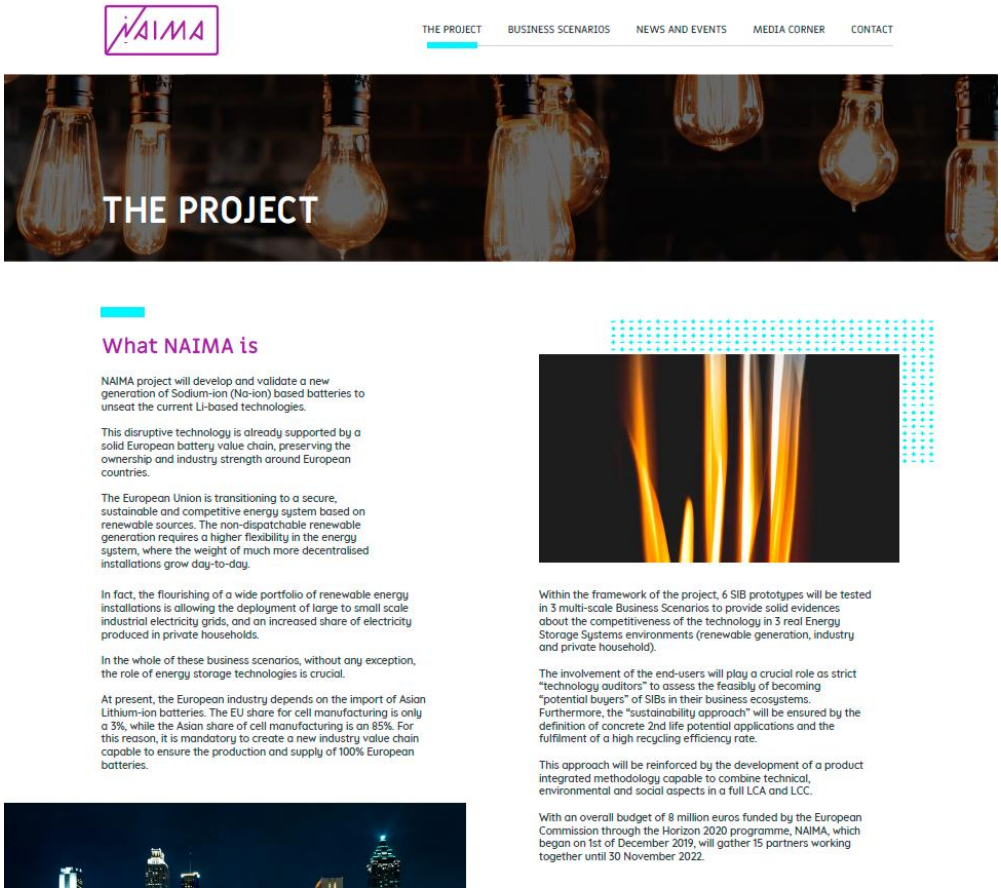


Figure 6 The Project Description

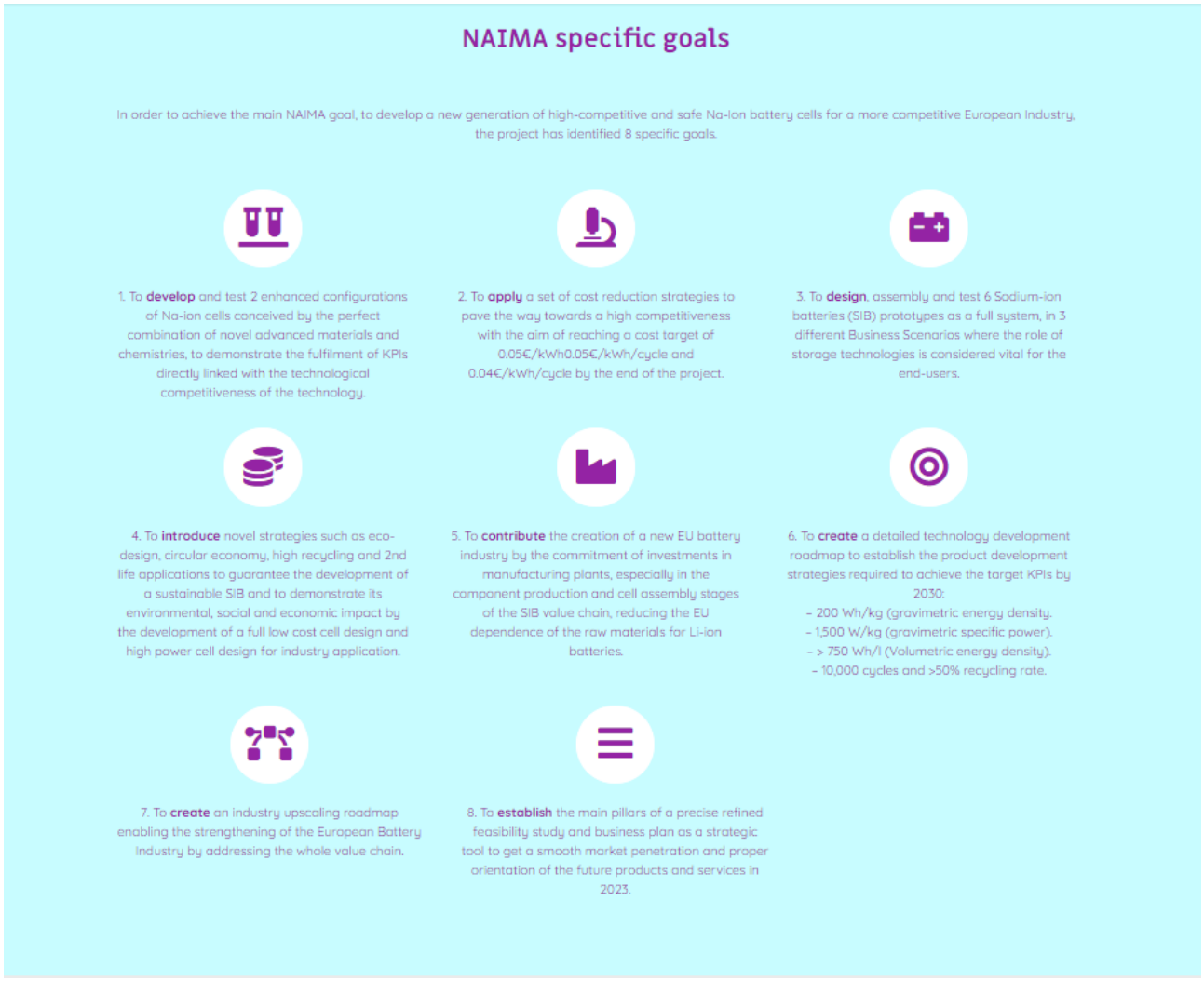


Figure 7 The project goals

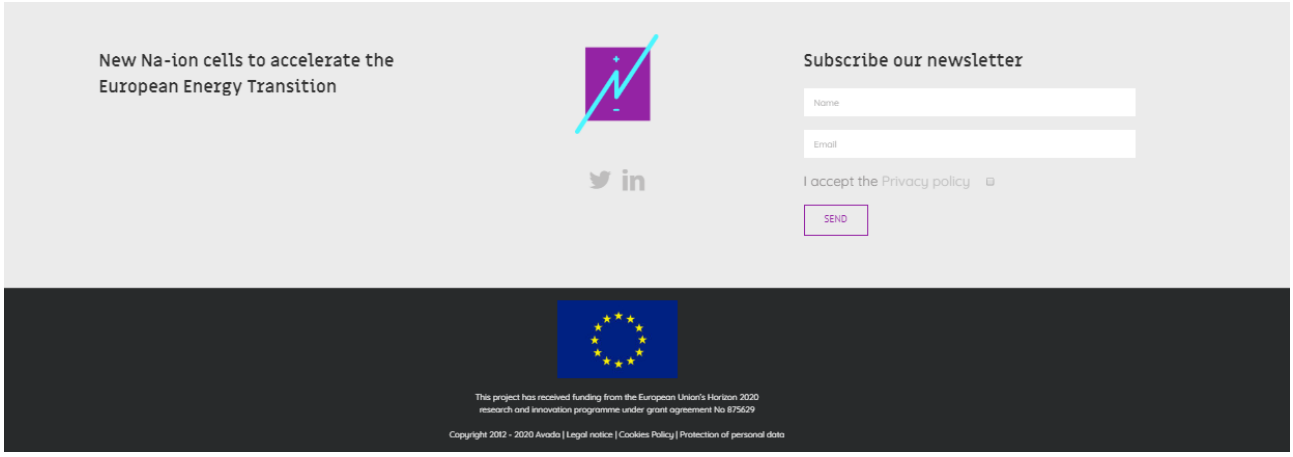


Figure 8 The project footer

3.1.3.2. Management Structure

NAIMA project applies a holistic methodology structured around 10 interrelated work packages (WP), leading to achieve the initiative's specific objectives.

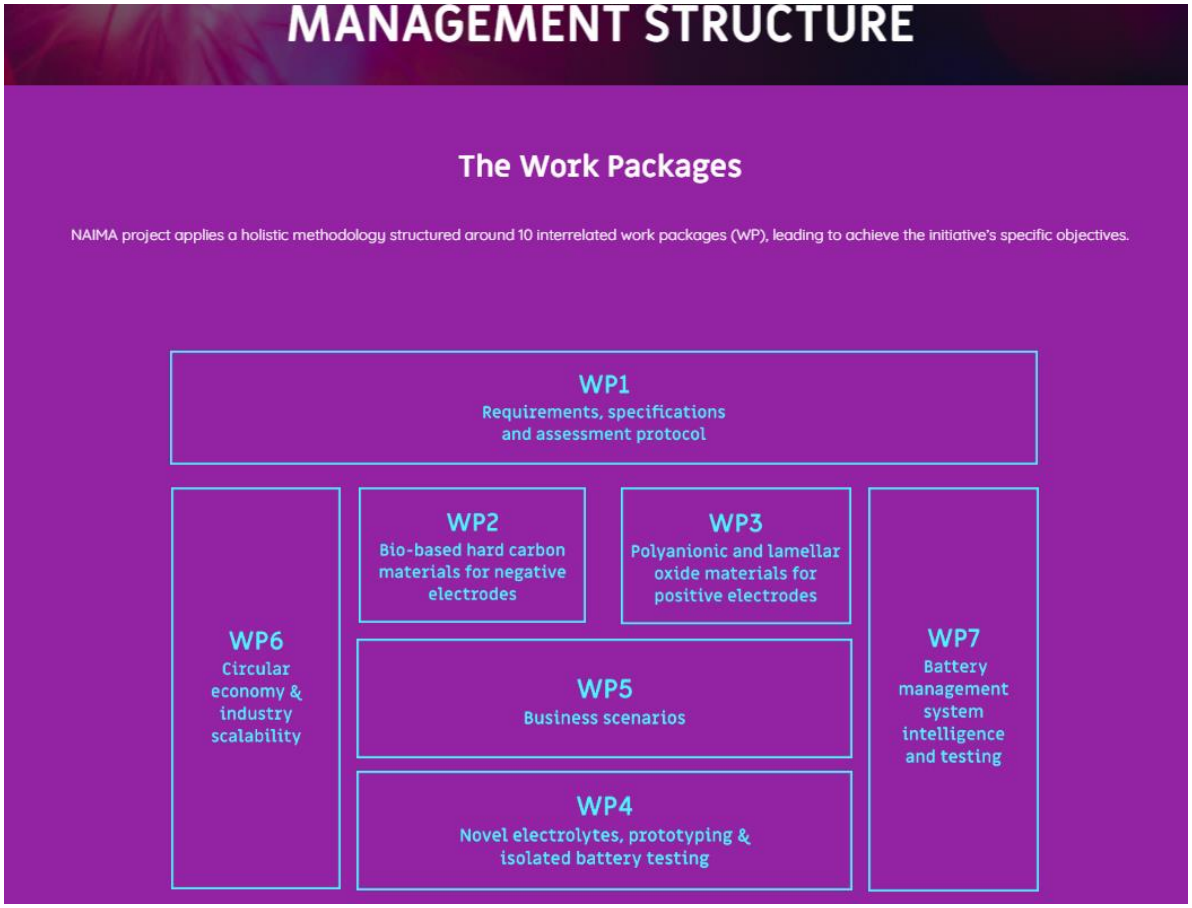


Figure 9 Management Structure

Figure 10 Management Structure

1- Requirements, specifications and assessment protocol

Led by TIAMAT, the WP1 will be driven to define the specifications and characteristics of the battery components at cell and battery module levels. This WP will establish the basis for the future development of the enhanced Na-ion cells, the configuration of the SIB prototypes for specific Energy Storage Systems (ESS) applications, as well as their full testing as isolated elements (cell approach) and as full assembled prototypes within the business scenarios.

2- Bio-based hard carbon materials for negative electrodes

Led by CEA, this work package will be a dedicated to the development and testing of negative electrode solutions based on hard carbons. The objective of this WP is to develop and scale-up high performances carbon-based anode materials for Na-ion batteries.

3- Polyanionic and lamellar oxide materials for positive electrodes

With CNRS as a leader, the WP3 will be focused on the development and testing of positive electrode solutions based on lamellar oxides for low-cost applications and polyanionic materials for fast charge and high-power applications.

4- Novel electrolytes, prototyping & isolated battery testing

Coordinated by TIAMAT, this work package will aim to assemble the component prototypes developed in previous WPs, at battery module prototypes. WP4 will develop two designs of high performance prototypes by optimizing the electrolyte composition and formation cycle. It will also optimize the positive and negative electrode formulation, design high energy and high-power prototypes and validate safety.

5- Business scenarios

IEIT is the leader of this work package designed to demonstrate the feasibility of the sodium-ion batteries in real conditions trough three different business scenarios. To that end, a concept validation at battery pack level will be implemented; feasibility analysis of the prototypes will be defined and preliminary market acceptance and technology development roadmaps to orient the future R&I tasks towards the upscaling of the prototypes will be designed.

6- Circular economy & industry scalability

Also led by TIAMAT, this WP will be dedicated to the integration of circularity and sustainability goals into the design process of the battery such as demonstrate the target recycling efficiency and the approaches associated to re-use and recycle the spent Na-ion batteries (re-assembly, stackability, easy-recycling processes). It will also make the evaluation of the economics and the environmental savings during the life cycle of batteries.

Figure 11 Structure Management

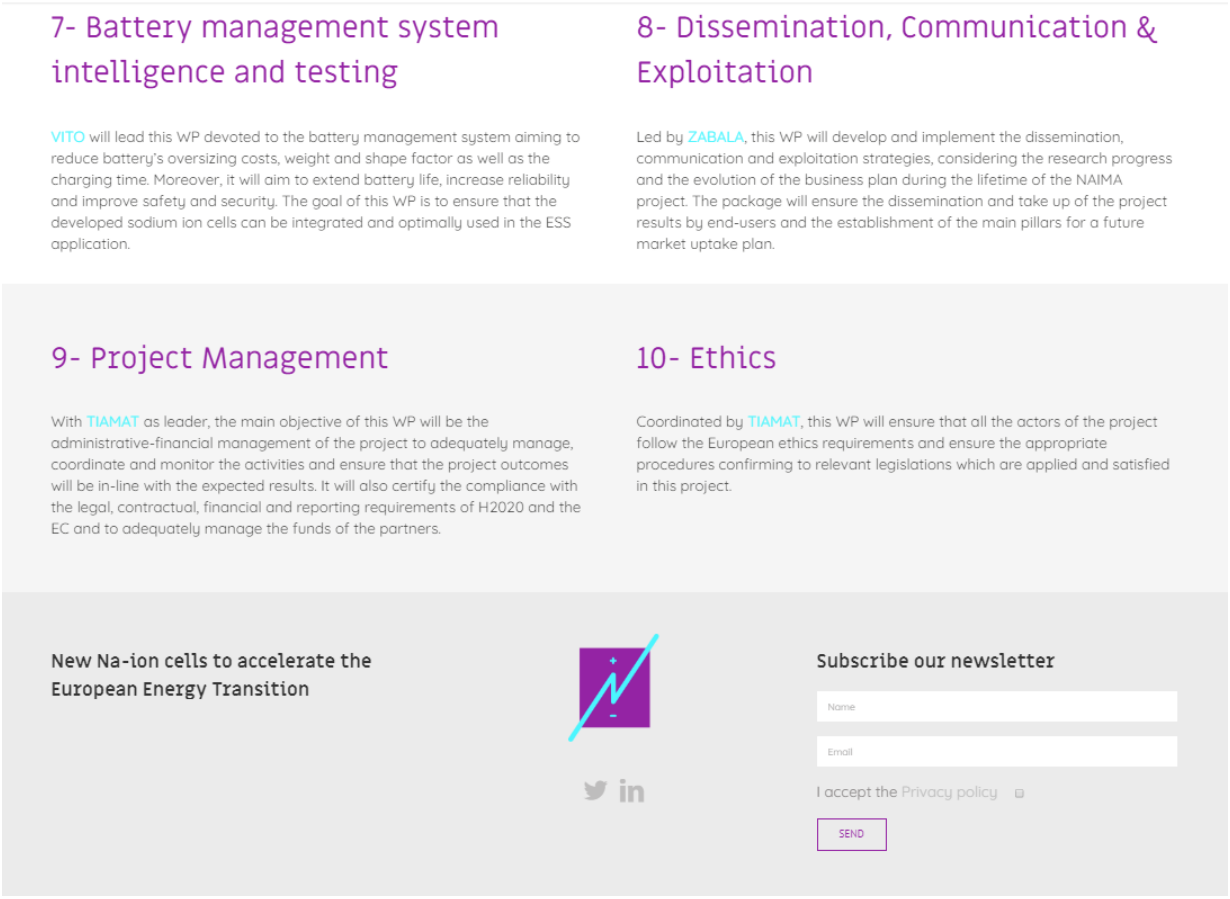


Figure 12 Structure Management

3.1.3.3. Consortium

This section provides a list of all partners taking part in the project linking to their short descriptions and websites. Every partner is briefly described in terms of research quality and groups participating in NAIMA project, as well as their main contribution and leaderships in the work plan.

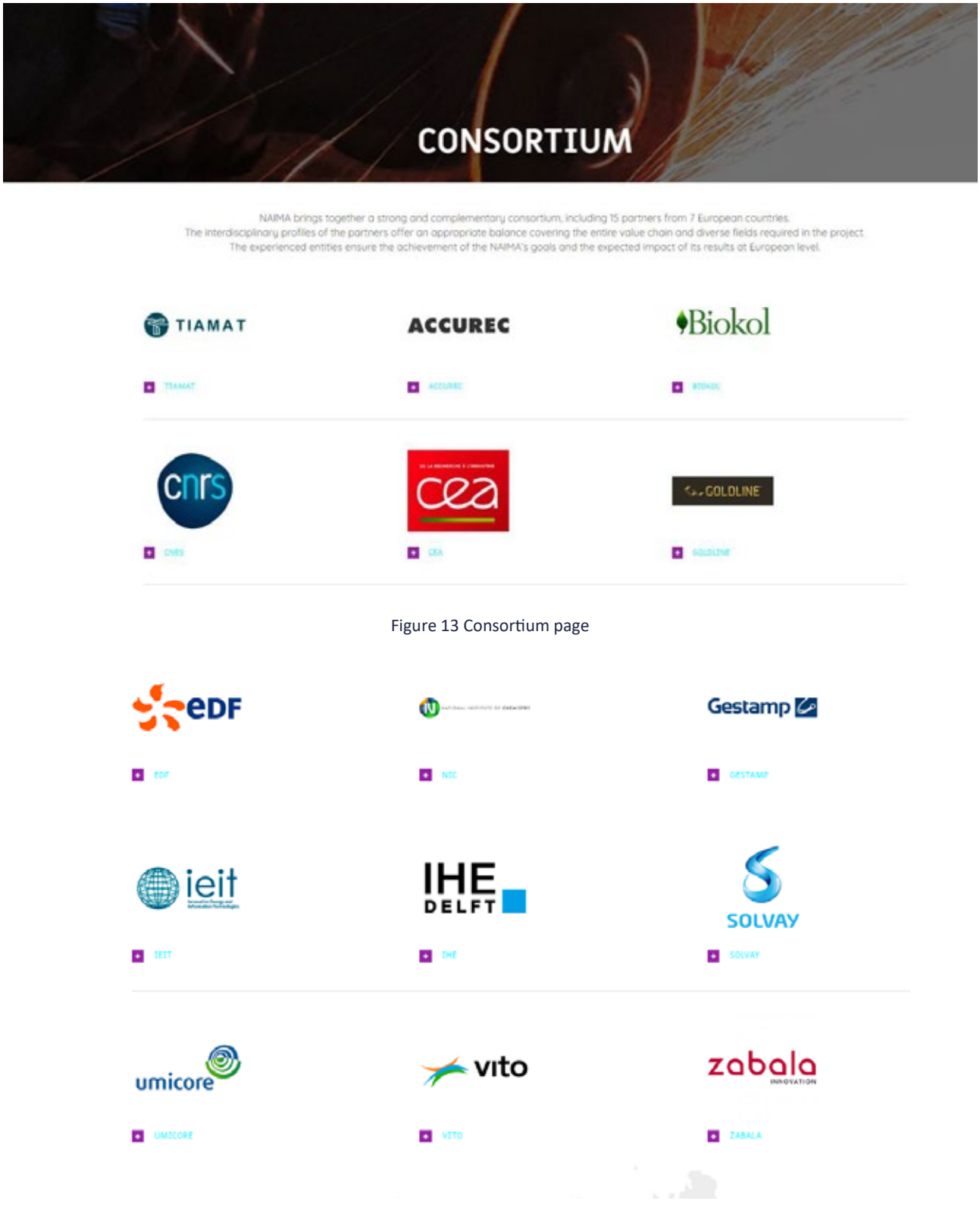


Figure 13 Consortium page

Figure 14 Consortium page

Figure 15 Consortium page

3.1.4. Business Scenarios

NAIMA will assembly and test *6 SIB prototypes*, as a full system, in 3 Business Scenarios (representing 3 ESS applications) where the role of storage technologies is considered vital for the end-users: EDF as Distribution System Operator (DSO), GESTAMP as automotive component manufacturer (for load management) and GOLDLINE as private householder. This approach will allow to demonstrate the technical feasibility of SIB prototypes by the monitoring and assessment of selected KPIs in a relevant environment.

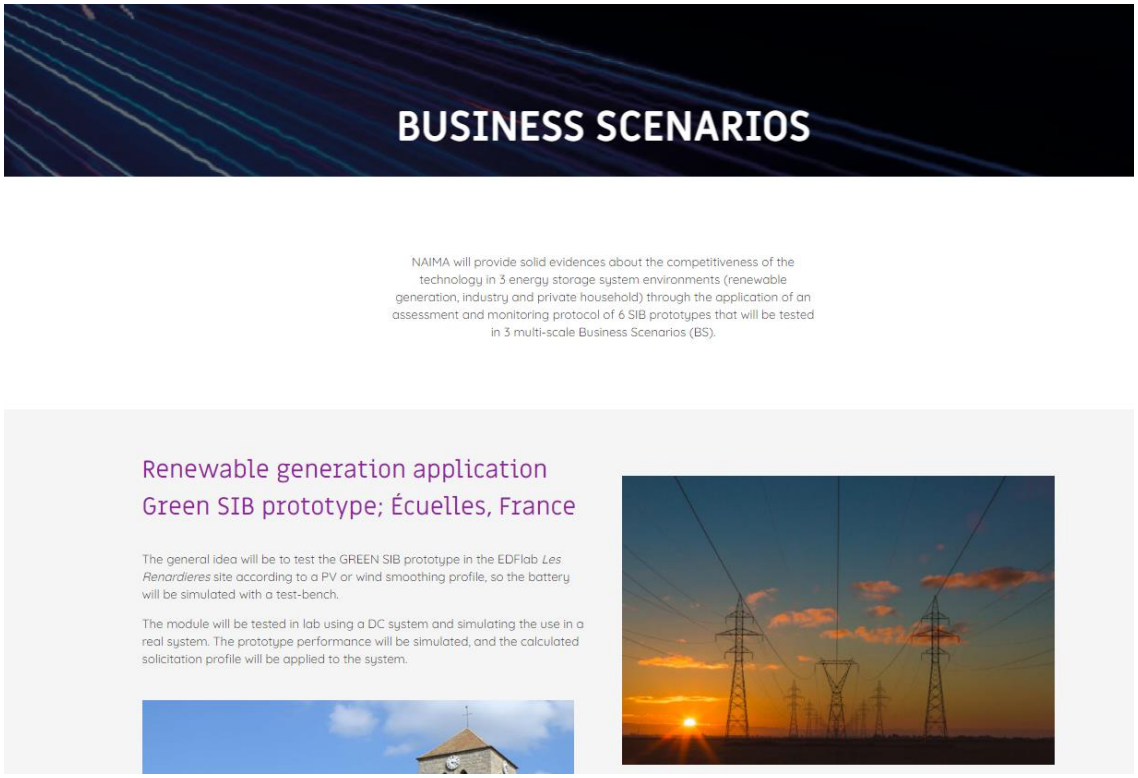


Figure 16 Business Scenarios section

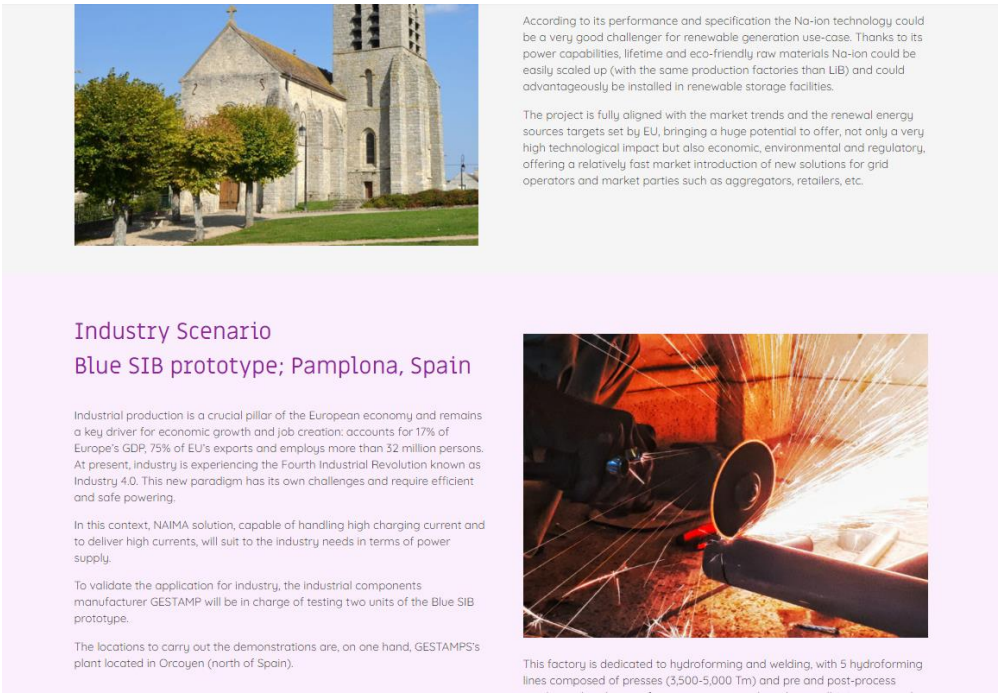


Figure 17 Business Scenarios section

machines (bending, preforming, cutting, washing, laser cells). It counts with more than 70 welding cells composed of around 200 robots.

Another possible location of is a plant located in Salinas, with stamping lines composed of 3 manual presses, 9 automatic presses (up to 800 Tm), one transfer press (1,100 Tm) and a servo-press (1,100 Tm). This plant has 2 shot-peening cells and 3 welding cells.

The different process involved in both plants have different energy consumptions. GESTAMP counts with an Energy Management System based on Big Data, which allows real-time monitoring of energy consumption needs enabling to connect the plant infrastructures to a solution in the cloud offering an instant diagnosis of electricity and gas consumption, and, which allows to have a detailed visualisation of the consumption of certain points for their analysis. The aim of implementing SIBs in industry is to decrease the contracted power on the plants due to the minimisation of power peaks and decreasing the energy costs.

Private Household scenario
Yellow SIB prototype; Sofia, Bulgaria

NAIMA Project will enable a specific solution for households based on the lamellar oxide families as this family focuses on low-cost materials that can cycle thousands of cycles, a feature that has been seldom demonstrated so far.

GOLDLINE partner will provide a demo site for the two units of SIB prototypes addressed to household BS. The site will consist of an office building, located on one of the busiest business areas in Sofia (Bulgaria).

The building has a roof-top with PV panels and storage units, while there is a private transformer and independent interconnections with the distribution

Figure 18 Business Scenarios section

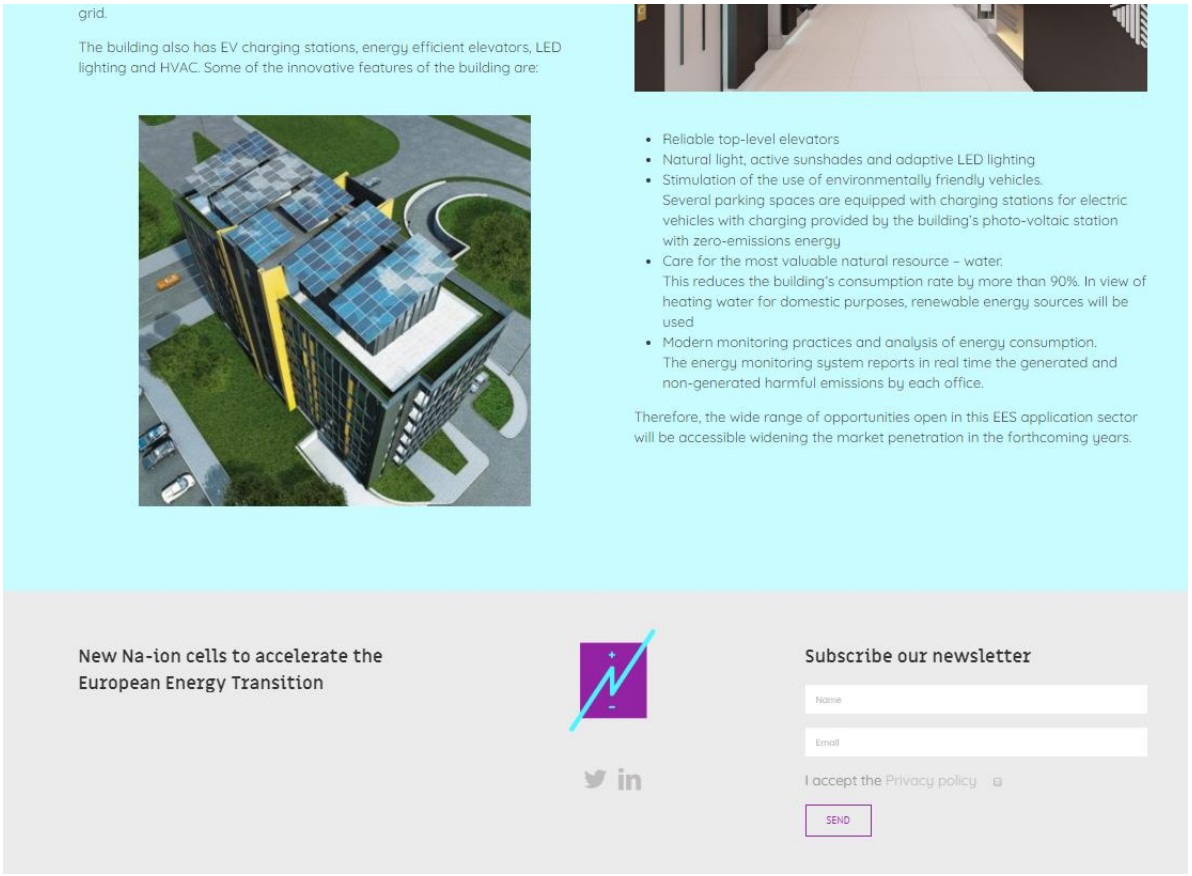


Figure 19 Business scenarios section

3.1.5. News and Events

In this section news and events of interest will be posted. News and events are always going to be up to date with the main outcomes and the related material useful for the consortium and the community of people interested in the project.

Periodically or two times a month we will try to release a piece of news and for that we will count with the help of the project consortium.

The events and pieces of news published in this section will be based on the future advances of the project, deliverables, meetings and events partners organise or attend to, workshops, pieces of news related to H2020 project with the same theme and events they organise, politics and new strategies de EC generates related to the theme of the project, events other projects related to NAIMA assist, and pieces of news about the value chain of the research field.

Every partner has the obligation of allowing the other member of the consortium know, the pieces of news they generate this being: the attendance to an event or workshop, the publication of a science paper or anything that could be useful to the communication plan of this project. The website will be up to date by posting at least to pieces of news per month.

The internal proceedings of NAIMA were described in the *D.8.1 Diss&Com& Exploitation Plan*

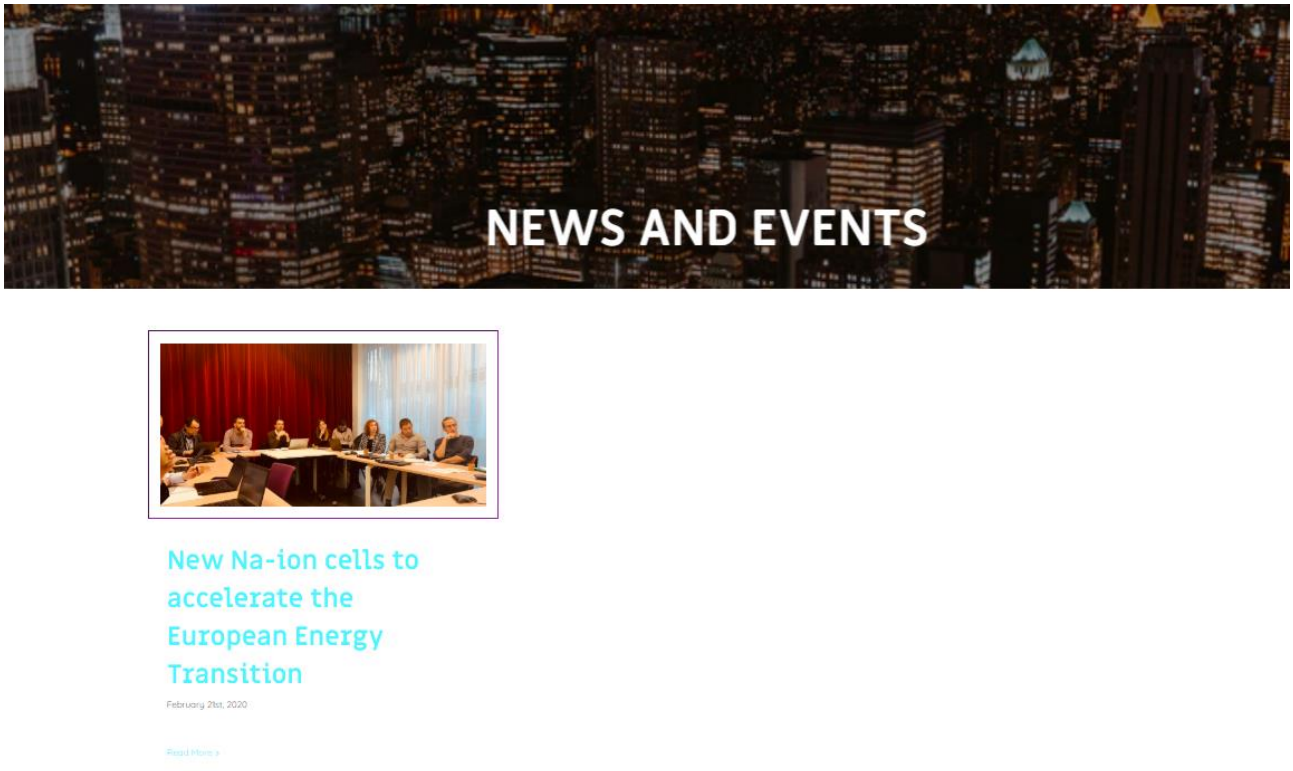


Figure 20 News and Events

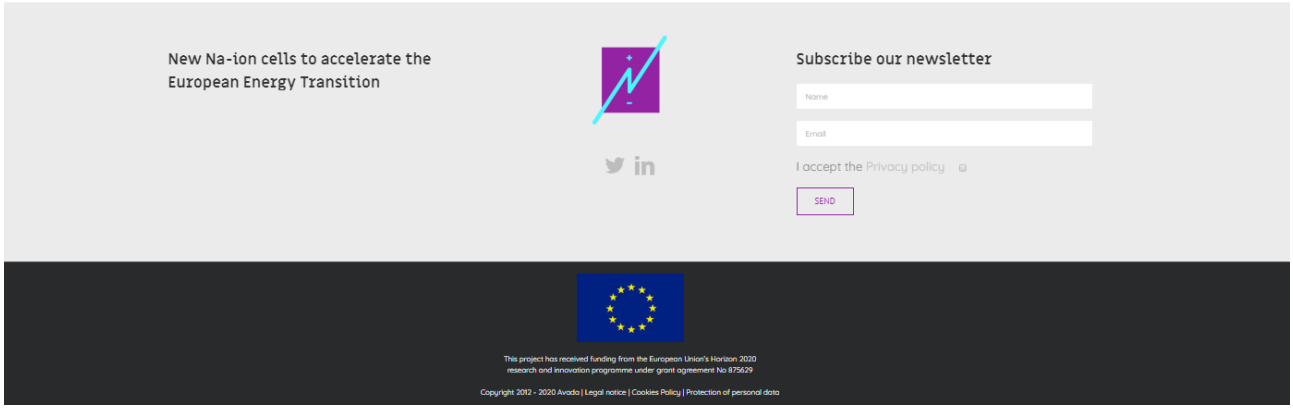


Figure 21 Footer on every page

3.1.6. Documentation

In this section you will find public documents with the main outcomes and results achieved by NAIMA project. This will allow visibility and transparency for the project.

- Public documents
- Deliverables
- Scientific papers

- Scientific communications

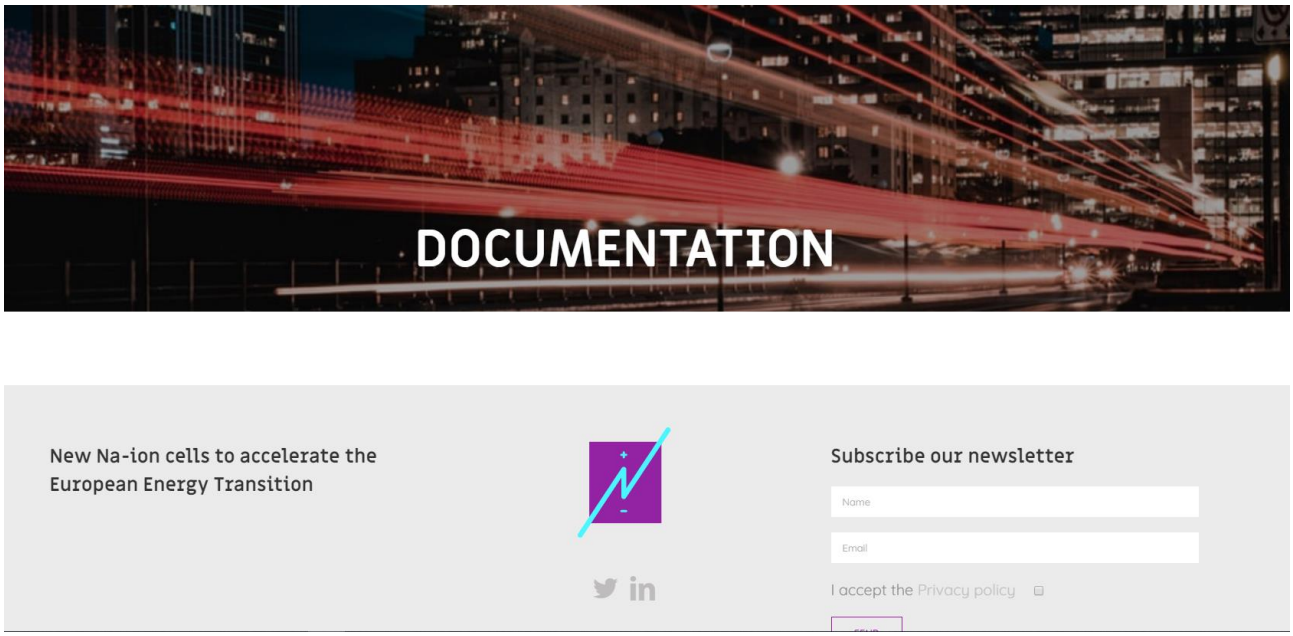


Figure 22 Documentation page overview

3.1.7. Media Corner

This section consists in different subsections which documents are all downloadable.

- Press Releases.
- In the media
- Newsletters
- Resources
- Documents
- Gallery

3.1.7.1. Press releases

In this section you can find the press releases made by the project consortium. Posting the press releases made, it is a way of showing the work progress that is being done.

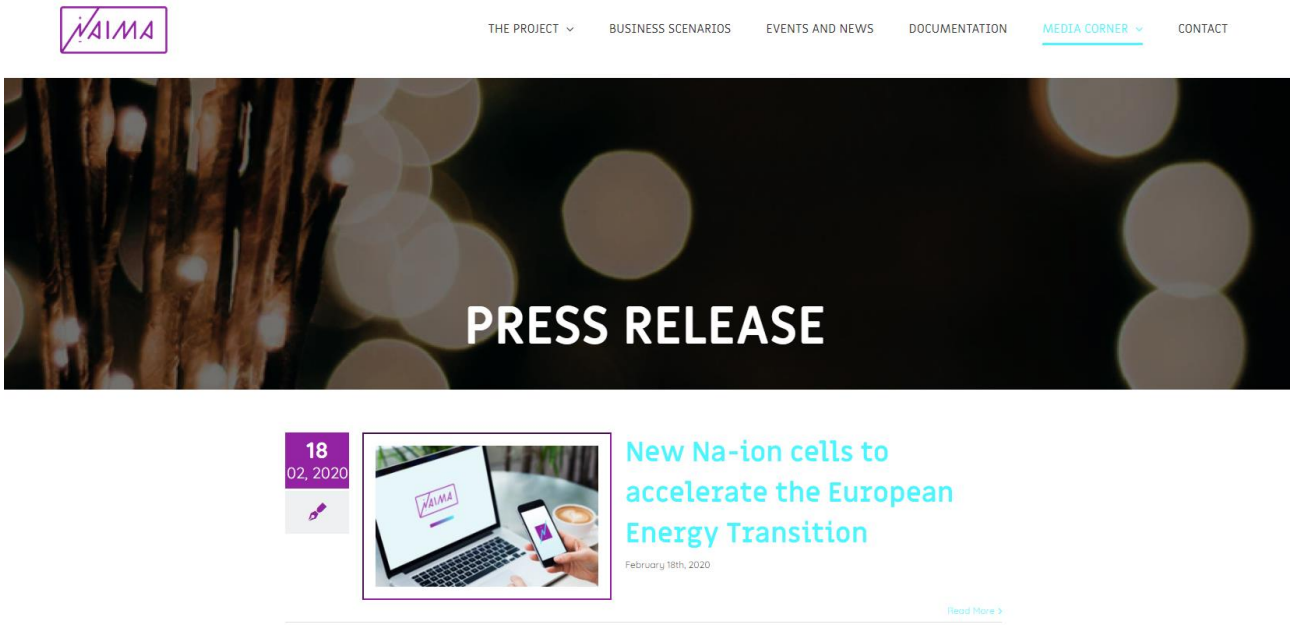


Figure 23 Press releases section

New Na-ion cells to accelerate the European Energy Transition

> *The European project NAIMA aims to develop a new generation of high-competitive and safe Na-ion cells for the current and future energy storage technologies, supported by the key actors of the European Battery value chain*

Last month of December 2019, EU funded project NAIMA "*Na Ion materials as essential components to manufacture robust battery cells for non-automotive applications*" was kickstarted in Amiens (France). This project was awarded a Horizon2020 programme grant of almost 8 M€ by the European Commission. The duration of the project will be 36 months as of 1 December 2019.

Figure 24 Inside a Press release

The NAIMA project will demonstrate that two new generations of highly-competitive and safe Na-ion cells developed and tested during the project are some of the most robust and cost-effective alternatives to unseat current and future Li-based technologies in dedicated storage applications, nowadays controlled by Asian industry. The Na-ion disruptive technology is already supported by a solid European Battery value chain (industry partners of the consortium) through their solid commitment of substantial investments in the manufacturing of all components of a battery, preserving the ownership and industry strength around European countries

NAIMA bring together a strong and complementary consortium, including 15 partners from 8 European countries (France, Germany, Sweden, Bulgaria, Spain, Netherlands, Slovenia and Belgium): 5 being R&D organisation (CNRS, CEA, NIC, IHE, VITO), 6 SMEs (TIAMAT, BIOKOL, IEIT, GOLDLINE, ACC, ZABALA IC) and 4 large companies (EDF, GESTAMP, SOLVAY, UMICORE). The well-balanced and interdisciplinary profiles of the partners covers satisfactorily the entire battery value chain along with the diverse fundamentals R&D fields required in the project. Moreover, an international advisory board will be involved in the development of the project, so that the use cases developed become real business models.

The project is ledby the French company TIAMAT, which hosted the kick – off meeting in Amiens, and is specialized in the design, development and manufacture of sodium ion battery cells targeting fast charging.high discharge current applications in mobility and stationary storage sectors.

Within the framework of the project, 6 SIB prototypes will be tested in 3 multi-scale Business Scenarios to provide solid evidences about the competitiveness of the technology in 3 real environments (renewable generation – EDF/France, industry – GESTAMP/Spain and private household-GOLDLINE/Bulgaria).

To that end, the involvement of the end users (EDF, GESTAMP, GOLDLINE) will play a crucial role as strict "technology auditors" to assess the feasibly of becoming "potential buyers" of SIBs in their business ecosystems. Furthermore, the "sustainability approach" will be ensured by the definition of concrete 2nd life potential applications and the fullfilment of a high recycling efficiency rate (>50%wt). This approach will be reinforced by the development of a product integrated methodology capable to combine technical, environmental and social aspects in a full Life Cycle Assessment (LCA) and Life Cycle Costing (LCC).

"The NAIMA Project is the perfect opportunity to further develop a deep, fundamental and practical knowledge of Na-ion technologies in order to assess their potential in realistic environments and help bring them to a comercial reality. The possibility to source mosto f the materials of these batteries from within Europe fits well with the strategy and willingness of the European comission and would help de-risking some of the key challenges with the value chain of Li-ion cells. TIAMAT is very proud and excited to be working alongside the best industrials and labs in Europe to deliver Na-ion as an alternative energy storage technology."

The context in the frame of Energy Transition

The EU is transitioning to a secure, sustainable and competitive energy system as laid out in the EC's Energy Union strategy. The growing penetration of renewable energy sources in the EU energy market, go hand in hand with a high competitiveness of the most consolidated technologies: Wind Energy and Solar Photovoltaics. The non-dispatchable renewable generation requires a higher flexibility in the energy system, where the weight of much more decentralised installations grow day-to-day. In fact, the flourishing of a wide portfolio of renewable energy installations is allowing the deployment of large to small scale industrial electricity grids, and in an increased share of electricity produced in private households.

Just the availability of the raw materials of Li-ion cells is almost a "miracle". Under this scenario, the most robust non-Lithium alternative is the technology based on Sodiumion (Na-ion). This disruptive technology is already supported by a solid European Battery value chain (industry partners of the consortium) through their solid commitment of substantial investments in the manufacturing of all components of a battery, preserving the ownership and industry strength around European countries.

Contact:
Susana Garayoa
Carla Sala

Zabala Innovation Consulting

Figure 25 Inside a press release

3.1.7.2. In the Media

In this section you will find the pieces of news about NAIMA project in the general and specialized Media.

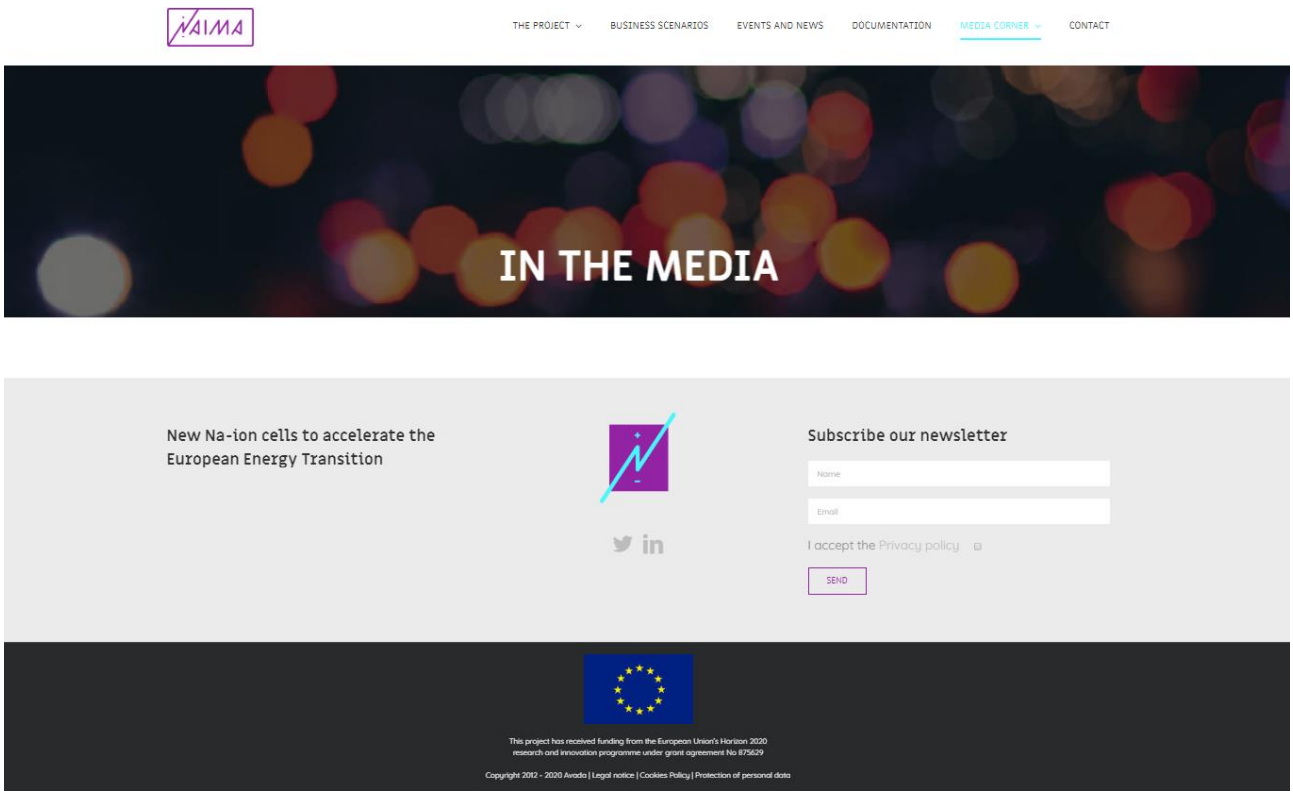


Figure 26 In the media section

3.1.7.3. Newsletters

A quarterly newsletter is going to be launched putting out feelers of the news that are going to be posted on the website and highlighting the main outcomes of the project, the newsletter is going to be found in this section in a pdf. version to download.

3.1.7.4. Resources

In RESOURCES you can find the NAIMA brand resources and useful templates to download.

- Logo and visual guidelines.
- Roll-up design.
- Posters.
- Infographics.
- Templates of the project.
- Other specific campaigns with resources and material.

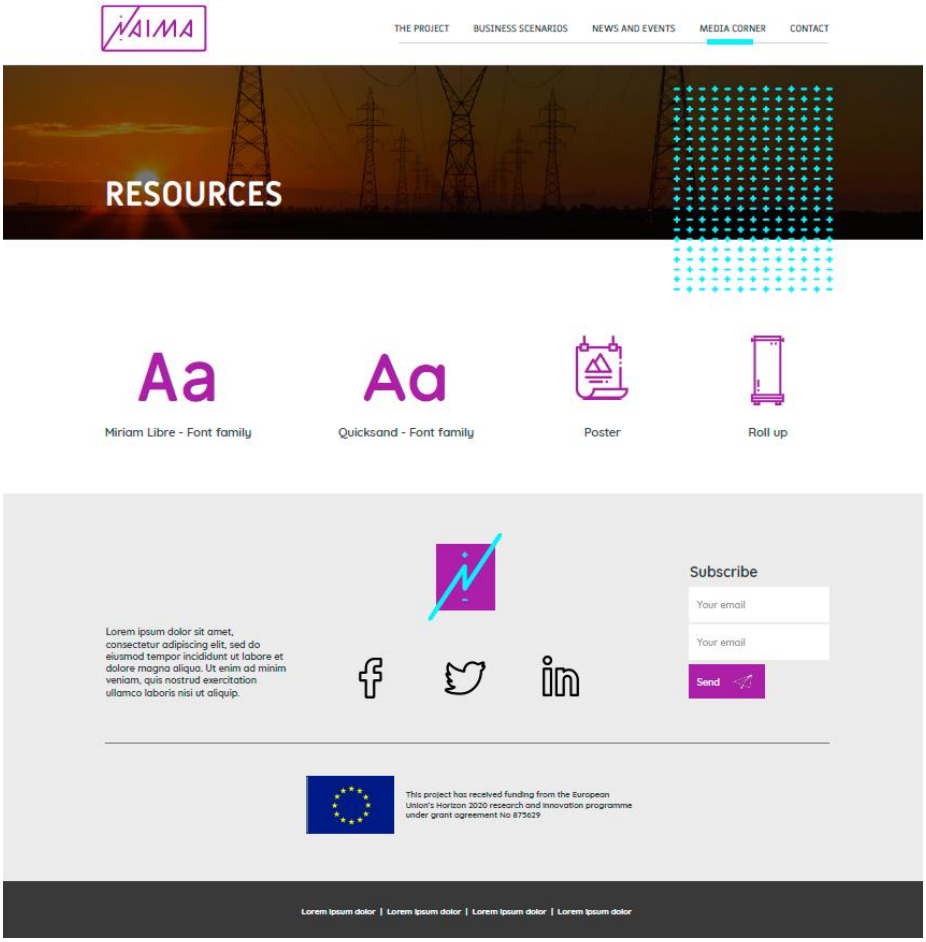


Figure 27 Resources section

3.1.7.5. Gallery

In this section pictures of the consortium and the events that NAIMA will attend to will be posted. All photos will be described with a headline and a short paragraph in a way to let people get into context and are order by Day-Month-Year.

3.1.8. Contact

In the CONTACT section a form with the GDPR consent will be available for the community of the project to get in touch with the researchers and the consortium and ask anything they could have in mind.

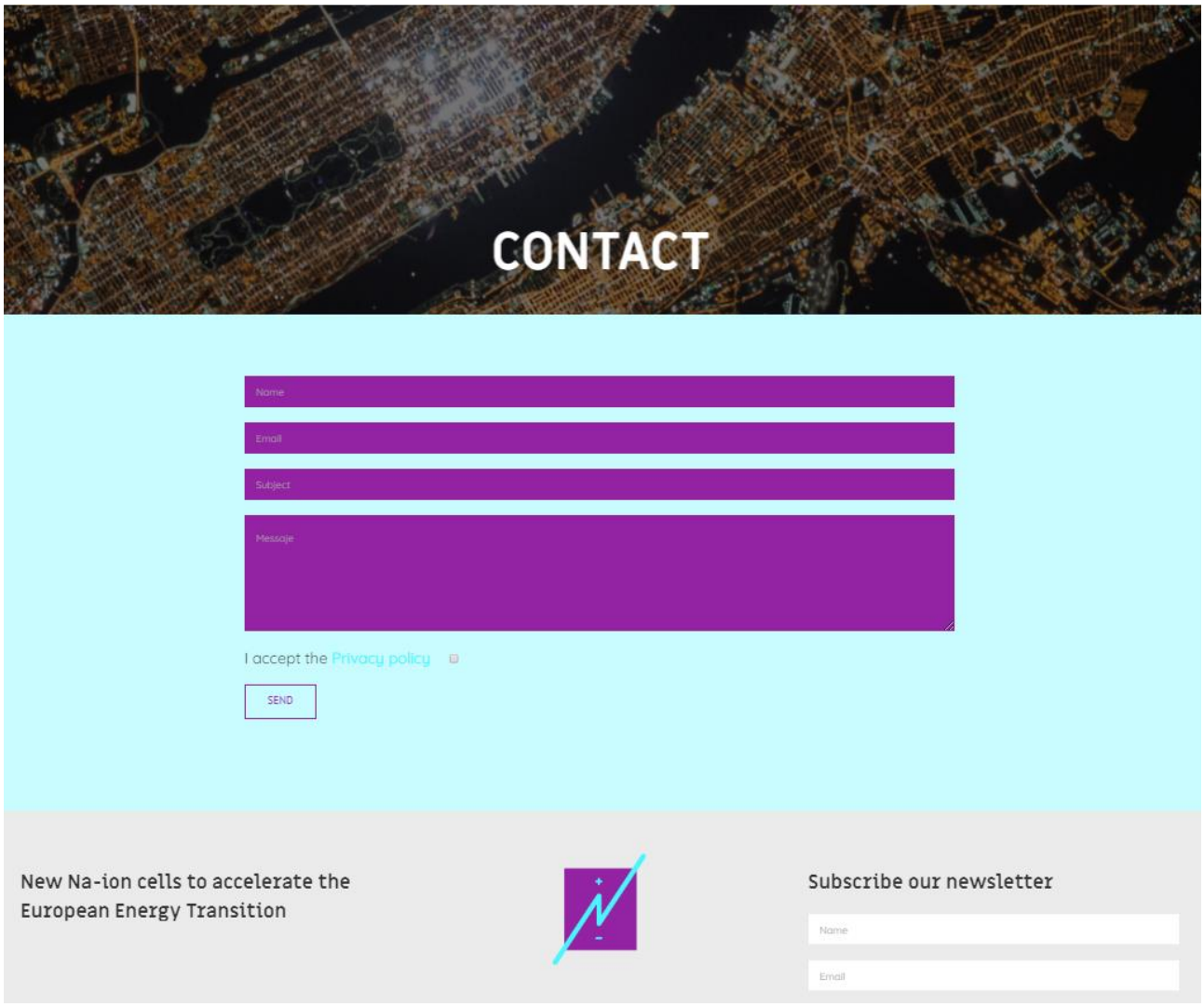


Figure 28 Contact form