



The project has been accepted for funding within the Key Digital Technologies Joint Undertaking (KDT JU), a public-private partnership in collaboration with the Horizon Europe (HORIZON) Framework Programme and National Authorities under grant agreement number 101096387.



PowerizeD

Digitalization of Power Electronic Applications within Key Technology Value Chains

Deliverable	Project website: PowerizeD web portal establishment and operation		
Involved WPs	WP 4	Deliverable type	Public
Project	PowerizeD	Grant Agreement Number	101096387
Deliverable File	D4.1	Last Modified	28.03.2023
Due Date	31.03.2023	Actual Submission Date	28.03.2023
Status	ready to review	Version	1.0
Contact Person	Heike Lepke	Organisation	OTH-AW
Phone	+49(0)9621/482-3621	E-Mail	h.lepke@oth-aw.de



Document history			
V	Date	Author	Description
0.1	27.03.2023	Heike Lepke	Initial Version
0.2	28.03.2023	Daniela Maier	Review
1.0	28.03.2023	Alfred Hoess	Final and reviewed Version




Table of contents

1	Publishable summary	4
2	Introduction & Scope	5
2.1	Purpose and target group	5
2.2	Contributions of partners	5
2.3	Relation to other activities in the project	5
3	Website Design.....	7
3.1.1	Project Logo	7
3.1.2	Website Layout	8
3.1.3	Website Access	8
3.1.4	Website sections.....	8
4	Conclusion	17
4.1	Contribution to overall picture	17
4.2	Relation to the state-of-the-art and progress beyond it	17
4.3	Impacts to other WPs and Tasks.....	17
4.4	Contribution to demonstration.....	17
4.5	Other conclusions and lessons learned	17
5	List of figures	18
6	List of tables	19



1 Publishable summary

Project acronym	PowerizeD
Project Logo	
Project full title	Digitalisation of Power Electronic Applications within Key Technology Value Chains
Project Coordinator	Mr. Jochen Koszescha, Jochen.koszescha@infineon.com Infineon Technologies AG
Coordinating Entity	Infineon Technologies AG

The PowerizeD project website, hosted at www.PowerizeD.eu, is an important source of public information about the project. The website is managed and maintained by Infineon Technologies AG (IFAG), the purchaser of the website, and OTH-AW, responsible for the technical set-up and design realisation. The design is a result of the dissemination partner Dis.co and IFAG with the realisation of the OTH-AW.

The website contains official project content and has been online since the beginning of the project. As a key representation of the PowerizeD project, the website aims to provide information to the general public, experts in the field, related projects, other research programmes and relevant authorities. It serves as a platform for information exchange, displays the status of work and results, and provides downloads of dissemination materials. The website will be updated frequently, with new input such as project news, meetings, participation in events and developments being added in a rolling process by project members.



2 Introduction & Scope

2.1 Purpose and target group

The PowerizeD project website is the central source of information for the public on the progress and objectives of the project. The website provides comprehensive information about the PowerizeD project, its research and innovation objectives and its expected societal impact.

The work on the website represents the PowerizeD project and provides information to the general public, experts in the field, related projects, other research programmes and relevant authorities.

Through the website, visitors can learn about the ground-breaking technology being developed by PowerizeD for digitised and intelligent power electronics, and is used as the primary source of information about the project. It supports the exchange of information within and outside the project and shows the work status and results of the project.

2.2 Contributions of partners

Explain which partner were involved and their activities in their various sections:

TABLE 1: CONTRIBUTIONS

Chapter	Partner	Contribution
All sections	OTH-AW	Heike Lepke, Main author, elaboration and completion
All sections	IFAG	Daniela Maier, PMO, review

2.3 Relation to other activities in the project

The website is the result of an ongoing collaboration between all PowerizeD work packages and supply chains. Inputs from other WPs, UCs, CDTs and Tasks will be extensively used by the PowerizeD project to achieve its goals. Partners will be regularly asked for input and can send input initiatives such as new research results, meetings or publications. The requests will be driven by the dissemination partner DIS.CO, edited and published by OTH-AW.

The results of the PowerizeD project will be used in different ways by the project consortium and other stakeholders. For example, the newly developed key technologies will be demonstrated and evaluated in a number of universally applicable outcomes, providing a methodological approach to sustainable and resilient energy generation, transmission and applications.

The demonstrators and use cases of the PowerizeD project will be explicitly described on the project website. These will showcase the innovative breakthrough technologies developed by the project consortium.

The results of the project will be disseminated to the general public, experts in the field, related projects, other research programmes and relevant authorities through the PowerizeD website and other dissemination channels, in order to gain a better understanding of the project's objectives and achievements.



D4.1 Project Website: PowerizeD web portal established



PowerizeD will establish an easily recognisable brand identity through the creation of a project website, social media presence and dissemination templates, which will be managed by the project's dissemination partner Dis.co. These efforts aim to ensure that the project results are easily accessible and understandable to a wide range of end users. In order to achieve this, an in-depth analysis of the needs and priorities of different stakeholders will be carried out, followed by the implementation of measures to maximise the applicability and usability of the project results. Social media channels will be linked to the website and vice versa.



3 Website Design

The website will be set up in a rolling process by the project members and will be frequently updated with new input, e.g. project news, meetings, participation in events and developments. The website will also be used to provide downloads of dissemination materials.

The technical process of setting up the PowerizeD website involves several ongoing steps. From determining the purpose, goals, target audience and content of the website to designing the layout of the website, including colours, typography, images and other graphic elements.

The design is set up in a practical and secure content management system (CMS) to ensure a flexible and up-datable layout and is continually tested for functionality, usability and compatibility with different devices and browsers. Content is edited and uploaded to the website by the OTH-AW, including text, images, video and other media.

The website will be hosted on a web server with a dedicated domain, accessible via the URL www.PowerizeD.eu with the official web content and is already online since the start of the project. The PowerizeD website is a useful tool to present the project work and dissemination material in a practical and user-friendly way. The use of the www (World Wide Web) gives access to every member of the project and also gives the public a quick and easy way to receive project information.

The PowerizeD web design has been created specifically to match the content of the project, including the logo and visual identity used for both internal and external communication. The design is crucial in maintaining a consistent and recognisable image, which is important in establishing a solid public image throughout the duration of the project.

The website will be updated and maintained, including fixing bugs, adding new features and creating new content, throughout the project and for 4 years after the project ends.

The project internal data exchange will be described in D5.4 Data Management Plan.

3.1.1 Project Logo



FIGURE 1: POWERIZED LOGO

The name PowerizeD is used as a logo for this project. It is a combination of "power" and "digitalised" and reflects the project's focus on the digitalisation of power electronics applications within key technology value chains.

This document and the information contained may not be copied, used or disclosed, entirely or partially, outside of the PowerizeD consortium without prior permission of the partners in written form.



Based on the slogan "Digitalisation of Power Electronic Applications within Key Technology Value Chains" and the importance of the European Green Deal, the logo for the PowerizeD project features a simple and modern design with a green "D" to represent the focus on sustainability and energy efficiency. The colours are consistent throughout the website layout.

The logo is easily recognisable and memorable, with a strong visual identity that reflects the mission of the PowerizeD project to promote the digitalisation of power electronics within key technology value chains. This is in line with the PowerizeD vision:

„PowerizeD will bring intelligence to power devices and systems in order enable energy savings, cost effectiveness, increased reliability and lifetime as well as improved functionality and interoperability for electrical energy related systems. Due to the applicability for multiple industrial domains as demonstrated in the project, the project developments will result in massive economic and societal benefits for the EU and will help to realize top priorities of the European Commission, such as the transformation towards an independent energy market, the EU Green Deal and the digitalization of the EU economy. “

3.1.2 Website Layout

The PowerizeD website is designed with a responsive template that allows for optimal viewing and interaction on both desktop and mobile devices. The layout automatically adapts and resizes to provide a comfortable reading, navigation, resizing, panning and scrolling experience. The site is compatible with a range of devices commonly used by the general public, including desktop monitors and mobile devices.

3.1.3 Website Access

The PowerizeD project website is accessible to the public via the URL www.powerized.eu. The choice of the domain name PowerizeD.eu was made with the intention of establishing a clear link to the project name PowerizeD, while at the same time reflecting the top-level domain .eu, which serves as a reference to the European Union (EU).

3.1.4 Website sections

The PowerizeD project website is divided into different sections, each with a specific purpose. The website is currently in its initial setup, but is being revised to include more detailed information on the project's work packages, use cases and demonstrators.

The news sections will provide a more comprehensive understanding of the project's objectives, progress and deliverables, making it easier for stakeholders to access relevant information.

3.1.4.1 Home Page - Landing Page

The landing page of a website is the first page a user sees when visiting the site. The landing page of the PowerizeD project website provides an overview of the project and its goals, as well as easy navigation to other sections of the website. Ongoing testing and analysis of user behaviour on the landing page will help identify areas for improvement and optimisation.



PowerizeD

[Home](#) [News](#) [Project](#) [Consortium](#)



FIGURE 2: MENU AND HOME SECTION OF THE INITIAL SETUP OF THE POWERIZED WEBSITE



Vision for Europe's independence and sustainability in the field of electric energy

Successful developments of PowerizeD with the implementation of intelligence for novel products and applications will enable the following achievements: • Green energy by increasing the efficiency of power devices and systems with loss reduction up to 25% • Sustainable Operation for increased lifetime by at least 30% • Robust and Safe Operation by intelligent device control • Reduction of required Chip Size by 10-15% • Reduced Design Time for power electronic control systems by 50%

FIGURE 3: THE PROJECT VISION AND MISSION



D4.1 Project Website: PowerizeD web portal established

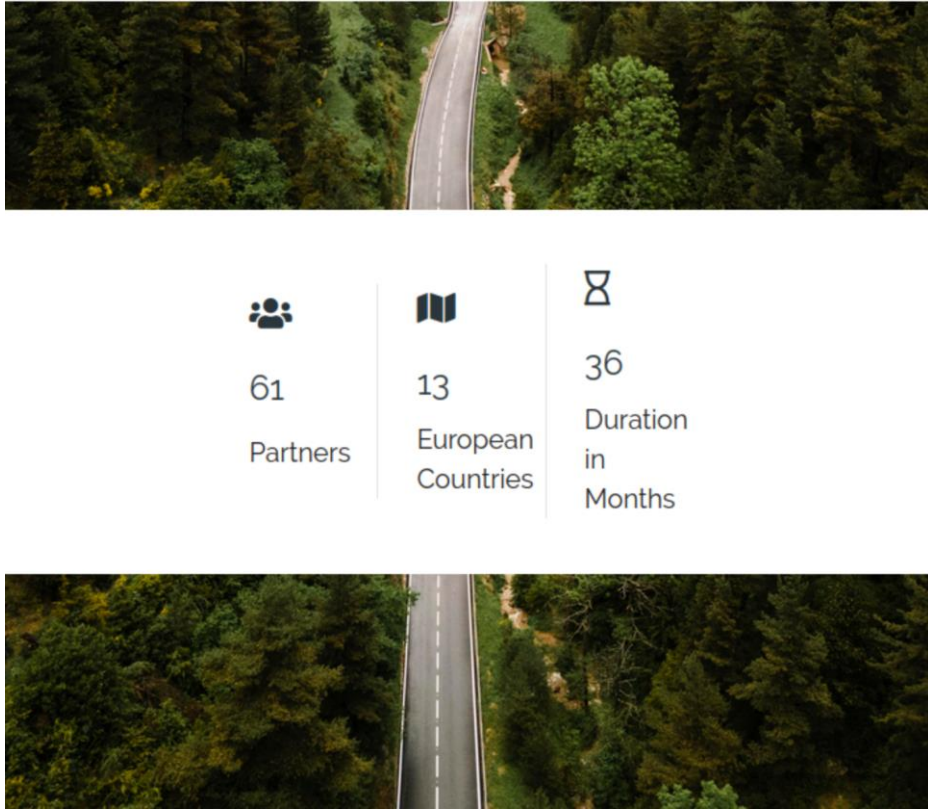
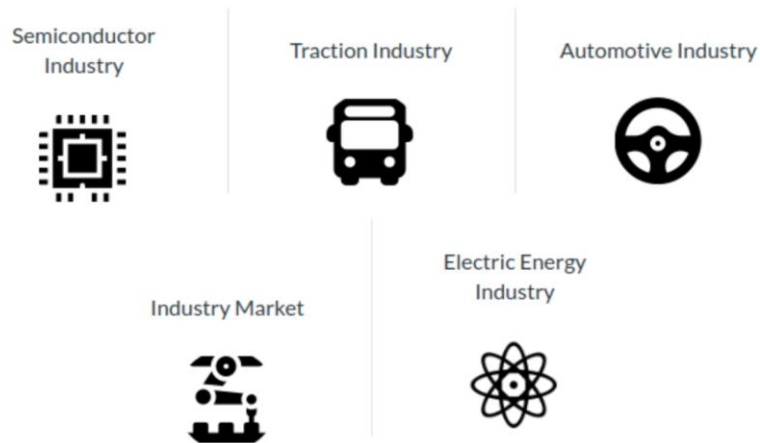


FIGURE 4: PROJECT DETAILS IN A MOVING COUNTER



PowerizeD will finally support the transformation of the energy market in the areas of the three megatrends of Sovereignty, Sustainability, and Digitalization.

FIGURE 5: PROJECT SECTIONS. THESE SECTIONS WILL BE LINKED TO NEW INPUT.



3.1.4.2 News

The news section of the PowerizeD website serves as a platform to share project updates, events and other relevant news with the public. Keeping this section up to date with the latest information about the project can help to keep stakeholders engaged and informed about the progress of the project.

In addition, the news section can be used to highlight important achievements and milestones, which can help to increase the visibility and impact of the project. To ensure the effectiveness of the news section, we will regularly update it with relevant and interesting content and ensure that the content is easy to access and share on social media platforms.



[Home](#) [News](#) [Project](#) [Consortium](#)

Lates News in PowerizeD



Pan-European research initiative PowerizeD for intelligent power electronics launched

Written on February 09, 2023

Over 100 representatives from 39 companies and 23 research institutions are meeting today in Munich at the Campeon, headquarters of Infineon Technologies AG, for the kick-off of the European research initiative

FIGURE 6: LATEST NEWS OF POWERIZED



3.1.4.3 Project

This section provides detailed information about the PowerizeD project, its objectives and the partners involved. Several subsections will be setup:

- Work packages: This part of the website provides detailed information about the different work packages of the project.
- Demonstrators: This section provides information about the different demonstrators developed in the project.
- Use Cases: This part of the website describes the different use cases of the project and their applications.



Home News Project Consortium



PowerizeD

Digitalization of Power Electronic Applications within Key Technology Value Chains

Project vision and mission
PowerizeD will develop breakthrough technologies of digitized and intelligent power electronics to enable sustainable and resilient energy generation, transmission, and applications

Vision for Europe's independence and sustainability in the field of electric energy

- Power electronic applications developed, manufactured, and used in Europe
- Power electronics to meet key challenges of the European green deal Digitalization
- The contribution to the future intelligence of and for the European power electronic industry

Successful developments of PowerizeD with the implementation of intelligence for novel products and applications will enable the following achievements:

- Green energy by increasing the efficiency of power devices and systems with loss reduction up to 25%
- Sustainable Operation for increased lifetime by at least 30%
- Robust and Safe Operation by intelligent device control
- Reduction of required Chip Size by 10-15%
- Reduced Design Time for power electronic control systems by 50%

Expected Impact from PowerizeD at a glance

PowerizeD will address aspects for power electronics from materials to systems across application area boundaries, to cover the following European Domains shown below:

- Semiconductor Industry
- Traction Industry
- Automotive Industry
- Industry Market
- Electric Energy Industry

PowerizeD will finally support the transformation of the energy market in the areas of the three megatrends of Sovereignty, Sustainability, and Digitalization.

Main objectives and goals

1	2	3	4	5
Intelligence for:				
More Efficiency and Generative Operation	Novel Materials and Reliability	Robust and Safe Operation	Functional Integration	Effective Collaborations on IoT: Revealing Sensitive Data

Project facts

64 Partners	13 European Countries	Duration 36 Months	Overall project budget ~77mln Eur	EU contribution 18mln Eur
-------------	-----------------------	--------------------	-----------------------------------	---------------------------

Consortium Map

Project selected from HORIZON JU-AI-2021-0-04

FIGURE 7: PROJECT OVERVIEW.

This document and the information contained may not be copied, used or disclosed, entirely or partially, outside of the PowerizeD consortium without prior permission of the partners in written form.



3.1.4.4 Consortium

The PowerizeD project is a collaboration between several European institutions. The consortium overview can be found on the PowerizeD project website, which provides an overview of the consortium members; each partner is linked to its member's website.



[Home](#) [News](#) [Project](#) [Consortium](#)



FIGURE 8: COUNTRIES TAKING PART IN POWERIZED.

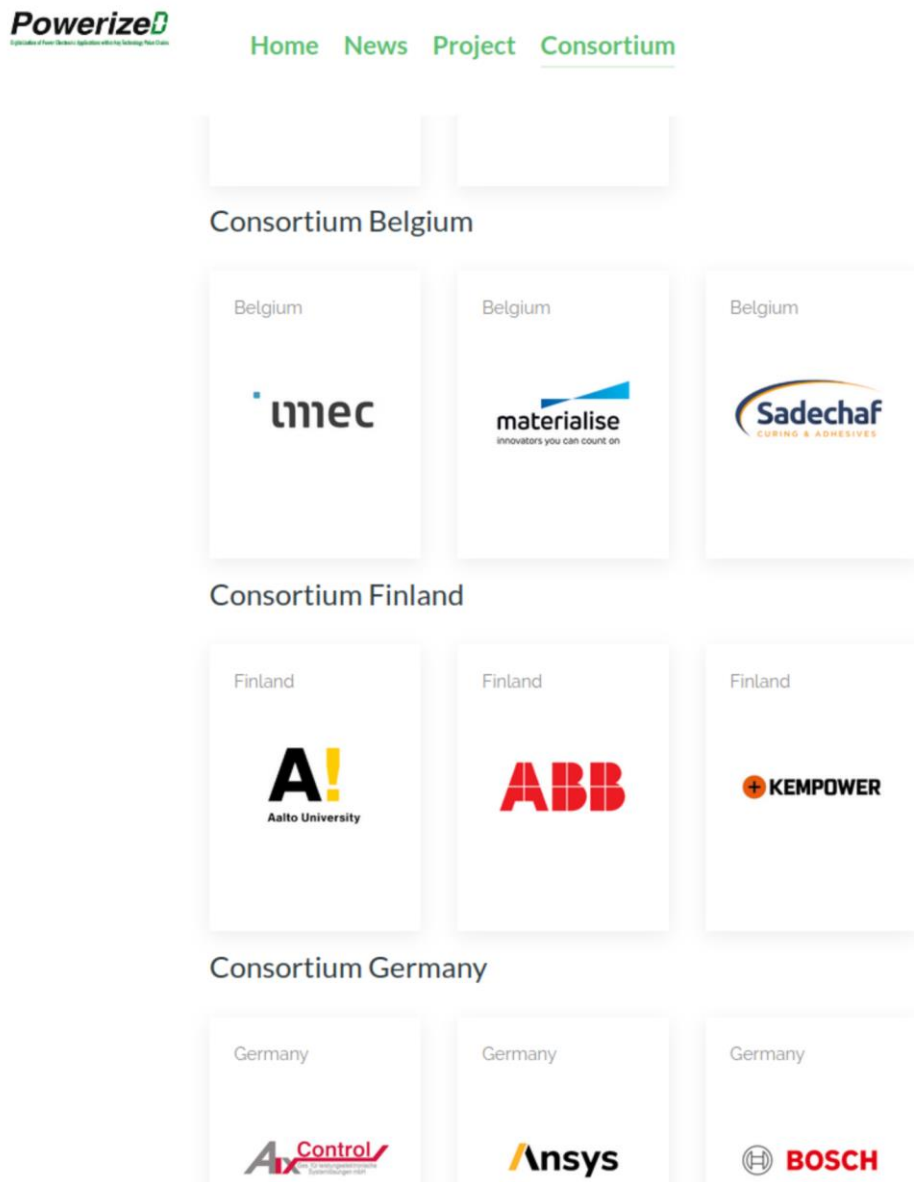


FIGURE 9: ALL 61 PARTNERS ARE LISTED IN THE CONSORTIUM'S SECTIONS, STRUCTURED BY COUNTRIES.

3.1.4.5 Resources

The publications section of the PowerizeD website is dedicated to providing easy access to all project-related publications, including reports, scientific papers, presentations, and more. This section is essential for sharing the knowledge and results of the project with the scientific community, industry, and the general public. The section includes links to external platforms where the publications are hosted, ensuring that they are always up-to-date and easily accessible. This section is under development and will be released in the next website update.



The screenshot shows the PowerizeD website navigation menu with 'Resources' expanded to show 'Deliverables' and 'Publications'. Below is a table of publications:

TITLE	AUTHOR	YEAR
D4.10 Report on the Potential and Future Improvement of Market Shares	Infineon	2023
D4.2 Draft Plan for Use, Dissemination, and Communication of the foreground	Infineon	2023
D4.1 Project Website	Innovation Dis.Co	2023

FIGURE 10: THE RESOURCES SECTION WILL PROVIDE THE PUBLICATIONS OF THE PROJECT.

3.1.4.6 Media

The media section of the PowerizeD website contains various types of multimedia content such as photos, videos and recordings related to the project. This section will also include press releases, news articles and other media coverage of the project. In addition, it could provide access to interviews with project team members, stakeholders and experts in the field, as well as webinars and presentations given by the project team. The media section will act as a hub for all publicly available media related to the project, allowing users to easily access and engage with this content. This section is also under development.

The screenshot shows the PowerizeD website navigation menu with 'Media' highlighted. Below is a table of media items:

TITLE	CREATOR	DATE
Kick off meeting	Innovation Dis.Co	7-8/2/2023
Kick off meeting	Innovation Dis.Co	7-8/2/2023
Kick off meeting	Innovation Dis.Co	7-8/2/2023

FIGURE 11: MEDIA SECTION PREVIEW.



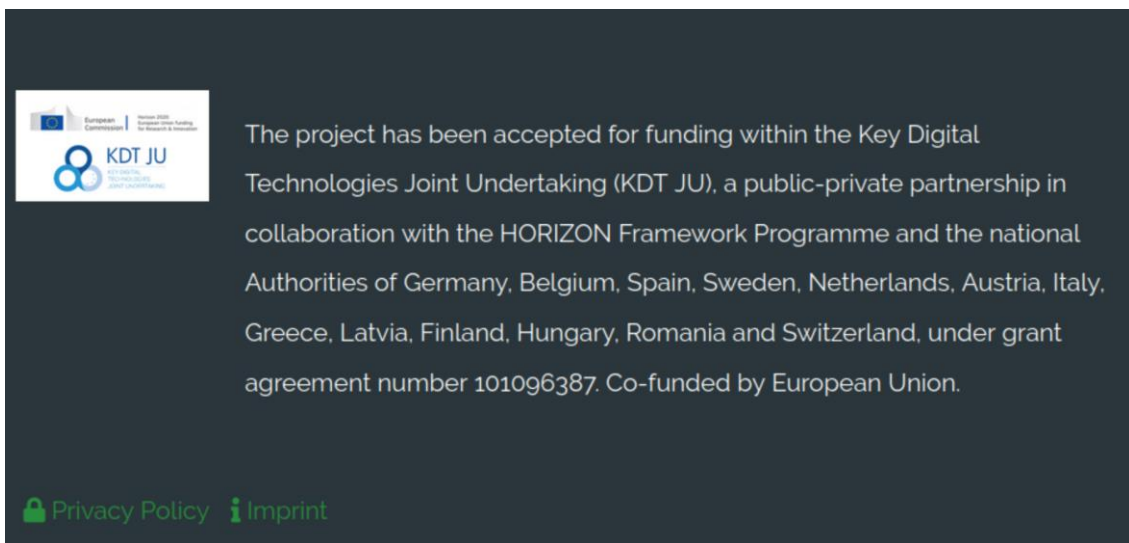
3.1.4.7 General Information - Footer

Each page uses the same footer with the KDT project acknowledgement, followed by general information about the project, imprint and privacy information, and a link to a contact form.

Infineon is the purchaser of the website and therefore responsible for the legal notices on the website.

All parts in the footer sections (Imprint, Disclaimer and Privacy Policy) have been developed and cross-checked with the responsibilities of Infineon. with the responsibilities of Infineon.

The imprint includes a contact address, which is implemented as a form available next to the imprint button.





4 Conclusion

4.1 Contribution to overall picture

The PowerizeD project website is an essential platform for disseminating information about the project to a wide range of stakeholders, including the general public, experts in the field, related projects, other research programmes and relevant authorities. The website serves as a hub for information on the progress of the project, including work status and results, as well as news, meetings, events and publications. With a responsive design and easy-to-use interface, the website provides an optimal viewing and interaction experience for users on a range of devices. Overall, the website plays a crucial role in establishing the project's brand identity and maximising the applicability and usability of its results for a wide range of end users.

4.2 Relation to the state-of-the-art and progress beyond it

The PowerizeD project aims to go beyond the state of the art by creating an easily accessible and user-friendly platform that provides detailed information on the project's progress and results. The website is designed to adapt to different devices and provide optimal viewing and interaction for all users. In addition, the website will be complemented by a social media presence and dissemination templates to maximise the visibility and impact of the project. The ongoing revision of the website aims to further improve its functionality and provide more detailed information on the project's work packages, use cases and demonstrators.

4.3 Impacts to other WPs and Tasks

The PowerizeD project website serves as a communication and dissemination tool that impacts other work packages and tasks. It provides a platform for the project partners to share their progress, results and findings, and to collaborate and share knowledge. The website also plays a role in disseminating the project results to a wider audience, including stakeholders, policy makers and the general public. Thus, the website contributes to the achievement of the project objectives and ensures the alignment of the different work packages and tasks towards the common goals. In addition, the website allows for efficient management and coordination of the project activities, which further supports the successful implementation of the project.

4.4 Contribution to demonstration

The website will showcase the achievements and innovations of the project. This may include the use of new technologies or processes, the implementation of new systems or the validation of theoretical concepts.

4.5 Other conclusions and lessons learned

Overall, the setup of the PowerizeD website provides a solid foundation for project communication and dissemination. However, there are always opportunities for improvement and regular evaluation and updates can help to ensure that the website remains effective in achieving its objectives. We will take into account needs and changes in order to continuously improve the website.



5 List of figures

Figure 1: PowerizeD Logo	7
Figure 2: Menu and home section of the initial setup of the PowerizeD website.....	9
Figure 3: The project vision and mision	9
Figure 4: Project details in a moving counter.....	10
Figure 5: Project sections. These sections will be linked to new input.....	10
Figure 6: Latest news of PowerizeD	11
Figure 7: Project overview.....	12
Figure 8: Countries taking part in PowerizeD.....	13
Figure 9: All 61 partners are listed in the consortium's sections, structured by countries.	14
Figure 10: The resources section will provide the publications of the project.....	15
Figure 11: Media section Preview.	15



6 List of tables

Table 1: Contributions..... 5



D4.1 Project Website: PowerizeD web portal established



- Last page of the document is intended to be blank! -