D7.1 Website

Project acronym	HiPower 5.0
Project title	Leading edge semiconductor, integration, and control system technologies for highly compact and smart edrive components towards more sustainable power electronics 5.0
Grant Agreement No.	101194250
Call	HORIZON-JU-Chips-2024-2-RIA-T1
Project starting date	1.7.2025
Project duration	36 months
Coordinator	Christoph Abart, AVL List GmbH

Dissemination Level	PU
Deliverable type	DEC
Deliverable Date	2025-12-31
Deliverable Responsible	Juraj Marek

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EXECUTIVE SUMMARY

This document provides an overview of the HiPower 5.0 project website and its content. It describes the purpose of the site in sharing public information about the project and outlines the structure, including details of the developed pages. The website is accessible at www.hipower50.eu.

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Content

1 INTRODUCTION 4

2 PROJECT WEBSITE 5

2.1 KEY MESSAGES FOR THE GENERAL PUBLIC 5
2.2 WEBSITE ACCESS AND STRUCTURE 5
2.3 MAIN PAGE 6
2.4 THE PROJECT 7
2.5 USE CASES 8
2.6 CONSORTIUM 8
2.7 NEWS&EVENTS 10
2.8 OUTCOME 11
2.9 CONTACTS 12

3 COMPLIANCE AND REGULATIONS 13

3.1.1 Data Privacy and Cookie Compliance (GDPR & ePrivacy) 13
3.1.2 EU Identity and Visibility 13

4 TERMS, ABBREVIATIONS AND DEFINITIONS 14

Content of Figures

Figure 2-1: Main page of HiPower 5.0 project web page – top 6
Figure 2-2: Main page – Project at a Glance part.....6
Figure 2-3: All page's footer 7
Figure 2-4: *The Project subpage* 7
Figure 2-5: Use cases 8
Figure 2-6: Project partners.....9
Figure 2-7: Partner description – AT&S.....10
Figure 2-8: News section 11
Figure 2-9: News section – Kick-Off meeting information 11
Figure 2-10: Contact section.....12

Content of Tables

Table 4-1: Terms, Abbreviations and Definitions 14

1 Introduction

This document details the activities undertaken to design, develop, and launch the official website for the HiPower 5.0 project. It summarizes the collaborative efforts carried out by the Slovak University of Technology in Bratislava (STUBA) and Politecnico di Torino (PoliTo), in conjunction with the project coordinator, AVL.

The establishment of the web platform constitutes the primary outcome of Task 7.2.2. While the project website itself serves as the tangible deliverable, this document provides a formal overview of the development process, the site architecture, and the content strategy implemented to ensure effective project dissemination and communication.

2 Project website

While the **HiPower 5.0** website provides data relevant to scientific and industrial stakeholders, it is primarily designed to be accessible to the **general public**. As the main tool for public dissemination, the website serves as the primary entry point for non-technical audiences.

2.1 Key Messages for the General Public

To effectively engage a non-technical audience, the content strategy focuses on three core messages:

- **Relevance of EU Funding:** Demonstrating that EU-funded research generates tangible value and improvements to the everyday lives of European citizens.
- **Consortium Excellence & Recruitment:** Showcasing the project partners as successful entities leading high-level research. This aims to support recruitment activities and inspire the younger generation to pursue technically oriented studies (STEM).
- **European Leadership:** Reinforcing Europe's leading market position and know-how in the industrial electronics and mobility sectors, confirming that the EU's strategic visions (Horizon Europe, Chips Act) are being actively fulfilled.

2.2 Website Access and Structure

The project website was officially launched in **November 2025** and is accessible via the following URL:

www.hipower50.eu

Sitemap and Navigation

The website features an intuitive top-panel navigation bar that divides the content into easily accessible subpages:

- **THE PROJECT:** Provides a comprehensive overview of the project's vision, specific objectives, and technical scope.
- **USE CASES:** Detail the real-world application scenarios and demonstrators developed within the project.
- **CONSORTIUM:** Presents the profiles of the partner organizations (industrial and academic) involved in the collaboration.
- **NEWS & EVENTS:** Offers regular updates on project progress, past meetings, and upcoming conferences or workshops.
- **OUTCOME:** Serves as a repository for public deliverables, scientific publications, and technical results.
- **CONTACT:** Direct channels for reaching the project coordinator.

2.3 Main Page

The Main Page (Figure 2-1) is the primary landing page accessible at **www.hipower50.eu**. It serves as the central information hub for the project, offering an immediate overview of the project's mission. The site features a clean, professional header with the **HiPower 5.0 logo** on the left and a responsive navigation menu on the right.



Figure 2-1: Main page of HiPower 5.0 project web page – top

Directly below the introductory vision and objectives, the **"Project at a Glance"** section (Figure 2-2) presents the "Key Facts" of the project in a numerical format. This section highlights the project's scale, including its **36-month duration**, a consortium of **45 partners** from **11 countries**, and a total budget of approximately **58 million euros**.

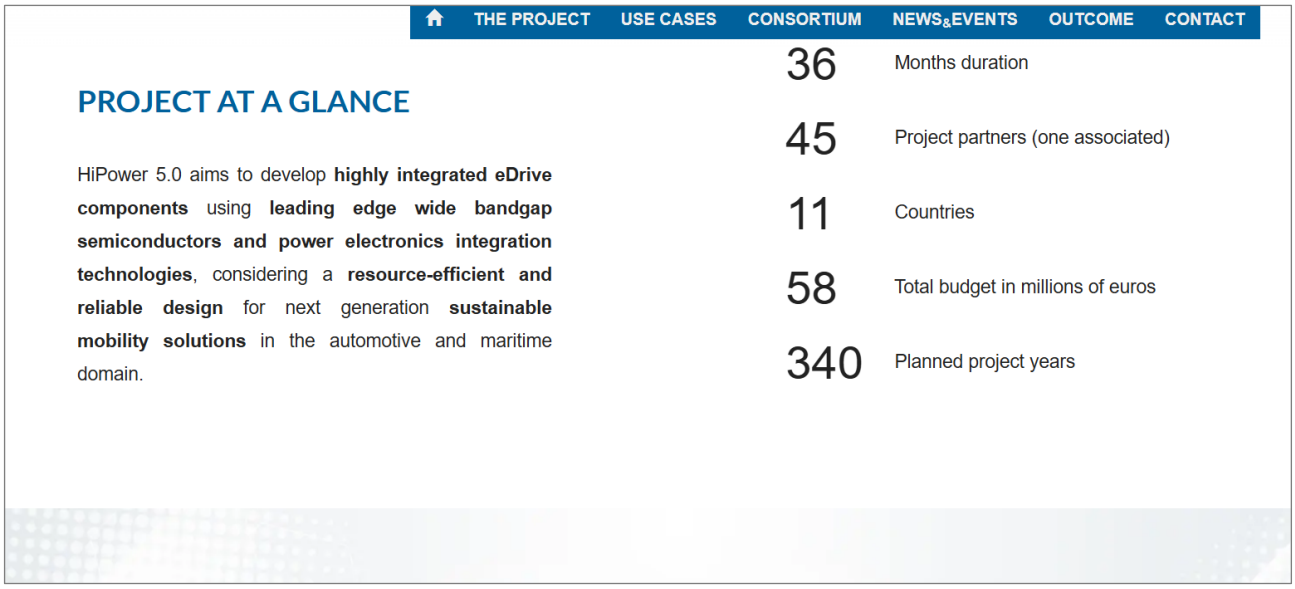


Figure 2-2: Main page – Project at a Glance part

The bottom of every page contains a comprehensive footer (Figure 2-3) which ensures legal and funding transparency. This includes the mandatory **EU emblem** and the specific funding acknowledgment for **Grant Agreement No. 101194250**, noting the support of the **Chips Joint Undertaking** and its participating national members.



Figure 2-3: All page's footer

2.4 The Project

The **"The Project"** subpage (Figure 2-4) outlines the strategic vision and technical roadmap of **HiPower 5.0**, highlighting its commitment to the European Green Deal's goal of climate neutrality by 2050. It details the project's focus on developing highly integrated eDrive components for the automotive and maritime sectors by leveraging leading-edge wide bandgap (WBG) semiconductors like **GaN** and **SiC**. Visitors can learn about the four core objectives: achieving energy efficiency of up to 99%, doubling power density, increasing component lifetime and reliability by 20%, and implementing digital tools for the "twin transition" of next-generation powertrains. Additionally, the page explains the project's "Power Electronics 5.0" vision, which emphasizes a resource-efficient, resilient, and all-European integrated value chain from semiconductor materials to final mobility applications.



Figure 2-4: The Project subpage

2.5 Use cases

The **Use Cases** subpage provides a detailed look at the six primary application areas where **HiPower 5.0** technologies are demonstrated. These range from revolutionary **automotive applications**—such as bidirectional GaN switches based topologies(UC1), hybrid multi-level inverters (UC2), and fully integrated eDrives (UC4)—to advanced **digital twin simulations** (UC5) aimed at optimizing GaN component performance. Additionally, the page highlights the project's expansion into the **maritime domain** (UC6), featuring innovations like high-power charging units and solid-state circuit breakers to support the electrification of ships. Each use case is designed to push the boundaries of energy efficiency, power density, and reliability across the mobility sector.

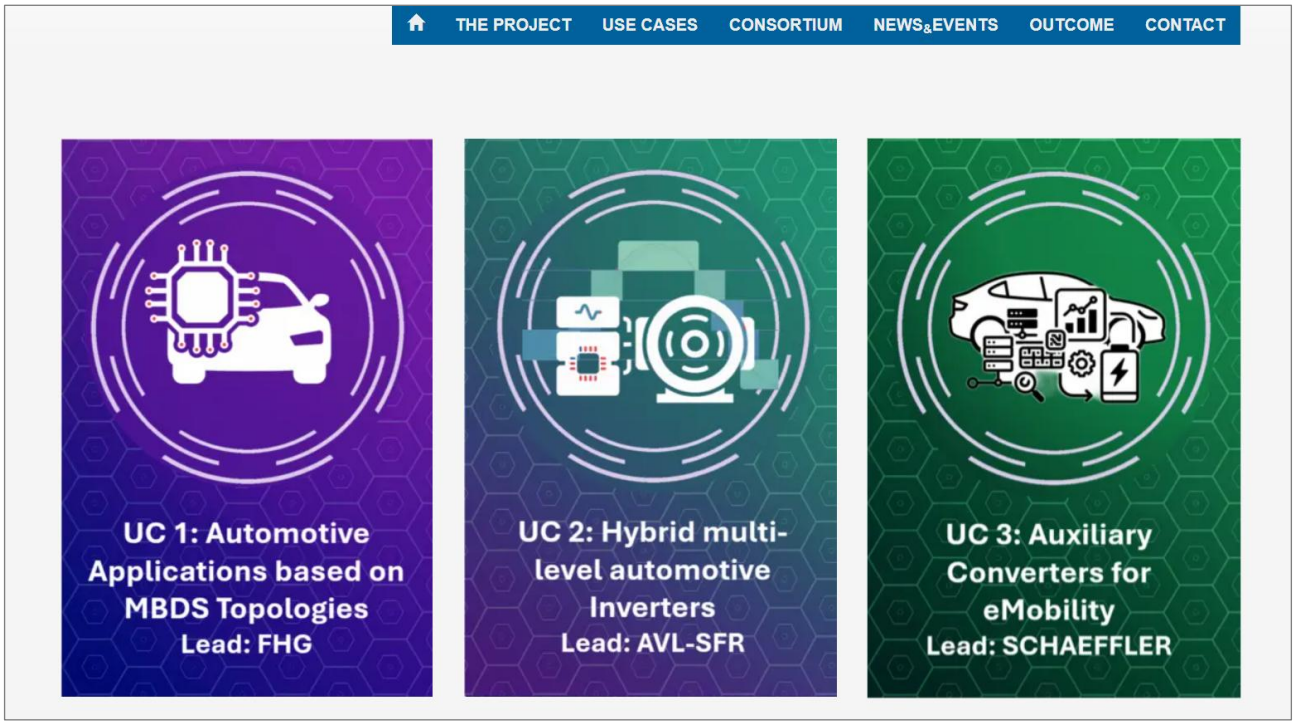


Figure 2-5: Use cases

2.6 Consortium

The **Consortium** subpage highlights the extensive collaborative network behind **HiPower 5.0**, which consists of **45 partners from 11 European countries**. This diverse group is strategically composed along the entire value chain, including major industrial leaders, innovative SMEs, and prestigious research organizations and universities. By combining cutting-edge academic research with industrial manufacturing expertise, the consortium aims to strengthen Europe's technological sovereignty and global competitiveness in the power electronics market.



Figure 2-6: Project partners



Figure 2-7: Partner description example – AT&S

2.7 News&Events

The "News&Events" page (Figure 2-8) informs about all project news, and about project related events & workshops. After clicking on one news entry, a new page will be opened. Exemplarily, the Kick-off meeting information is presented in Figure 2-9. The system allows attaching files to the message. direct download links can be attached or button for download request. This can be used for downloading public files that will be also published through the website.

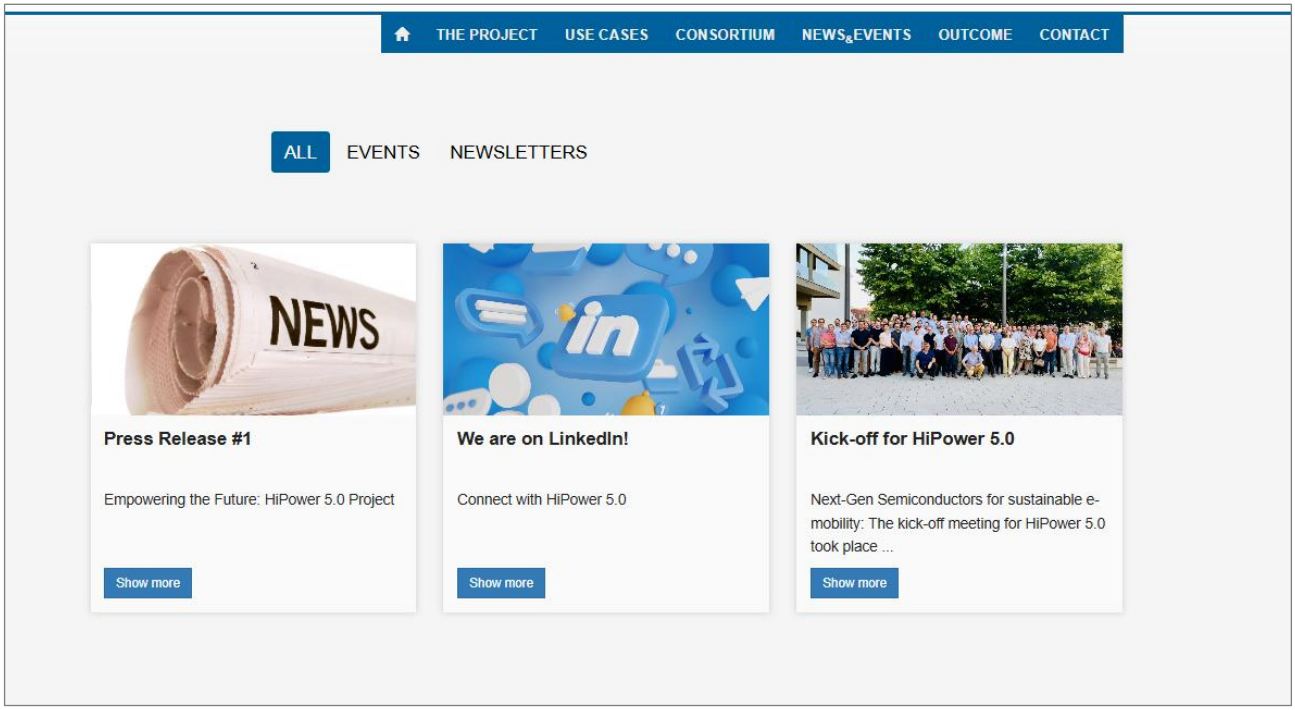


Figure 2-8: News section

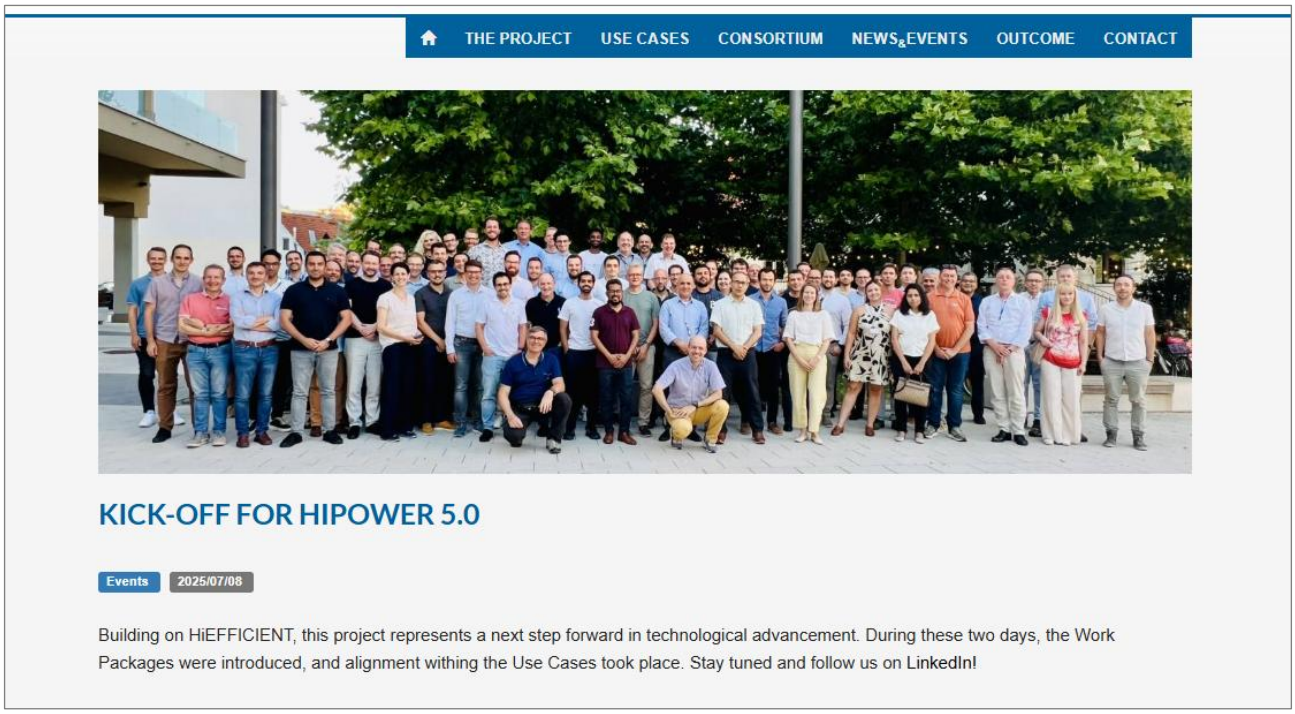


Figure 2-9: News section – Kick-Off meeting information

2.8 Outcome

This section will provide a list of all papers, books or other documents which are published under the sign of the HiPower 5.0 project. The list will be kept constantly updated as the project begins to deliver results. Press releases of partners will also be published here to inform the public about the project objectives. However, due to early stages of the project, no scientific or technical publications are in this section yet.

2.9 Contacts

The main contact information of the project coordinator can be found here (Figure 2-10).

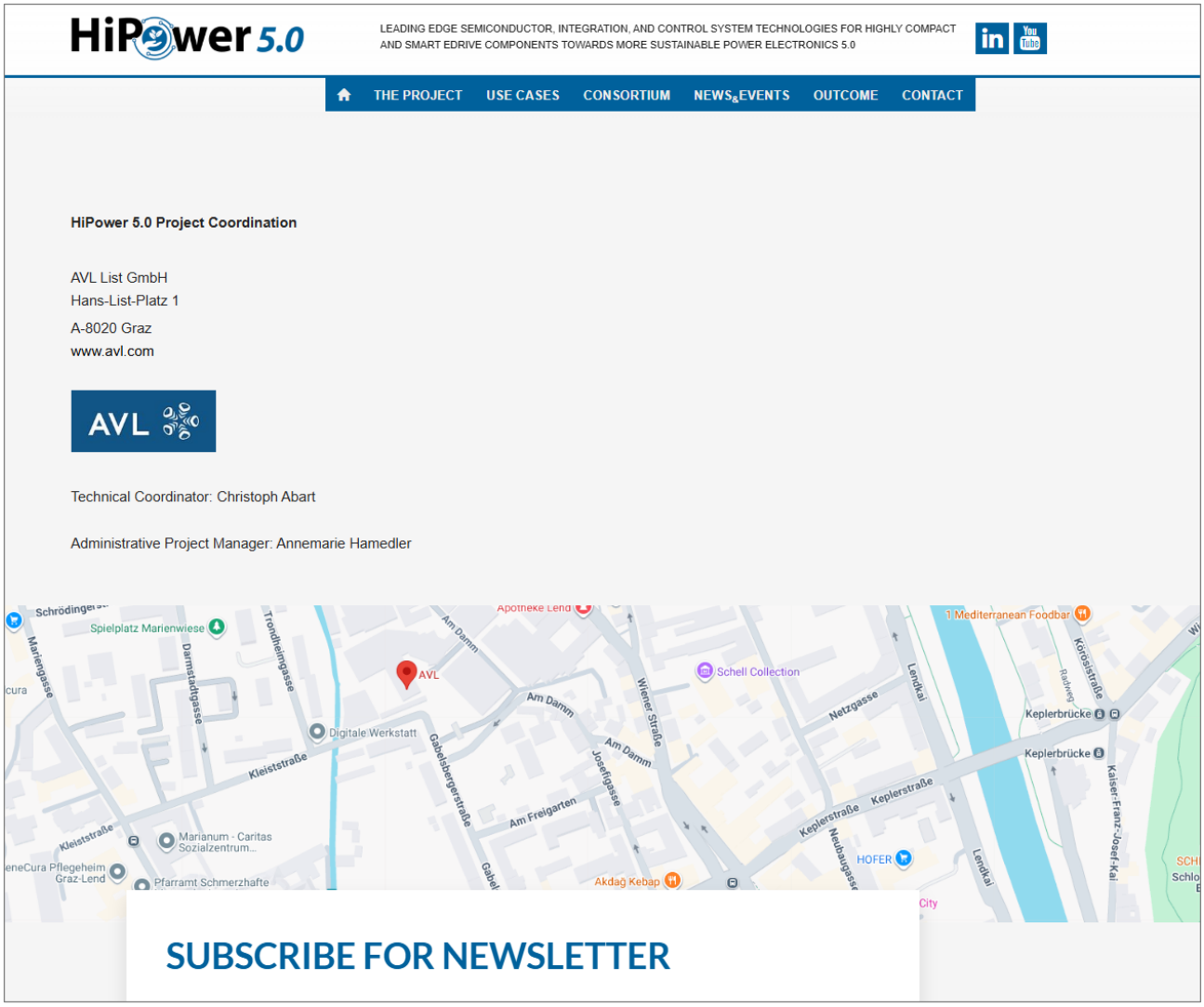


Figure 2-10: Contact section

3 Compliance and Regulations

To ensure full alignment with European standards and the Grant Agreement obligations, the **HiPower 5.0** website has been developed with strict adherence to data protection and digital accessibility regulations.

3.1.1 Data Privacy and Cookie Compliance (GDPR & ePrivacy)

The website is fully compliant with the **General Data Protection Regulation (GDPR)** and the **ePrivacy Directive** (the "Cookie Law"). Key measures include:

- **Cookie Consent Management:** A transparent consent banner is implemented, allowing users to accept or reject non-essential cookies (such as analytics) before they are activated.
- **Privacy Policy:** A dedicated legal section provides clear information on what data is collected, the purpose of processing, and how users can exercise their rights (e.g., the right to be forgotten).
- **Data Minimization:** The site only collects the minimum amount of data necessary for functional performance and anonymized visitor statistics.

3.1.2 EU Identity and Visibility

As a final requirement of the funding body, the website prominently displays the European Union emblem alongside the following funding acknowledgement:

> *The HiPower 5.0 Project (Grant Agreement No. 101194250) is supported by the Chips Joint Undertaking and its members, including the top-up funding by Austria, Belgium, the Czech Republic, Denmark, France, Germany, Italy, the Netherlands, Slovakia, and Slovenia. Co-funded by the European Union. Views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union, Chips JU, or the national granting authorities. Neither the European Union nor the granting authorities can be held responsible for them.*

4 Terms, Abbreviations and Definitions

HiPower 5.0	Leading edge semiconductor, integration, and control system technologies for highly compact and smart edrive components towards more sustainable power electronics 5.0
DEC	Websites, patents filing, press & media actions, videos, etc.
DEM	Demonstrator, pilot, prototype, plan designs
DMP	Data Management Plan
EC	European Commission
ePrivacy	EU's legal framework (primarily the ePrivacy Directive 2002/58/EC) protecting privacy in electronic communications, complementing the GDPR
GaN	Gallium Nitride
GDPR	General Data Protection Regulation
HW	Hardware
R	Document, report (excluding the periodic and final reports)
SEN	Sensitive, limited under the conditions of the Grant Agreement
SiC	Silicon Carbide
PU	Public, fully open, e.g. web (Deliverables flagged as public will be automatically published in CORDIS project's page)
WP	Work Package

Table 4-1: Terms, Abbreviations and Definitions