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	PROJECT: SIDERWIN
	Deliverable:
	D8.1
	<u>Title:</u>
	Project website
Date:	29 December 2017
Version:	1.0
Website:	https://www.siderwin-spire.eu/

### <u>Status</u>

⊠Final	
□ In Progress. Please explain:	□ Iterative Process – This year's results have been 100% achieved.
	Delay – This year's results were not fully achieved.

# **Tracking Changes**

Version	1.0	Issue to EC

# Level of Dissemination

Confidential

🛛 Public

# <u>Author(s)</u>

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## **1** Executive summary

This document is a deliverable of WP8 of the European commission funded project, SIDERWIN (Grant Agreement no. 768788, under the H2020 framework and the SPIRE initiative) and presents the website of SIDERWIN project (available at the following link <a href="https://www.siderwin-spire.eu/">https://www.siderwin-spire.eu/</a>) and all the sections that constitute it.

The deliverable D 8.1 "Project Website" is under the responsibility of TECNALIA and it is associated with Task 8.1 Communication and dissemination actions.

The website has been created at the beginning of the project to publicize the start of the project and the envisioned objectives, increase their visibility and promote the dissemination activities. It is planned that the website will be updated throughout the project, including updated information about the project, news and events.

The website is oriented to the dissemination of the objectives and results of the project, being available different areas: (i) for downloading dissemination materials and public documents of the project (deliverables, papers, posters,...), (ii) for displaying project tweets, (iii) for accessing the collaborative portal between the partners.

People interested in special topics of the project will be able to ask for information through the Contact Us section.

Project logo choice is part of the website development. Different logo designs were proposed to the consortium by TECNALIA, as WP8.1 Leader. After an internal voting process among all the partners, the following logo was selected:



Figure 1 Project's logo

In addition, a short-logo is also designed for other purposes, such as the Twitter and LinkedIn profile picture.



Figure 2 Short project's logo

### 2 Technical content

This document is a deliverable of WP8 of SIDERWIN's project and is associated to Task 8.1 "Communication and dissemination actions". The goal of this document is to present the project website and all their relevant parts.

The SIDERWIN website has been developed making use of DRUPAL 7 tool. The main criteria for selecting this tool have been to base the developments on:

- Open Source Tools with dynamic communities behind them.
- Tools allowing powerful scalability.

DRUPAL 7 is a friendly and powerful Content Management Platform for building websites that can vary from blog and microsites to collaborative social communities. It is an open source solution with a very active community around it. DRUPAL is a very flexible, scalable and powerful platform with a lot of possibilities for Web's development.

During the preparation of the proposal, the idea was that the project website will be the main communication tool of the project, where updated information and dissemination material will be published. For the internal communication among project partners, Dynergie will create and maintain an intranet accessible only through credentials. The link to this collaborative tool, to facilitate the communication within the consortium and act as repository for documents is found in the Cocreation Area section of the website.

The next sections describe the different parts and utilities of the SIDERWIN website and present briefly the Cocreation area. It is worth pointing out that the updating and improving of the website will be a continuous process, so changes in the structure and format described in this document could be carried out along the project life.

### **3** SIDERWIN website

The SIDERWIN website is available at the following link: <u>https://www.siderwin-spire.eu/</u>.

To emphasize the nature of the website as the official website of a project funded by the European Commission (EU) under the Horizon2020 framework, the ".eu" domain was chosen. In addition, to reflect the project is under the SPIRE PPP initiative, the "spire" term was included in the name.

The goal of the website is the dissemination of the project objectives, results, events and initiatives, providing essential information related to the project and the partners. For this purpose, specific sections of the website provide:

- A brief introduction to the project
- A description of project objectives and work packages
- A presentation of the partners involved
- Access to public documents of the project such as public deliverables, open access papers, etc
- Access to dissemination materials such as presentations, brochures, posters and videos
- Information related to the status of the project through news, events and public documents
- Social media links to follow and share the project activities
- The possibility to get in touch with the consortium

The structure of the page is shown in Figure 3:

- On the left it can be find: i) the menu, ii) the logo of EU that is funding the project, iii) the SPIRE project logo and a link to https://www.spire2030.eu/ in order to acknowledge SIDERWIN as a project that is in line with the SPIRE PPP targets, iv) a private area accessing only by registered website administrators, and v) an area to display the project links to Social Media, such as Twitter and LinkedIn, and last Tweets information (@siderwin\_spire account)
- At the bottom, the logos of the partners of the consortium and the general information of the project is reported (Project title, acronym, partners, project

ID, duration (start and end dates), and a link to the Call). Clicking on a project partner logo the user will be redirected to the associated partner dedicated page.

The next sections of the document describe each one of the sections of the page, providing also a screenshot of the corresponding section.



Figure 3 SIDERWIN website: vertical navigation bar, left part with SPIRE and EU logos, and links to project Twitter and LinkedIn sites, Last Tweets, footer with partner names and general information about the project

#### 3.1 Home

The *Home* section provides an overview of the project describing: the need, the objective, the approach and the benefits of the project.

Š Side	for InDustrial CO2-fre <b>E</b> steel p <b>R</b> oduction by electro <b>WIN</b> ning
> Home	
> Objectives	Development of new methodologie <mark>S</mark> for InDustrial
Work Packages	CO2-freE steel pRoduction by electroWINning
Consortium	ΣIDERWIN is a European project under the Horizon 2020 framework and the
Documents	SPIRE initiative Steel production represents 4% of Europe(27) CO2 emissions, and therefore CO2 mitigation in
Cocreation area	steel production is required.
News	
Events	
Contact Us	
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 768788	Based on this premise, <b>ZIDERWIN</b> project proposes a breakthrough innovation, compared to the actual steel production process, bringing together steel making with electrochemical process. The electrolysis process using renewable energies will transform any iron oxide, including those iniside the byproducts from other metallurgies, into steel plate with a significant reduction
PROJECT	of energy use. This process decomposes under mild conditions but at intense reaction rate naturally occurring iron oxides such as hematite into iron metal and oxygen gas. By offering a CO2-free steel production process, the project will contribute to the reduction of the total greenhouse gas emissions. Compared to traditional steelmaking plants, this innovative technology has several positive impacts such as: • a reduction by 51% of the direct CO2 emissions, • a reduction by 51% of the direct energy use, • the ability to produce steel from by-products rich in iron oxides from non-ferrous metalungy residues, and • an increased integration with renewable energies with a more flexible process. The project is led by ArcelorHittal, the world's leading steel and mining company. The company has been working for 12 years on the development of the technology to bring it from the TRL 0 to TalL 4 through the manufacturing of 5 different plots, proving the potential of the technology. With this solid background, ArcelorMittal surrounded by 11 additional innovative technology at TRL 6.
MEMBERS PRIVATE AREA username password Login DILOW US	ULCOWIN PILOT Cel Versions N*1 N*2 N*3 Cel Versions Iron samples T70mm long 43 43mm thick
SkierwinSpire Retweeted  Horizon 2020 GEU / 76220  Adapting flwerkage environments for nodern requirements is floereng/knowl/knownere/HH 2020/InterestLutessanch Research/prost	ULCOWIN pilot used in IERO project to validate the feasibility of the technology at TRL 4

Figure 4 Home section (only part of the screenshot, by eligibility footer has not been included)

### 3.2 **Objectives**

The *Objectives* section describes the main objectives for the SIDERWIN project, as well as the background of the project.

<u>Š</u> Side	Development of new methodologie <b>S</b> for InDustrial CO2-fre <b>E</b> steel p <b>R</b> oduction by electro <b>WIN</b> ning
> Home	Objectives
> Objectives	
> Work Packages	$\Sigma$ IDERWIN project aims at developing an innovative electrochemical process to transform iron
> Consortium	oxide into steel metal plates. This process, based on the ULCOWIN technology developed since 2004, produces steel by electrolysis without direct CO2 emissions. In this operation, electrical
> Documents	energy and iron oxide are converted into chemical energy consisting of separated iron metal from oxygen gas. It is a disruptive innovation that entirely shifts the way steel is presently produced.
> Cocreation area	Produced. Electrolysis is the main processing unit of an iron-making route beginning with mineral iron ore
> News	and producing liquid steel.
> Events	Pellet fixed Ultra Fine one Inton calde Inton metal plates Liquid steel
> Contact Us	🔆 - 🔛 - 🛢 - 👘 - 🐎
This project has received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement No 768788	Register for the second
PROJECT	Electrochemical processing route for steel production and ULCOWIN technology to decompose iron axides The new technology will contribute to the achievement of the strategic goals defined by the European Commission for Europe 2020. Full deployment of such technology will deliver significant contributions to European Union objectives of CO2 emission reduction, of energy efficiency improvement, of increased share of renewable energy and of material resource efficiency. Furthermore, as a breakthrough technology addressing the processing route of a large and energy intensive industry it would fully participate into several flagship initiatives such as the "Innovation Union", "industrial Policy for the Globalisation Era", "Resource efficient Europe" and "Agenda for new skills and jobs".
	Main Objectives
MEMBERS PRIVATE AREA	The consortium has set five main objectives:
password	The <b>first objective</b> is to develop, build and demonstrate the production of iron metal from its oxide without direct involvement of carbon or fossil fuels and according to the simplest stoichiometry of the reaction of iron oxide decomposition:
Login	12Fe <sub>2</sub> O <sub>3</sub> -> Fe + ¾ O <sub>2</sub>
Follow Us	The second objective is to produce iron by electrowinning with a prototype cell equipped with the key components of the final version.
y in	The <b>third objective</b> is to interface the electrowinning prototype cell with a communication system to operate it according to electric grid priorities in real time.
Tweets by @siderwin_spire	The <b>fourth objective</b> is to produce iron metal from iron oxide coming from low-grade iron ore incompatible with the conventional process and from residues of non-ferrous metallurgies.
SiderwinSpire Retweeted      Adapting #heritage     environments to modern requirements	The <b>fifth objective</b> is to propose a profitable model that should facilitate the financial support of the next development steps of the ULCOWIN process. Thus, bridging the "valley of death" between TRL 6 and 8 where investment is too high for research programs and too risky for industrial participation.
ec.europa.eu/research/infoc #EnergyUnion#Environment#H2 020#InvestEUresearch #ResearchImpactEU	Chercher 2: Industrially
A BI	Objective 2: Industrially feasible new-processing route

#### Objective 3. Kron metal product from terevolable energy Specific objectives of ΣIDERWIN project

#### Background

<text>



#### 3.3 Work Packages

The *Work Packages* section describes the eight work packages and the relation between all of them.



Figure 6 Work packages section (only part of the screenshot by space constraints)

### 3.4 Consortium

The *Consortium* section provides an overview of the SIDERWIN consortium and information of each one of the twelve partners: logo, general description of the organization and a link to the partner website.

<u>Š</u> Side	Development of new methodologies for InDustrial CO2-freE steel pRoduction by electroWINning
> Home	Consortium
> Objectives	Consoluum
	The consortium is led by ArcelorMittal, the world's leading steel and mining company. With its philosophy to produce safe and sustainable steel, the worldwide group is always researching
Work Packages	more efficient and environmentally friendly ways to produce its main product: crude steel. The company has been working for 12 years on the development of the ULCOWIN technology
> Consortium	through experiments validating the four first TRLs and by testing three different versions of cells at TRL4 proving the potential of the technology.
Documents	
Cocreation area	With this solid background, ArcelorMittal surrounded by 11 additional innovative European companies and RTOs (Research and Technology Organisations), aims at developing a new
> News	experimental pilot to validate the technology at TRL5 and TRL6.
> Events	
Contact Us	
()	Participants in the kick-off meeting held on 10th October 2017 at the European Commission
	premises
A to	AMMR
PROJECT	Arcelor/Mittal is the world's leading steel and mining company. Guided by a Arcelor/Mittal inflosophy to produce safe, sustainable steel, it is the leading supplier of quality steel products in all major markets including automotive, construction, household appliances and packaging. Arcelor/Mittal is present in 60 countries and has an industrial footprint in 18 countries.
	CMI
MEMBERS PRIVATE AREA	CMI (Cockerill Maintenance & Ingénierie) designs, modernises and maintains
username	equipment in the domains of energy, defence, industry and the environment. The solutions provided by CMI to its clients enable the economic and technical
password	performance of their production equipment to be improved, while also reducing
Login	their environmental footprint. In 2016, CMI turned over in excess of 1.2 billion Euros, with a workforce of 4,600 highly qualified persons. Based in Seraing (Belgium), CMI has installations in Europe, the United States, Africa, Brazil, Russia, India and China.
ollow Us	EDE
	With around 75 billion euros of annual revenue, 37.6 million of worldwide clients and 87% of CO2 free electricity. EDF is the world's biggest electricity
Tweets by @siderwin_spire @	generator. The EDF Group covers every sector of expertise, from generation to trading and transmission grids. EDF builds on the expertise of its people, its R&D and engineering skills, its experience as a leading industry operator and the attentive



#### 3.5 **Documents**

The *Documents* section will make available to the external audience all the public information produced by the SIDERWIN consortium. This section has been divided in three categories according to the typology of the documents. These three categories are:

- Deliverables
- Papers and posters
- Others

### 3.5.1 Deliverables

The *Deliverables* sub-section provides a list of all deliverables produced in the project sorted by work package. In addition, the public deliverables will be able for downloading just clicking the title of the deliverable. At the moment of producing this deliverable, no deliverables have been produced, so the sub-section is empty, and only the list of work packages appears.

<mark>گ</mark> Sid	Development of new methodologies for InDustrial CO2-freE steel pRoduction by electroWINning
> Home	Deliverables
> Objectives	Deliverables
> Work Packages	WP1. Management
> Consortium	WP2. Specifications
> Documents	WP3. Simulation
Deliverables	WP4. Pilot Development
Papers and posters Others	WP5. Process operating
> Cocreation area	WP6. Alternative raw material
> News	WP7. Techno-economic and environmental assesments
> Events	WP8. Communitation, dissemination and exploitation
> Contact Us	
o Sean carsan comany a	

Figure 8 Deliverables sub-section (only part of the screenshot by space constraints)

#### 3.5.2 Papers and posters

The *Papers and posters* sub-section offers the possibility to download public papers and posters of the SIDERWIN project by clicking on the corresponding item. At the moment of producing this deliverable, no public papers/posters have been produced, so the section is empty (See Figure 9).

### 3.5.3 Others

The *Others* sub-section offers the possibility to download the dissemination material produced by the consortium (such as flyers, presentations, videos...) by clicking on the corresponding item. At the moment of producing this deliverable, no dissemination material has been produced, so the section is empty (See Figure 10).

<mark>گ</mark> ُ Sid	Development of new methodologies for InDustrial CO2-freE steel pRoduction by electroWINning
) Home	Papers and posters
> Objectives	
> Work Packages	Papers and posters
> Consortium	
> Documents	
Deliverables Papers and posters Others	
Cocreation area	
> News	
> Events	
> Contact Us	

Figure 9 Papers and posters sub-section (only part of the screenshot by space constraints)

Sciel	Development of new methodolo for InDustrial CO2-freE stee	
<u>,                                    </u>	pRoduction by electroWINnir	
> Home	Others	
> Objectives		
> Work Packages	Others	
> Consortium		
Documents		
Deliverables		
Papers and posters		
Others		
Cocreation area		
> News		
> Events		

Figure 10 Others sub-section (only part of the screenshot by space constraints)

#### 3.6 Cocreation area

The *Cocreation area* section provides a link to the intranet of SIDERWIN project developed by Dynergie.

In order to ease the communication between the partners and support the project management functions such as task assignments, time-managing deadlines and milestones among others, Dynergie have created a collaborative platform that is completely dedicated to the SIDERWIN project. All the project partners, and the partners only, will be able to access the platform and take advantage of the tools at their

disposal. The goal of this platform is to gather all the important elements of the SIDERWIN project together in one place and make them available anytime, anywhere.

#### 3.7 News

In the *News* section the external audience will be informed about the news related to the SIDERWIN project. At the moment of producing this deliverable, no news are available, so the section is empty (See Figure 11).



Figure 11 News section (only part of the screenshot by space constraints)

#### 3.8 Events

The *Events* section will inform to the external audience about the events related to the SIDERWIN project. There is a main screen with near future events, and two categories accessible though the left menu:

- Project meetings
- Dissemination

<mark>گُ</mark> Sid	Development of new methodologies for InDustrial CO2-freE steel pRoduction by electroWINning
> Home	Events
> Objectives	
> Work Packages	WP6 kick-off meeting will be held at the University of Aveiro on the 30th of January 2018.
> Consortium	
> Documents	
> Cocreation area	
> News	
> Events	
Project meetings Dissemination	

Figure 12 Events section (only part of the screenshot by space constraints)

#### 3.8.1 Project meetings

In the *Project meetings* sub-section the external audience will be informed about the meetings of the SIDERWIN consortium. Clicking on the meetings name, a brief description will be displayed.

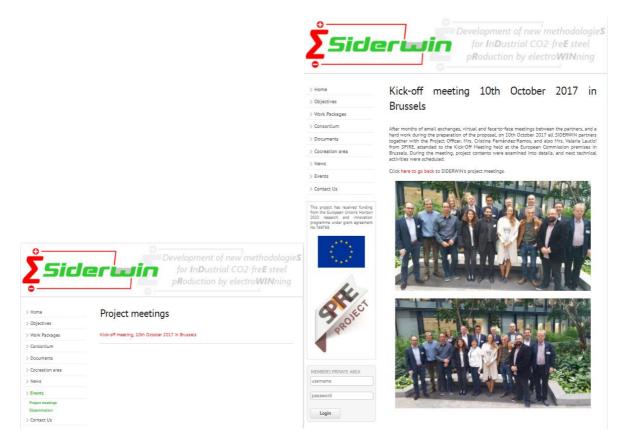


Figure 13 Project meetings sub-section (only part of the screenshot by space constraints)

#### 3.8.2 Dissemination

In the *Dissemination* section the external audience will be informed about the SIDERWIN dissemination events. At the moment of producing this deliverable, no dissemination activities have taken placed, so the section is empty.



Figure 14 Dissemination sub-section (only part of the screenshot by space constraints)

### 3.9 Contact Us

The *Contact Us* section has been implemented with the aim to provide to the public audience the contact points where asking for more information about the project.

By completing the form and clicking on the send message icon, an email will be submitted to:

- Project coordinator
- Dynergie, as support of the coordinator in administrative matters
- Tecnalia, as leader of Communication, dissemination and exploitation work package.

<sup>°</sup> Side	Development of new methodologies for InDustrial CO2-fre <b>E</b> steel p <b>R</b> oduction by electro <b>WIN</b> ning
> Home	Contract Un
	Contact Us
> Objectives	Your name *
Work Packages	
Consortium	Your e-mail address *
Documents	Subject*
Cocreation area	Subject
) News	Message *
Events	
Contact Us	
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 768788	Send message
	Project Coordinator ArcelorMittalMaizieres Research SA Vole Romaine, BP 30320
	Maizières-lès-Metz Cedex 57283
PROJECT	France
7,012	Principal Investigator
PR	Hervé Lavelaine de Maubeuge
	Email: herve.lavelaine@arcelormittaLcom
	Phone: +33 (0)3 87 70 47 25

Figure 15 Contact us section (only part of the screenshot by space constraints)

### 4 Conclusions

This report describes the SIDERWIN website (<u>www.siderwin-spire.eu</u>). The main objective of the website is to ensure the dissemination of the project results, events and initiatives. For this reason, the page has been divided in the following main sections:

- Home
- Objectives
- Work Packages
- Consortium
- Documents
- Cocreation area
- News
- Events
- Contact Us

The updating and improving of the website will be a continuous process, so changes in the structure and format described in this document could be carried out along the project life.