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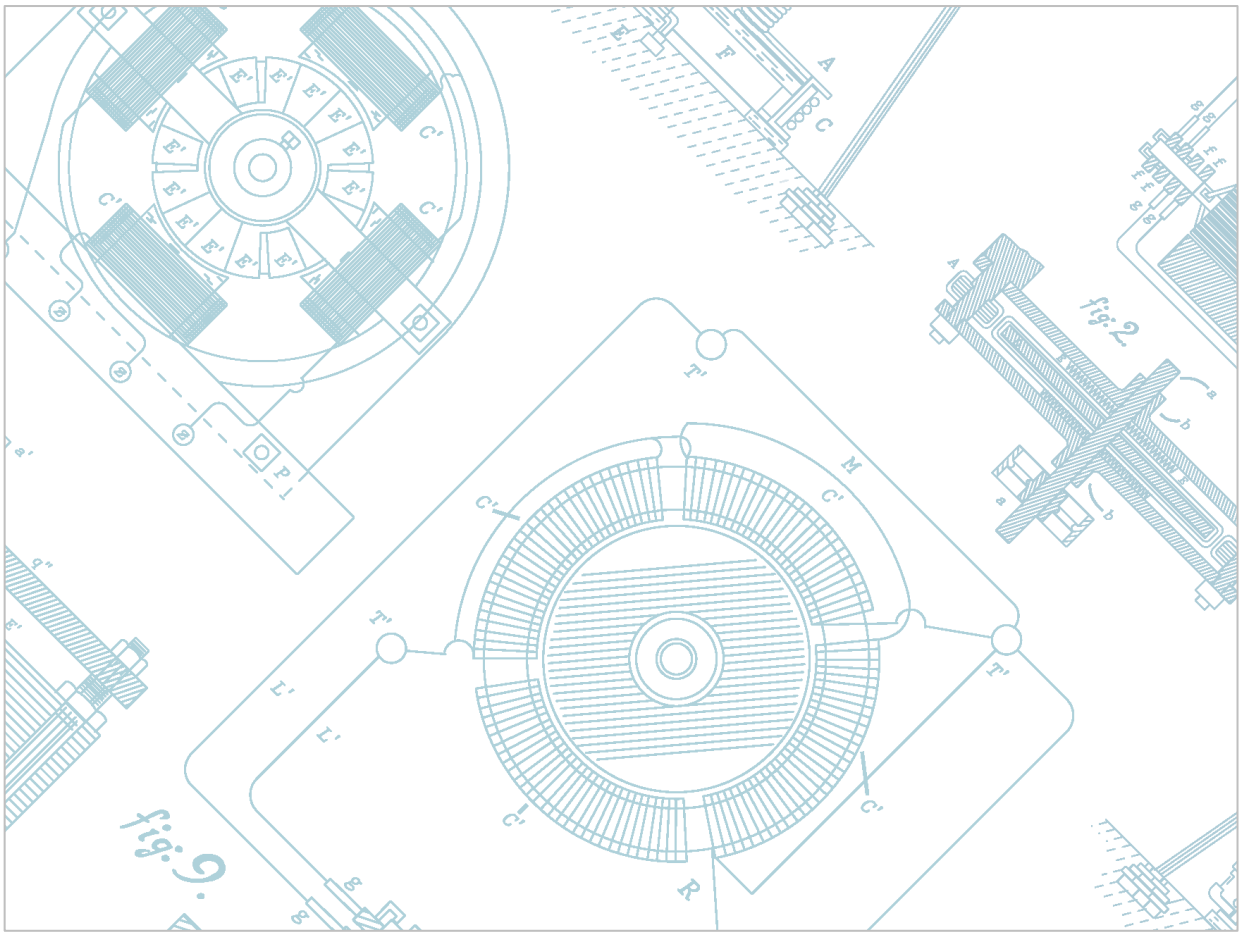

D5.2 Dissemination and Communication Plan

CATCHER

Creation of innovative "humidity to electricity" renewable energy conversion technology towards sustainable energy challenge

This project has received funding from the European Union's Horizon Europe HORIZON-EIC under Grant Agreement No. 101046307.
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Project factsheet

Acronym:	**CATCHER**
Title:	**Creation of innovative "humidity to electricity" renewable energy conversion technology towards sustainable energy challenge**
Coordinator:	COFAC COOPERATIVA DE FORMACAO E ANIMACAO CULTURAL CRL (Ulusofona)
Reference:	101046307
Type:	HORIZON-EIC
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Duration:	48 months
Website:	catcherproject.eu
Consortium:	**COFAC Cooperativa de Formacao e Animacao Cultural CRL,** Portugal (Ulusofona), Coordinator **Ecole Royale Militaire - Koninklijke Militaire School,** Belgium (RMA) **Cascatachuva LDA (CASCATA),** Portugal (CASCATA) **Nanomaterials Research and Development SP. Z O.O,** Poland (NRD) **Nanotechcenter LLC,** Ukraine (NANOTECHCENTER) **SYNYO GmbH,** Austria (SYNYO) **LAVOLA 1981 SAU,** Spain (ANTHESIS LAVOLA)

Deliverable factsheet

Number:	**D5.2**
Title:	**Dissemination and Communication Plan**
Lead beneficiary:	SYNYO
Work package:	Dissemination, Exploitation, and Communication
Task:	T5.2 Setting up a communication and dissemination plan
Dissemination level:	PU – Public
Submission date:	30.09.2022
Contributors:	COFAC, NOVA

Document history:

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3	23/09/2022	Ulusofona	S. LYUBCHYK
4	28/09/2022	SYNYO	A BOGADI

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Abbreviations

EAB: Expert and Advisory Board

EC: European Commission

FAQ: Frequently Asked Questions

F&B: Food and Beverage (Industry)

HCD: Human-Centered Design

PWS: Project Website

Executive Summary

This deliverable compiles the CATCHER project's Dissemination and Communication strategy. As such, it puts together a synopsis of all measures that will be adopted to reach the overall goals and objectives of the communication and dissemination plan. All these measures shall ensure the high visibility, accessibility, and promotion of the project and its outputs. The deliverable's development was led by SYNYO, who is the project's Dissemination & Communication leader, with contributions for the report and strategy implementation from all project partners. The deliverable is structured as follows:

- After a general introduction as background to the communication activities, the second chapter of the report is giving an overview of the task and deliverable descriptions which are provided in the project proposal / description of the action. Also, the main target groups are being described in order to identify and effectively reach the main beneficiaries of the project.
- The third chapter describes the outline and core elements of the communication and dissemination plan. It will give an overview of different internal gathering, planning, monitoring, and tracking tools for communication, dissemination, and exploitation activities.
- The next chapter outlines the overall communication strategy across the European, National, and local levels. It presents the overall project identity, communication materials, social media channels as well as the project website.
- Chapter 5 describes the various dissemination stages and exploitation of results. The innovation and exploitation strategy are being achieved by the establishment of multiple synergies, workshops, and networking activities, which will also be outlined in this chapter.
- The last chapter lists the Key Performance Indicators (KPIs), which will be used as an orientation to enhance and track the impact of the project´s outcomes. The continuous tracking of these values will enable all the project partners to keep track and react accordingly.

The overall communication strategy aims at laying the foundation for a regular flow of information within the consortium partners, and the use of highly established networks as well as engaging stakeholders in order to initiate and strengthen the CATCHER community. Stakeholder contacts will play an important role in the efficient dissemination and awareness-raising strategy during the whole project period.

Moreover, this Communication Strategy will serve as a framework reference to evaluate the progress through constantly monitoring dissemination activities and keeping a track record of the achievements. This applies to the different communication channels and measures for successful project communication as well as to ongoing dissemination activities targeting experts and research communities.

The Dissemination and Communication Plan is a living document, which will be updated annually throughout the project. In this regard, all the information in this report is subject to update, based on new developments in the project, feedback received and/or new decisions taken by the project committee.

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Acronyms and Abbreviations

Term	Description
D	Deliverable
EAB	Expert and Advisory Board
EC	European Commission
EE	Energy Efficiency
EEFP	Energy Efficiency First Principle
EU	European Union
GDPR	General Data Protection Regulation
NGO	Non-Governmental Organizations
NPO	Non-Profit Organization
T	Task

1. Project introduction as background to the communication activities

CATCHER will develop a highly innovative “atmospheric humidity to electricity” technological solution for direct conversion of the humidity adsorption energy to electrical energy. The project will promote and disseminate the results and enable the elaborated & technically demonstrated concept on “humidity to electricity” for further successful introduction and preparation to the renewable energy market.

CATCHER will gain a new sustainable source of renewable energy to contribute to implementing the specific priorities for strengthening EU leadership on renewables. The successful realization of the project is assured by implementation of knowledge sharing in material science, physics, nanoelectronics, green chemistry, nanoengineering, sustainability and research marketing via international and intersectoral collaboration of highly qualified research and business from Portugal, Belgium, Austria, Spain, Poland and Ukraine.

Communication and dissemination basics were discussed among all the partners in the CATCHER kick-off meeting. After the kick-off meeting, SYNYO focused on creating all relevant reference documents (e.g., deliverable templates) and developing the first communication outputs including the CATCHER project logo, general designs and the overall project identity which were agreed among all partners. Furthermore, the project website and the social media accounts (Twitter & ResearchGate) were launched and the first factsheet was designed and distributed. Finally, the CATCHER Communication and Dissemination Plan was drafted and discussed with partners to build up the final document.

2. About the Dissemination and Communication Strategy

2.1 Tasks and Deliverables

This deliverable **D5.2 Dissemination and communication Plan** represents the groundwork for **WP5 Dissemination, Exploitation and Communication** as it is the outcome of the second task in the work package, *T5.2 Setting up a communication and dissemination plan*. Furthermore, this deliverable is closely related to *T5.1 Setup a project inform website*, as they feed the structure and are necessary input for all dissemination and communication activities:

- An identification of the project stakeholders and study of their characteristics in order to establish the most suitable dissemination way for each stakeholder group (e.g., identification of dissemination and communication channels for each stakeholder group and targeted messages to be communicated);
- The dissemination methods and their associated activities and tools to reach the expected impact (project website, social media channels, conferences, workshops, publications, newsletter, videos, webinars, etc.);
- Dissemination procedures according to the EC, General Assembly and Consortium Agreement;
- The schedule and complementarities of dissemination and communication among partners.

Since the communication strategy affects the whole project, the most important connections to other tasks are described briefly. Synergies exist especially with **T2.1 Materials & devices structural and morphological properties characterization**. Furthermore, this deliverable is closely linked to other tasks in WP5, in particular **T5.3 Exploitation, application strategy and open access**. Based on the identification, the communication plan defines key messages for the stakeholder groups who represent an important lever for the dissemination of the project result.

2.2 Definition and goals

Communication is a tool for supporting and strengthening the actions planned for expansion of CATCHER impacts and results. Therefore, this tool is being developed and defined right at the beginning of the project through a detailed and comprehensive communication strategy which will be developed with the participation of all partners. Furthermore, it should support the internal communication and define rules and assign responsibilities among the partners of the consortium.

According to EC Research & Innovation Participant Portal Glossary/Reference Terms:

- **Communication** in projects is “a strategically planned process that starts at the outset of the action and continues throughout its entire lifetime, aimed at promoting the action and its results. It requires strategic and targeted measures for communicating about (i) the action and (ii) its results to a multitude of audiences, including the media and the public and possibly engaging in a two-way exchange.”
- **Dissemination** is “the public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium.”

The CATCHER project team wants to make sure the project results are clear and understandable for policy makers, national level authorities, scientific communities, investors and private companies but also the general public, and that they reach all target groups. To achieve maximum impacts, CATCHER ensures that effective and targeted information will be aggregated and disseminated.

2.3 Target groups

Commercial organizations, private and public investors related to Energy Technologies and engineering as well as technology organisations and institutions are the primary beneficiaries of this project. Also, **energy authorities and policymakers (EU and national level), national level authorities and scientific communities, and the general public** are as well important stakeholders in this project, but not necessarily in the same level as the groups mentioned before.

To effectively raise awareness and engage each community, the dissemination strategy differentiates the messages and communication channels to be used for each target group.

Target Group 1	Policymakers, national level authorities, relevant national and European institutions

Who: The European Commission decision-makers in charge of energy policy design, policy-making, and implementation – such as the Energy Union, National Energy Agencies, regional local authorities, permitting bodies, and municipalities with competencies in the field of achieving energy efficiency targets and other topics related to CATCHER – are the objective of these dissemination activities.

Raising awareness and the acceleration of regulatory-related processes is expected thanks to the deployment of feasible measures towards deploying “humidity to electricity” technology. It is also important to identify regulatory aspects at European or regional levels which could reduce the project dissemination potential.

Key Message:

- Investments, regulations, and financing needs based on the “humidity to electricity” technology potential
- Advantages, economic and social impacts on “humidity to electricity” technology
- Guidelines on the strategy of how the EU and different countries in Europe can take steps towards adopting atmospheric humidity exploitation as a new source of energy, which will bring the EU to a leading position in the field of renewable energy, where worldwide exploration & technologies are significantly behind.
- Demonstration of its sustainable benefits
- “Humidity to electricity” technology potentials for reaching energy targets
- Socioeconomic analysis, generating in this way a contribution to EU policies and directives and for achieving the EU goals.

Channels: participation in relevant conferences and workshops, personal meetings with policymakers and representatives of energy authorities, virtual knowledge exchange and demonstrations, policy recommendations, LinkedIn, Twitter, articles in the specialized press, and policymaker updates.

Key project results:

- D2.2. Protocol on Morphological and Electrical Properties of YSZ -based prototypes
- D4.2 Report on Environment and Social Assessment
- D4.3 Report on Integrated Multicriteria Analysis and Risk Assessment
- D4.4 Life Cycle Sustainability Assessment (LCSA)

Information Needs:
The target group of the policymakers and public bodies as well as authorities on different levels is mainly having an interest in the regulatory aspects and socioeconomic impacts of CATCHER results. Different levels of impact have to be considered, because of the differences when it comes to regulations, distribution of competences and organizational structure (e.g., reports on sustainability, responsibilities within the institution including involved departments). The non-energy related impacts will be regarded as very important and included in the reports and in the dissemination materials.

Target Group 2	Scientific Communities

Who: Research initiatives and groups, research institutes in universities and private research institutes, future leaders in their field such as excellent early-career researchers.

CATCHER will contribute by S&T advances in four of the total six EU Key Enabling Technologies: Micro-and Nanoelectronics, Nanotechnology, Advanced Materials and Advanced Manufacturing Technologies in the specific fields of i) Solid state physics and nano-electronics: enhanced materials, synthesis and architectures of novel nanostructured humidity-to-electricity converter device. Chemistry and surface science: enhancement of adsorption properties of material aimed at higher localization of electrons from impurity levels and their over- barrier transfer to the dispersion medium. Electro-physics and nanoengineering: decrease of charges dissipation through elimination of the potential barriers. Engineering and Manufacturing: creation of humidity to electricity prototype.

The main messages to deliver to the scientific communities related to the CATCHER activities are technical, publishable results of CATCHER according to the methodology performance and the energy efficiency potentials and social impact derived from the project, contributing to share experience among all these stakeholders and enhancing project impact and exploitation potential.

Key Message:

- Energy-efficiency potentials in integrated energy systems
- Economic, social and ecological impacts of implementing the CATCHER technology
- New scientific knowledge in the fields hygroelectricity, nanopowder and humidity to electricity

Channels: scientific publications, presentations at conferences, CATCHER physical events and webinars. research gate, seminars, workshops, European Charter for Researchers, publishing offers at Euroaxess.

Key project results:

- D2.2. Protocol on Morphological and Electrical Properties of YSZ- -based prototypes
- D4.2 Report on Environment and Social Assessment
- D4.3 Report on Integrated Multicriteria Analysis and Risk Assessment
- D4.4 Life Cycle Sustainability Assessment (LCSA)

Information Needs:
For the scientific community, the useful and required information depends on the field and professional background. The scientific community will want the information about the methodology and results and impacts of the developed approach.

Target Group 3	Commercial organizations: Investors related to EE technologies, engineering and consulting firms

Who: Potential stakeholders in Europe, particularly the ones which have currently invested in similar renewable technologies in Europe, promising high-tech SMEs, including start-ups.

The CATCHER will contribute by S&T advances in four of the total six EU Key Enabling Technologies: Micro-and Nanoelectronics, Nanotechnology, Advanced Materials and Advanced Manufacturing Technologies in the specific fields of i) Solid state physics and nano-electronics: Enhanced materials, synthesis, and architectures of novel nanostructured humidity-to-electricity converter device. ii) Chemistry and surface science: enhancement of adsorption properties of material aimed at higher localization of electrons from impurity levels and their over- barrier transfer to the dispersion medium. iii) Electro-physics and nanoengineering: decrease of charges dissipation through the elimination of the potential barriers; iv) Engineering and Manufacturing: the creation of humidity to electricity prototype.

The main objective of dissemination activities is to make EU economic agents aware of the benefits they could achieve by using the CATCHER project results. To this end, they will be informed of data and results obtained from this project as well as on the documents and tools available for their use. This information will be modified depending on the sectors and subsectors contacted by each communication channel in order to provide them with the most relevant data for each of them.

Key Message:
Fortify the EU Renewable Energy market by trailblazing a disruptive new product capable of supplementing current technologies, thus supporting the 2050 target.

The proposed “humidity to electricity” conversion technology with high current output of 15-20mW/cm2 will strengthen technologies fusion that demands robustness and power supply intermittency and expand the hybrid energy market.

The application of the proposed technology and its impact can be maximized given its modularity, to be adapted to a variety of appliances ranging from a large-scale energy production plant, to an energy recovery system due to its appliance in environments where humidity and steam are produced via the heating or cooling systems, household, a non-profit organisation to use it for tropical and sub-tropical countries.

- Show which are the most suitable device applications, based on the market demand survey
- Show which application variant is the most profitable and sustainable
- Economically, based on the production plan and business case for different applications mentioned above and assessing the expected return of investment and break even,
- Show how to raise from research to innovation to reach the next TRL 6-7 aiming at future industrial-scale application.
- Show proof of technological feasibility of the concept-driven R&D
- Investment needs, policy frameworks, regulations, and incentives in the implementation of Catcher technology
- Costs aspects and contributions to meet the energy targets
- This technology can bring you profit, this is how

Channels: official and personal email communication, project website, presentations at fairs and networking events, LinkedIn, Twitter, conventional media (press, TV, radio, newspapers), engaging tech influencers,

articles in the trade press, participation in relevant conferences and workshops, organization of workshops and demo events, individual presentations and discussions with key organizations

Key project results:

- D2.2. Protocol on Morphological and Electrical Properties of YSZ- -based prototypes
- D4.2 Report on Environment and Social Assessment
- D4.3 Report on Integrated Multicriteria Analysis and Risk Assessment
- D4.4 Life Cycle Sustainability Assessment (LCSA)

Information Needs:

This target group is mainly interested in benefits resulting from the CATCHER project, potential savings and cost reductions across the different fields. Their main interest is in the tools and other materials developed that might be applied within the company.

Target Group 4	Energy and technology organizations

The main objective of dissemination activities is to make organizations aware of the benefits they could achieve by using the CATCHER project results. To this end, they will be informed of data and results obtained from this project as well as on the documents and tools available for their use. This information will be modified depending on the sectors and subsectors contacted by each communication channel to provide them with the most relevant data for each of them.

Key Message:

- Catcher technology potentials for energy systems;
- Costs aspects and contributions to meet the energy targets
- You need to understand the policies, here they are
- We are in the market with the new technology

Channels: official and personal email communication, project website, newsletter, LinkedIn, Twitter, conventional media (press, TV, radio, newspapers).

Event exhibitions, event workshops, LinkedIn, fairs, virtual presentations and knowledge exchange

Key project results:

- D2.2. Protocol on Morphological and Electrical Properties of YSZ-based prototypes
- D4.2 Report on Environment and Social Assessment
- D4.3 Report on Integrated Multicriteria Analysis and Risk Assessment
- D4.4 Life Cycle Sustainability Assessment (LCSA)

Information Needs:

Their main interest is in the data and tools developed

Target Group 5	General public

Key messages for the general public should be the wide advantages that the CATCHER methodology in order to meet European energy independency. The General Public and employees as end users are a key part of the project and the key message for them should be a wide advantage that has the CATCHER technology.

Key Message:

- The project is targeted at the advancement, optimization, and scalability of a previously developed technology that converts atmospheric humidity into electrical current which will be ready for scaling up and further integration with existed EU electrical system for general energy use
- The CATCHER technology has the potential to create efficient use of the new sustainable source for renewable energy and thus strengthens the EU leadership on renewables and lower demand for natural gas or oil

Channels: Newsletter, social media, conventional media (press, TV, radio, newspapers), Twitter, YouTube, knowledge articles and videos on the project website and third-party media networks, press releases

Key project results:

- D5.1 Project website and Social media channels
- D2.2. Protocol on Morphological and Electrical Properties of YSZ- -based prototypes
- D4.2 Report on Environment and Social Assessment
- D4.3 Report on Integrated Multicriteria Analysis and Risk Assessment
- D4.4 Life Cycle Sustainability Assessment (LCSA)

Information Needs:

This target group is mainly interested in information that is easily available and is related to daily routines, economic issues, and getting closer to achieving EU energy, and economic targets.

3. Setup of the Communication and Dissemination Plan

The creation of impact by the CATCHER project requires a strong and flexible communication plan, with a clear definition of target values, target audience and key messages, channels and the aim of the communication activities, which is not limited to the visualization of the project. As for CATCHER, one of the core elements is the development of an innovative technology to exploit the atmospheric humidity for direct conversion to the electricity.

3.3 Outline

Communication is a tool for supporting and strengthening the actions planned for dissemination and expansion of CATCHER impacts and results. At the beginning of the project, a detailed and comprehensive communication strategy will be developed with the participation of all partners. Elements and the scope as well as ongoing activities are described in the following section of the document.

According to the description of work, a detailed and agile dissemination and communication plan is presented and will be updated periodically and deployed along the project life cycle. At the beginning of the project it will contain 1) an identification of CATCHER stakeholders, and study of their characteristics, in order to establish the most suitable dissemination way for each stakeholder; 2) the dissemination methods and their associated activities and tools to reach the expected impact (project website, social media channels, conferences, workshops, publications, newsletter, video, etc.); 3) dissemination procedures according the EC GA and CA; and 4) the schedule and complementarities of dissemination and communication among partners.

3.4 Elements

The central elements of the strategy will be the final definition of the target groups, the communication channels to be utilized to reach them, and a sound timing for the identified dissemination activities to be carried out. The communication plan will contain specificities for the communication not only in the consortium countries, but also across the EU, in order to ensure proper replication and dissemination. Communication plan will be produced and updated twice, including the general strategy updates and the operational plan for the next period. This plan will cover: WHO (target audiences) will receive WHAT (key messages), WHY (relevance for the target audience), HOW (communication channels) and WHEN (implementation and schedule).

However, it is crucial that communication is active from the very beginning. Based on the draft from the proposal, communication activities start in an early stage of the project and will feed into the projects' communication plan in order to maximize the impact of the project and will favor the creation of a community of interested stakeholders, related to implementing the novel methodology.

3.5 Scope

In order to successfully carry out the communication and dissemination activities, there is a need of a clearly structured and well-planned communication framework among the partners of the consortium (Internal Communication Strategy). This means the awareness of all partners to contribute to dissemination activities as well as the regular update of external parties on the project's progress and internally in the consortium.

As stated in the description of work *"Unless excluded by the call conditions, the beneficiaries must provide and regularly update a plan for the exploitation and dissemination of results including communication activities."*

The following tools and measures are therefore used in order to keep track and plan accordingly all related activities:

1. **Survey for dissemination activities for all consortium partners**;

A communication survey sent to all the partners is collecting an overview on the existing channels and accessible resources. The overview is not final and subject to changes therefore the communication survey is kept as a living resource and shared document to grow throughout the project.

In the progress report, there will be an overview of all collected channels whereas in this deliverable the identification of stakeholders and key messages to be sent to them are summarized. The long version of the survey is to be found in the Annex.

2. **Distribution of responsibilities and definition of timeline**;

A coherent and long-term perspective is important in order to meet all the deadlines (e.g., for registration for events, and submission of scientific contributions) as well as to maintain regularity in the dissemination activities.

3. **Regular Consortium Calls and internal communication strategy framework**;

Updates and exchanges about ongoing activities are the main purposes of the regularly scheduled consortium calls where it is foreseen that each partner participates. Apart from the regular consortium calls, flexible and dynamic communication among the partners is secured by sharing a mailing list.

4. **Monitoring and Target Values**.

As the communication strategy is an ongoing activity throughout the project, the selected and described tools are flexible in their use and secure the success of the before-defined objectives (Key Performance Indicators) of the communication and dissemination tasks. The documentation of all ongoing activities needs a thorough maintenance by all partners of the tracking sheets set up, a rhythm of 3 months is defined in order to keep them updated.

4. Communication Strategy

The use of communication channels of existing networks on the renewable energy sector is a cornerstone to reach the target audiences. The interconnection of various communication tools, such as multimedia material, press and specialist press, audio-visual media, website and social media, is considered essential in order to achieve maximum impact and spread of messages, exchange of information and knowledge to the indented recipients.

The purpose of the dissemination and communication actions is to ensure that information is shared with appropriate audiences on a timely basis and by using the most effective means and tools, at regional, national and European level. The project will be presented by all partners at applicable and most relevant national and international forums.

The target groups, as described in Chapter 2, are allocated across three levels: EU, national and Local/Regional. In order to maximise the dissemination impact, it is appropriate/necessary that:

- **European level**: At this level, European stakeholders, initiatives, projects etc. will be informed about CATCHER. In order to prevent duplications, actors on the European level are contacted by the project's Communication coordinator SYNYO or by the project coordinator in English.
- **National level**: Actors on the national level have to be addressed in their language. This means that communication activities on this level will be done by the CATCHER partners in their own country. They will receive news, articles and information in English by the communication coordinator, which will be translated and distributed by the project partners in each consortium country. The consortium will use its networks and access to other channels all around Europe to distribute key project results in EU countries which are not part of the CATCHER team, especially in English but also in the local language, if project resources and capabilities allow.
- **Regional and local level**: Actors on the regional level also have to be addressed in their local language. Furthermore, local partners do already have existing networks to media and stakeholders, which they can use for their activities. The national project partners are responsible for regional/local requests and communication activities.

The aim is to disseminate the project results, mobilize stakeholders and establish deep ties with relevant platforms, networks, associations, and other related projects through implementing the following measures and tools as described in the following section of the chapter. In the upcoming deliverable D6.2, a final overview of the produced materials will be given.

4.1 Project Identity and communication materials

The project identity reflects the process of converting humidity into electricity in the logo. The logo of the CATCHER project was selected by the consortium from a number of designs proposed, considering that it should be easily used in the products, printouts, project slides, and on the web.

Figure 1: Early logo drafts

Figure 2: Final CATCHER Logo

Figure 3: CATCHER presentation template (example master slide)

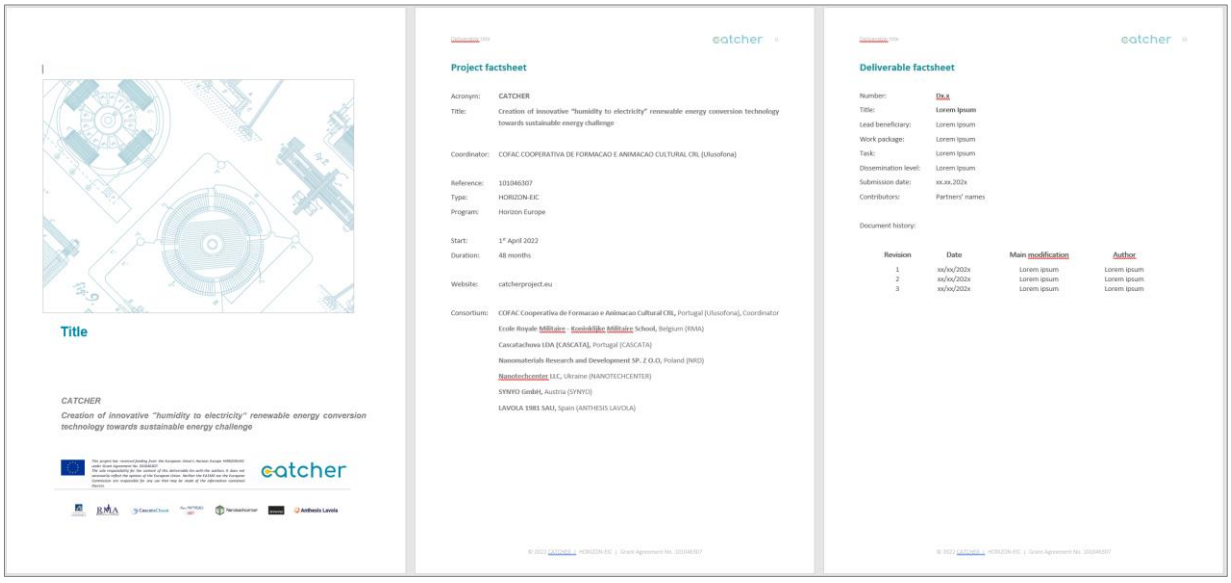


Figure 4: CATCHER deliverable template

SYNYO developed **presentation and report templates** to ensure uniformity in internal and external presentations but also in reports delivery to the EC or to external project stakeholders. The templates, developed using the project identity and project metadata following the EC's Horizon Europe guidelines for communication and dissemination of project results, are showcased in Figures 3 – 4. The templates will be updated as needed during the project duration.

During the project, the consortium will conceptualize and create **project videos** with specific messages for different target groups. They will be shared via internet instances, such as the project website and social media channels.

4.2 Project Website

The project website can be accessed through https://catcherproject.eu/ and is a living resource for the project. It will be updated regularly and fed with relevant content. The project website was launched in month 2 and reported in *D5.1 Project website and logo* to be available during the whole project duration. During the course of the project all pertinent information about CATCHER and its activities including partner contact details, background information, research results, events, etc. will be accessible through the website. The visibility of the CATCHER project website is optimized via effective Search Engine Optimization (SEO) to both increase the web-portals relevance to specific keywords and to remove barriers to the indexing activities of search engines. As an effective knowledge awareness strategy, SEO considers how search engines work, what people search for, the actual search terms or keywords typed into search engines and which search engines are preferred by their targeted audience. In general, via SEO the CATCHER project website will appear more frequently in the search results list, and more visitors it will receive from the search engine's users. SEO may also target different kinds of search, including image search, local search, video search, news search and theme-specific vertical search engines.

4.2.1. Structure

The structure of the CATCHER website is illustrated below. In the following, each subsection will be described with more details.

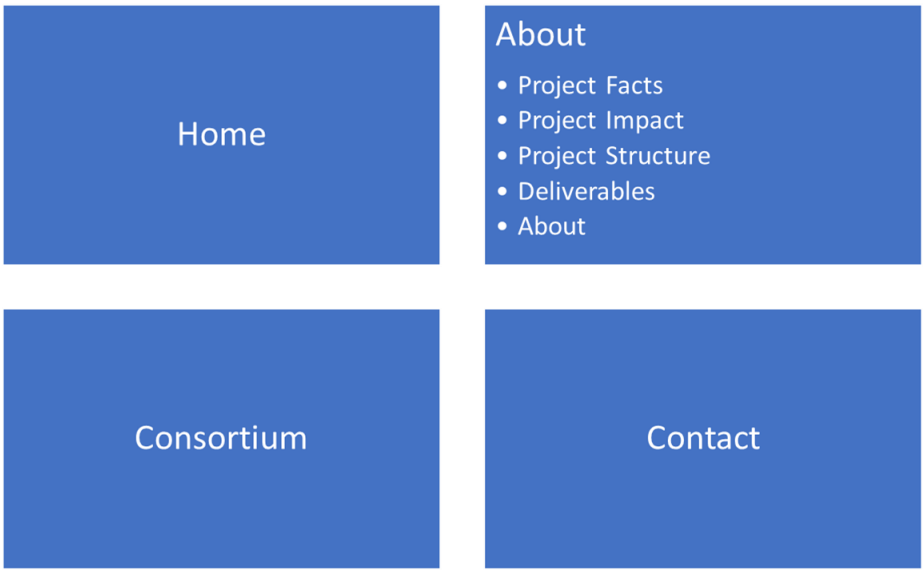


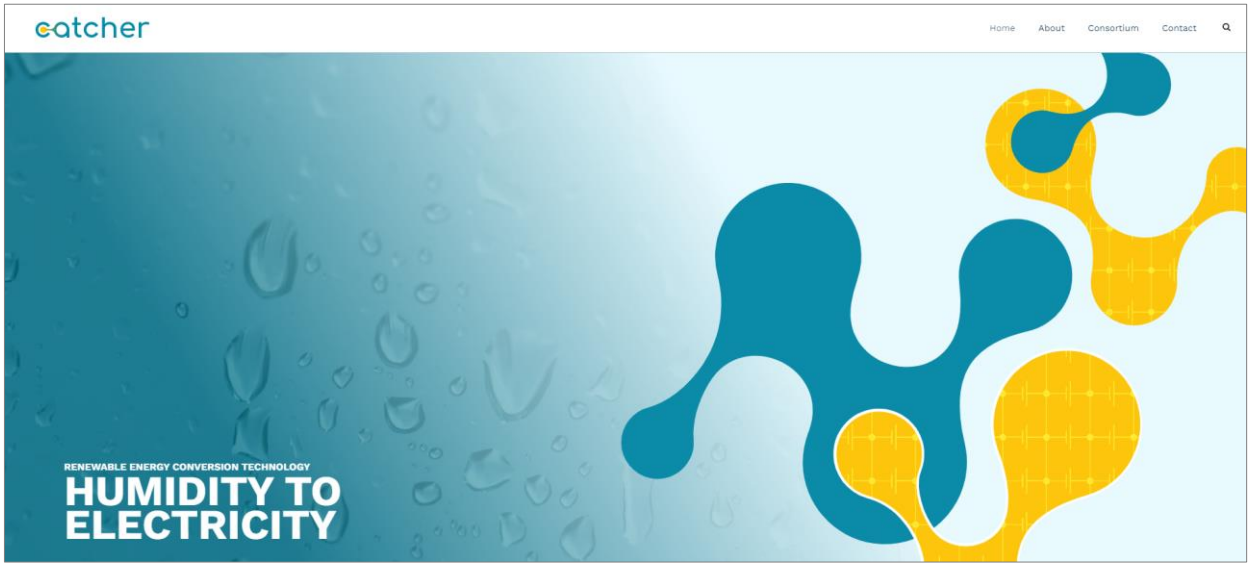
Figure 5: CATCHER project website

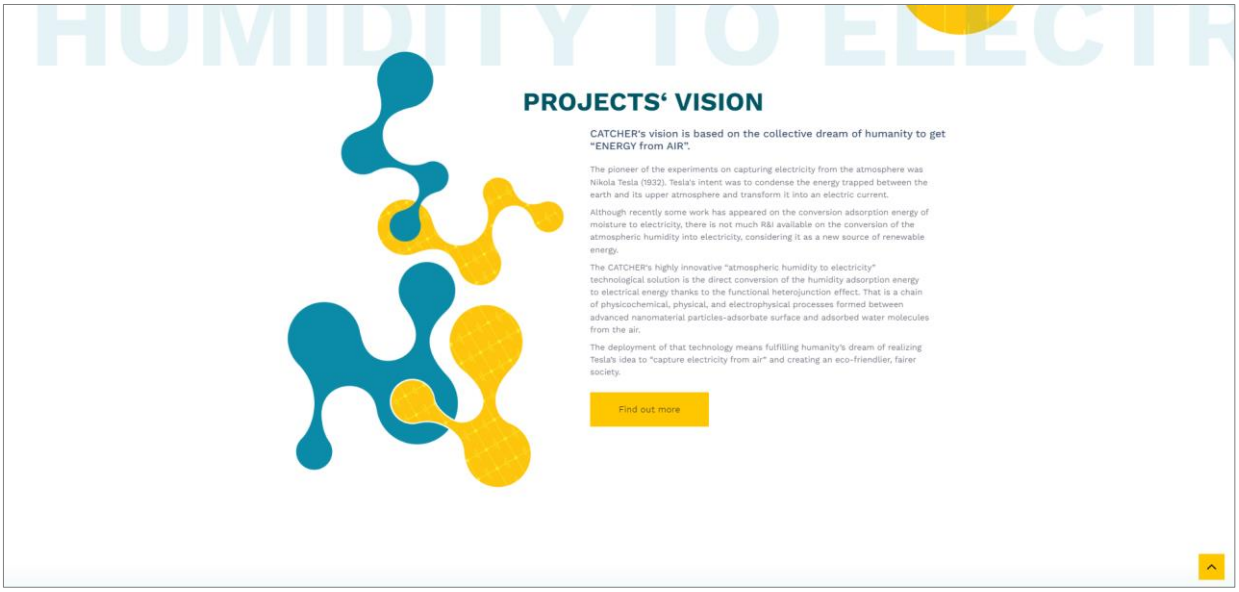
Figure 1 shows the high-level sitemap of the website. The main menu includes the most frequently required links like a shortcut to the home page, About section, Consortium page, and contact.

The sitemap is also created as XML Sitemap and connected to SEO (Search Engine Optimizer) for better indexing and searching on search engines like Google, Bing, Yahoo, and more.

4.2.2. Content

The front page ("**Home**") highlights the main facts in brief and provides information on the project and the funding scheme as well as the project number and the coordinator. It also highlights the main targets and partners within the project.





The section about the project ("**About**") is divided into different sections, showing the general project facts, impact & structure as well as published deliverables.

Figure 6: Project facts and science-towards-technology breakthrough

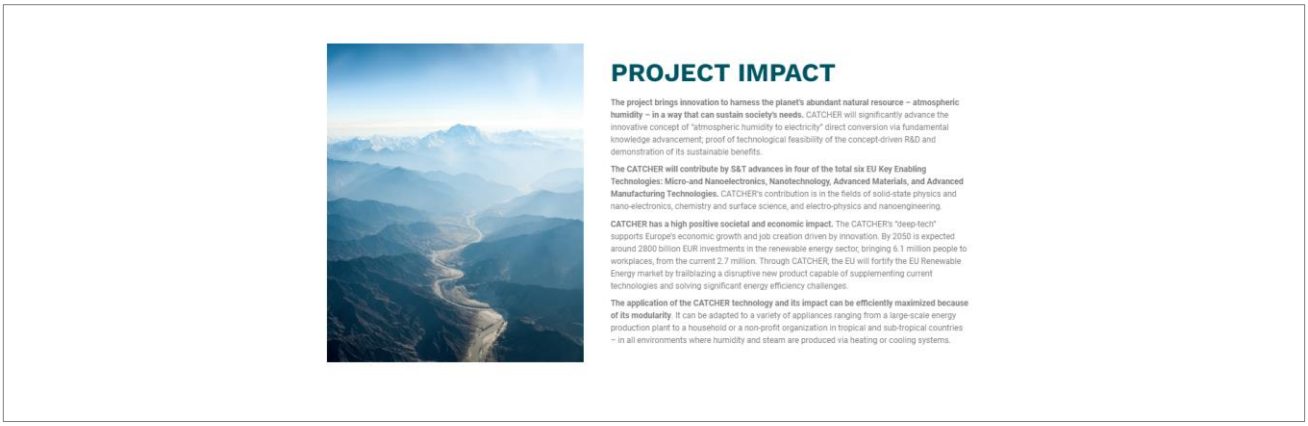


Figure 7: Project impact

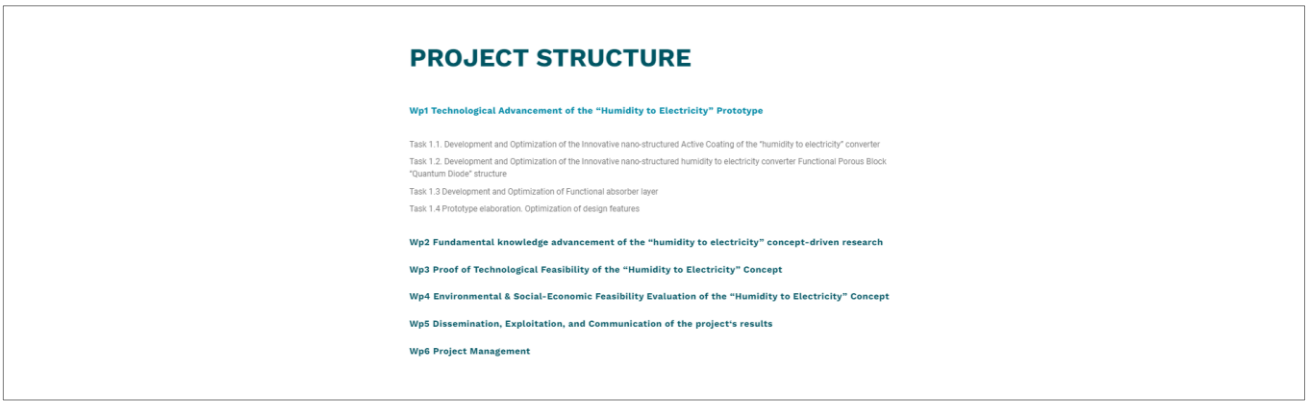


Figure 8: Project Structure

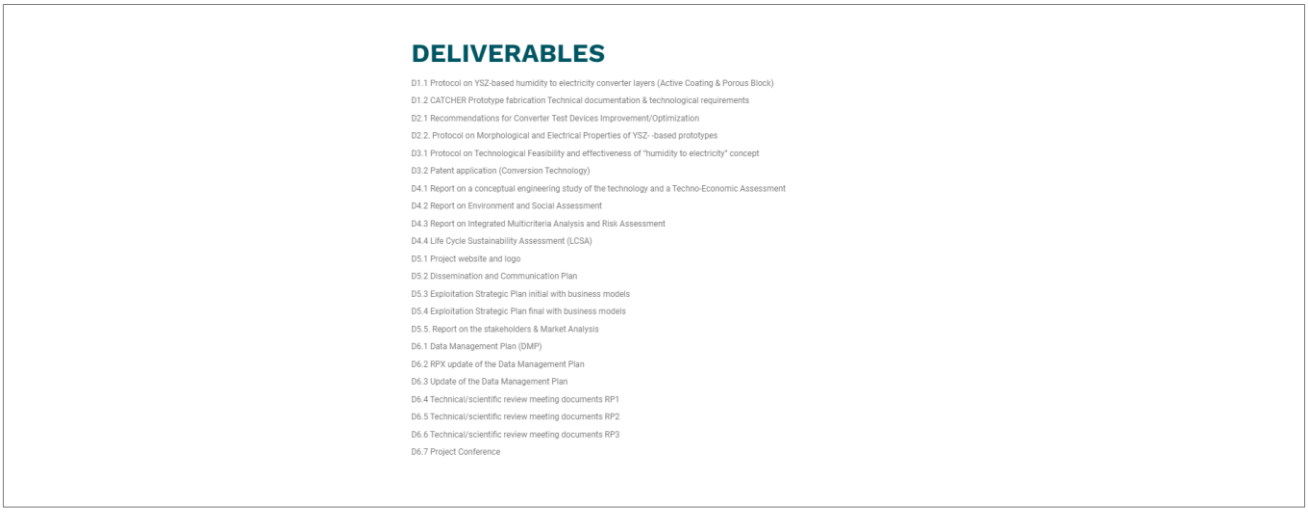


Figure 9: Deliverables

Press releases. On the basis of the information provided, the communications team will prepare professional press releases in English, which will be translated by the partners according to other project languages. The press releases will be spread at regional/local, national and European level according to the particular content to press offices, technical press, associations, networks, social media channels and other instances in the corresponding countries. Past press releases will be found on the CATCHER project website.

4.3 Social Media

To address the general audience, also the traditional media like newspapers, television, radio and popular magazines will be used. These sources will be chosen based on findings during the project that point out which media optimally reaches the relevant target groups. Furthermore, CATCHER will have a strong social media networking presence through Twitter and LinkedIn to further enhance scope and outreach. The before mentioned target audience includes groups with different interests and economic backgrounds. To address private actors as well as the scientific community, the general public and policy makers, several Social Media networks will be used as dissemination and communication platforms.

4.3.1 Twitter

A Twitter Account was already created: https://twitter.com/catcher_eu. It aims at increasing the presence and visibility of the project in Social Media channels. Furthermore, it should serve as an important communication tool throughout the whole project duration and afterwards. Tweets on project-related events (e.g., kick-off, project meetings, project presentations), project outcomes (publicly available deliverables, hard-facts) on important project related events (e.g., EU framework-policy, innovations in the renewable energy sectors) and other related content will be posted throughout the whole project duration.

Most of our target audience can be addressed with this channel, and it will also connect the different target groups with each other. This will create the opportunity to connect project partners with interested followers for feedback on their work and discussions on common issues. Also, Twitter is the easiest way to share the newest project results, events, and information, that is interesting for the total target group.

Figure 10: CATCHER Twitter Account

4.3.2 LinkedIn

LinkedIn will be used to disseminate project results and communicate with project members, energy technology organisations and other interested stakeholders in a professional environment. It is specifically viable to reach high and medium management bodies from companies and technical experts as well as potential investors.

4.3.3 ResearchGate

Considering that one of the core target groups are scientific communities, a ResearchGate account was created to reach out to scientists in the fields of renewable energies, nanotechnologies and others.

4.3.3 YouTube

The CATCHER consortium will create a YouTube channel during the project´s lifetime. Audio-visual content is highly appreciated by users and specially is a resource that can be easily shared or even used by bloggers and journalists. Throughout the project it is planned to create several short videos to promote the project as well as highlight relevant outcomes and events.

4.4 Scientific and Technical Publication

In order to maintain the scientific credibility and the research conducted in this project, a series of peer-reviewed articles will be submitted to high-ranking scientific journals. This will provide feedback from peers within the different disciplines included in CATCHER. Collaboration with some of the related projects (mentioned on page 28) will also provide an opportunity for the consortium of CATCHER to maintain dialogues with peers and constant feedback on ongoing activities. Scientific publications that will be elaborated during the project and that are peer reviewed (and do not conflict with intellectual property and patents rights which are regulated within the consortium agreement) will be made available at least under a green open access standard. This ensures a longer-term dissemination of the results through the international scientific community.

The CATCHER partners will publish the results (according to the IPR protection strategy, the GA and the CA) in the scientific literature, dedicated journals and magazines. Results will be also published in partners' websites and other instances. Additionally, sectorial platforms and associations will also receive the information, as well as the synergetic EU funded projects. The task leaders and deliverable responsible are asked to take into account the date of publication of the deliverables in order to generate a publishable version of the corresponding deliverable in the shortest time possible.

Pre-selected scientific **EE Research Journals** include, but are not limited to:

- Journal of Material Science (ISSN: 1573-4803)
- Nano Energy (ISSN: 2211-2855)
- International Advanced Research Journal in Science, Engineering and Technology (ISSN: 2394-1588)
- Energy (ISSN: 0360-5442) //
- Energy Policy (ISSN: 0301-4215) //
- Energy Economics (ISSN: 0140-9883) //
- Energy Reports (ISSN: 2352-4847) //
- Energy Research & Social Science (ISSN: 2214-6296)

The CATCHER partners will ensure open access to peer-reviewed scientific publications relating to their results, in particular: (i) At the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, will be deposited in a trusted repository for scientific publications. Also, (ii) immediate open access will be provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights: for monographs and other long-text formats, the licence may exclude commercial uses and derivate works.

5. Dissemination and exploitation of results

CATCHER, as a dedicated PATHFINDER project, has selected work packages that are focused on Technological Advancement as well as Technological, Environmental & Social-Economic feasibility. The information produced in these work packages will be disseminated to the project target groups. The main results from the Energy systems modelling will be particularly disseminated to the target groups. This process must be conducted in a timely and efficient manner to achieve maximum impact. To optimize the delivery of the anticipated data and material, the consortium will have categorized the dissemination into three stages:

Stage 1: Dissemination for Awareness:
The general objective at this early stage of the project is to raise awareness across as many diverse energy consumer groups as possible. Targeted audiences will become aware of the project, and its motivation and forthcoming materials.

Stage 2: Dissemination for Action:
During the second stage of dissemination, the focus shifts to delivering materials to stimulate different stakeholders to mobilise and take action. For this, the CATCHER project has several intended webinars. At these online events, key stakeholders as well as their respective networks will have access to valuable dissemination material. Furthermore, this stage dissemination is also focused on gathering contact details of the target groups and interested users to maximize future outreach.

Stage 3: Dissemination for Results:
The final stage of the CATCHER project is dedicated to communicating the results. The planned outcomes will be disseminated to not only select stakeholders such as policy makers, but also to a wider community of researchers. The aim here is to use the CATCHER outcomes to generate policy defining changes, based on a participative governance process.

The CATCHER project will exploit several dissemination channels to facilitate impactful external communication with broad audience. Some of the dissemination channels are as follows:

5.1 Innovation and exploitation strategy

The technology exploitation strategy will be supported by WP5. The initial exploitation plan (D5.4 Exploitation Strategic Plan final with business models, due in month 47) will incorporate all actions involved in the establishment of an environment for the wider use of CATCHER results, and the potential for sustainability of project outcomes - including the individual exploitation plans of partners based on their contributions & developments within the project and their business development strategy. By involving policy makers, relevant market and innovation stakeholders, CATCHER is expected to provide a wide range of exploitation prospects, the potential for their wider use, and consequently impact to the economy and society. The consortium will carefully examine the possibilities for commercial actions after the lifetime of the project. Collaboration will be regulated in compliance with the guidelines as part of the Consortium Agreement. The opportunities to exploit the results achieved by the consortium will be different for each type of partner and they will depend on the stage of development of project outcomes.

4.1 Synergies with other projects and initiatives

Close interaction and exchange with the other projects funded under the same call will take place, especially regarding joint communication activities and the preparation of communication related outcomes such as policy recommendations. Furthermore, CATCHER is committed to exploit outcomes from partners' previous synergetic projects and to build on their capacity, thus avoiding duplication of efforts and encourage reuse of established results. An initial list of synergetic projects, initiatives or tools is presented in the table below.

Project/ Initiative/ Tool	Description and potential synergies with CATCHER	LINK PWS	Related WP/task
HUNTER	The HUNTER project develops revolutionary power devices that convert humidity into an electrical charge (hydroelectricity), thereby contributing to European technology and creativity through joint R&D and R&I multisectoral and international cooperation activities supported by knowledge sharing.	http://hunter-greenenergy.com/	WP1
SSHARE	SSHARE project aims to develop innovative envelopes for buildings aimed at net zero energy, contributing significantly to European technology and creativity.	http://hunter-greenenergy.eu/	WP5
DeepU	Deep U-tube heat exchanger breakthrough: combining laser and cryogenic gas for geothermal energy exploitation	https://www.deepu.eu/	WP5
ESiM	ESiM (Energy Storage in Molecules) creates the scientific basis for a radically new technology addressing the pressing challenges of scalable clean energy storage.	https://cfaed.tu-dresden.de/esim-about	WP4
Bio-FlexGen	Highly-efficient and flexible integration of biomass and renewable hydrogen for low-cost combined heat and power generation to the energy system.	https://bioflexgen.eu/	WP4
EU-SCORES	EU-SCORES will present the benefits of continuous energy production with small space requirements via complementary energy sources (wind, sun, and waves). This mixed approach will create a more resilient and stable power system, with greater production capacity, at a lower cost per MWh.	https://euscores.eu	WP4
EnergyPLAN	Hourly resolution energy system analysis tool designed for modelling largescale integration of renewable energy and smart energy systems with a focus on the integration of electricity, heating, cooling, industry, and transport	https://www.energyplan.eu/	WP5

4.2 Workshops, webinars & conference

In the project's lifetime, the CATCHER consortium will organize **3 open workshops (M14, M26 & M37) and a final conference (M47),** which will be dedicated to or in collaboration with larger initiatives in which the results of the project will be presented and discussed. In the following section, an overview of all planned activities is given, although the final event is only planned for the projects' finalisation.

At least 4 open webinars will be organized, in which the results of each work package will be presented and discussed in order to extend the CATCHER community and raise awareness on the project findings and innovation. The webinars will be recorded and made available on the project website also after the end of the project implementation. The webinars will be designed and carried out under task 6.2 and reported in deliverable D6.7.

The preparation of the concept and the strategy to disseminate the workshops & webinars is being prepared within the first project phase, including the launch of an additional section on the project website in order to promote and link the events but also to include the registration process. A further report on the progress is, as well, described in D6.7 which includes all activities related to the workshops and project conference.

The final project conference will be organized by ULusofona an accordance with other partners and will be held in the last phase of the project, in M47.

4.3 Networking activities and external other events

Partners are encouraged to actively participate at events not organised by the consortium at regional/local, national and European level to stimulate interest from "new" stakeholders, including the general public. Key European events will be identified and selected continuously during the project implementation. The partners participating will bring promotional materials and spread it with other participants, thus raising awareness about the CATCHER activities. Besides presentations, posters, booths and spreading of print materials, partners will also discuss officially and unofficially with interested stakeholders and will promote all official channels to actors seeking further details.

CATCHER will be presented in a number of relevant international forums and events related with the scope of the project, such as conferences, exhibition fairs, etc. Regarding the European forums, CATCHER will take advantage of the existing relation of its partners, tackling those forums, associations and platforms in which the consortium has an active role. Contacts with target groups will also take the form of workshops, set up by the project in different locations across the EU. The objective is to discuss project results and receive inputs from outside.

6. Documentation and ongoing monitoring activities

SYNYO will coordinate and manage the dissemination and all partners will play a role in the dissemination of the results. Their interests and opportunities will be identified through a dedicated excel file[1] template to be filled (and updated) by the partners during the project. In addition, the partner responsible of each deliverable will be asked to establish the dissemination potential of the deliverable prior to its submission. The deliverables of the project will be used as milestones to monitor the progress of dissemination activities.

The dissemination activities will be tracked and monitored constantly, thus in every SC meeting will be presented brief overview.

The scope of the dissemination plan is defined by the following Key Performance Indicators (KPIs):

KPIs for the communication plan		
	Planned Activity	Target Number
Communication & Dissemination	Number of Press releases	6
	Number of peer-reviewed Scientific Publications	3
	Number of conference presentations & networking events	10
	Number of website visits (end of project)	8.000
	Number of created synergies with projects and initiatives	6
	Number of social media channels addressed	3
	Number of Followers on Twitter at the end of the project	800
	Minimum number of posts on social media (Twitter & LinkedIn, YouTube)	400
	Number of news articles on website	8
	Number of Marketing Materials (flyers, brochures, posters)	4
	Number of videos created	8
	Number of dissemination templates	2
	Number of mentions in conventional and business-oriented media during the project timeline	20
Stakeholder Engagement	Number of stakeholders reached	1.000
	Number of companies involved	15
	Number of demo events/workshops	3
	Number of seminars/webinars organized	4
	Number of final conferences	1

The continuous tracking of these values enables the project partners to keep track and react accordingly in order to secure successful communication and dissemination of project results.

As mentioned in the scope of the communication strategy, a regular update of the ongoing activities is important not only to keep on track with achieving the defined KPI.

[1] This file will be provided in the shared work space or as google spreadsheet. The file is to be found in the Annex.

7. Conclusion

As described in this report, the dissemination and communication plan is an important and dynamic element of the project which needs to be updated periodically and deployed along the project life cycle.

The project website will serve as an important resource and dissemination tool, where researchers, experts, companies, other involved stakeholders, the interested public, and potential participants can find relevant information about the project. A website is an object of change as new information will be published or changed. Complementary to the project website, further dissemination channels and activities are planned to be enrolled including Twitter, LinkedIn, and dissemination materials, e.g., templates for flyers and brochures which will be provided for all consortium members for further distribution.

8. References

European Commission, “Annotated Model Grant Agreement”, 2019

European Commission, “Communicating EU research and innovation guidance for project participants”,

European Commission, “Good practice in energy efficiency”, COM (2016), 761 final.

CATCHER, “Description of Action Part A”, 2022

CATCHER, “Description of Action Part B”, 2022

9. Annexes

ANNEX 1: TITLE