

D10.3 Plan for the exploitation and Dissemination of Results (PEDR)

Project Information

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PU	Public	✓
PP	Restricted to other programme participants (incl. Commission Services)	
RE	Restricted to a group specified by the consortium (incl. Commission Services)	
CO	Confidential, only for the members of the consortium (incl. Commission Services)	

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1 Executive Summary

The Plan for the Exploitation and Dissemination of Results (PEDR) summarises the consortium’s strategy and concrete actions to disseminate, exploit and protect the foreground generated by intelWATT project and will be used as a guideline to the Consortium for the dissemination and exploitation activities.

This deliverable is the first release of the PEDR. It gives an overview on the dissemination activities at M6 and the ones planned for the subsequent period, together with the identification of exploitable opportunities and identification of target segments for intelWATT project. The deliverable will be updated at M18, M30 and M42 at of the project reviews.

The two key areas addressed by this deliverable are the dissemination and the exploitation actions, which are separately reported in the Dissemination Plan and the Exploitation Plan respectively.

Section A (Dissemination Plan) describes the scheduled dissemination measures and activities. This deliverable aims at the presentation of a suitable dissemination plan for the project’s promotion in Europe and beyond. Based on the plan described in the Description of Action (DoA), the main expected results, the key stakeholder groups, the dissemination tools and the preliminary target groups for dissemination in intelWATT are identified and the subjects and matters of these actions are listed. The management as well as the tools and activities are defined and presented.

Section B (Exploitation Plan) describes the routes for the exploitation of results that project partners have envisioned at the beginning of the project and which are being redefined as the project progresses.

The deliverable is structured in five chapters:

- i. Chapter 1 gives a short introduction to the project and the deliverable’s scope.
- ii. Chapter 2 is focused on the dissemination strategy, where different paragraphs illustrate the objectives of the dissemination, the target audience, the timing of the activities, the dissemination management policy and methodology as well as the dissemination tools.
- iii. Chapter 3 contains the Project Communication Plan (PCP), outlining the dissemination activities to be performed during the first project period.
- iv. Chapter 4 describes the public Exploitation Plan and the general approach adopted by the consortium.
- v. Chapter 5 outlines the Intellectual Property Rights (IPR) management strategy.

1.1 intelWATT in a nutshell

IntelWATT aims to develop innovative, cost efficient, smart separation technologies applied in energy and water intensive industries. The goal of the project is to demonstrate 3 TRL7 case studies that will achieve water preservation along with energy production and material recovery. The proposed solutions will also target at zero liquid discharge while implementing maximum water reuse. Tailor made sensors and automated decision making mechanisms will optimize the process conditions in real time. The case studies will be implemented in crucial EU and global industrial applications such as electricity production, mining and metal plating.

- Case study 1: Demonstration prototype for CTBD treatment. The development of efficient, cost effective, smart solutions for water management in a thermoelectric power plant, aiming at minimization of the cooling tower blow down (>99% recovery) through developing a pilot unit of 100 m³/day treatment capacity installed in the premise of PPC's unit V (natural gas combined cycle facility, Megalopolis, Greece) based on a closed loop, near zero liquid discharge approach.
- Case study 2: Demonstration of a symbiotic concept between industries: sustainable production of energy and water. In this context, an integrated pilot unit (100 m³/day) comprised by Reverse Electrodialysis (RED) and solar powered membrane distillation (MD) systems.
- Case study 3: The application of a novel, hybrid high recovery RO (HRRO) / Ion exchange (IX) resin prototype will demonstrate the recovery of valuable electrolytes and fresh water preservation in a plastic electroplating facility. The process is aiming towards recovering up to 95 % of Chromium and Copper and 50% of Nickel, while preserving 65% of fresh water.

Implement smart sensor technology for online monitoring, real time process adaptation and deep learning, with customizable intelligent industrial process software module based on an agnostic protocol connectivity cloud infrastructure.

1.2 Scope and objectives of the PEDR

The PEDR is one of the main activities of WP10 "*Dissemination and exploitation*", aiming to underpin dissemination and exploitation of methods and results. **Project Communication Plan (PCP)** is also formulated within the PEDR, where users' specific communication needs are analysed, and the strategy to monitor their impact is foreseen.

The PEDR is a living document, which implementation takes place along the whole project duration in order to ensure that the project results are taken up by the main stakeholder groups (such as decision-makers to influence policymaking) by both industry and the scientific community.

The PEDR identifies:

- who will benefit from the work (the stakeholders),
- how they will benefit (the message),
- how intelWATT will benefit,
- how to maximise reach to stakeholders (the tools).

The development of the PEDR throughout the lifetime of intelWATT will consist on three steps:

1. **identify a result that is ready to be evaluated for release.** This might either be one of the results described as expected results in the proposal stage, or it might even be intermediate results/data, which could be useful for specific users: all partners will discuss the relevance of results both for new as well as for already identified potential 'users of the knowledge'. The WP leaders are responsible to identify results that are ready for evaluation;
2. we will **analyse the value of a result for the potential users** (not limited to financial value), the costs to release it, and possible competition. At the end of the evaluation phase, there will be a

clear recommendation on how to release the result. This would include one of the three options ‘**use, sell, or publish**’ and accompanying measures. The latter relates to protection and communication: depending on the competition, we might decide selling a result under patent protection, or we might sell it under trade secret, or we might keep it secret and sell a service based on the result. Depending on the potential users we might have to select different communication tools; reaching the scientific community calls for open access publications in relevant peer-reviewed journals, while reaching commercial users might require demonstration cases, data for regulatory validation, or the endorsement of influential opinion-leaders;

3. use the results as impacts enablers. Use of results will follow the provisions described in the Consortium Agreement (CA), where the details on IPR are fixed. The partners who own the result will use, sell, or publish it; at all instances, we will ensure that the other partners retain access rights, if those are needed to either conduct the project or to release own results. Formally, the Consortium Agreement fixes details on IPR; practically we will consider modern exploitation and dissemination measures such as Creative Common licenses or Joint Ventures.

Depending on the potential users different communication tools will be selected, which are described in the PCP (chapter 3).

The Consortium attaches great importance to dissemination. All partners will contribute to that effort and will strive to maximize the use of all existing dissemination channels, such as high-quality papers containing the best scientific achievements and oral and poster contributions to national, international and European conferences. Industrial partners regularly participate in workshops, fairs and showcases where technical achievements and case studies can be presented to stakeholders.

For any comments and/or suggestions, please refer to the **Dissemination & Networking Manager (D&NM): Isella Vicini** – WH – appointed during the intelWATT Kick-off Meeting.

The **Exploitation Plan (EP)** will be designed in order to multiply the impact of the proposed solutions and prepare the transition towards industrial and commercial uptake in order to fully achieve the expected impact. The EP will describe the activities to be undertaken (how and by whom) in order to ensure the exploitation beyond the project itself. The exploitation strategy will reflect and will be built-up as a result of sound analysis of the market trends potential users, and financial sustainability. The target users will be precisely identified and analysed in terms of specific needs and objectives. The exploitation activities will be coordinated by the Steering Board in collaboration with the Exploitation Manager.

For any comments and/or suggestions, please refer to the **Exploitation Manager (EM): Thijs Wolbrink** – NI – appointed during the intelWATT Kick-off Meeting.

SECTION A - Dissemination and Communication Plan

2 Dissemination Strategy

The objectives of the dissemination within intelWATT are:

- to deliver INTELWATT's **expected results** and progress to the defined professional groups using effective communication means and tools;
- to raise **public awareness** about intelWATT;
- to **exchange experience** with projects and groups working in the field in order to join efforts, minimize duplication and maximize potential;
- to exploit the **fundamental knowledge, the methodologies and technologies** developed during the project also through foreseen training activities and workshops organization.

The dissemination strategy and activities will follow **principles and best practices** successfully tested by the partners in other projects and in line with the EC Guidelines for successful dissemination:

- all research results/reports will be duly reviewed, and a copy will be sent to relevant partners involved in the project before these are published or disseminated. When appropriate, the reports will refer to other research projects and build on the existing results and literature;
- research will be conducted following sound analysis and scientific practice principles, considering as much as possible policy requirements and needs;
- all partners who will contribute to the project activities will be duly informed about the final outcomes and the implications stemming from project results;
- all public results will be accessible from the project website and usable from all parties who may benefit from them.

The definition of the dissemination strategy is based on the identification of the following milestones, which are described in the following chapters:

1. the subject of dissemination (what will be disseminated);
2. the identification of target audience (who will most benefit from the project results and who would be interested in learning about the project findings);
3. the definition of methods and tools (what is the most effective way to reach the target audience);
4. the timing (when dissemination will take place);
5. the dissemination management and policy (who is responsible of and how dissemination is ruled).

2.1 Subject of dissemination

The following general subjects of dissemination have been identified:

1. intelWATT project itself (general scope, coverage, goals and milestones and plans to reach them);
2. publishable research results (reached objectives and achievements);
3. developed techniques and methodologies (in view of pre-normative research impacts);
4. developed tools and technologies (in respect of industrial IPR issues);
5. innovation aspects (in an "open innovation" perspective).

2.2 Target Audience

2.2.1 Dissemination within the intelWATT partners (Internal dissemination)

Ensuring effective internal communication and dissemination among the consortium partners represents an important key success element for INTELWATT.

Partners’ organizations are important for dissemination for two reasons. Firstly, they are potential users of intelWATT project results themselves and, secondly, they represent “*influencers*” because of their huge impact on the associated research community and industrial sectors.

All partners are indeed established figures in their respective areas, with extensive networks and long-standing involvement in research fields such Membrane Technology, Smart Monitoring & Prototype Manufacturing, Sensors, Process Development & Optimization, Planning & Construction, Materials Characterization, Economics and Life Cycle Assessment.

The partners are also widely involved in global science journals and communication organisations/events. This supports broad scientific dissemination in high impact journals (with focus on open access) and supports the organisation of workshops or dedicated conference sessions on intelWATT results. The partners in industry will ensure a broad dissemination to industrial organisations and ensure that end-users are directly informed.

The global nature of the intelWATT partnership will be exploited in full to gain maximum global reach for dissemination. Each international partner’s status is made up as either a government laboratory with direct links to national authorities, policy makers, or an academic centre with strong international stakeholder networks and nationally recognised reliable and relevant facilities. By adapting an approach to dissemination focused on facilitating international adoption we will support and maximise the impact potential, and the new tools and solutions developed.

Partners’ extensive international network of collaborators, strong links with a wide variety of stakeholders, and extensive experience in method and data dissemination will be used to reach a large international audience for global dissemination. These collaborative links have been developed through the many initiatives that each partner have been involved in particular other H2020 funded projects.

Methods of internal dissemination will vary from providing links from partners’ web pages to the intelWATT website, to seminars or workshops showcasing, to articles in partners’ internal newsletters and publications, etc. The internal communication strategy also pursues the objective to maintain all partners fully informed about planning, work in progress and existing or potential problems.

Project collaborative tool has been set-up by CNR with the aim to store and share documents and files in a fast and convenient way, among all consortium members. The project Intranet will be described in the deliverable D11.2 “*Set up of the project management collaborative tool*”.

2.2.2 intelWATT External Stakeholders

A preliminary list of key stakeholders to get involved for making a successful exploitation and supporting intelWATT are identified in the Table 1

Table 1 intelWATT target groups, main messages and how to reach them

Stakeholder groups	Stakeholder’s needs	Strategy for dissemination and exploitation
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Stakeholder groups	Stakeholder's needs	Strategy for dissemination and exploitation
Regulators and Policy makers at EU, National, local level	Products and processes developed in intelWATT project can be adopted by industry to achieve water preservation along with energy production and material recovery and have an impact at environment and renewable energy policy level	Proactive liaison with stakeholders from governments and regulatory organizations to identify the best opportunities. Our partner NI will be actively involved promote the dissemination of the results through networks at national European and international level. In addition, the project partners will establish cooperation with other EU projects under the cross-cutting call– SPIRE-07-2020 and SC5-04-2019 “Building a water smart economy and society”, EC clusters such as ict4water.eu and network like Bluetech® and experts representing interested stakeholders.
Industry (manufacturing SMEs and large companies)	Implement the technology at WWTP and selling the membranes to the end-user market in chemical, energy industrial sector	Several Partners involved in intelWATT are in relationship a very large existing worldwide network of with Industries and Associations operating in many countries, that can be involved for sharing the results achieved.
Industry associations	Create awareness of the stakeholder community	The industry network from intelWATT partners will be useful to disseminate and exploit project activities. For example Italian Association of Science and Technology, International Water Association’s and European Membrane Society’s wastewater treatment.
Scientific communities and working groups	Research communities interested in CTBD water treatment, salinity gradient energy, membrane-based technologies for renewable energy generation, plastic electroplating, sensors and machine learning	intelWATT outputs will be disseminated mainly through (i) peer reviewed open access articles and scientific conference proceedings. Particular care will be given to feature articles (e.g. process emission documentation and use), special issues in dedicated journals, technical magazines and relevant workshops; (ii) training events and teaching (lectures or seminars, conferences and workshops) will be extensively used also with Field trips; (iii) Staff exchange between partner’s institutions; (iv) presentations promoting alignment of strategies in funded EU projects running in parallel with Intelwatt with the same topics.
Civil society/General public	Enhanced consumer awareness about water preservation along with energy production and material recovery	Identify relevant events where non-experts interested in of the renewable energy and clean water.

Stakeholder groups	Stakeholder's needs	Strategy for dissemination and exploitation
		<p>The public website and social networks will be the main instruments, together with leaflets, for the public in stakeholder organisations linked to the consortium. Moreover, podcasts and magazine press-releases to non-specialized magazines for general public will be produced.</p>

An effective communication will be also put in place with a number of stakeholder audiences. An **International Advisory Board (IAB)** is being appointed to officially include stakeholders from academia and industry areas related to intelWATT. It will support and advise the consortium on all scientific issues, on ethics, exploitation, and dissemination of results. The list of members identified are listed in Table 2. These members have been identified at the proposal stage, they confirmed their interest to take part at IAB after the proposal approval and they have been invited at the Month 6-Periodical Technical Meeting.

Table 2 intelWATT IAB members

Expert name	Affiliation	Position and relevance to intelWATT	Country
Dr. Matthias Balsam	Senior Scientist in Process	Deep knowledge in process analytics and wastewater treatment	Germany
Dr. Ir. J.W. Post	Deputy Programme Director	Deep knowledge in RED and desalination processes	Netherlands
Prof. Dr. Jochen Strube	Head of the Institute for Separation and Process Technology, Clausthal University of Technology	Broad background and experience in separation technology (Membranes, Ion exchangers)	Germany
Dr. He Xuezhong	Norwegian University of Science and Technology	Recognized membrane scientist with deep expertise in material science	Norway
Dr. Eric Singsaas	Initiative Director, Natural Resources Research Institute (NRRI)	Expertise in circular economy and bioenergy	USA
Dr. Aron Kneer	CEO, TinniT Technologies	Deep knowledge and experience in environmental engineering, energy and water recovery	Germany
Dr. Sacha Beutel	Associate Professor, Head of Research" Group Bioprocess Engineering" Leibniz University Hannover, Institute of Technical	Broad expertise in membrane technology	Germany

Expert name	Affiliation	Position and relevance to intelWATT	Country
	Chemistry		
Dr. Bhaskar Bandarapu	Senior Engineer, LAM Research Corporation, Austria	Broad knowledge and experience in fluid mechanics and CFD	Austria
Dr. Emad Alhseinat	Assistant Professor at Khalifa University	Expert in novel separation processes and fouling prediction	United Arab Emirates

The project is part of the **ict4water.eu**, a hub for EU-funded research projects on ICT and Water Management, which aim is to maximise the synergies between European-level projects and increasing interoperability between water information systems at EU and national levels and efficiency of water resources management.

2.3 Schedule of dissemination activities

The dissemination activities will be performed according to the following schedule:

- 1. initial awareness phase** (month 0-6): intelWATT project website set-up (<https://www.intelwatt.eu/>), analysis of relevant information resources, identification of dissemination opportunities and creation of basic dissemination tools including graphical identity of the project (i.e. project logo, templates for project documents and for project presentations).
- 2. targeted dissemination phase** (month 7-24): the consortium will enrich the website, publish a project poster, issue the first press release (see section 3.4 below) and attend selected events. Preliminary project results will be presented to the target audiences. Preliminary release of the PEDR (M6), and first training activities to foster initial knowledge exchange are put in place. PEDR release will be then updated during project technical review at M18.
- 3. pre-launch phase** (month 24-42): this represents the second period of the project, when intelWATT consortium partners will deliver the majority of project outputs. This phase will be focused on informing the target audience of the exploitable results. PEDR release will be updated during project technical review at M30 and at the end of the project (M42).

2.4 Dissemination management

2.4.1 Distribution of responsibilities

According to the Article 29.1 of the Grant Agreement:

“Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — ‘disseminate’ its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium)”.

Therefore, every possible opportunity will be embraced by individual partners or on collective basis through joint appearance by more than one partner to make intelWATT known among professionals and general public as well.

All partners of the consortium must contribute to the dissemination according to their foreseen role and effort and using all available tools, thus for instance by participating and giving presentations at conferences, publishing papers, holding press conferences, networking and similar activities and will strive

to maximize the existing dissemination channels for the purpose of project result adoption and successful future commercialization of intelWATT outputs.

According to the description of Management Structure reported in the Grant Agreement - section 3.2 - each Work-package and task leader will be responsible for the technical follow-up of their specific work packages and for the detailed co-ordination of the different tasks with other tasks. The WP leaders will foster the discussion of new ideas and will identify results that are ready to be evaluated for dissemination and exploitation.

2.4.2 Dissemination policy and rules

Grant Agreement (GA) article 29 and Consortium Agreement (CA) sections 8.4, 8.5 define specific dissemination policy and rules for intelWATT.

We report below article 8.4 of the CA:

8.4 Dissemination

8.4.1

For the avoidance of doubt, nothing in this Section 8.4 has impact on the confidentiality obligations set out in Section 10.

8.4.2 Dissemination of own and joint Results

8.4.2.1

During the Project and for a period of 1 year after the end of the Project, the dissemination of own Results by one or several Parties including but not restricted to publications and presentations, shall be governed by the procedure of Article 29.1 of the Grant Agreement subject to the following provisions. Prior notice of any planned publication shall be given to the other Parties at least 30 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the Coordinator and to the Party or Parties proposing the dissemination within 15 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.

8.4.2.2

An objection is justified if

- (a) the protection of the objecting Party's Results or Background would be adversely affected
- (b) the objecting Party's legitimate interests in relation to the Results or Background would be significantly harmed.

The objection has to include a precise request for necessary modifications.

8.4.2.3

If an objection has been raised the involved Parties shall discuss how to overcome the justified grounds for the objection on a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting Party shall not unreasonably continue the opposition if appropriate measures are taken following the discussion.

8.5

The objecting Party can request a publication delay of not more than 90 calendar days from the time it raises such an objection. After 90 calendar days the publication is permitted.

8.5.1 Dissemination of another Party's unpublished Results or Background

A Party shall not include in any dissemination activity another Party's Results or Background without obtaining the owning Party's prior written approval, unless they are already published.

8.5.2 Cooperation obligations

The Parties undertake to cooperate to allow the timely submission, examination, publication and defence of any dissertation or thesis for a degree that includes their Results or Background subject to the confidentiality and publication provisions agreed in this Consortium Agreement.

8.5.3 Use of names, logos or trademarks

Nothing in this Consortium Agreement shall be construed as conferring rights to use in advertising, publicity or otherwise the name of the Parties or any of their logos or trademarks without their prior written approval.

2.4.3 Dissemination monitoring and reporting

All consortium partners are encouraged to report the results of each dissemination activity immediately after they are presented. The reports shall include feedback gathered by the respective partner from the target audience (if applicable), eventually gained contacts to be listed in the contact repository used for further dissemination purposes.

This must be done through the intelWATT Intranet, which contains a specific dissemination section. All partners are invited to upload the dissemination material (this can be a paper, a conference presentation or the audio file of an interview for example).

For monitoring purposes, the dissemination activities will be reassessed regularly by the Executive Management Board (EMB) during the EMB meetings.

The information gathered during the entire lasting period will be incorporated in the PEDR releases prepared in M18 at review stage. This document includes a dissemination report of the first part of intelWATT in the form of overview of activities performed in this period. The results of the evaluation will be then projected in the dissemination plan for the upcoming period. At M42 the updated PEDR will present the results of communication, dissemination and exploitation activities.

2.4.4 Evaluation

For the purposes of evaluation of intelWATT dissemination activities, quantitative indicators and associated metrics were set up where applicable. A numerical target (KPI) has been estimated as a cumulative estimate based on individual partners’ inputs. These targets will be periodically reviewed by the DISSEMINATION& NETWORKING MANAGER (D&NM) in collaboration with the whole Consortium.

Table 3 Indicators and associated metrics for evaluation of the dissemination activities

Communication tool/channel	How to measure	Objective	Contingency plan
Website	Number of total users	5,000	Promoting the web site in Social Networks, e.g. Twitter / Newsletter to target groups
	Number of page views	15,000	Promoting the web site in Social Networks, e.g. Twitter / Newsletter to target groups
	Duration of visits	2 minutes average	Re-organize the website to make it easier to find relevant items. Upload more attractive content

Communication tool/channel	How to measure	Objective	Contingency plan
	Number of references from external web pages	20	Contact more stakeholders and initiatives to agree on the promotion of the site
	Number of podcast	3	Create contents for the website
Social Media	Twitter Number of Followers	200	Definition of a Social Plan to have always updated feeds. Monthly report of Social Media activity and engagement to analyse performances and plan future strategies.
	Twitter Number of Impressions	3,500	
	Facebook: Number of Follower	100	
	Facebook: number of impressions	400	
	LinkedIn: Number of Follower	200	
	LinkedIn: Number of Impression	15,000	
Publications	Number of articles in journal publications	20	Encourage partners to publish papers peer-reviewed and indexed journals, Find appropriate events.
Attendance of events	Number of attended conferences with presentations	20	Responsibilities and budget have been assigned. Invite partner teams to assist
	Number of public events	20	Find alternative events, contact organizers
	Number of invited lectures	5	Find alternative events, contact organizers
	Number of field trips	4	Virtual visit
Organization of events	Number of organized professional workshops	2	Responsibilities and budget have been assigned. Invite partner teams to assist

3 Dissemination tools

3.1.1 Project Graphic Identity (logo)

The graphic identity logo has been described in deliverable D10.2 “Project graphic identity (LOGO), leaflet and poster”. It was developed by the Warrant Hub and it will be used for all communication activities.



Figure 3.1 intelWATT logo

3.1.2 Project leaflet

The main objective of the project brochure is to provide intelWATT audiences an attractive and written project overview and a summary of the main project objectives and characteristics.

To assist the dissemination effort, the attractive and professional brochure, prepared by WH, is published on the project website.

The text is designed considering not only experts, but also an interested non-specialist. Furthermore, the brochure includes the website address, the project details and provides basic information on intelWATT consortium. All partners' logos are also displayed.

The brochure can be circulated in printed form, e.g. it can be handed out at conferences or other events; on the other hand, also an electronic version (e.g. PDF file) can be circulated.

Figure 3.2 Outer front of the brochure



Figure 3.3 Inner front of the brochure



A second version of the brochure will be implemented at mid-term, or before, if necessary. This version will contain an updated content, with an overview of preliminary results, and a new layout for making it more attractive.

3.1.3 Project poster

The main purpose of the poster is to catch the audience attention. The poster focuses on the visual aspects and the content is clear and easily understandable by the target end users.

Regarding the layout and design, the poster shows the intelWATT project's logo and the colours emphasizing the link to the project's graphic.

From the content point of view, the poster of the intelWATT project illustrates its concept, its roadmap, the case studies foreseen and the expected impacts, as well as all partners' logos. At the bottom all the project details can be found. It is possible to download it from the intelWATT website.

Figure 3.4 Project Poster



The poster features the intelWATT logo at the top right, social media icons for Facebook, Twitter, and LinkedIn, and the handle @intelwatt. Below the logo, the poster is divided into three main sections: PROJECT, PROBLEM, and SOLUTION.

PROJECT: intelWATT is an Horizon 2020 funded project which aims to create intelligent Water Treatment Technologies for water purification combined with simultaneous energy production and material recovery in energy intensive industries. Three TMLT case studies will be implemented in crucial EU and global industrial applications such as electricity production, mining and metal. It is developed on three pilots:

- The development of efficient for water management in a thermoelectric power plant.
- The sustainable production of energy and water.
- The recovery of valuable electrolytes and fresh water.

PROBLEM: intelWATT's starting point results from the convergence of preliminary research outcomes carried out by both the RTDs and industrial partners. For this purpose, following key technologies have been identified to have a strong potential for boosting fresh water production in energy intensive processes. The consortium aims to improve the state of the art in these technologies in order to bring the technology up to the level of demonstration on real environments (P1, P2 & P3). The project methodology is structured in three main phases:

1. Life Cycle Assessment
2. Process Optimization
3. Smart Sensor

SOLUTION: All the innovative solutions proposed by intelWATT are based on the abovementioned pillars aiming to boost water production through resource recovery and energy cogeneration while optimizing the balance between capital and operating costs. The proposed solutions will also target at zero liquid discharge while implementing maximum water reuse. Tailor made sensors and automated decision-making mechanisms will optimize the process conditions in real time. The project will implement smart sensor technology for online monitoring, real time process adaptation and deep learning, with customizable intelligent industrial process software module based on an agnostic protocol connectivity cloud infrastructure.

CASE STUDIES:

- 1. Cooling smart bleed down treatment
- 2. The industry pulping energy
- 3. Simultaneous metal recovery and hydrogen treatment in pulp electrolysis processes

WORK PACKAGES PROGRESS:

The progress is shown in a circular diagram with 10 work packages: WP1: Project management, WP2: Feasibility study, WP3: Design and development, WP4: Manufacturing and testing, WP5: Validation and demonstration, WP6: Integration and optimization, WP7: Smart sensor development, WP8: Process optimization, WP9: Life cycle assessment, and WP10: Final report and dissemination.

PARTNERS:

A row of logos representing the project partners, including various research institutions and industrial companies.

DETAILS:

PROJECT TITLE: intelWATT - Smart Water Treatment for energy production combined with simultaneous energy production and material recovery in energy intensive industries
 START DATE: 01/01/2020
 END DATE: 01/01/2023
 FUNDING: Horizon 2020 Marie Skłodowska Curie grant agreement No 958454
 WEBSITE: www.intelwatt.eu
 CONTACT: +353 87 231 2211

CONTACT:
 CONTACT: +353 87 231 2211
 WEBSITE: www.intelwatt.eu
 MAIL: info@intelwatt.eu

Powered by Women4Tech SpA

3.1.4 Project public Website

To ensure maximum visibility to the intelWATT objectives and results, WH has set up a project website, described in deliverable deliverable “D10.1 Project Website.”, registered in the “EU” domain and with an intuitive URLs to increase hit rates: <https://www.intelwatt.eu/>

The website has several sections devoted to present the project to external visitors:

- HOME: the home page of the website shortly introduces intelWATT project and gives the important relevant information. The EU co-funding is duly acknowledged, also by the inclusion of the official EU emblem and claiming that:



"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958554".

- PROJECT: on this label, three different sub-sections are linked. These sub-sections are the pages of "concept and methodology", the "project status" and the presentation of the "case studies".
- PARTNERS: this webpage section presents a brief description of the project partners. Each partner logo is linked to a dedicated webpage which contains a description of the partner and its role in the project.
- NEWS & EVENTS: this page shows the most updated information from the intelWATT Consortium to the public. It will be updated regularly and used as a fast tool to communicate intelWATT main achievements with wide public and all stakeholders. The Events' section provides a calendar that presents future and past events, which are of interest to the intelWATT community at large. It provides dates and a contact point, especially if an event is of public nature, lists conferences and special sessions during which the project will be presented and considers web streaming of events or the upload of eventual conference videos.
- CONTACTS: this section enables people to easily get in touch with the Project Coordinator and with the DISSEMINATION& NETWORKING MANAGER (D&NM)
- DOWNLOAD: a download page is shown on the top of the website. In this page, all visitors can easily download all public documents from the project (i.e. public deliverables).
- PRIVATE AREE: on the intelWATT website homepage there is a link allowing to access the Collaborative tool used for partnership internal communication and project management. The collaborative website is totally private, and a password is mandatory to gain access to it. More details about the website are described in deliverable D11.2 Set up of the project management collaborative tool.

3.1.5 Social Media

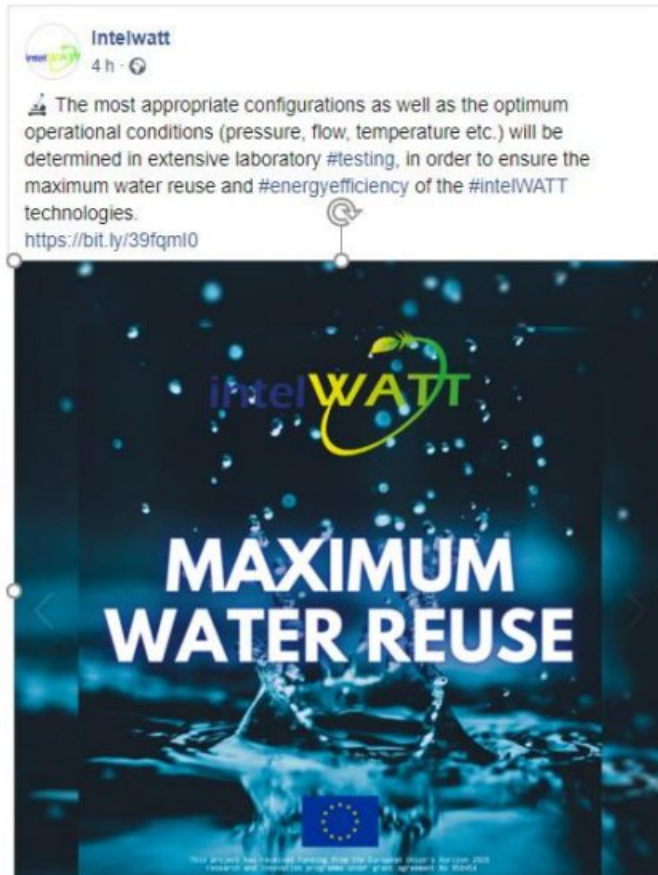
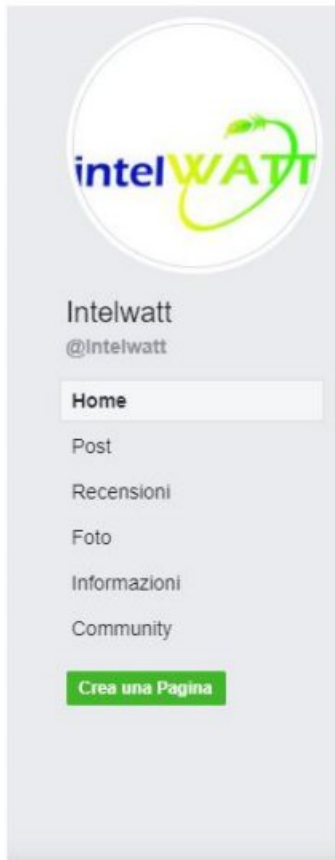
Social media platform (e.g. Facebook, Twitter, LinkedIn) will be used as dissemination tools to increase project awareness and for dissemination of key results/outputs. They will also be used in order to spread intelWATT results amongst health and sport sector.

The use of the partners' own social media channels will be maximised. Cross-national dissemination will be ensured by translating the results into each language of the consortium to overcome linguistic barriers.

The campaign will follow the scheduling of communication and dissemination objectives and the typical features of each tool.

The social account of the project are:

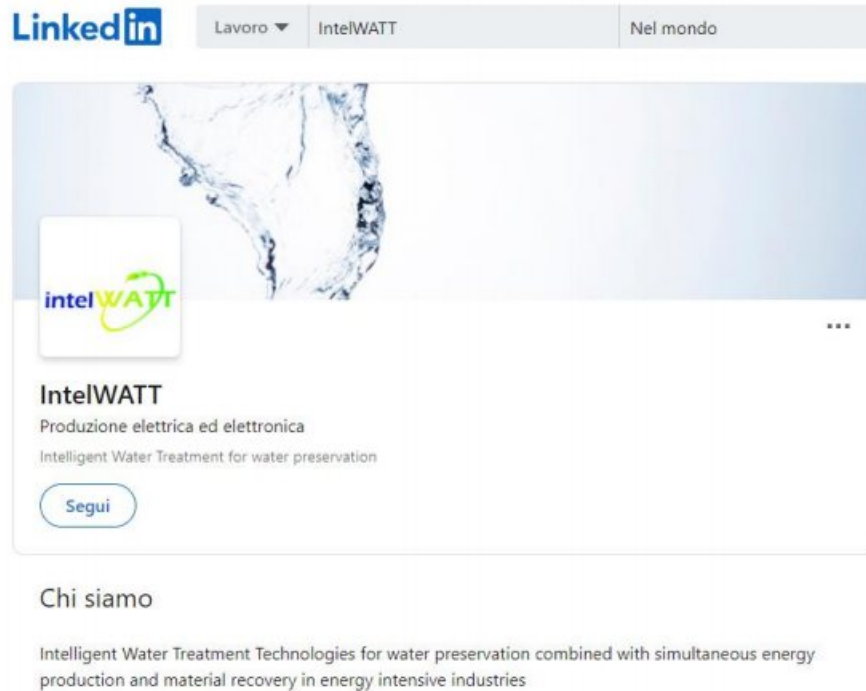
- Facebook: <https://www.facebook.com/Intelwatt/>



- Twitter: @intelwatt



- LinkedIn: <https://www.linkedin.com/company/intelwatt/>



3.2 Project Communication Plan

The Project Communication Plan (PCP) outlines the communication strategy and activities to be performed, and it is a core component of the PEDR. The approach is based on the identification of specific communication needs of different user groups, addressing how best to maximise awareness of project results among users in each of those groups.

This builds on knowledge acquired through partners’ participation in other active EU projects of relevance. In order to ensure that our PCP remains appropriate and effective throughout the lifetime of the project, we will monitor communications reach and evaluate it against our communication objectives. Adaptations and refinements will be made to the PCP as and when necessary to ensure that the aforementioned objectives are achieved.

The new knowledge arising from intelWATT will have to be effectively communicated to **industry, researchers, public institutions** through appropriate channels and in a timely manner. Communication measures, where necessary, specifically target the broader **scientific community**, as the new tools and materials developed will be of considerable relevance to diverse scientific areas. Similarly, other measures specifically target the **general public**. As such, the planning of the communication activities in the reflects the needs and preferences of the target user group(s) in terms of the methods used and the language, style and tone adopted.

The strategy of our PCP is summarized in the following table, where we associate the specific type of message and tool, to each target group.

Table 4 Project Communication Plan

ACTIVITY/MEDIA	DESCRIPTION	TARGET GROUPS
Website	<p>The website will act as a platform to communicate up-to-date information relating to intelWATT during and after the project.</p> <p>It will give an overview of the project, outlining its main objectives and results. It will contain contact points for the people involved in the project, as well as a list of project partners. The website will be linked to partners' websites and vice versa and it will be organised in two levels in order to be easily accessible by both the scientific and the general audience.</p> <p><i>Feedback/indicators:</i> number of visitors</p>	<ul style="list-style-type: none"> - Regulators and Policy makers at EU, National, local level - Industry - Industry association - Scientific communities and working groups - Civil society/General public
Social Media	<p>Social media platforms (e.g. Twitter) will be used as dissemination tools to increase project awareness and for dissemination of key results/outputs. They will also be used in order to spread intelWATT results amongst industries and public institutions not directly involved in the management of case studies.</p> <p>The networking with other projects social media channels in the same field of intelWATT will be maximised. Cross-national dissemination will be ensured by translating the results into each language of the consortium to overcome linguistic barriers.</p> <p><i>Feedback/indicators:</i> number of followers, likes, sharing.</p>	<ul style="list-style-type: none"> - Civil society/General public
Promotional Material	<p>For the duration of the project, leaflet, posters, and other electronic material describing the objectives of the project will be made available. They will contain a contact for sending feedback and asking further information.</p> <p><i>Feedback/indicators:</i> new generated contacts, numbers of distributed/sent copies</p>	<ul style="list-style-type: none"> - Industry - Civil society/General public
Training Activities	<p>Training activities will be performed to ensure transfer of knowledge and expertise to relevant stakeholders and especially to industry, SMEs in particular. Training activities will aim to contribute to capacity building, knowledge improvement and professional development especially of industrial stakeholders and young researchers. Training activities will be:</p> <ul style="list-style-type: none"> - internal: aimed to form professionals and young researchers within the intelWATT consortium (Masters Programs, course in Water Engineering and Management, lectures for undergraduates and postgraduates); - external: towards external stakeholders, especially industry professionals, students, and researchers (accredited Continuing Professional Development - 	<ul style="list-style-type: none"> - Industry - Scientific communities and working groups

ACTIVITY/MEDIA	DESCRIPTION	TARGET GROUPS
	<p>CPD- courses)</p> <p>The training activities will be implemented in the form of training schools, courses, webinars. A detailed description of the training activities will be presented in D10.4 Training plan.</p> <p><i>Feedback/Indicators: number of courses</i></p>	
<p>Conference/ Workshop/ Trade Fairs</p>	<p>The consortium will seek participation in strategic events. The most relevant relevant events have been identified and Some actions have been already performed (see par 3.2.2)</p> <p><i>Feedback/indicators: number of conferences, workshops</i></p>	<ul style="list-style-type: none"> - Industry - Scientific communities and working groups
<p>Publications</p>	<p>Publications will be made in highly reputed journals giving particular emphasis to the quality and evocative potential of the graphical abstract and to the possibility to upload video presentations.</p> <p><i>Indicators: open access publications.</i></p>	<ul style="list-style-type: none"> - Industry - Scientific communities and working groups
<p>Networking and Clustering</p>	<p>Relevant projects will be identified for clustering and to seek joint opportunities.</p> <p>In particular, intelWATT will collaborate with other EU funded projects and take part to clustering and networks (see par 3.2.3)</p> <p><i>Feedback/indicators: number of cluster/networks</i></p>	<ul style="list-style-type: none"> - Regulators and Policy makers at EU, National, local level - Industry - Scientific communities and working groups - Civil society/General public

The main communication activities are described in the paragraphs below.

3.2.1 Publication in Scientific and Technical journals, conference proceedings and technical magazines

The partners will individually and in collaboration publish and present scientific advances in technical papers as well as in journals (peer reviewed or not) and magazines. Scientific publications are an effective way to disseminate high-level project information and to attract the interest of representatives of the various target groups. Publications in specialised magazines, papers sent to related events will attract the attention of technicians and researchers as well as to give the opportunity to collaborate within the purposes of intelWATT. In order to support this activity, whenever possible, project publications will be archived or linked on the intelWATT website.

The table below shows journals and magazines are especially relevant for the communication strategy of the project, and other major ones will be considered along the project

MEDIA	DESCRIPTION	TARGET GROUPS
Scientific journals	<ul style="list-style-type: none"> - Desalination - The International Journal on the Science and Technology of Desalting and Water Purification - Advanced functional materials - ACS Applied materials and interfaces - Carbon - Journal of membrane science - The International Journal of Life Cycle Assessment 	Scientific communities and working groups
Newspapers magazines	<ul style="list-style-type: none"> - The Guardian - The Times newspapers, - B2B magazines such as Water Desalination + Re-use and Water & Effluent Treatment News, - the PoliFlash magazine - WaterForum (Dutch) - H2O (Dutch) - Global Water Intelligence - Interviews 	General public

3.2.2 Participation and presentation to conferences, congress, workshop and exhibitions

intelWATT promotes oral and poster presentations at scientific conferences targeting relevant domains for the project. The impact of presentations at this kind of events is very high because of the attendance of scientists and industrial experts. National and international conferences are an excellent opportunity to share the results with experts in the field and, therefore, to achieve an effective dissemination of the project. Workshops, meetings and other large events (exhibitions, trade fairs, congresses) represent relevant opportunities for dissemination.

The following events are especially relevant for the communication strategy of the project:

	Relevant conferences, congress workshops and exhibition	TARGET GROUPS
Planned events	<ul style="list-style-type: none"> - Amsterdam – Nov 2021 - Amsterdam International Water Week – Nov 2021 - Singapore International Water Week – 2022 - IFAT – 2022 - BlueTechForum – 2022 - Weftec - Yearly Industrial event planning and seminars, with e.g. focus on energy and heavy industries platforms 	End users, industries, utilities

3.2.3 Networking and clustering

intelWATT will seek opportunities for exchange of scientific knowledge and dissemination activities with other EU-funded projects and clusters. A list of projects interesting for networking activities has been identified:

EU projects of interest for intelWATT	Advantages for intelWATT
<p>AquaSPICE, Grant agreement ID: 958396</p> <p>“Advancing Sustainability of Process Industries through Digital and Circular Water Use Innovations”</p>	<ul style="list-style-type: none"> - Likewise, this project targets the industry but from a process driven approach. Exchanging of technology trends, identification of common goals and exchange of data handling methods can be foreseen. - See more for AquaSPICE here: https://cordis.europa.eu/project/id/958396
<p>iWAYS Grant agreement ID: 958274</p> <p>“Innovative WAter recoverY Solutions through recycling of heat, materials and water across multiple sectors”</p>	<ul style="list-style-type: none"> - IWAYS aims to develop a set of technologies capable of recovering water and energy from exhaust gases in the industrial processes. One of Intelwatt’s case studies is focused on a power plant. There is a direct link between this project and our view will focus on exchanging ideas on how to integrate technologies from one project to the other, at least in gas exhausting industries, alike a powerplant. - See more for iWAYS here: https://cordis.europa.eu/project/id/958274
<p>NAIADES, Grant Agreement ID: 820985</p> <p>“A holistic water ecosystem for digitisation of urban water sector”</p>	<ul style="list-style-type: none"> - Naiades project is aiming towards developing strategies and tools for the digitization of urban water networks. Intelwatt has already benefited on the exchange of data models and Intelwatt ICT members have already participated in an online event organized by Naides project titled “Data Models for Digital Water and the IoT transition” co-organized by DW2020 synergy group (five projects within the ICT4WATER cluster) - See more for NAIDES here: https://naiades-project.eu/ and here: https://cordis.europa.eu/project/id/820985

cluster of interest for intelWATT	Advantages for intelWATT
<p>DigitalWater2020 Synergy Group</p> <p>https://ec.europa.eu/easme/en/section/horizon-2020-environment-and-resources/synergy-group-digitalwater2020</p>	<ul style="list-style-type: none"> - To use data models already tested and validated, data cloud strategies and methodologies in creating, homogenizing, interexchange and use of water related data.

SECTION B: PUBLIC EXPLOITATION PLAN

4 Public Exploitation Plan

The Exploitation Plan (EP) has the objective to define the strategy to multiply the impact of the proposed solutions and prepare the transition towards uptake in order to fully achieve the expected impact. The EP will describe the activities to be undertaken (how and by whom) to ensure the exploitation beyond the project itself. The exploitation strategy will reflect and will be built-up as a result of sound analysis of the market trends, potential users, and financial sustainability. The target users will be precisely identified and analysed in terms of specific needs and objectives.

The exploitation strategy will include the participation to exploitation strategy seminars held by EC experts, to which all partners shall have the possibility to acknowledge what exploitation activities include, and how to exploit and disseminate the results achieved. Some extra activities to plan apart from the dissemination ones with focus on exploitation plan is the: press release, webinars, info graphic and white papers to show the successful results. Another great way to promote the results is via award nominations via for example GWI or Aquatech.

4.1 Exploitable results

Firstly, we need to consider the type of exploitable results generated by intelWATT. intelWATT outputs include a wide range of information, materials and knowledge generated by the consortium. The potential outcomes of intelWATT in terms of industrial application are very relevant and strategic for all the industrial partners involved in the Consortium. All partners of intelWATT are interested in the results exploitation in different manners. Research partners are more oriented to transfer knowledge and technology to interested stakeholders while the industries are strongly focused on industrialization and future commercialization of the research products. The research performed during the project is going primarily to deliver new knowledge as well as innovative methods, patentable processes, and know-how.

To summarize, the exploitable results foreseen in the intelWATT project are of two main types:

1. Research data
2. Industrial prospective (processes, smart sensing & monitoring and derived products in membranes and resins for water treatment)

The research data will be managed according to the Open research Data Pilot and Data Management Plan (D11.4 at M6) that use a dataset template defined by Warrant Hub and approved by the European Materials Modelling Council (EMCC) as result of a funded European Project and now also suggested in Horizon 2020 Projects. All details are feasible at the following link <https://emmc.info/emmc-info-data-management-plan-template-dataset-description/>

From industrial perspective the results should focus how to be linked in real applications and further business.

For example, Nijhuis Industries with the support of the Saur group and the Nijhuis Saur Industries business units Econvert and Unidro, has already successfully implemented numerous full-scale installations in the (waste)water sector (**>4,000 references in total**) with excellent referee reports from its clients, including various large multinationals. This has in many cases resulted in a close relationship between the client and follow-up projects, allowing the exact entry point to propose upgrading the installation for the production of membranes and ion exchange with target to reduce the fresh water intake and depletion of metals.

Another way to share the knowledge and our results is use of partners’ network. For example the Nijhuis partner network like Bluetech® experienced in market intelligence and assisting in the business development for third parties. This will support the business partners and the research institutes partnering in the project to realize a successful definition of their business plans relying on the outcomes of the project. Nijhuis Industries may use the local regions marketing and communication plan to start first discussing possible IntelWATT results to clients (targetted approach). Nijhuis Industries can also make use of their business units in heavy industries such as O&G, metal, steel, power plants to direct check the interest of these clients to our proved solutions. The basis to develop and implement an innovative solution to the market is at Nijhuis Industries based on the funnel presented in Figure 5.

From idea to standard sales | Stage Gate Process

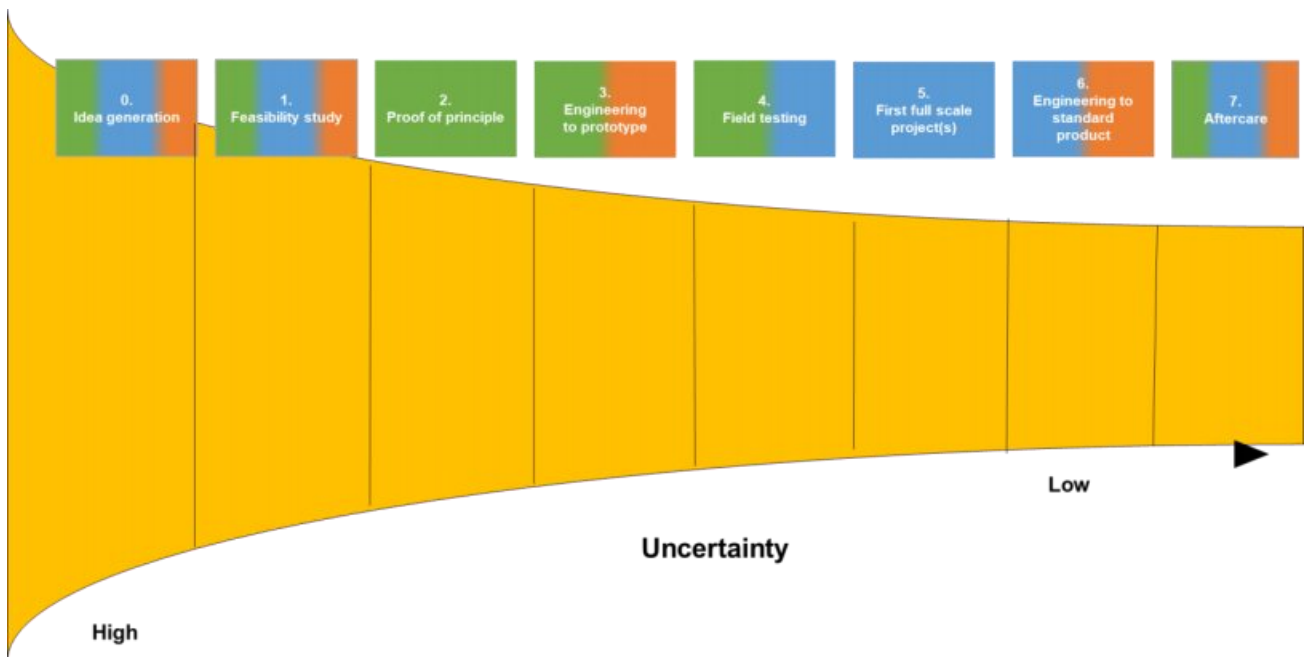


Figure 5 - Development funnel from R&D to market implementation

Normally the uncertainty of innovation success start reduces from high to low within the stage process. The more successful results we can book, the more certain the intellWATT project will also become successful. As Nijhuis Industries is a very experienced innovation partner providing solid and adaptive solutions, they help intellWATT through all the stages of the process.

The “funnel approach” have been adopted by the Consortium. At the moment the IntelWATT project starts with the feasibility study and together with partners we will proceed to proof of principle and engineering to pilot/field testing. Then important steps to define the full scale project success in the market is the pricing strategy and distribution strategy via direct clients and/or partners. Nijhuis Industries will mainly support to develop a plan and together with partners to finalize it.

Last but not lease, Nijhuis Industries will help identify the go to market strategy assessing by utilizing at maximum their partnership with Global water Intelligence who is identifying new opportunities in the market. In addition, the network of Nijhuis Industries within the water market (e.g. Aquatech, NWP, AIWW, H2O) can help to find interesting launching customers.

Starting from the proposal phase, the intelWATT project has adopted the Business model Canvas for the identification of the main exploitable technologies results and SWOT analysis for the exploitation plan. The aim is that all IntelWATT partners will have an own exploitation and business plan which stands alone but

also relies on and fortifies the business plans of the other partners. IntelWATT partners have already set up initial business plans that will be revised and finalized during the project.

4.2 Exploitation management

The exploitation activities will be coordinated by the Exploitation Manager (EM) who will work in close collaboration with NI as Task Leader 10.1 Exploitation to support the Project Coordinator (PC) on exploitation related issues. The Exploitation Manager is Mr. Thijs Wolbrink and he has been officially appointed during the Project kick-off meeting. The Exploitation Manager supported by WH, as responsible of the innovation management, will be responsible for the exploitation of the Project's results and for patent survey, market data trends evaluation and updating and to evaluate all intelWATT public contributions (e.g. conferences, seminars, press release) in order to avoid infringement of protectable IP.

The potential outcomes of intelWATT in terms of industrial application are very relevant and strategic for all the industrial partners involved in the Consortium. For this reason, the EM should keep in mind the strategic viewpoint of the enterprises (both industries and SMEs) and, whenever required, present such vision to the SB. The EM has to be always updated on the SMB progresses of the project and of current IPR scenario in order to detect potentially exploitable results. An additional responsibility of the EM is to make sure that technological progress remains consistent with the industrial perspective and assist the PC to evaluate the impact of the project from an industrial point of view.

intelWATT is structured to ensure effective exploitation towards stakeholders in all sectors reliant on effective and proportionate regulation. All results will be adequately transferred to enable their use beyond the lifetime of the project, using the dissemination and communication tools identified in the dissemination plan, briefly:

- data will be shared through four main instruments:
 - (1) Website to make information and data publicly available;
 - (2) Restricted website for internal data sharing through the consortium;
 - (3) Conference presentations;
 - (4) Open Access publications.
- where potential IPR exists, data will be made publicly available when IP protection is enabled and when it is commercially appropriate.

Mechanisms considered for exploitation of project outputs include a carefully selected series of local initiatives (general public), web-based community-initiatives, special technology transfer workshops, conference presentations, white papers, and scientific publications, and they are described in the dissemination plan.

The intelWATT research is highly relevant European industrial development and growth. The consortium is fully committed to the H2020 Open Access to Research Data scheme. Thus, without compromising IPR, the participants will implement a policy of open access and wide dissemination so that research findings are made available as soon as possible to regulators, industry and to the general public, raising public awareness about the new tools and innovative technologies.

The responsible partner undertaking each element of work will curate the intelWATT data, and where appropriate (e.g. after publication) it will be sent to public databases. The data will be stored locally by each partner in electronic format and will be curated in the intelWATT database.

According to "Article 28.1 Obligation to exploit the results" of the Grant Agreement:

Each beneficiary must - up to four years after the period set out in Article 3 - take measures aiming to ensure 'exploitation' of its results (either directly or indirectly, in particular through transfer or licensing; see Article 30) by:

- using them in further research activities (outside the action);
- developing, creating or marketing a product or process;
- creating and providing a service, or
- using them in standardisation activities.

Besides, according to Article "28.2 Results that could contribute to European or international standards – Information on EU funding" of the Grant Agreement:

If results are incorporated in a standard, the beneficiary concerned must — unless the Commission requests or agrees otherwise or unless it is impossible — ask the standardisation body to include the following statement in (information related to) the standard:

"Results incorporated in this standard received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 958454".

5 IPR management

5.1 Procedures to guide beneficiaries in the proper use of IPR

To protect and ensure due and early consideration of IPR that will be created within intelWATT and made available in documents, such as peer-reviewed publications, licenses or patents, the following rules and procedures will be implemented for dissemination and exploitation.

5.1.1 Submission of Reports and Deliverables

Deliverable reports are the main outcome of the project and related to a specific task within a specific WP, and they can be either confidential (restricted to Consortium and the EC) or publishable (suitable to be used also as dissemination material).

5.1.2 Publication and presentation of produced results (foreground)

Section 8 (Results) of the intelWATT Consortium Agreement (CA), chapter 8.4.2 - *Dissemination of own (including jointly owned) Results-*, describes the rules all participants have to follow to protect any IPR associated with the dissemination of results from the project and how to handle and overcome any conflicting situation related to objections are given, but also how to protect foreground.

5.1.3 Sharing confidential information with the International Advisory Board (IAB)

Based on the provisions already set up in the CA (section 6.6), a specific Non-Disclosure Agreement (NDA) will be developed and agreed by all partners to ensure protection of any confidential data and information when shared with the members of the International Advisory Board (IAB). The IAB members shall be allowed to participate in Strategic Management Board meetings upon invitation but have not any voting rights.

5.2 Ownership

New results (foreground) generated within the project are owned by the participant producing it. When foreground is generated jointly (i.e. where the separate parts of some result cannot be attributed to different participants), it will be jointly owned, unless the participants concerned agree on a different solution (see article 26 of GA and section 9 of the CA).

5.2.1 Joint ownership

Joint ownership is governed by Grant Agreement Article 26.2 with the following additions set by the Consortium Agreement specified in Article 8.2.

5.2.2 Transfer ownership

Transfers of ownership of foreground are allowed following the procedures of the Grant Agreement Article 30 - *Transfer and licensing of results*-. More detailed obligations are specified in the Consortium Agreement in Article 8.3 Transfer of Results.

5.3 Intellectual property rights (IPR)

The management of IPR is strictly ruled by the Consortium Agreement (CA) which includes all provisions related to the management of IPR including ownership, protection and publication of knowledge, access rights to knowledge and pre-existing know-how as well as questions of confidentiality, liability and dispute settlement.

In the CA the Partners have identified the background knowledge included and excluded.

5.4 Exploitation of foreground

Participants shall use the foreground, which they own, or ensure that it is used (Article 28 of GA). "Use" means the direct or indirect utilization of foreground in further research activities other than those covered by the project, or for developing, creating and marketing a product or process, or for creating and providing a service. Participants receiving EU funding are supposed to take appropriate measures that ensure exploitation of their results. This includes that the results they own are used:

- in future research activities, or;
- in developing, creating and marketing a product or process, or service, or;
- in standardization activities.

The exploitation of the foreground of a participant may be also indirectly done by another legal entity, e.g. through licensing or assigning results to third parties, in accordance with the requirements established in the GA.

5.5 Dissemination of foreground (see Section A: Dissemination Plan)

Each participant shall ensure that the foreground it owns is disseminated, which means its public disclosure by any appropriate means, except those resulting from protecting or exploiting the foreground. Scientific publications, general information on web sites, participation in conferences or trade fairs are some examples. However, any dissemination should be delayed until a decision about its possible protection has been made (through IPR or trade secrets). Also, other participants may object to the dissemination if their legitimate interests in their foreground or background could experience disproportionately great harm. No

dissemination at all may take place if it is intended to protect the foreground as a trade secret (i.e. confidential know-how).

According to the GA, participants have the obligation to disseminate their foreground as soon as possible, unless it goes against their legitimate interests and subject to any necessary restriction due to their commitments concerning the protection of foreground and confidentiality (See Article 36 of the GA). Confidentiality obligations (Article 36 of the GA) have been also detailed in Section 10 of the Consortium Agreement. Protecting foreground before any public disclosure is indeed crucial, since such disclosure can destroy the participants' chances of being granted IPRs, in particular patents and models that require novelty. For this reason, procedures have been established and described in the CA to protect foreground and its dissemination during the project.

5.5.1 Maintaining confidentiality

Prior to any dissemination activity other partners will be consulted to allow them to exercise their right to object in the case where such dissemination could cause significant harm to their background or foreground, as foreseen in GA (Article 29) and CA (section 8.4.1).

5.5.2 Reporting

Dissemination activities, such as participation in workshops or publication of information on the website, have a positive effect particularly on market-oriented exploitation of foreground, as they enable “participants to get feedback on the economic potential and recommended market-oriented exploitation pathways” from relevant stakeholders or end-users.

Any dissemination activity shall be immediately reported in the PEDR and following releases with sufficient details/references to enable the EC to trace the activity. As part of the final project report, the Project Coordinator will be required to submit a full list of publications relating to foreground of the project. Further details on the procedure for publications used within intelWATT are available in the CA section 8.4.2.

5.5.3 Open access of publications

Each participant must in general aim to ensure open access, which means free of charge online access for any user to all peer-reviewed scientific publications relating to results produced within the project. This does not mean that participants have the obligation to publish their results, nor does this affect their plans for exploitation.

It is recommended that participants decide first on the protection of their results and after that consider if and when dissemination should be done through scientific publication. The rules that govern their dissemination, such as publications and presentations, or standardizations, are established in the CA sections 8.4 and 8.5.

5.5.4 Post-project obligations

All IP rights and measures for their protection will remain in force after the end of the project, related to confidentiality or access and transfer of data and information, including the following IPR management steps:

- Participants keep all data, documents or other materials (in any form) identified as confidential as strictly confidential during and four years after the project end date (see CA Section 10.2).
- The obligation to protect foreground remains and include the statement of financial support in any application for protection of foreground.
- Dissemination obligations remain in force, including the need to mention the EU funding and to include a disclaimer.

- Participants are entitled to request access rights up to twelve months (CA section 9.4.3) after the end of the project, why exclusive licenses require during this period a prior written waiver of rights from the other consortium partners concerned.
- Obligations regarding the transfer of foreground also remain in force.

