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**PANTERA**  
***Pan European Technology Energy Research  
Approach***

Work Package 1  
**[Select an element pls.]**

Deliverable 1.6  
**[1<sup>st</sup> Project Progress Report]**

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**All Authors/Partners**

Christina Papadimitriou/FOSS  
 Venizelos Efthymiou/FOSS  
 Mattia Cabiatti/RSE  
 Anna Mutule/IPE  
 Andrei Morch/SINTEF  
 Mohamed Shalaby/Derlab  
 Melissa Setakhr/Derlab  
 Tasos Tsitsanis/Suite5  
 Shafi Khadem/IERC  
 Paula Carol/UCD

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## Abbreviations

CSA	<i>Coordination and Support Action</i>
Del	<i>Deliverable</i>
DER	<i>Distributed Energy Resource</i>
DG ENER	<i>Directorate General Energy</i>
DOA	<i>Description of Action</i>
EERA	<i>European Energy Research Alliance</i>
EIRIE	<i>European Interconnection for Research Innovation &amp; Entrepreneurship</i>
ENTSO-E	<i>European Network of Transmission System Operators for Electricity</i>
ERA SES	<i>European Research Area Smart Energy Systems</i>
ETIP SNET	<i>European Technology &amp; Innovation Platform for Smart Networks for the Energy Transition</i>
EU	<i>European Union</i>
EUSEW	<i>European Union Sustainable Energy Week</i>
GA	<i>Grant Agreement</i>
IEA	<i>International Energy Agency</i>
IEC	<i>International Electrotechnical Commission</i>
IES	<i>Integrated Energy System</i>
ISO	<i>Independent System Operator</i>
ISGAN	<i>International Smart Grid Action Network</i>
JRC	<i>Joint Research Centre</i>
KPI	<i>Key Performance Indicators</i>
MS	<i>Milestones</i>
NECP	<i>National energy and climate plans</i>
PC	<i>Project Coordinator</i>
PO	<i>Project Officer</i>
R&D	<i>Research &amp; Development</i>
R&I	<i>Research &amp; Innovation</i>
RICAP	<i>R&amp;I status and Continuous gAP analysis</i>
S3P or RIS3	<i>Smart Specialization Platform</i>
SG	<i>Smart Grids</i>
SWOT	<i>Strengths, weaknesses, opportunities and threads</i>
TCP	<i>Technology Collaboration Programmes</i>

<i>T&amp;D</i>	<i>Transmission &amp; Distribution</i>
<i>WG</i>	<i>Working Group</i>
<i>WP</i>	<i>Work Package</i>
<i>WT</i>	<i>Working Team</i>

## Executive Summary

The purpose of Deliverable D1.6 is to provide a detailed description of the status of PANTERA project at M18 the middle of the second project year, the work completed as well as the activities planned for the next period.

During the second project year, substantial technical, scientific and dissemination activities have been initiated with very good progress achieved, completing all deliverables and milestones foreseen for this period. This notable progress has been achieved thanks to the active involvement of all PANTERA partners in the project & foreseen activities, their close collaboration, and the efficiency of the established by the consortium monitoring and management procedures. The work plan has been structured to allow a logical progression of the needed activities, to closely follow the objectives, and aligned with the methodology proposed in the Description of Action. For improved coordination and coherence, the activities of the PANTERA project have been categorized under the main three functions of the project meaning: the platform, the regional desks and the working teams while keeping the structure of WPs and the foreseen efforts as described in the Grant Agreement.

As a consequence, all work packages and their activities are contributing to these three functions as follows, in addition to the coordination responsibilities that WP1 has undertaken, led by the team of the Coordinator:

- PANTERA platform: WP2, WP3, WP7, WP8, WP5
- PANTERA Regional Desks: WP2, WP4, WP6, WP5
- PANTERA Working Teams: WP2, WP3

Through a careful evaluation of the targeted objectives of the PANTERA project aiming to achieve a working environment through which the effort put in raising the activities of the low activity countries to a direction of being more sustainable, a conscious decision has been taken by the consortium, to develop the PANTERA process by introducing the following main functions:

- Design, develop and operate a multifunctional, interactive platform
- Develop and operate a representative number of Regional Desks
- Organize and run an appropriate number of Working Teams covering important areas that can be a constant source of information and knowledge to the multifunctional platform

Hence, irrespective of the targeted objectives of each and every work package, the PANTERA project has amalgamated into the above three main functions constituting the PANTERA process.

The above identified important functional activities will be constantly supported by the work of all work packages during the course of the project and complemented with external support where needed to substantiate their long-term sustainable future. To this effect working relations have been pursued and grown to a satisfactory level with the following:

- JRC and DG Ener have agreed to a formula of supporting the operation of the interactive multifunctional platform by hosting it on their servers and provide a service contract through the services of DG Ener to support and operate the platform following the completion of the PANTERA project.
- The S3P smart specialisation platform operated by the Commission has welcomed working relations with the PANTERA consortium to build and operate 6+1 Regional Desks that cover adequately all countries that are classified as low activity countries.
- ETIP SNET through the activities of Working Group 5 has joined forces with the PANTERA



consortium to organise and operate an appropriate number of Working Teams capable of addressing important themes that will constantly feed information and knowledge to the interactive multifunctional platform.

The document firstly describes the overall status of the PANTERA project, including the progress achieved through the deliverables and milestones foreseen within the first 18 months of the project, and the main results achieved under technical, scientific and dissemination & communication perspectives. The progress achieved towards the projects' objectives are also discussed in detail with reference to individual Work Packages (WPs), which have been active during this first review period.

In M18 of the project, all PANTERA WPs are active. In detail, 14 deliverables have been submitted out of the 39 deliverables in total that are foreseen. As for the milestones' status, 4 have been achieved in line with what was expected in this reporting period covered by this report. As for dissemination and communication activities, the PANTERA project was present outreaching several international scientific events, engaging to a good level on networking and dissemination core activities.

Through extensive surveys and interactive sessions with the related stakeholders' valuable input was generated for the consortium to define the functionalities that need to be provided by the envisioned PANTERA platform. This led to the initial functional specifications of the PANTERA platform and eventually through extensive internal analysis, to the initial design of the platform against competing platforms in the domain. This enabled the consortium to fine-tune and further enhance the envisaged functionalities, so as to ensure the development of a multi-functional platform that offers a wealth of services to the EU Smart Energy Systems R&I stakeholders and can potentially be established as a central reference point and one-stop-shop for knowledge and information at EU level. Following this process, the consortium completed the functional specifications of the platform that paved the way towards the formal adaption of the exploitation path through the active contribution of DG ENER and the Joint Research Centre of the European Commission. Along this route the consortium initiated a series of contacts with the European Commission (DG ENER and JRC) and the owners of the platforms that would need to integrate with the PANTERA platform (ETIP-SNET, BRIDGE, EXPERA in the initial specifications) for promoting the concept of the PANTERA platform and getting them on board. This ensured the hosting of the PANTERA platform on the JRC servers not only during the project lifetime but mainly during the post-project period (JRC/ DG ENER) and agreeing on the integration principles with other platforms under the PANTERA umbrella. This has allowed the consortium to complete the tender specifications calling for bidders to develop, commission and operate the required platform that will play an important role in fulfilling the targeted objectives of the PANTERA project. Tenders were received and evaluated leading to the contract award within this reporting period.

Moreover, this document also describes the activities planned for the next project year, including the deliverables and milestones foreseen for this period.

Finally, a critical assessment of the project progress is presented, by describing the risks already identified during the first 18 months of the project and those foreseen for the next period, with corresponding status and corrective actions taken and/or proposed. The progress of each WP and the effective activity of the related WP team with reference to this project period is also assessed against a series of internal Key Performance Indicators, by considering both technical and organizational aspects.

# 1 Introduction

The main objective of PANTERA project is to deliver a multi-dimensional platform of pan European status and influence capable of leveraging coherence and trust as a pull towards enhanced R&I in energy systems centred around an integrated grid active and responsive. This proposed platform, as shown in Fig.1, can work for Local Energy Systems in an integrated PAN European Smart Grid with specific emphasis on the low spending countries. This platform will bring together the attractiveness of successful partnerships being national, regional or European building through them the will for enhanced adaption to areas and partnerships that can broaden active participation for mutual benefit. From the beginning the element of sustainable presence of the collaborative platform will strongly influence the design and approach to be adapted.

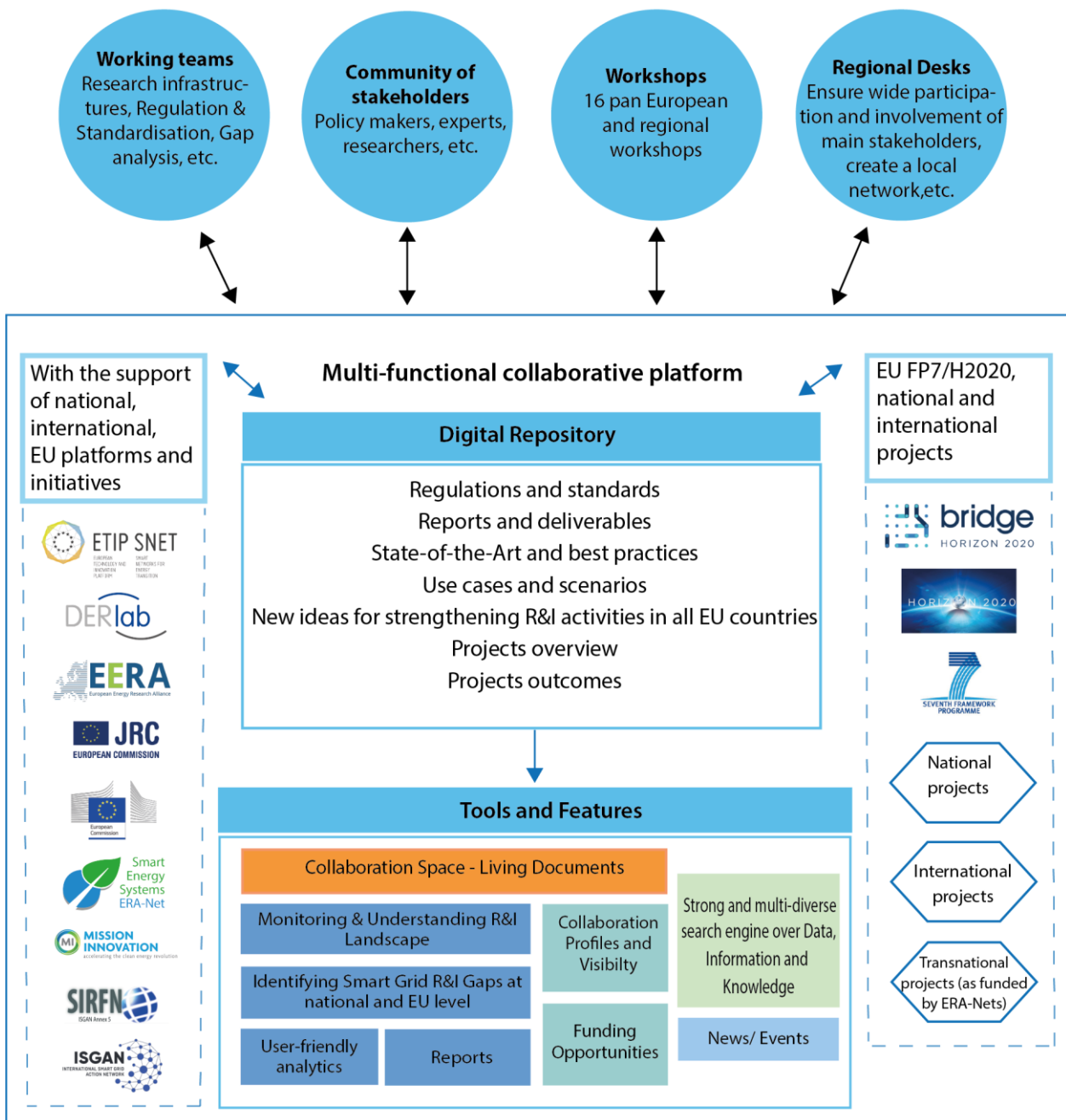


Figure 1 PANTERA proposed collaborative platform

The project comprises eight work packages (WP), each of them with a specific measurable objective, as indicated below:

1. Ensure an efficient and smooth coordination of the scientific, organizational and technical activities of the project, as well as its overall administration, covering overall project coordination, organizational, scientific and technical management, administrative, financial and contractual management, quality control procedures, data control and managing risk **(WP1)**
2. Identify and establish communication links with R&I stakeholders active in the fields of smart grids, storage and local energy systems including policy makers, standardisation bodies and experts in both research and academia representing the EU-28 energy system **(WP2)**.
3. Develop an innovative top-down and bottom-up approach for effectively identifying the key challenges in accelerating R&I activities in low spending countries **(WP3)**.
4. Formalize a governance structure capable of delivering targeted objectives that will bring under the same umbrella all active entities / stakeholders in the field of smart grids / storage and local energy systems to leverage synergies and maximize benefits **(WP6)**.
5. Develop enhanced knowledge-sharing mechanisms that help identify, discuss and structure the key R&I challenges **(WP3,4,8)**.
6. Build a pan-European multi-functional collaborative platform through which dedicated tools will facilitate the collection of real data / results from on-going projects, build a useful shareable data repository (a virtual stakeholder's hub, termed as ViSor-Hub will be developed), capable of supporting case studies of exploitable results, scenario building and local energy system analysis accessible by all interested stakeholders **(WP4,6,7,8)**.
7. Organise dedicated workshops which facilitate exchanges of experience and capacities between members of R&I community in collaboration with already on-going activities aiming to wider participation, strengthen objectives and extent impact of achieved results **(WP5)**.
8. Develop working groups consisting of stakeholders depending on evolving R&I needs and topics identified in the project for generating results, reports, white papers and offer support where needed **(WP6)**.

The mid progress report in M18 of the project, is a cornerstone document for monitoring the project activities and evaluating the progress achieved towards the technical, scientific and dissemination objectives foreseen for this time period in accordance with the Description of Action (DoA).

At the end of the month 18, all PANTERA WPs are active. A very good progress has been achieved thanks to the active involvement of all PANTERA partners in the project and foreseen activities, their close collaboration, and the efficient monitoring and management procedures established by the consortium. To this effect, the work plan has been structured to allow a logical progression of the needed activities, and has closely followed the objectives and methodology proposed in the DoA of the project. For improved coordination and coherence of the project the activities have been categorized under the main three outcomes of the project meaning: the platform, the regional desks and the working teams.

Until the month 18, 14 deliverables have been submitted compared to the total of 39 deliverables foreseen. As for the milestones' status, 4 have been achieved that is totally aligned with what was expected for this reporting period. As for dissemination and communication activities, the

PANTERA project was present outreaching several international scientific events, engaging to a good level on networking activities and dissemination of core activities. The project website and different social media channels have also been active and engaging, sharing all the project's latest news and achievements with the stakeholders and general public. It is expected that when the interactive platform will be launched, all these aforementioned activities will be organized having the platform in the center. Interacting and getting feedback from stakeholders is a key process of the PANTERA project.

The coordination and management activities, as well as most of technical activities, proceeded on time without any significant issues. As for dissemination and communication activities, PANTERA project has established a very satisfactory presence at national and EU level as will be presented in this document.

Plans for the next time period of the project will focus in continuing current activities within the WPs and keep them unfolding. In detail, focus will be given to the deliverables that will be submitted and the identified milestones to be achieved.

This Mid Progress Report is designed to be used in conjunction with:

- The Grant Agreement (GA) including its Annexes, and in particular the Annex 1: Description of Action;
- All the deliverables and related Amendments released during the period [M1-M18];
- All tangible results of PANTERA stemming from the activities such as the ones related to the Platform, Regional Desks and Working Teams
- The PANTERA website (<http://PANTERA-project.eu/>), and PANTERA social media platforms (LinkedIn, Twitter, and ResearchGate) with reference to all aspects related to dissemination and communication activities

## 1.1 Purpose and scope of this Document

This deliverable D1.6, falls within the scope of WP1 dedicated to the Coordination and Project Management, and describes the progress achieved by the PANTERA project during the first 18 months of operation. The main objectives of this deliverable are described below:

- Describing the overall status of the project at the end of M18, including the status of deliverables and milestones;
- Describing in detail the progress achieved under individual WPs;
- Describing the activities planned for the months ahead, including the deliverables and milestones foreseen till the end of the project;
- Presenting a critical assessment of the project progress with reference to the second year, through the identification of risks for each WP, with related status and mitigation measures;
- Assessing the progress of each WP and the effective activity of the related WP team against a series of internal Key Performance Indicators (KPIs), by considering both technical and organizational aspects.

## 1.2 Structure of the Document

In the following, the progress of PANTERA project and results achieved until month 18<sup>th</sup> are described in Section 2. The activities planned for the next time horizon i.e. month 18-24 are discussed in Section 3. Finally, the critical assessment of the project progress with reference to the

rest of the second project year is presented in Section 4. Conclusions and outlook can be found in Section 5.

## 2 Progress of PANTERA project and results achieved until M18

### 2.1 Overall status of the PANTERA project.

In month 18 all PANTERA WPs are active. The detailed PANTERA GANTT Chart with related details of the project is shown in Figure 2.

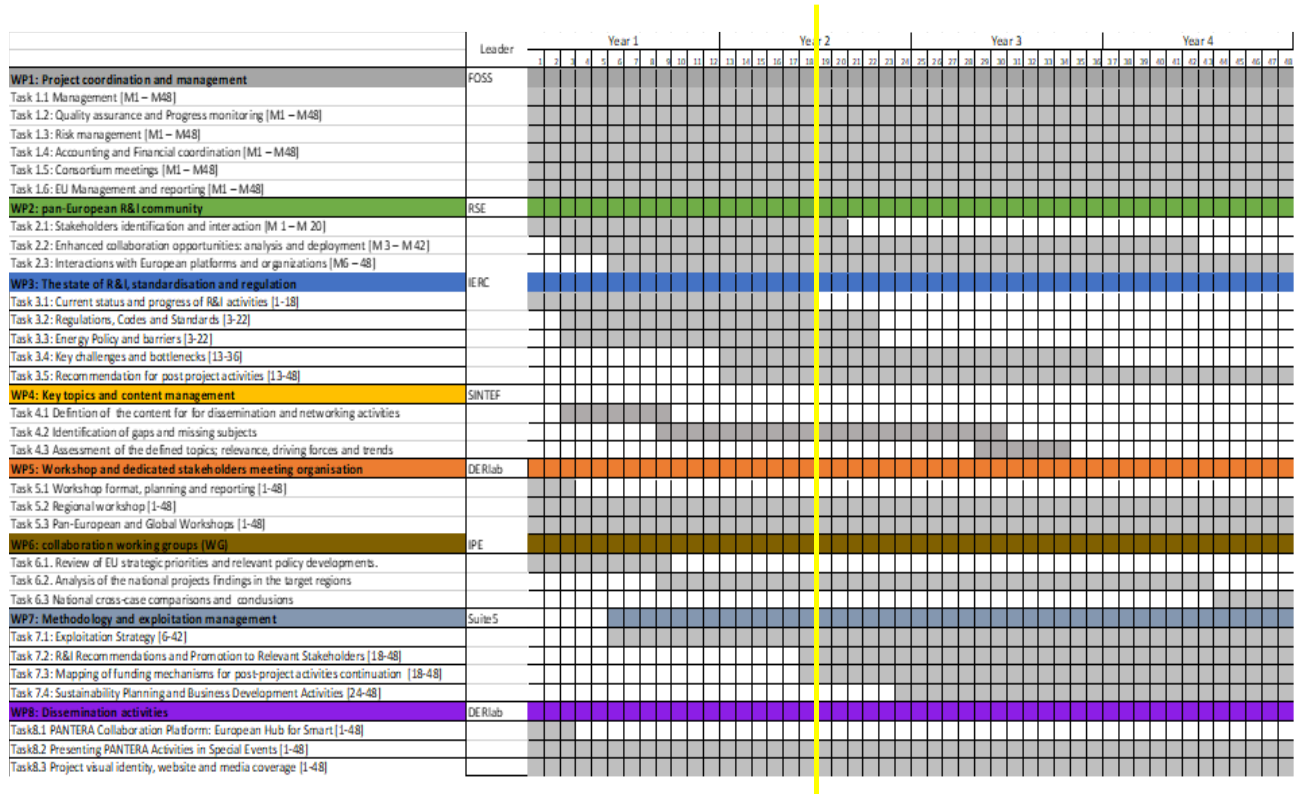


Figure 2 The PANTERA GANTT Chart

With specific reference to the time horizon of M18, 14 deliverables have been submitted (Table 1) and 4 milestones have been achieved (Table 2).

Table 1: List of deliverables released until M18

no	Deliverable number	Deliverable title	WP/Lead Beneficiary	Type/Dissemination Level	Due date (in months)
1	D1.1	Project guidelines	WP1/FOSS	Report/Public	M02
2	D1.2	Risk management report	WP1/FOSS	Report/Public	M03
3	D1.3	ICT tools	WP1/FOSS	Other/Confidential	M03
4	D1.4	Quality Assurance Plan	WP1/FOSS	Report/Public	M03
5	D1.5	Data	WP1/FOSS	Open Research Data	M02

		Management Plan		Pilot/Confidential	
6	D2.1	Report on stakeholder's identification and interaction	WP2/RSE	Report/Public	M09
7	D3.1	Report on current status and progress in R&I activities: Technology	WP3/IERC	PU	M18
8	D4.1	Content and topics for dissemination and networking activities	WP4/SINTEF	PU	M09
9	D4.2	1st report on Identification of gaps and missing subjects	WP4/SINTEF	PU	M12 (M14)
10	D5.1	Workshop Format	WP5/DERlab	Report/Public	M03
11	D6.1	Review of EU strategic priorities and relevant policy developments	WP6/IPE	PU	M10
12	D6.2	Stakeholder consultation plans (one for each region/country)	WP6/IPE	PU	M6
13	D8.1	Dissemination, communication and cooperation plan	WP8/DERlab	Report/Public	M03
14	D8.2	Promotion and marketing material	WP8/DERlab	Websites, patents, filling, etc. /Public	M04

Table 2: List of milestones achieved until M18.

no	Milestone number	Milestone name	Related work package	Due date (in month)	Means of verification
1	MS5	Outcome of first set of workshops in the first year and lessons learned for corrective action	WP5	M12	Validation of outcome by participants at the workshops.
2	MS6	Detailed analysis of linked stakeholders and corresponding contributions for corrective action by the consortium	WP6	M12	As M6 is built utilizing a complex approach which includes results of workshops, interviews, survey, organizing WTs and Desks, it is validated by various means, e.g. survey and interview analysis, partner mutual approval of Desk concept, agreement of WTs activity plan.
3	MS7	Agree on the exploitation strategy for firm actions by the consortium for building work forward	WP7	M18	The successful achievement of this milestone, was verified by the in detail analysis of the needs of the end-users of the PANTERA platform (R&I stakeholders around the EU in the domain of Smart Grids and Energy Systems) through a series of surveys conducted under WP2 and WP6 of the project, as well as, associated interviews and Q&A sessions organized in the frame of the 3 regional workshops organized by the project in the first 18 months of implementation (July 2019 in Sofia, Bulgaria – December 2019 in Dublin, Ireland – February 2020 in Athens, Greece).
4	MS8	Finalize the initial design of the collaboration multi-functional platform	WP8	M8 <b>(M16)</b>	Key stakeholders will be consulted to validate the identified design through a



		and take firm action for establishing it			consultative process.
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**Regarding the noted delays** of Del.4.2 submission and MS8 achievement, the following could be reported:

The main reason for noted **delays of D4.2** were errors in due dates for several deliverables in WP4 that were not aligned with the described activities and their duration. This was the reason for issuing the amendment request, submitted by the Coordinator 2020-04-02 (see below), through which the remaining deliverables D4.3 and D4.4 were accordingly suggested for re-scheduling from M30 to M41 and from M22 to M45. An additional reason for the delay was the important decision of the Consortium to include results and findings from the interaction with stakeholders during the workshop in Dublin (IE). Considering the importance of D4.2 for covering the concurrent activities of the project, the Consortium completed and submitted the document with the noted short delay.

Regarding the **MS8 delay**, it should be underlined that the PANTERA consortium has done all that was required but based on the fact that consultations with the important stakeholders for identifying and agreeing the functionalities to be included in the PANTERA platform took much longer than originally planned. The consultation process however, has gone through all stages that were identified and agreed with the Project Officer resulting into a complete document with detailed specifications for designing, developing and commissioning the envisioned PANTERA platform capable of delivering the targeted needs of the research & innovation community.

**Amendments requested to the Grant Agreement:** Two separate amendments were requested as follows:

- **Amendment 1 (2019-03-15):**

PANTERA consortium has spotted specific actions of WPs that with a small revision would greatly benefit the workflow and the outcomes of the project influencing the final deliverables in the most positive way.

**WP2:** D2.1 Report on stakeholder’s identification and interaction to be delivered in M9 instead of M20. Identifying the stakeholders as early as possible, the workflow of the PANTERA project will run smoother, while WP6 will specifically be benefited for elaborating better the objectives of the WP and use the information for developing the WGs.

**WP3:**D3.3. Report on community energy policy and barriers to be delivered in M22 instead of M24 to be consistent with T3.3, as it is strongly linked with T3.3 whose duration lies between M3 – M22

**WP6:** D6.1 Report on identification/ selection of stakeholders within the national/ regional desks [M3] to change to "Review of EU strategic priorities and relevant policy developments" and delivered in M9. With this modification D6.1 matches the T6.1 content which is of crucial importance to have the review prior the development of the WGs. By having D6.1 and D2.1 in month 9, the further deployment of WP6 towards its objectives is strongly secured.

- **Amendment 2 (2020-04-02):**

The main issue that triggered amendment 2 request was that some deliverables and milestones were originally scheduled based on a project duration of 3 years and have not been re-aligned with the duration of the project when the consortium has correctly taken a decision at project submission, to extent the duration of the project to 4 years. So, these amendments within the indicated packages allow the consortium to deliver the promised outcomes and reach the targeted milestones within the revised planned timeline for the best interest of the project.

**WP4**

The details of the required amendment in WP4 are as follows:

To move the deliverable “D4.3 Final report on Identification of gaps and missing subjects” with current due date M30 to M41. (to be aligned with the end of T4.2 and the work targeted therein)

To move the deliverable “D4.4 Assessment of the defined topics; relevance, driving forces and trends” with current due date M22 to M45. (to be aligned with the end of T4.3 and the work targeted therein)

To move milestone MS4 “Identify gaps and missing links: Detailed analysis for firm action by the consortium” to M33 instead of M24 to be aligned with the work contained in the respective tasks.

Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48						
WP4																									M																													
T4.1									4.1																																													
T4.2												4.2																																										
T4.3																																																						
	2019-01-01	2019-02-01	2019-03-01	2019-04-01	2019-05-01	2019-06-01	2019-07-01	2019-08-01	2019-09-01	2019-10-01	2019-11-01	2019-12-01	2020-01-01	2020-02-01	2020-03-01	2020-04-01	2020-05-01	2020-06-01	2020-07-01	2020-08-01	2020-09-01	2020-10-01	2020-11-01	2020-12-01	2021-01-01	2021-02-01	2021-03-01	2021-04-01	2021-05-01	2021-06-01	2021-07-01	2021-08-01	2021-09-01	2021-10-01	2021-11-01	2021-12-01	2022-01-01	2022-02-01	2022-03-01	2022-04-01	2022-05-01	2022-06-01	2022-07-01	2022-08-01	2022-09-01	2022-10-01	2022-11-01	2022-12-01						

Figure 3 The WP4 amendment

**WP6**

The details of the required amendment in WP6 are as follows:

Expand D6.3 “Consolidated summary report on desk activities in the target regions” to two versions: The first one to be a living document and to be delivered in M22 and the final in M43 to be aligned with the end of T6.2.

To move D6.4 “Catalogue of potential solutions to overcome acceptance barriers for each country” from M26 to M48 to be aligned with the end of T6.3.

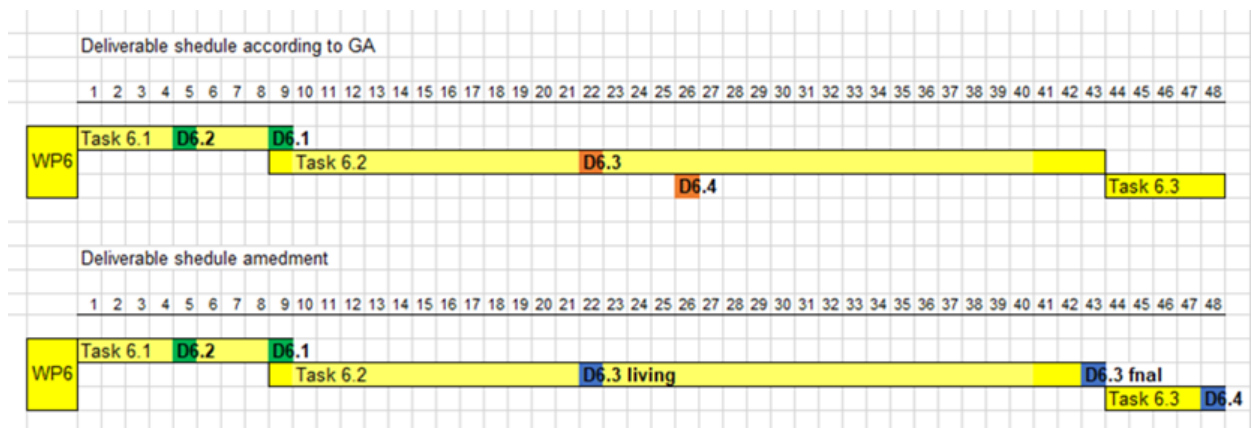


Figure 4 The WP6 amendment

Both requested amendments were approved by the Project Officer as submitted and the Grant Agreement has been modified appropriately.

## 2.2 Progress under the coordination and project management perspective.

### 2.2.1 Progress achieved under WP1

The coordination and management of the PANTERA project is covered by WP1, which aims to ensure a successful completion of the project goals on time, within the limits defined by the budgetary framework, and adequate quality in line with the European standards.

WP1, led by FOSS and supported by all partners where relevant, consists of six tasks, which are:

- **Task 1.1: Management**

This task focuses on the

- Work plan overview and work programme overview for each single WP
- Coordination of each WP Leader and supervision of each WP activity
- Schedule and deadline supervision
- Contract implementation and adherence to Consortium Agreements
- Control of the project outputs and the impacts
- Respect of due dates timely

More details on task 1.1 and the different conducted activities can be found in the D1.1<sup>1</sup>

As the project progressed following the initial kick off, the Team of the Coordinator has diagnosed that the management of the project required stronger and wider interlinking and coordination of the actions of the WPs and the Partners to address the needs of the CSA project in the direction of generating:

- A solid impact on the support of the low activity countries,
- A continuous and rolling process building on early achievements growing into mature sustainable deliverables capable of operating beyond the years of the PANTERA project,
- To identify and bring to the forefront, the interlinking activities forming a solid process capable of growing in support of the R&I community in Europe with particular emphasis on the low activity countries.

So, after detailed evaluation of the processes that can be further developed through coordinated efforts of the consortia of the project in relation to the needs of the R&I community of Europe with specific emphasis on the low activity countries, the coordination management of the project responsibly introduced the PANTERA process composed with the following trajectories:

- PANTERA platform
- Regional desks
- PANTERA working teams

to cover respectively the following important activities:

- Coordinate the design, development and operation of the PANTERA platform with continuous collaboration with important external actors / stakeholders including JRC, ETIP SNET, BRIDGE and ERA SES. This activity calls for the support and contribution of all partners and WPs, requiring constant and continuous coordination of all actors involved.
- Coordinate the setting up and operation of the PANTERA regional desks to foster a hybrid approach for supporting the low activity countries. This coordination action involves all partners with specific responsibilities for selected regions and building up of coordinated work

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<sup>1</sup> <https://pantera-platform.eu/wp-content/uploads/2019/07/D1.1-Project-guidelines.pdf>

with the Smart Specialization Platform S3P of the Commission who have developed strong regional activities throughout Europe in support of energy transition in the field of smart grids.

- Introduce the functioning of working teams in collaboration with WG5 of ETIP SNET including their external experts and the involvement of all the partners under our guidance and control. Initially we have identified the setting up of 5 WT that need to generate appropriate content for the functioning of the PANTERA platform and the envisaged deliverables to the R&I community of Europe.

The above important functioning needs of the PANTERA CSA project are further detailed under Section 2.3 and the reported activities of the various WPs that follow.

- **Task 1.2: Quality assurance and Progress monitoring**

This task focuses on the

- Quality assurance plan established (kick-off meeting) and the quality manager that was selected by the partners
- Internal quality of the project: reporting, documentation control, etc
- Project quality evaluation and evaluation of results
- Progress monitoring through the performance indicators set (KPIs)

More details on task 1.2 and the different activities can be found in the D1.4<sup>2</sup>.

- **Task 1.3: Risk management**

This task addresses all issues related to anticipated risks. Risk identification and management is a continuous process and is performed throughout the entire project.

As a result, risk identification and management began by establishing key project targets and by making an initial identification of the key risk factors and their respective risk events within D1.2. Moreover, this task conducted an assessment and identification of the relevant management methods and tools that will be utilized to mitigate risk.

The key objectives of this task are:

- Review the essential project targets and establish the context of risk management
- Early identification of the key risk factors and risk events
- Establishing methods, tools and project specific work program ISO/IEC 31010:2009, Risk management - Risk assessment techniques and ISO 31000:2009, Risk management - Principles and guidelines to be followed during risk identification and management. Based on the above the coordinator addressed the following:
  - Risk management analysis that was completed within the first 4 weeks of the project together with mitigating actions that needed to be enforced depending on the results of the risk analysis.
  - Drafted a Risk Managing Activity plan addressing all identified risks and corresponding mitigating factors.

More details on task 1.3 can be found in the D1.2<sup>3</sup>.

- **Task 1.4: Accounting and Financial coordination**

This task focuses on the

- Budget review and cash flow management

<sup>2</sup> <https://pantera-platform.eu/wp-content/uploads/2019/07/D1.4-Quality-Assurance-Plan.pdf>

<sup>3</sup> <https://pantera-platform.eu/wp-content/uploads/2019/07/D1.2-Risk-management-report.pdf>

- o Financial management and payments

This task also focuses on the coordination and monitoring activities for the preparation of the periodic technical and financial reports delivered at the end of the first reporting period, as well as on the preparation of the first review meeting (RV1) with the EC, which will be organized in M21.

- **Task 1.5: Consortium meetings**

Coordination of all project meetings and Coordination of meeting minutes/ decision registers is under this task. The meeting plan is formed as follows:

Partners of the project pursue both physical and virtual meetings regularly to have the appropriate interaction and the completeness of activities within the project:

- **Physical meetings:**

In the following, the physical meetings with the main outcomes are reported. Analytical minutes and reporting were uploaded in the ONLYOFFICE shared repository. General Assembly meetings followed the regional physical workshops that were organized.

- o Kick off meeting in Nicosia, Cyprus (30.01.2019)
- o GenA meeting in Sofia, Bulgaria (03.07.2019)
- o GenA meeting in Dublin, Ireland (03.12.2019)
- o GenA meeting in Athens, Greece (14.02.2020)

There were two more physical meetings between PANTERA partners with other parties to discuss issues related to the platform.

- o PANTERA-JRC-ETIPSNET-DG ENER-ERANET meeting (17.09.2019)
- o PANTERA-JRC-ETIPSNET-DG ENER meeting (21.01.20)

- **Virtual meetings:**

25 different teleconferences as Consortium Meetings have been launched so far for coordinating the work in progress among the partners.

- o We have been engaged to a bi-weekly meeting (GENA) since the kick off of the project until 04.03.2020
- o Since 04.03.20 the intensity of the meetings was increased by splitting content into three different regular meetings under the three trajectories of the project: Platform, Regional desks and Working Teams.

Under this task, the advisory board members below were invited and engaged to actively contribute to the PANTERA process objectives. A dedicated collaboration space and a newsletter is circulated for facilitating the work and the interaction of the advisory board members with the project consortium. Also, dedicated physical activities have been designed for their valuable feedback e.g. working dinner within EUSEW that has been cancelled due to the Covid-19 pandemia. These activities will be re designed in the next months according to the holding context and the project needs.

*Table 3 Advisory board members*

a/a	Name	Surname	organisation	Emails
1	Mario	Dionisio	BRIDGE and DG Energy	<a href="mailto:Mario.DIONISIO@ec.europa.eu">Mario.DIONISIO@ec.europa.eu</a>
2	Michael	LAUBENHEIMER	DG Research	<a href="mailto:Michael.LAUBENHEIMER@ec.europa.eu">Michael.LAUBENHEIMER@ec.europa.eu</a>
3	Michael	Huebner	ERA-NET SES	<a href="mailto:Michael.HUEBNER@bmvit.gv.at">Michael.HUEBNER@bmvit.gv.at</a>
4	Stathis	Peteves	JRC	<a href="mailto:Estathios.PETEVEVES@ec.europa.eu">Estathios.PETEVEVES@ec.europa.eu</a>
5	Luciano	Martini	EERA JP for SG	<a href="mailto:Luciano.Martini@rse-web.it">Luciano.Martini@rse-web.it</a>

6	Stefano	Passerini	EERA JP Storage	<a href="mailto:stefano.passerini@kit.edu">stefano.passerini@kit.edu</a>
7	Norela	Constantinescu	ENTSO-E	<a href="mailto:Norela.Constantinescu@entsoe.eu">Norela.Constantinescu@entsoe.eu</a>
8	Henry	Donchev	Ministry of Energy of Bulgaria, Expert in International Cooperation Directorate	<a href="mailto:a.donchev@me.government.bg">a.donchev@me.government.bg</a>
9	Nikos	Hadjinikolaou	Cyprus	<a href="mailto:nhadjinikolaou@mcit.gov.cy">nhadjinikolaou@mcit.gov.cy</a>
10	Johan	Driesen	European University Association	<a href="mailto:Johan.Driesen@esat.kuleuven.be">Johan.Driesen@esat.kuleuven.be</a>
11	Maher	Chebbo	Digital Europe or ESMIG	<a href="mailto:maher.chebbo@ge.com">maher.chebbo@ge.com</a>
12	Jochen	Kreusel	T&D Europe	<a href="mailto:jochen.kreusel@de.abb.com">jochen.kreusel@de.abb.com</a>
13	Nikos	Hatziargyriou	ETIP-SNET/DSO & EDSO4SG	<a href="mailto:nh@power.ece.ntua.gr">nh@power.ece.ntua.gr</a>
14	Kostas	Komninos	DAFNI/Fedarene(Appropriate representation of customers of electricity )	<a href="mailto:kk@aegean-energy.gr">kk@aegean-energy.gr</a>
15	Lisa	Ryan	ESIPP lecturer in energy economics,School of Economics,Energy Institute,UCD,	<a href="mailto:lisa.ryan@ucd.ie">lisa.ryan@ucd.ie</a>

### • Task 1.6: EU Management and reporting

This task focuses on the:

- Regular update (by email to project officer)
- Discussion of criticalities and problems with EU
- Grant reporting (progress, interim and final reports)
- Amendments filing
- Deliverable reporting to EU

## 2.3 Progress towards the overall objectives.

In the following points, the overall status of the scientific activities carried out by the PANTERA Consortium and the progress achieved under individual active technical WPs until M18 are presented.

### 2.3.1 The PANTERA Process

Through a careful evaluation of the targeted objectives of the PANTERA project aiming to achieve a working environment through which the effort put in raising the activities of the low activity countries to a direction of being more sustainable, a conscious decision has been taken by the consortium, to develop the PANTERA process by introducing the following main functions:

- Design, develop and operate a multifunctional, interactive platform
- Develop and operate a representative number of Regional Desks
- Organize and run an appropriate number of Working Teams covering important areas that can be a constant source of information and knowledge to the multifunctional platform

Hence, irrespective of the targeted objectives of each and every work package, the PANTERA project has amalgamated into the above three main functions constituting the PANTERA process.

The above identified important functional activities will be constantly supported by the work of all work packages during the course of the project and complemented with external support where needed to substantiate their long-term sustainable future. To this effect working relations have been pursued and grown to a satisfactory level with the following:

- JRC and DG Ener have agreed to a formula of supporting the operation of the interactive multifunctional platform by hosting it on their servers and provide a service contract through the services of DG Ener to support and operate the platform following the completion of the PANTERA project.
- The S3P smart specialisation platform operated by the Commission has welcomed working relations with the PANTERA consortium to build and operate 6+1 Regional Desks that cover adequately all countries that are classified as low activity countries.
- ETIP SNET through the activities of Working Group 5 has joined forces with the PANTERA consortium to organise and operate an appropriate number of Working Teams capable of addressing important themes that will constantly feed information and knowledge to the interactive multifunctional platform.

### PANTERA Platform

The important decision has been taken early days of the project and strong effort has been directed to develop the interactive multi-functional platform in collaboration with PANTERA, JRC, ETIP SNET and ERA-Net SES. The main objective was to connect the R&I community of EU to enhance collaboration, wider interest and use on the project results, avoid duplication and lost euros, strengthen the participation of all Member States in support of the fifth pillar of the Energy Union (RIC) and energy transition. This has taken as a high-level objective the following schematic.

Following the successful buildup of this targeted objectives, DG Ener has come along and approved the creation of the platform and has taken a decision to give it a more sustainable name and call it: European Interconnection for Research Innovation & Entrepreneurship or in short EIRIE Platform.

The current status of where we are with the development of platform is reported under WP8.

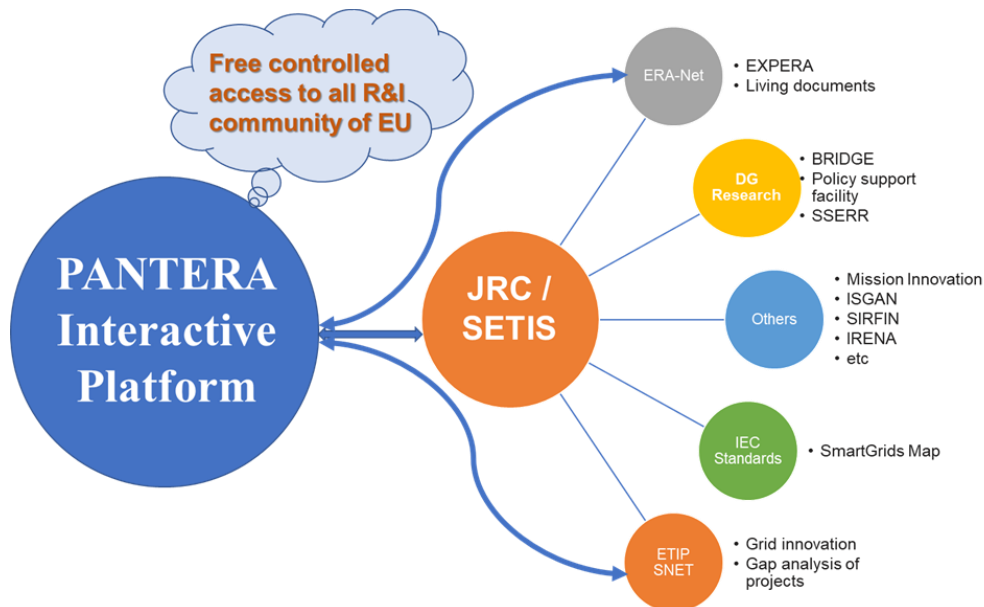


Figure 5 The PANTERA platform positioning

The consortium welcomed this decision and has introduced a new logo to support this change:



Figure 6 The new logo for the EIRIE platform

### 6+1 Regional Desks

PANTERA 6+1 approach is an inherent part of PANTERA process which aims at strengthening national participation rate in smart grid investments by making national stakeholders’ needs and expectations more visible on the European arena. It is a place for raising discussions with national decision-makers, sharing experience and challenges in research and innovation, inviting local stakeholders to interact more actively with PANTERA and other EU-level initiatives. Thus, it is a key opportunity for attaining PANTERA ambition of creating a true pan-European R&I community.

PANTERA 6+1 approach includes six PANTERA Regional Desks committed to target countries which appear to have a lower rate of smart grid investment and one best-practice Desk elaborating on gathering and systemizing good experience in projects and R&I governance from more successful countries (Figure 7). The term “Regional” describes the way the work is organized within the consortium rather than geographical division, it stresses the intention of PANTERA to be closer to the local stakeholders and adapt to the local processes and cultures. Relevant PANTERA partner is responsible for the host country and for the closer, so called associated, countries.

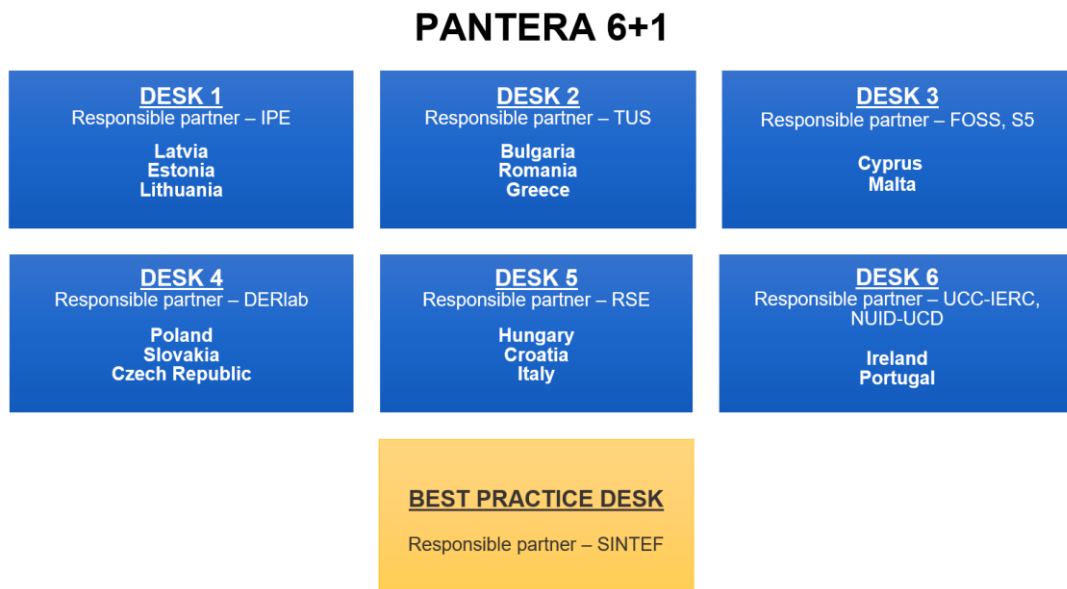


Figure 7 the PANTERA Regional Desks

Current status and results achieved in the coordinated regional work is reported under WP6.



## Working Teams

In close cooperation with ETIP SNET working teams are currently operating with wider experts that can feed into the PANTERA platform much wanted data, information and knowledge (see Fig.8).

- Work closely with DERlab in populating the platform with all the information related to research infrastructure, regulations and standards that are much needed for effective R&I activity in the targeted countries.
- Working on R&D needs in identifying progress made in the technologies, systems and solutions in support of the energy transition. This work is organised so as to be in full coordination with experts of ETIP SNET and INTENSYS4EU aiming to formalize procedures, populate data and results from wider sources of information. High level objective of this work is the evolution into maturity indices for technologies, systems and solutions that can be made available for wider use through the planned multifunctional platform.
- Generate innovation support for the market uptake of projects in full coordination with the services offered by DG RTD and support the scalability and replicability work of BRIDGE for raising the impact of R&I work in Europe.

Be close to international activity in the field of smart grids, storage and local energy systems by working closely through WT5 with the international activities of ETIP SNET that include Mission Innovation, ISGAN etc.

Domain		Working Teams			
System		WT2:			WT5:
Technology	WT1:	Regulation &	WT3:	WT4:	Global &
Market	Research	Standardization	R&I Needs	Innovation	European
Society	Infrastructure		Mapping &	support to the	Research and
			Evaluation	market uptake	Innovation
					Community

Figure 8 The working teams' visualization

Work in progress and results achieved through the Team Work are reported in many sections of this report since team work is a collective effort and all members of the consortium are actively contributing.

### 2.3.2 Overall status of the PANTERA activities carried out during the first 18 M of the project.

As shown in the GANTT Chart in Figure 1, most of the technical and supporting activities have been active during the second year. In consistence with the actions planned for this timeframe, the progress of the project concerns the following completed actions of the objectives. Under this subsection a short reference of the progress towards the objectives is made whereas the activities in details are presented under each WP:

**Objective 1:** Europe is rich in activities related to smart grids / storage and local energy systems but not in a coordinated way losing valuable resources through repetitive work, lack of knowledge of results achieved and lack of understanding of the strengths of the technologies as they evolve.

PANTERA has identified a way forward that will build on the strengths of the current state of the art and promote a governance that will unite resources under the same umbrella but with rights that the involved stakeholders will feel at home and contributing.

Towards this objective the following packages have contributed through on-going procedures as:

**WP2:** Established communication links with R&I stakeholders, developed a European stakeholders database coming from the low spending countries, identified their needs,

challenges and priorities through consultation and open questionnaire processes.

**WP3:** Has provided an extensive analysis of the energy strategy related documents at both national and EU level, develop an innovative top-down and bottom-up approach for effectively identifying the key challenges in accelerating R&I activities in low activity countries and established Regional Desks recruiting stakeholders. Activities at local level through Regional Desks is a rolling and on-going process.

**WP4:** Identification of Gaps and Missing Subjects as a rolling process based on reviews and targeted interviews with stakeholders.

**WP5:** Have organised dedicated workshops which facilitated exchanges of experience and capacities between members of R&I community in collaboration with already on-going activities aiming to wider participation and strengthen objectives.

**Objective 2:** Real analytical data is missing and the consortium of PANTERA envisions a few further steps in this direction for building analytical tools, scenario and case studies tools that will facilitate the evaluation of projects, reporting, ways forward for exploitation and how these results can be used to elaborate visionary solutions of future work.

**WP8:** The specifications on the collaborative platform together with the functionalities and the tools were already designed and the implementation phase is about to start. This collaborative platform that the consortium has set as an ambition to achieve, can generate real on line data for all the needs of researchers and moreover all these will be readily available to newcomers thus encouraging low activity in R&I countries to identify the benefits and be part of the process for bridging the existing dividing gaps that hinder their economy.

**WP6:** Developed working teams consisting of stakeholders depending on evolving R&I needs and topics identified in the project for generating results, reports, white papers and offer support in the RICAP process

**Objective 3:** The ambition of the PANTERA consortium is that the wealth of the data that will be generated through the platform can be a suitable source for analysing and synthesizing local specificities allowing future users of the platform to plan correctly their R&I plans that can lead them to strengthening their activity in this field with direct benefits to their growth.

**WP3:** Under WP3, a governance structure capable of delivering targeted objectives that will bring under the same umbrella all active entities / stakeholders in the field of smart grids called the RICAP process is established. Under this process the different tools and activities are intertwined together in a complementary way to close a loop of cooperation with other initiatives and the platform.

**WP4:** The administrative and decision-making mechanisms for R&I in different countries have been reviewed and compared. The main objective of this procedure is to provide a framework that analyse local specificities and provide some recommendations

**WP6:** Along with the regional desks, PANTERA partners have been cooperating with JRC and the Smart Specialisation Platform to identify and highlight the direct benefits to countries growth by building on their strengths and competences.

**WP8:** Along with the above, WP8 has developed enhanced knowledge-sharing mechanisms that help to identify, discuss and structure the key R&I challenges

### 2.3.3 Progress achieved under WP2

**The objective of WP2** is to identify and establish communication links and then close interactions with R&I stakeholders active in the fields of smart grids, storage and local energy systems (research organizations, utilities, industry associations, academia) that belong to the project “targeted” countries. These are the European countries that, according to the JRC report “Smart grid projects

outlook 2017<sup>4</sup> are spending less funds in R&I in the energy domain considering per capita values.

**WP2** breaks down in 3 different tasks:

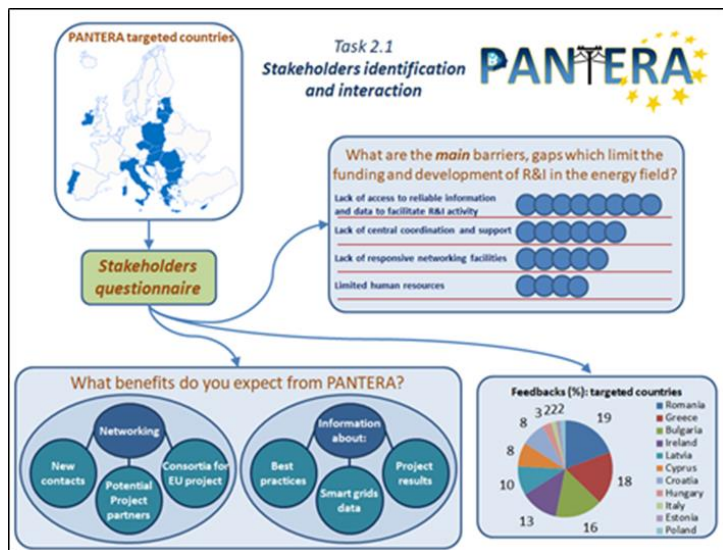
- Task 2.1 “Stakeholders identification and interaction”
- Task 2.2 “Enhanced collaboration opportunities: analysis and deployment”
- Task 2.3 “Interactions with European platform and organizations”

**During the first 18 months** of the project: Activities, results and deliverables

**Task 2.1 “Stakeholders identification and interaction” (M1-M20).**

Within the first eighteen months of the project, this task has been almost fully accomplished. The deliverable D2.1 “Report on stakeholder’s identification and interaction” has been prepared and submitted. It summarizes the results of the activities performed in task 2.1<sup>5</sup>. In particular, it reports the analysis of the results obtained through a questionnaire aimed at collecting the feedback about the involvement of PANTERA targeted stakeholders in EU level activities, the main gaps that limit R&I activities in the different countries and the barriers that hinder the full integration of all EU member countries in the R&I field. Several stakeholders have been contacted until month 18 and different web meetings have been organised to present the PANTERA project. People from different organizations replied to the questionnaire, approximately half of them from industry, DSOs and industry associations, the remaining replies are from research organizations and academia. Most of the respondents have already participated in EU projects, but approximately 20% of them declare that their organization is not taking part in EU level initiatives at the moment. Considering the overall replies to the questionnaire a couple of important considerations for the PANTERA project emerge. Many repliers stated that the networking and access to reliable information and data is of key importance for them to enhance the R&I activities and specially to promote and facilitate the integration at EU level. In this respect, it is important to mention that two of the key PANTERA activities, that is organising workshops and building a knowledge sharing platform, are fully aligned in addressing these needs. Figure 9 shows an *info-graphic* summary of the received replies.

Figure 9 PANTERA stakeholders questionnaire info-graphic summary.



It is important to underline that despite task 2.1 is ending at the end of month 20, the process of contacting stakeholders will continue throughout the PANTERA project timeline. This decision of the PANTERA consortium is related to the identified fact that continuous communication and feedback from stakeholders is of prime importance in achieving the objectives of the PANTERA project. All the stakeholders

<sup>4</sup> Flavia Gangale, Julija Vasiljevskaja, Catalin Felix Covrig, Anna Mengolini, Gianluca Fulli, “Smart grid projects outlook 2017”, Joint Research Centre, 2017

<sup>5</sup> <https://pantera-platform.eu/wp-content/uploads/2020/01/D2.1-Report-on-stakeholder%E2%80%99s-identification-and-interaction.pdf>

contacted are constantly updated about the project results and the PANTERA platform development in order to let them benefit from its deployment and to receive their feedbacks about the overall PANTERA activity. In some cases, deeper interaction has been established with the identified stakeholders from the target countries. This will result in the joint organization of workshops leveraging the knowledge of the local R&I community as facilitator to involve relevant local contacts and stakeholders.

**Tasks 2.2 Enhanced collaboration opportunities: analysis and deployment and Task 2.3 Interactions with European platform and organizations**

PANTERA fosters also the collaboration with different European and international level Smart Grids initiatives. In particular coordination and interaction has been achieved with EERA JP on Smart Grids (SG) and the global initiative Mission Innovation (MI) Innovation Challenge 1 on Smart Grids. The PANTERA project has been presented in occasion of meetings and workshops of these two initiatives during the last 18 months. In particular, we recall here the presentation of the PANTERA project at the last two EERA JP on Smart Grids steering committee meetings and, at international level, at the last MI IC1 workshop held in Paris on November 2019 during the European Utility Week.

Close contacts have also been established with the ETIP SNET considering different directions such as the interactions in the definition of the requirement for the PANTERA platform and through the activity performed within PANTERA *working team 5 of Working Group 5 - Global & European Research and innovation community*. In this second case PANTERA participated in different web meetings of the ETIP SNET working group 5 sharing information about international activity such as the one already mentioned MI IC1 and EERA JP SG, but also about the IEA TCP on smart grid ISGAN (International Smart Grid Action Network). Figure 10 shows an overview about the international initiatives with which PANTERA has established relations.



Figure 10. Overview of the international initiatives with which PANTERA has established relations

**Deliverables**

The following deliverable has been released reporting on the outcome of the above activities:

- D2.1 “Report on stakeholder’s identification and interaction”

**Contribution to the PANTERA process**

WP2 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Participated in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.

- WP2 leads Working Team 5 for enriching the international interest and work of PANTERA and feed in useful information and knowledge covering this area.
- WP2 is playing a leading role in the work for building good sound working relations with stakeholders and has formalised a continuous working environment with achieved contacts supporting at the same time the process of expanding and enriching the PANTERA activity in this field. This has positive effect in the regional work activity and for this reason collaborative activities were pursued with positive enriched results.

### 2.3.4 Progress achieved under WP3

**The objective of WP3** is to identify the current state and progress of the R&I, regulations and standardisation activities in the areas of smart grid, storage and local energy systems and then develop an efficient process to address the key challenges at national and EU level and recommend for post project activities. The main tasks consist of:

**T3.1- Current status and progress of R&I activities [M1 – M18]** – develop a process to address the R&I status and needs at national level;

**T3.2- Regulations, Codes and Standards [M3 – M22]** – identify the regulations, grid codes and technology standards;

**T3.3-Energy Policy and barriers [M3 – M22]** - Identify the national and EU energy policies and barriers (at community level) related to smart grids, storage and local energy systems;

**T3.4- Key challenges and bottlenecks [M13 – M36]** - develop an efficient process to address the key challenges and bottlenecks;

**T3.5- Recommendation for post project activities [M13 – M48]** - develop a roadmap for post project activities.

With the aim of this coordinated action for setting up a European forum, International Energy Research Centre (IERC) is leading this WP3 and with participants working together to identify the current status and progress of the R&I activities in the field of smart grids, storage and local energy systems at the national and EU level towards the development of decarbonised European smart grid network.

**Until M18**, the following progress has been achieved per task:

- T3.1: This Task has been completed recently according to the planned timeline. The deliverable report (D3.1) has also been submitted. One of the key outcomes of PANTERA is to identify the current status of the EU member states (MS) with the low R&I activities in the field of smart grid, storage and local energy systems. Along with this, PANTERA is analysing the needs for future R&I priorities to achieve the decarbonised European smart grid network in a harmonised way (to meet the EU 2050 energy target by all countries towards for decarbonising the whole energy sector). In that sense, the whole smart grid electricity network is considered as Integrated Energy System (IES) and the R&I roadmap to achieve this IES at EU level is initiated in ETIP SNET vision 2050. Under this task, PANTERA team has reviewed the existing/practiced methods to evaluate the smart grid projects. Some of these are ETIP SNET, BRIDGE, EPRI methodologies. Along with this, R&I priorities as outlined in the NECPs at national level are also analysed. All these studies and analysis finally has led PANTERA to develop the RICAP technical process (R&I status and Continuous gAP analysis), where an attempt has been made to develop a universal methodology by linking the past to the present and future plan to achieve the target based on the ETIP SNET vision 2050. RICAP administrative process is also structured to perform

the required administrative task to communicate with relevant stakeholders, collect project information and sharing the outcomes to EU and PANTERA platform. The PANTERA recommends how the proposed technology classification can be linked to the FUNCTIONALITY of the ETIP SNET 2020-2030 roadmap. A case study for Ireland is given as an example to demonstrate the R&I status based on the technology classification, mapping with FUNCTIONALITY under the RICAP process. Final recommendation is made to implement the proposed RICAP process in future R&I status analysis towards the achievement of a decarbonised EU smart grid network.

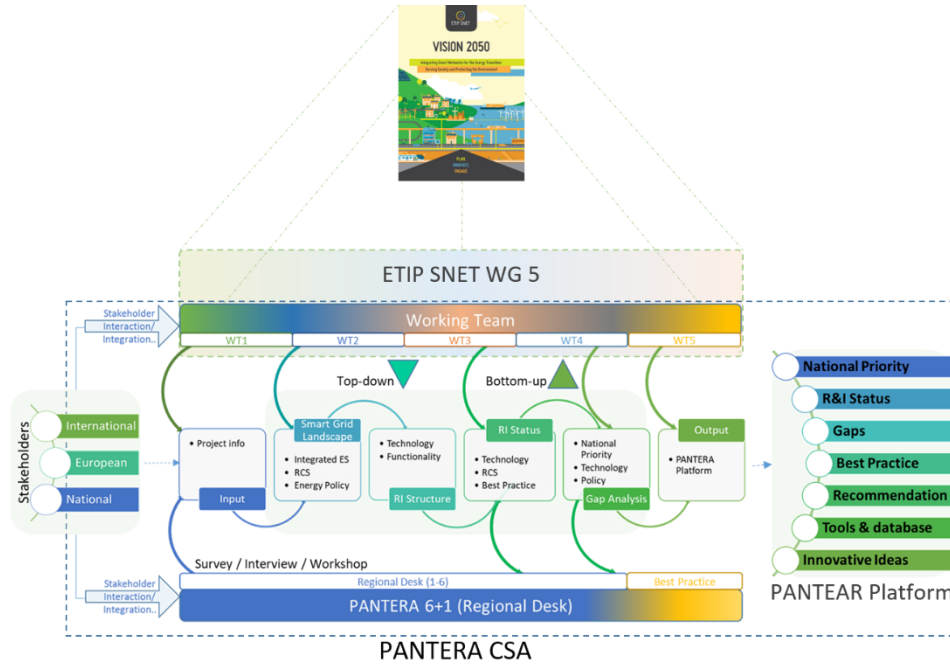


Figure 11 PANTERA RICAP (administrative process)

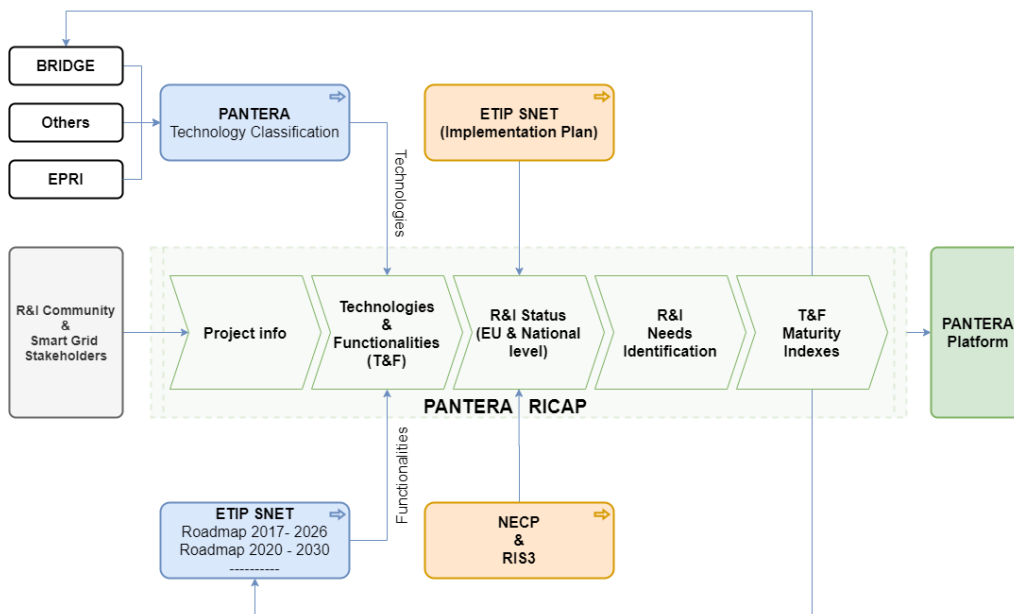


Figure 12. PANTERA RICAP (technical process)

- T3.2: This task is reviewing the grid codes, regulations and standards that technically fit the

smart grid solutions at national and European level and under the classification provided by the ETIP SNET platform including IEEE, ETP-SG, the European Committee for Standardization (CEN), the European Committee for Electrotechnical Standardization (CENELEC), the European Telecommunications Standards Institute (ETSI), IEC, ENTSO-E implementation codes, CEER codes etc. This task is also identifying the mapping process to link the regulation, grid codes with the FUNCTIONALITY as defined in the ETIP SNET roadmap. Task is still on-going and preparing the outcomes as a deliverable D3.2 which is due in Oct 2020.

- T3.3: Meeting the EU and national target to decarbonise the smart grid network as well as empowering energy citizen as prioritized in the NECP, this task is focusing on the national energy policy for the countries of low R&I activities. Special focus is being given on the consumers' participation in the local energy market and their integration to the wholesale energy market. National policies are being reviewed to identify the gaps and provide recommendation for the implementation and deployment of smart grid technologies (PANTERA Technology classification, as identified in the PANTERA RICAP process) and to align with the ETIP SNET 2030 roadmap. Task is still on-going and preparing the outcomes as a deliverable D3.3 which is due in Dec 2020.
- T3.4: This task is developing an efficient process to identify the key challenges and bottlenecks from all the PANTERA activities. Special focus is given on the (i) technological solutions, (ii) regulation, standards and (iii) policy gaps related to smart grids, flexibility / storage and local energy systems to empowering the energy citizen, at national and EU level. The developed process will analyse the outcomes from the RICAP process, PANTERA workshops, seminars, survey for discovering the key challenges to integrate consumers to decarbonise the smart grid solutions and make them energy active citizens. This task is also on-going and will deliver the outcomes in Dec 2021.
- T3.5: In the framework of this action, based on the best practice examples and by developing the solutions for the existing technologies, PANTERA (during the project life time) and later (by and beyond 2020) will be recommending the required emerging technologies to keep the exploitation of smart grid technologies for decarbonizing electricity in the energy roadmap 2050. The sustainability of PANTERA platform (as post project activity) to serve the purpose will also be outlined.

## Deliverables

The following deliverable has been released under the above activities:

D3.1: Report on current status and progress in R&I activities: Technology [IERC, R, PU, M18]

## Contribution to the PANTERA process

WP3 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Participated in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.
- Having the main objective to serve the PANTERA platform, work under WP3 has developed the PANTERA RICAP process (both administrative and technical) to identify the current R&I status and needs to meet the national and EU target on decarbonisation of smart grid network. This will constantly feed-in information and knowledge in the platform that will be highly beneficial to the broader R&I community.
- The RICAP process is highly contributing to the work of Working Team 3 with the results broadly used by ETIP SNET and BRIDGE.

- The R&I priorities of regions and how these are tight in to their strengths is an input to the RICAP process for developing the R&I needs in response to the 10-year plan and implementation plan calls of ETIP SNET. These will form an important input to the PANTERA platform for wider sharing and use.

### 2.3.5 Progress achieved under WP4 “Key topics and content management”

The objective of WP4 is to identify the proper topics for dissemination and networking activities within the project, covering the setting up of a forum, event organization, virtual meetings, establishing collaborative working spaces and social media. Next figure shows the main WP4 reasoning.

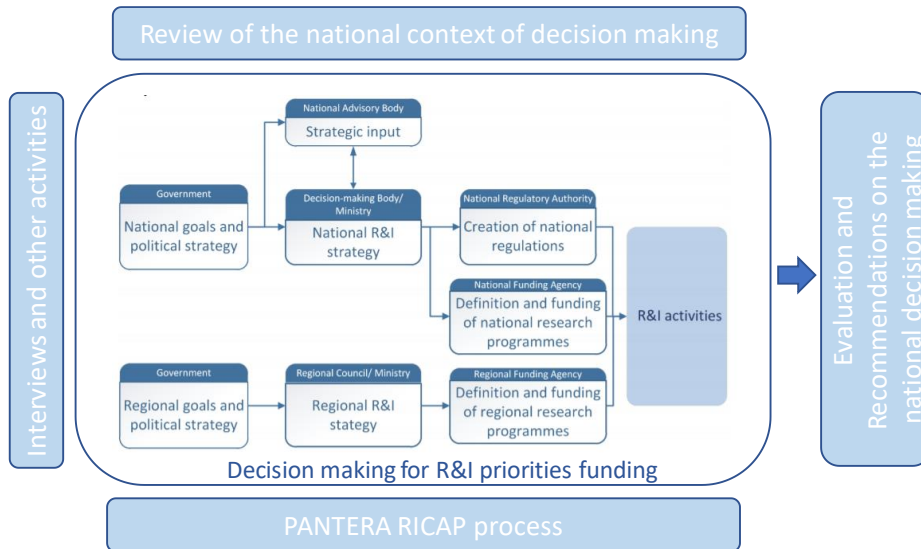


Figure 13 WP4 main activities infographic

WP4 is led by SINTEF Energi AS.

The activity breaks down into three different tasks:

- **T4.1:** Definition of the content for dissemination and networking activities [M3-M9]
- **T4.2:** Identification of gaps and missing subjects [M9-M41]
- **T4.3:** Assessment of the defined topics; relevance, driving forces and trends [M40-M45]

Until M18, the following progress has been achieved per task:

#### T4.1: Definition of the content for dissemination and networking activities

- The task participated in the preparation and arrangements for of the first PANTERA workshop in Sofia. During the workshop personal interview were arranged with several stakeholders, representing different sectors in Bulgaria (TSO, DSOs, manufacturing and academia). The interviews were used for both testing initial selection of the topics as well as defining new and brought two important learnings:
  - Feedback from the interviews pointed towards opening a new area, related to decision-making and regulatory aspects supporting Research and Innovation (R&I) in member-states as an important factor influencing engagement in smart grids, storage and local energy systems’ domain.



- The first draft of the technical topics was directly based on the taxonomy, which was previously suggested and verified by ETIP-SNET. These were presented and discussed with the interviewees. The important feedback was that topics are almost equally important, and for this reason they should be introduced sequentially, close to the roadmap pathway, following interdependencies between different technical elements.
- To elaborate the uncovered decision-making issue, a case study was conducted after the workshop with the participation of decision-makers in Norway, during which key elements of the process were mapped. The outcome of this case study was presented in deliverable D4.1. In addition, the results were passed on to WP6 to incorporate in their activities.

#### **T4.2: Identification of gaps and missing subjects**

- Following the Description of Action and the path identified in T4.1, the task continued with individual interviews during the workshop in Dublin (IE), which proved again the importance and relevance of national decision-making and regulatory framework and through this process gaps and missing elements were identified.
- The initial case study approach was extended with three additional countries (LV, CY and IE), where the previously identified structure and elements were further refined.
- As defined in the DoA, the task used the first feedback from WP3, based on the developed RICAP analysis, which was conducted and considered the relevant topics, derived from the analysis of Ireland. Useful and relevant feedback, elaborating on the key identified issues was passed on to WP6 for further utilization.
- The outcome of this work was presented in summary in deliverable D4.2.

#### **Task 4.3: Assessment of the defined topics; relevance, driving forces and trends**

The activity has not started as yet since it is scheduled to start in month 40..

#### **Deliverables**

The following deliverables have been released under the above activities:

- D4.1: Content and topics for dissemination and networking activities<sup>6</sup>
- D4.2: Identification of gaps and missing subjects<sup>7</sup>

#### **Contribution to the PANTERA process**

WP4 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Participated in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.
- As indicated above the main outcome of the work in WP4 serve the Regional activities of PANTERA using the content generated from the interviews and results from the case studies, forming in this respect a set of best practices passed on to WP6 for wider utilization. The

<sup>6</sup> <https://pantera-platform.eu/wp-content/uploads/2020/01/D4.1-Content-and-topics-for-dissemination-and-networking-activities.pdf>

<sup>7</sup> [https://pantera-platform.eu/wp-content/uploads/2020/07/D4.2\\_1st-Report-on-Identification-of-Gaps-and-Missing-Subjects.pdf](https://pantera-platform.eu/wp-content/uploads/2020/07/D4.2_1st-Report-on-Identification-of-Gaps-and-Missing-Subjects.pdf)

passed-on proposals included a comparative evaluation of alternative approaches for:

- Funding schemes
- Creation of financial incentives
- Regional cooperation

The selection of the best practice topics was done based on the following assumptions as a learning phase for populating the best practice page of the PANTERA platform:

- The proposal should avoid any controversy political, ethical or commercial.
- The suggested best experiences should be justified or substantiated by existing positive experience, feedback from the stakeholders or conclusions from the 3rd parties.
- The suggestions should be as much as possible universally relevant and applicable to different countries and different stakeholders (both academia, R&D and industry).

### 2.3.6 Progress achieved under WP5

**The objective of WP5** is to organize workshops and interactive meetings with stakeholders beyond the steering committee and working groups members. Thus, reaching a wider range of stakeholders and initiatives through these actions. WP5 is led by DERlab and supported by all project partners contributing in the PANTERA process as seen in the following figure.

**WP5** breaks down in three different tasks:

- Task 5.1: Workshop format, planning and reporting [M1-M6]
- Task 5.2: Regional Workshops [M1-M48]
- Task 5.3: Pan-European and Global Workshops [M1-M48]

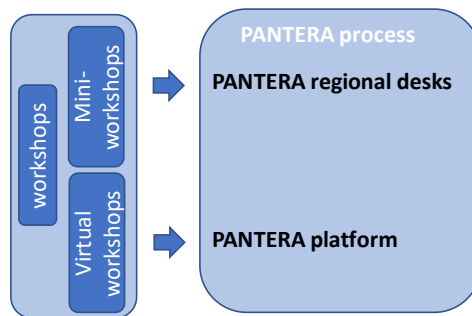


Figure 14 The WP5 contributing in the PANTERA process

PANTERA was initially planning to organise 16 workshops. Eight workshops were planned to be organised at the regional level, while the other eight workshops were planned to be organised at the Pan-European level. In the first year of the project, two workshops have been organised, while in the second and third year of the project five workshops were planned to be organised.

Each workshop, was planned with the specificities of the welcoming country / region / city aiming to address the need for the energy transition from the perspective of the identified specificities. Specific attention was given to mobilising the stakeholders of the country / region / city and generate appropriate content that will attract their interest for active contribution and interaction. The consortium further approached the organization of such events as the platform to get into one to one discussions with the important stakeholders of the country / region / city and to this effect customised interviews and bilateral discussions were pursued. Thus, each workshop was unique and building on the lessons learned from the previous encounters.

Our initial plans were forced to be re-considered for the following important reasons:

- The need for continuous local stakeholders' engagement.
- The need for closer connection with regional desks activities
- The need for more engaging more resources on developing the envisioned functionalities and tools for the platform
- The COVID-19 pandemic

Based on extensive discussions among the partners, the following concepts have been introduced:

- virtual events and
- mini workshops

**Under this approach, we could organize the number of workshops as initially stated in our GA with increased possibility to achieve many more mini workshops taking advantage of the special sessions of selected events.**

Such sessions can be free of charge or carry a small fee that we will discuss and approve each time a proposal comes forward.

The main advantages of this approach are:

- Wider impact with the same or lower overall cost.
- Wider geographical spread and greater possibility of engaging more countries in the PANTERA desks.
- Wider audience to engage within the PANTERA platform.
- Quick feedback from the stakeholders keeping the momentum high and continuous.

Moreover, the main challenges of this approach are:

- There is a tradeoff between the PANTERA members logistics and the cost savings from organizing a workshop from scratch (Sofia event financials would help us there to have a first impression). This way we can set how many mini workshops we can plan in place of the regular workshops to keep budget within limits.
- An attractive challenge is that the mini workshops sessions every time need a unique design with well-balanced and targeted content as the audience, or the specifications of each conference special sessions may be different.
- The monitoring and the KPIs need to be tighter not to lose track and be proactive to make corrective moves if necessary.

The overall consensus is that the mini workshops could have a great positive impact to the PANTERA process whereas challenges that are foreseen are manageable by the PANTERA consortium.

As indicated in the paragraphs below, the COVID-19 pandemic has forced project to consider other ways of doing business to meet objectives and contact planned work. Thus, virtual workshops is the natural and the only other interactive option if we are to connect with wider stakeholders and interact on all desired issues. For this reason, we have investigated possibilities for organizing such virtual events through the experience of other entities and consortia and planned the first such event in June 2020 as detailed below. The results were overwhelming positive, giving us enough evidence that we can capitalize on such approach giving us the possibility of contacting effective communication with the desired stakeholders with less costs and great reduction in required time since no travelling is required.

The above reasonings have been welcomed by the Project Officer.

**Until M18**, the following progress has been achieved per task:

### Task 5.1: Workshop format, planning and reporting

- Workshop format and planning has been put forward. This is a flexible and ongoing process even if this task has ended at M6.
- MS5: “Outcome of first set of workshops in the first year and lessons learned for corrective action” was achieved on time.

### Task 5.2: Regional Workshops

- PANTERA consortium organized three physical regional workshops and one nano-workshop. The main outcomes of these workshops can be found in the project’s website<sup>8</sup>
- The first PANTERA’s regional workshop took place on the 2nd of July 2019, Sofia, Bulgaria. The title for the workshop was “Pan European Research and Innovation activities for Smart Grids, Energy Storage and Local Energy Systems”. This regional workshop focused on the following countries: Bulgaria, Romania and Greece. The objectives of this workshop were:
  - Identify and establish communication links with local R&I stakeholders.
  - Identify the key challenges in accelerating R&I activities in the region.
  - Exchange experience and knowledge between members of R&I community.
- The first nano-workshop was organized on the 13th of September 2019 in Varna, Bulgaria within the BULEF scientific conference. The participants provided valuable feedback on the bottlenecks hindering the R&I activities and gave their expectations from PANTERA project. The main outcomes from the first PANTERA nano-workshop are:
  - The micro-, mini- and nano- workshop concept is very promising and highly productive.
  - The event continued the dialogue with the energy sector stakeholders on how the PANTERA project could help in strengthening R&I activities in EU.
- The second PANTERA regional workshop took place on 2nd of December 2019 in UCD, Dublin, Ireland. This regional workshop explored the opportunities and challenges for research and innovation in Smart Grids, Energy Storage and Local Energy Systems in Ireland and tackled the following topics:
  - The European and Irish Smart Grid Landscapes
  - Supporting Research & Innovation funding opportunities
  - Working teams - Local and Pan-European Networking for promoting regional needs and capitalizing on local strengths and opportunities
  - PANTERA platform and its functionalities
- The third PANTERA regional workshop took place on 13th of February 2020 in Athens, Greece. The title for the workshop was “Green Islands as a driver for the Energy Transition - Going Renewable and Smart”. This workshop focused on the challenges and barriers, along with the best practices and future steps towards greening geographical islands and transforming them to 100% renewable energy systems with the support of technologies that enable their smart autonomous operation.

### Task 5.3: Pan-European and Global Workshops

The first virtual Pan-European workshop took place on 24th of June 2020, as part of the EU Sustainable Energy Week (EUSEW 2020 - Energy Days). The PANTERA consortium had to shift

<sup>8</sup> <https://pantera-platform.eu/resources/>

from physical workshop to virtual workshop due to COVID-19 situation in Europe. The title for the workshop was “PANTERA Virtual Workshop at EUSEW - for widening R&I activities in the EU in support of the Energy transition”. The workshop addressed the following topics:

- EU policy for 2030 and 2050 and the role of the R&I community.
- Green Deal objectives and the R&I community positioning
- ETIP SNET and BRIDGE role for building R&I priorities roadmaps.

### **Deliverables**

The following deliverable has been released covering the initial format of workshops covering all important areas expected to be covered to improve participation of stakeholders and interaction with them:

- D5.1: “Workshop Format”

### **Contribution to the PANTERA process**

WP5 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Participated in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.
- WP5 through the extensive work for organizing successful workshops for effective interaction with stakeholders, has strengthened the regional approach for identifying mode of working with regions for addressing their specific local issues and linking them effectively with the activities of the platform. This activity has achieved commendable results for the first period up to the period for the lock down with COVID-19 side effects, through the following successful events: Three regional workshops during the first period of the project.
  - One nano-regional workshop.
  - One virtual pan-European project
- During the proceedings of workshops extensive time was allocated for presenting and discussing the content and functionalities of the multifunctional platform. With interactive discussion with participants the planned benefits of the platform were made clear and attractive for wider interest. Feedback from the participants on their expectations from the platform has given to the consortium valuable information to include in the planned specifications of the platform.
- Moreover, workshops were the natural place to shed light on the activities of PANTERA giving real examples of the established process and its content can be beneficial to them. Extensive presentation of the work done within the Working Teams has attracted interest from the stakeholders alerting of the benefits from being active contributors.

### **2.3.7 Progress achieved under WP6**

The **objective** of WP6 is to provide organisational support in order to establish regional stakeholder desks in the target regions, as vehicles to ensure wide participation and involvement of market actors and stakeholders throughout the project and to create local networks. WP6 is led by IPE (Institute of Physical Energetics). Next figure shows the engagement planning of the stakeholders along with the organised desk activities.

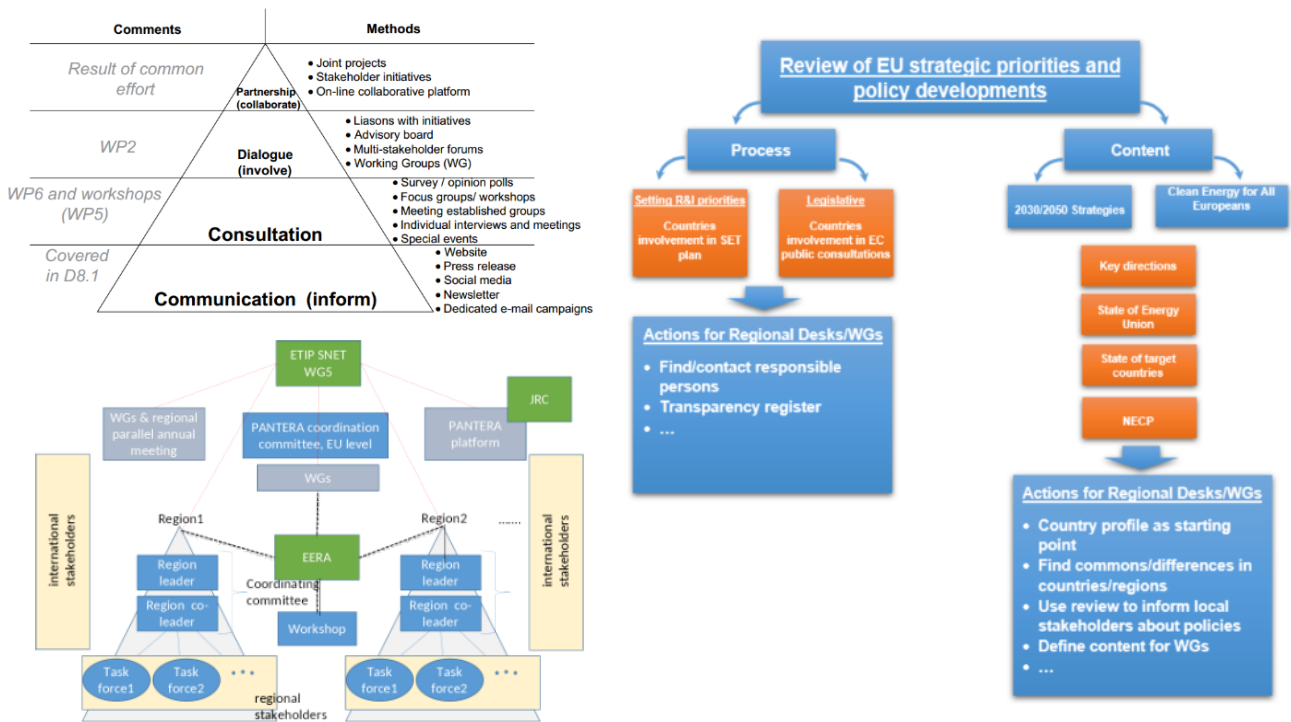


Figure 15 WP6 activities visualization

WP6 breaks down in three different tasks.

- Task 6.1. Review of EU strategic priorities and relevant policy developments.
- Task 6.2. Analysis of the national projects, findings in the target regions.
- Task 6.3. National cross-case comparisons and conclusions.

Until M18, the following progress has been achieved per task. Note that all WP6 tasks' activities form a core of regional dimension and are fully aligned with Desks timeline.

**Task 6.1. Review of EU strategic priorities and relevant policy developments.**

This task focuses on a review of EU strategic priorities and policy developments structured into two dimensions: the dimension of the legislative process and the dimension of the policies themselves. The dimension of the legislative process addresses the process of legislation co-creation and social acceptance from stakeholder perspective. The dimension of the policies review investigates policy implementation on two levels: the EU and national. Task 6.1 is completed with extensive review of European and national (target countries) policy developments in the frame of five dimensions of Energy Union. Through this Task the first version of country profiles was created.

More details can be found in D6.1.<sup>9</sup>(completed in M9)

**Task 6.2. Analysis of the national projects, findings in the target regions.**

This task focuses on establishing and guiding the activities of Regional Desks for engaging stakeholders from target countries. It also includes the overview of target countries' specific situation in the frame of the five dimensions of the Energy Union and the set 2020/2030 targets in order to identify existing gaps between the current and the desired situation. Special focus is given on R&I dimension and utilisation of Smart Specialization (RIS3) strategies. Within task 6.2 PANTERA 6+1

<sup>9</sup><https://pantera-platform.eu/wp-content/uploads/2020/01/D6.1-Review-of-EU-strategic-priorities-and-relevant-policy-developments.pdf>

approach is established, the framework for the Desk activities planning process, Desk operation is monitored on a regular basis and corrective actions being implemented where necessary. PANTERA synergy with RIS3 platform and management is supporting the Desk activities based on their long-standing experience and stakeholder base. Additionally, country profiles are updated, with continuous work in an attempt to deepen the R&I dimension and the respective visualisation of data.

Task 6.2 lays the structured foundation for developing Task 6.3 targeted objectives.

### **Task 6.3. National cross-case comparisons and conclusions.**

This Task summarises Desk activities and includes country's specific and cross-country policy analysis conclusions. The concept of consultations with stakeholders involved through regional desks has been developed. The work of Task 6.3 is on-going.

#### **Deliverables**

The following deliverables have been released including milestone 6 covering the above referred activities:

- D6.2<sup>10</sup> Stakeholder consultation plans (one for each country/region);
- D6.1 Review of EU strategic priorities and relevant policy developments;
- MS6 Detailed analysis of linked stakeholders and corresponding contribution for corrective action by the consortium.

#### **Contribution to the PANTERA process**

WP6 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Participated in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.
- The main activities of WP6 is the regional activity and for this reason the activity is continuous with a lot of tangible results such as:
  - development and launching of the PANTERA 6+1 approach;
  - setting objectives and defining the mode of working for Regional Desks;
  - creating and maintaining country profiles for target countries;
  - establishing synergies with RIS3.
  - With the support of all partners of the project the Magna Carta of regional work has been drafted and made publicly available for improved communication with the stakeholders.
- Working extensively with stakeholders through the regional desk activity the issue of the multifunctional platform always crops in with extensive benefits for all stakeholders and promotion of regional work through the platform to wider visualisation and raising interest and support.
- Moreover, the regional activity alerts regional experts of the benefits of being active in the Working Team work of the PANTERA consortium raising interest and support. Regional stakeholders see a true benefit of being active in the expert team work since though this they can build working relations with wider experts for building R&I interest and cooperation.

#### **2.3.8 Progress achieved under WP7**

The **objective** of WP7 is to deliver a concrete methodology and plan for the future sustainability of

<sup>10</sup> <https://pantera-platform.eu/wp-content/uploads/2020/01/D6.2-Stakeholder-consultation-plans.pdf>

the PANTERA platform, beyond the duration of the project. In this sense the WP will deliver a robust exploitation strategy for the PANTERA platform, while analyzing future costs for the operation and expansion of the Platform and identifying possible financing mechanisms and instruments at European and Regional level to cover any financing gaps. WP7 is led by Suite5 and the SWOT analysis where WP7 activity is based is shown below.



Figure 16 SWOT analysis for the development of the PANTERA platform

WP7 is organised in 4 different tasks:

- **Task 7.1 Exploitation strategy**
- **Task7.2 R&I Recommendations for future smart grids and promote aon to relevant stakeholders**
- **Task 7.3 Mapping of funding mechanisms for post-project activities continuation**
- **Task 7.4 Sustainability planning and business development activities**

Until M18, the following progress has been achieved per task:

### Task 7.1 Exploitation Strategy

Task 7.1 aims at delivering the PANTERA platform exploitation strategy. In more detail Task 7.1 aims at performing an analysis of the landscape and offerings around R&I knowledge management platforms around the EU and assessing the extent they address user needs. Through this analysis it will enable the definition of the functionalities that need to be offered by the PANTERA platform and will drive the definition of the requirements and architecture specifications, upon which the platform development will be based. The PANTERA platform is the main tangible outcome of the project and in this context Task 7.1 will define the preliminary exploitation strategy of the project and the roles each partner will have in the post-project operation of the platform. Until M18, significant progress has been made in the frame of the exploitation strategy (Task 7.1) of the project, by defining in detail the user needs, performing the market analysis in the area of Knowledge Platforms and Services around R&I in Smart Grids, defining the functionality of the PANTERA platform, designing the architecture that has been included in the tender for the development of the PANTERA platform and spending a lot of effort towards ensuring the future sustainability of the platform through a dedicated agreement for the post-project hosting, operation and sustainability of the platform with the Joint Research Centre (JRC) of the European Commission.



## **Task 7.2 R&I Recommendations for future Smart Grids and Promotion to Relevant Stakeholders**

This task aims at delivering R&I Recommendations for future Smart Grids and Promotion to Relevant Stakeholders based on the results of WP3 activities. Since it has just started in M18 no progress has been made so far.

## **Task 7.3 Mapping of funding mechanisms for post-project activities continuation**

This task aims at the identification of alternative funding mechanisms to support post-project activities continuation and Platform operation. It has just started in M18 and no progress has been made so far.

## **Task 7.4 Sustainability Planning and Business Development Activities**

Task 7.4 aims at the preparation of the Sustainability and Business Plan for the PANTERA platform. It will start in M24 of the project and no progress can be reported at this stage.

No deliverables have been released under the above activities, so far, while a brief report on Milestone 7 (Agree on the exploitation strategy for firm actions by the consortium for building work forward) has been prepared, to report on the achievements made so far in the activities of T7.1.

## **Contribution to the PANTERA process**

WP7 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Has played a leading role in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.
- The main activities of WP7 is to build a concrete methodology and plan for the future sustainability of the PANTERA platform, beyond the duration of the project and for this reason the activities in this important objective of the project are continuous with a lot of tangible results such as:
  - Definition of the PANTERA platform requirements to address user needs from the different regions
  - Design of the PANTERA platform architecture and specifications to offer a user-friendly experience and added value services for the enhancement of R&I efforts in Smart Grids in the Regions that the project focuses on.
  - Preliminary definition of the PANTERA platform exploitation strategy having in mind the needs of the different regions for a platform that can engage regional and local stakeholders and will continue to operate in the post-project period in a sustainable and credible manner (under the auspices of the EC/ JRC and possibly financed directly by EC funds).
- Through the active contribution in building the multifunctional platform the WP is paying specific attention of how:
  - Teams are active and operating on issues that are needed by the platform to populate areas and activities that have been earmarked as highly contributing to the interests of connected stakeholders.
  - Regional work is well covered through the dedicated functionalities of the platform to support the rich work developed at regional level and give wider visibility of the priorities developed at regional level to raise interest and through this strengthen the process of regional activity.

### 2.3.9 WP8: Progress towards the dissemination objectives.

The **objective** of WP8 is to communicate and disseminate project activities to facilitate the flow and exchange of information to the stakeholders and broader audience, and also within the platform. This work package deals with two different types of activities:

- Dissemination activities, aiming at disseminating the PANTERA project outcomes and achieving the highest possible impact and visibility of its work.
- Communication activities, aiming at reinforcing the interaction between stakeholders and initiatives related to smart grids development

WP8 is led by DERlab and supported by all project partners to increase PANTERA’s awareness and impact among the R&I community in the energy field in Europe.

WP8 is organized in three different tasks that run continuously throughout the project:

- **Task 8.1. PANTERA Collaboration Platform: Pan-European Hub for Smart Grids [M1-M48]**
- **Task 8.2. Presenting PANTERA Activities in Special Events [M1-M48]**
- **Task 8.3. Project visual identity, website and media coverage[M1-M48]**

Until M18, the following progress has been achieved per task:

#### Task 8.1. PANTERA Collaboration Platform: Pan-European Hub for Smart

- Details of the planned platform have been addressed in WP7 and under the description for the PANTERA process. Hence, in WP8 the actual development phase and subsequently the operation of the platform is covered.
- To this effect, the platform requirements and functionalities have been designed in detail and agreed with all involved stakeholders: JRC, ETIP SNET and BRIDGE.

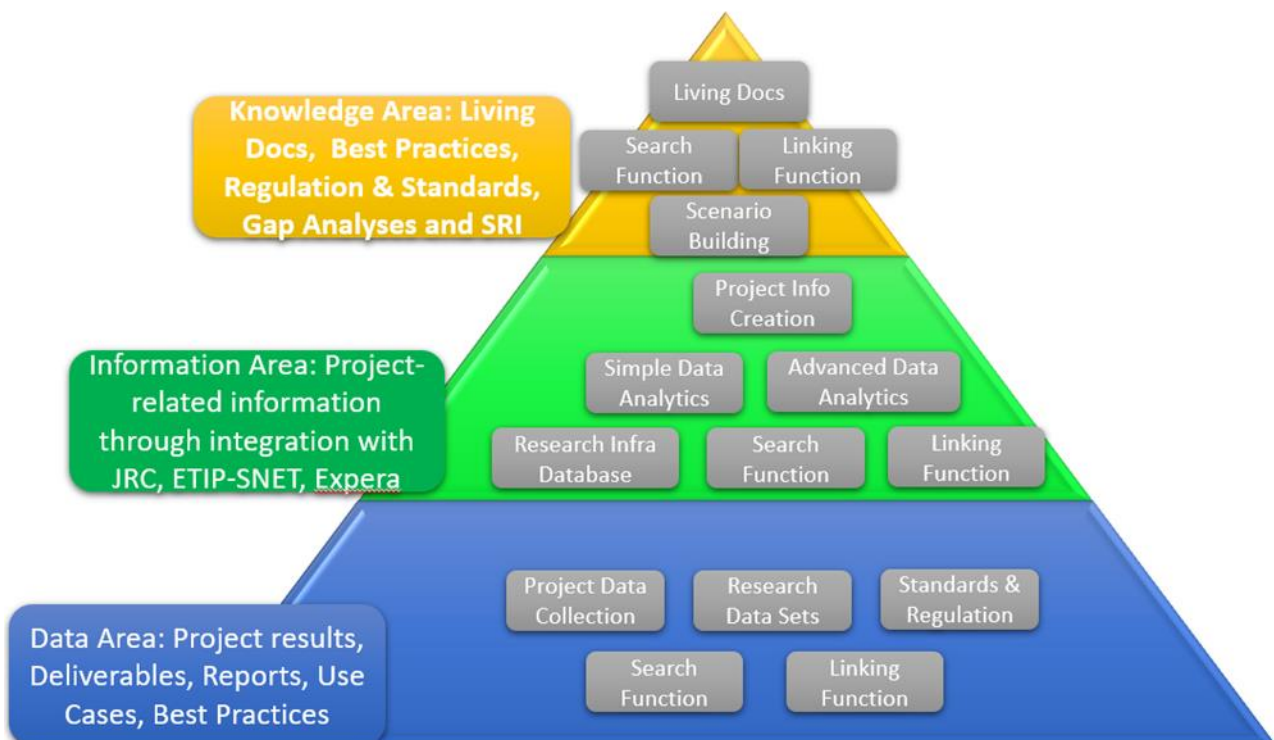


Figure 17 The PANTERA platform

- The PANTERA consortium prepared the tender specification document and invited sub-contractors to submit their offers. The PANTERA consortium evaluated the sub-contractors offers and invited the first ranked offer to sign the contract. The platform will be strongly supported by the EC. It will be hosted by the EC and will go under the name EIRIE – European Interconnection for Research Innovation & Entrepreneurship.

The architecture and the functionalities as agreed are seen in the following Figure.

### **Task 8.2. Presenting PANTERA Activities in Special Events**

This task is about increasing the awareness about PANTERA and disseminating the results by supporting and encouraging the active participation of project partners in relevant European events. For this purpose, the project partners are informed about relevant events within the European framework, promoting PANTERA's presence in the selected events and informing the stakeholders about them. The information obtained in each of these events will be reported, followed up and acted upon.

PANTERA has been presented in many relevant scientific events and conferences (EUSEW 2019, Mission Innovation 2019, BULEF 2019, ELMA 2019, etc.)

### **Task 8.3. Project visual identity, website and media coverage**

This task is about developing a project visual identity in order to present the external identity of the project in a consistent way. The identity consists of a project logo, general guidelines, as well as a presentation template, a document template and a project brochure/flyer. This task also includes the creation and maintenance of the public project website, suitable for different levels of interest and expertise. To insure dissemination of the project activities and results to the wide public several activities will be performed including: media coverage by using dedicated PR platform for press releases (e.g. newswire), social media (e.g. dedicated professional LinkedIn account, Twitter, Facebook, YouTube channel), DERlab public activity report and dedicated newsletter.

To summarize the activities undertaken under WP8, and make them more visible, the project website has been set up and running since the month 3 of the project and is regularly updated with project news and relevant information. Social media channels (Facebook, Twitter, LinkedIn, Research Gate and YouTube) have been set up and are managed by WP8 leader DERlab, with the collaboration of all project partners. Internal communication channels such as emails,

PANTERA was also promoted in the DERlab Public Activity Report 2018-2020, which is available online and has been sent to the DERlab members network. PANTERA has also been presented in many scientific events and conferences by project partners, which allowed us to interact with stakeholders and gather relevant feedback on the promoted solutions of the project and the PANTERA platform.

Regular updates and content are posted on the website and on the social media channels. Newsletters are regularly sent, especially before PANTERA workshops to promote them.

In order to keep track of the promoted work of the PANTERA project, through correct and effective communication channels and targeting the right audience, we have been monitoring different sets of Key Performance Indicators (KPIs). The KPI visualization of PANTERA's activities is presented in details in Annex 1.

OnlyOffice platform and Slack platform have been set up to enable smooth communication. between project partners. The visual identity of the project has been created (logo, templates, poster, rollup,

flyers, etc.<sup>11</sup>) and new promotion material is created systematically for the needs of the PANTERA workshops.

Support is provided to all WPs regarding dissemination material, promotion, etc.

### **Deliverables**

The following deliverables have been released covering the activities referred to in the paragraphs above:

- D8.1 Dissemination, communication and cooperation plan
- D8.2 Promotion and marketing material<sup>12</sup>

### **Contribution to the PANTERA process**

WP8 through constant coordination work has contributed extensively in the following fields in support of the objectives of the PANTERA Process:

- Has played a leading role in all the discussions of the consortium in developing and approving the specifications for the multifunctional platform.
- As indicated above the main activities of WP8 is to communicate and disseminate project activities to facilitate the flow and exchange of information to the stakeholders and broader audience, utilizing the capabilities of the platform as well and for this reason the activities in this important objective of the project are continuous with a lot of tangible results such as:
  - Support and alignment of the EC with PANTERA's objectives. The platform will be hosted by the EC and will be known under the name EIRIE – European Interconnection for Research Innovation & Entrepreneurship.
  - The project visual identity and dissemination material, public website and social media channels have been contributing to a strong and consistent image of the PANTERA project.
  - Interactions and engagement with the stakeholders through mailing campaigns, social media posts, website articles, newsletters, webinars and workshops, thus enriching the work done through the regional desks and complementing their efforts in activating stakeholders in the PANTERA process.
  - Project awareness, promotion and interactions with stakeholders have been facilitated through PANTERA's online presence, as well as in events and conferences.
  - Constant support to the regional activities and team work in promoting planned work, outcome and results achieved.

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<sup>11</sup> <https://pantera-platform.eu/resources/>

<sup>12</sup> <https://pantera-platform.eu/wp-content/uploads/2020/01/D8.2-Promotion-and-marketing-material.pdf>

### 3 Activities planned for the second half of the second year of the project (M18-M24)

The detailed PANTERA GANTT Chart with reference to the activities planned including the deliverables and milestones foreseen is shown in Figure 2.

The activities planned for next semester (18-24) of the PANTERA project will focus on:

- The PANTERA platform development phase in close collaboration with our tenderer (BILBOMATICA) and coordinated collaboration with JRC and ETIP SNET.
- The Working Teams will continue their regular meetings and targeted work for producing material for the platform covering their specific fields.
- Regional activities will intensify towards the strengthening of the regional desks and collaboration with the stakeholders of the Member States with low R&I activity.
- Organization of the planned regional workshop in Cyprus complimented with a regional nano workshop still to be identified and planned in detail.

The expected progress in submitting planned Deliverables and reaching identified Milestones due during this coming semester are detailed in the section below.

### 4 Planned Deliverables and Milestones in months 18 to 24

Table 4: List of deliverables released within M18-M24

Deliverable number	Deliverable title	WP/Lead Beneficiary	Type/Dissemination Level	Due date	Deliverable	Deliverable title
D2.3	Report on interactions with European	WP2	RSE	R	PU	24
D3.2	Report on RCS in EU-28	WP3	IERC	R	PU	22
D3.3	Report on community	WP3	IERC	R	PU	24
D5.2	Report on the outcomes of regional Workshops (intermediary)	WP5	DERlab	R	PU	24
D5.4	Report on the outcomes of Pan-European and Global Workshops (intermediary)	WP5	DERlab	R	PU	24
D6.3	Consolidated summary report of desk activities in the target regions	WP6	IPE	R	PU	22

No further milestone is anticipated within M18-M24.

## 5 Critical assessment of the project progress

### 5.1 Risks identified and/or foreseen with related mitigation measures

The foreseen risks as identified under the GA are presented in the following table.

*Table 5 The foreseen risks for the PANTERA project*

<b>Description of risk (indicate level of likelihood: Low/Medium/High)</b>	<b>WPs</b>	<b>Proposed risk-mitigation measures</b>
Losing critical staff or partners at crucial points of the project (Low)	WP1	The consortium has enough diversity and expertise to replace them by other qualified partners within the same organization or within the consortium. Also, DERlab can find one of its members to replace.
WPs resources not well balanced (Low)	WP1	Monitoring of the work and reallocation of resources in other WPs where necessary
Unexpected delays in delivering the project deliverables (Medium)	WP1	Related WP leaders and task leaders will be supported by other resources to produce deliverables on time
European entities do not respond positively (low)	WP2	The active participation of the EC will be tactfully engaged to spur interest and support.
Lack of information and/or co-operation from key stakeholders (Medium)	WP3	There is a plethora of information freely available. In addition, the relevant partner(s) have a wide and well-established network so alternative stakeholders can be found, if necessary
Not cover adequately the needs of stakeholders (low)	WP4	The planned actions and the formal operation of the Advisory Board will offer the mechanisms to identify the problem early and take appropriate action.
Workshops are not well attended and do not offer the planned impact (medium)	WP5	The consortium will utilise the experience gained by members of the Advisory Board especially ETIP SNET who is operating 4 regional workshops every year and build on this experience with quality control throughout.
Working groups fall low in activity and fail to deliver planned results (low)	WP6	The consortium considers the functioning of thematic working groups as pivotal in the work of PANTERA. Strong and continuous support will be offered with regular feedback control for appropriate corrective actions.
Stakeholders are not engaging in exploitation activities (Low)	WP7	Activities will be designed in a user-friendly manner so as to maximize engagement from all stakeholders. The partners' own networks are quite extended to secure full subscription in the exploitation events.
Project outputs are not effectively disseminated thus lessening the likelihood of market rollout (Low)	WP8	Partners are experienced in web based and scientific dissemination methods (articles, conferences). Partners are experienced in other methods of dissemination (workshops, industry events/organizations, targets publications). The

		responsible partner has a large amount of experience in the area especially from the viewpoint of technology transfer.
Failure or difficulty in establishing the PANTERA Collaboration Platform (low)	WP8	The operation of a collaborative platform is critical in the success of PANTERA and for this reason plans are in place to respond in all possible obstacles. Current activity in this direction by stakeholders especially JRC / SETIS will be utilised and extended.

The unforeseen risks identified until M18 for the last project year with corresponding corrective actions are presented in Table 5.

*Table 6: List of unforeseen risks identified with corresponding corrective actions*

<b>Risk/Associated WP</b>	<b>Status</b>	<b>Corrective actions taken</b>	<b>Corrective actions proposed</b>
Low interest from stakeholders /WP4, WP2,WP7	Difficulties in involving relevant stakeholders into interactions.	Explaining added value of the interaction, raising status of PANTERA as initiative.	Same as corrective actions taken
Cancellation of workshops due to COVID-19 pandemic/WP5, WP6	Due to COVID-19 pandemic the PANTERA consortium decided to shift and cancel some of the workshops	The Riga workshop has been shifted from 2020 to 2021. One Pan-European workshop has been hosted online as virtual workshop, instead of organizing it physically.	Mini and virtual workshops will be organized when needed and according to the needs of the project.
The PANTERA platform costs more than planned/WP8	According to the GA, the PANTERA consortium estimated the cost for the PANTERA platform around 120,000 €. The lowest priced offer submitted in the PANTERA tender was higher.	The PANTERA consortium decided to shift the un-used travel budget (due to COVID-19 pandemic) and cancelled workshops to fund the extra costs needed for the workshop.	Mini and virtual workshops will be organized when needed and according to the needs of the project, hence not losing in content and reaching out.

## 5.2 Impact and Progress in relation to the internal Key Performance Indicators

The list of the ad hoc indicators as defined in the GA have been enriched as follows:

- More indicators have been added to address the project's needs.
- These indicators are re-distributed following the three main functions of the project and not under the objectives as initially defined. This was decided as an important step forward in giving a more coherent approach to the work of the PANTERA project and following the three enriched areas of work: platform, regional desks and workshops. This change is fully aligned with the objectives while it offers an improved monitoring process of the actual related activities and an improved working environment with the

stakeholders.

As an indication of the working KPIs of the project, the following table is presented which was developed in *D8.1 Dissemination, communication and cooperation plan* and shows a few KPIs that were chosen to monitor the performance of the project’s social media channels and newsletters.

**PANTERA activities on social media seek the following impacts:**

- make the project visible online, disseminating news about project activities and achievements;
- Attract stakeholders who want to share their opinion and views and collaborate with PANTERA
- ensure effective reporting of events;
- support the project networking

*Table 7 The indicators list for monitoring the project and measures to be taken*

<i>Ad-hoc indicator</i>	<i>Target</i>	<i>Actual performance</i>
Number of newsletters	≥ 4 per year	3
Newsletter subscriptions	>100	114
Number of tweets	> 50 per year	60
Number of Twitter followers	> 100	90
Number of LinkedIn followers	> 50	62
Target number of events in which PANTERA is presented	≥ 4 per year	8

<b>Overall improvements</b>	<b>Reasons/measures for improvements</b>
<b>Higher number of newsletter subscriptions following workshops</b>	It is easier to attract newsletter subscribers once they have attended a PANTERA workshop and understand the project. Thanks to the registration forms online, the participants can always choose to subscribe to the newsletter as well.



Overall shortcomings	Reasons for shortcomings appearing	Actions to be taken to address shortcomings
<b>The number of tweets and number of newsletter is close to the set indicator which was decided upon at the beginning of the project, but it is slightly lower.</b>	Newsletters have been sent especially for inviting the subscribers to the next workshop. The workshop outcomes were not shared by newsletter but rather on the website.	A solution to increase the number of newsletters would be to send the outcomes and a summary of the workshop after the event.
	The main content so far, as the platform is not yet functioning is coming from the workshops. In these last 2 months there haven't been workshops or events therefore explaining the lack of tweets. However, retweets of interesting related tweets were shared to keep the interest on.	As already mentioned, a strategy has been put in place to activate the twitter account of the project and therefore increase the number of tweets and general activity.

Table 8 shows the metrics for the regional workshops organised so far.

Table 8 The metrics of the regional workshops

KPI	Regional Workshops					
	Sofia, BG		Dublin, IE		Athens, GR	
<b>Number of external participants in Workshop [number]</b>	32		40			
<b>Stakeholders categories [number]</b>	DSOs/TSOs	6	DSOs/TSOs	2	DSOs/TSOs	1
	Manufacturing /Industry	7	Manufacturing /Industry	10	Manufacturing /Industry	10
	Policy maker	6	Policy maker	3	Policy maker	2
	Research/Academy	13	Research/Academy	25	Research/Academy	31
<b>Active participants using voting system [number]</b>	NA		30 Participants		44 (52) participants	
<b>Regional stakeholder covering [number/country]</b>	Bulgaria	17	Ireland	37	Bulgaria	6
	Romania	2	Portugal	N/A	Romania	
	Greece	1			Greece	22
<b>Number of visits to the event [number of visits]</b>	290		551		386	
<b>Number of downloads for the slides [number of downloads]</b>	30		48		41	

In the Annex, more indicators and analysis of the performance of the PANTERA site and the dissemination channels are presented.

### 5.3 Update of the plan for exploitation and dissemination of result

Based on the recommendation of the Project Officer (PO), the PANTERA process will be presented and communicated in energy related brokerage events too. Potential operators, industries and academic/research institutes active in the field of smart grids, storage and local energy systems are attending looking those kinds of events for potential collaboration in R&I initiatives. It could be

interesting to promote the multifunctional collaborative platform and PANTERA project itself, in order to increase the number of involved stakeholders.

So, the dissemination plan is updated accordingly and partners are monitoring the potential broker events where PANTERA will participate in the next years.

**5.4 Use of resources**

Table 9 summarizes effort applied to the project in terms of person-months per work package. Overall, the comparison of actual versus planned work shows that the total level of effort matches the planned effort with acceptable spread between the various WPs. Within the project, work packages dedicated to actual work of organizing and running workshops, developing the PANTERA platform, building the regional desks and organizing / running the working teams have received more attention than other activities. More specifically, the methodology of exploitation of the outcomes of the project are at an early stage of activity and thus showing less personnel commitment.

As can be seen from Tables 10-12 this is also reflected in the individual activities of partners. In general, the project scope and objectives have progressed well as planned with the spread of work of partners revealing that not adequate attention has been given to charge correctly the various WPs to be in line with the planned work. This is specifically obvious with the allocations of FOSS, UCD, IERC and Suite5. All partners have confirmed that they do appreciate the generated problem, but they do assure the consortium that they will improve over the coming periods and they do not foresee any problems in aligning with the allocated PMs in the various WPs.

We can also assure, that we had extensive discussions in managing the work of the project and actual contribution of partners is well within the expected volume and scope. The noted excessive under spending of FOSS and UCD is not related to the actual contribution to the project by the respective partners, but attributed to internal management problems within the two universities who have experienced delays in getting organised internally to manage the required logistics. Moreover, FOSS has also related the appeared underspending to internal charging policies of the university that has nothing to do with the actual contribution of the active personnel to the project proceedings.

*Table 9 The summarized efforts and spent resources for the project*

WP	Start Month	End Month	Planned (M1-M18)	Actual (M1-M18)	% of total
WP1	1	48	15.94	8.78	55.1%
WP2	3	48	16.70	13.23	79.2%
WP3	1	48	21.56	30.89	143.3%
WP4	2	48	15.75	14.32	90.9%
WP5	1	48	18.56	17.60	94.8%
WP6	1	48	18.00	14.72	81.8%
WP7	6	48	15.12	7.67	50.8%
WP8	1	48	24.75	22.39	90.5%
<b>Total</b>			<b>146.37</b>	<b>129.62</b>	<b>88.6%</b>

Table 10 FOSS, UCD and TUS allocated resources

WP	Time Active		FOSS			UCD			TUS		
	Start Month	End Month	Planned (M1-M18)	Actual (M1-M18)	% of total	Planned (M1-M18)	Actual (M1-M18)	% of total	Planned (M1-M18)	Actual (M1-M18)	% of total
WP1	1	48	6.38	1.11	17.4%	1.13	0.52	46.2%	1.50	1.5	100.0%
WP2	3	48	2.09	0.21	10.1%	2.43	0.49	20.1%	3.13	3.37	107.7%
WP3	1	48	1.50	1.99	132.7%	3.56	3.87	108.6%	2.25	2.25	100.0%
WP4	2	48	2.25	1.51	67.1%	0.75	0.10	13.3%	2.25	2.25	100.0%
WP5	1	48	2.25	0.46	20.4%	1.88	1.16	61.9%	4.13	4.28	103.8%
WP6	1	48	1.50	0.33	22.0%	1.50	0.72	48.0%	2.25	2.25	100.0%
WP7	6	48	1.81	0.00	0.0%	0.60	0.28	46.3%	3.02	3.78	125.0%
WP8	1	48	3.00	0.16	5.3%	0.75	0.00	0.0%	3.00	2.73	91.0%
<b>Totals</b>			<b>20.78</b>	<b>5.77</b>	<b>27.8%</b>	<b>12.60</b>	<b>7.14</b>	<b>56.7%</b>	<b>21.53</b>	<b>22.41</b>	<b>104.1%</b>

Table 11 DERlab, RSE and SINTEF allocated resources

WP	Time Active		DERlab			RSE			SINTEF		
	5Start Month	End Month	Planned (M1-M18)	Actual (M1-M18)	% of total	Planned (M1-M18)	Actual (M1-M18)	% of total	Planned (M1-M18)	Actual (M1-M18)	% of total
WP1	1	48	1.50	0.52	34.7%	1.13	0.86	76.7%	0.94	0.42	45.0%
WP2	3	48	1.04	1.58	151.5%	4.17	3.50	83.9%	0.35	0.80	230.0%
WP3	1	48	1.50	2.13	142.3%	1.88	1.30	69.1%	0.00	0.00	0.0%
WP4	2	48	1.50	2.36	157.3%	1.13	0.80	71.1%	3.00	4.13	137.8%
WP5	1	48	4.13	5.97	144.7%	1.50	1.20	80.0%	0.75	0.24	32.5%
WP6	1	48	1.13	0.98	87.4%	1.50	1.50	100.0%	1.88	1.72	91.7%
WP7	6	48	1.51	0.34	22.7%	1.21	0.60	49.6%	0.30	0.00	0.0%
WP8	1	48	13.13	15.00	114.3%	1.50	1.00	66.7%	0.38	0.06	14.9%
<b>Totals</b>			<b>25.43</b>	<b>28.89</b>	<b>113.6%</b>	<b>14.01</b>	<b>10.76</b>	<b>76.8%</b>	<b>7.59</b>	<b>7.37</b>	<b>97.2%</b>

Table 12 IPE, Suite5 and IERC allocated resources

WP	Time Active		IPE			Suite5			IERC		
	Start Month	End Month	Planned (M1-M18)	Actual (M1-M18)	% of total	Planned (M1-M18)	Actual (M1-M18)	% of total	Planned (M1-M18)	Actual (M1-M18)	% of total
WP1	1	48	1.13	0.92	81.8%	1.50	2.12	141.3%	0.75	0.81	108.0%
WP2	3	48	2.09	2.58	123.6%	0.00	0	0.0%	1.39	0.7	50.3%
WP3	1	48	1.88	3.86	205.9%	2.25	2.59	115.1%	6.75	12.9	191.1%
WP4	2	48	2.25	1.67	74.2%	1.13	0	0.0%	1.50	1.5	100.0%
WP5	1	48	1.88	2.58	137.6%	1.13	0.42	37.3%	0.94	1.29	137.6%
WP6	1	48	7.13	6.12	85.9%	0.00	0	0.0%	1.13	1.1	97.8%
WP7	6	48	0.91	0.16	17.6%	4.53	2.21	48.7%	1.21	0.3	24.8%
WP8	1	48	1.50	1.13	75.3%	0.38	0.87	232.0%	1.13	1.45	128.9%
<b>Totals</b>			<b>18.74</b>	<b>19.02</b>	<b>101.5%</b>	<b>10.91</b>	<b>8.21</b>	<b>75.3%</b>	<b>14.79</b>	<b>20.05</b>	<b>135.6%</b>

## 6 Discussion and Conclusions

The main objective of this deliverable is to present the progress of the PANTERA project within the period of M1 to M18 of implementation. The main challenge is to present not only the progress made based on the expected deliverables, milestones or outcomes but also highlight the impact that this CSA project has managed to achieve by meeting the set objectives.

Based on this fundamental need, the management (WP1) of the project has adapted its activities by introducing the PANTERA process that has three main “arms”. Through them, the process -as a whole- impacts and promotes the designed activities in favour of the low spending countries for leveraging the R&I smart grids investments.

All work packages and their activities are contributing to these three arms as detailed below, in addition to the coordination responsibilities that WP1 has undertaken, led by the team of the Coordinator:

- PANTERA platform: WP2, WP3, WP7, WP8, WP5
- PANTERA Regional Desks: WP2, WP4, WP6, WP5
- PANTERA Working Teams: WP2, WP3

Under this approach, all deliverables, milestones and foreseen outcomes have been successfully completed whereas any risk (foreseen or unforeseen) has been effectively addressed. The fulfilling performance of the project is seen also through the metrics of KPIs that are continuously tracked.

The main success stories of this project- that also secures its sustainability-in relation to the identified needs amalgamated through the adapted process are the following:

- Development of an interactive multifunctional platform under the auspices of DG ENER and its initiatives that will re-enforce its winning character of being a single point of reference for the whole R&I community and hosted by the JRC
- Build the regional desks in cooperation with RIS3 Smart Specialization Platform of the Commission cooperation and connected local stakeholders under the continuous guidance and support of the partners of the PANTERA project.
- Provide support and engage energy experts of ETIP SNET to continuously nurture the Working Teams’ activities as a means of supporting the R&I Community of Europe and the targeted interactive and multifunctional platform with exploitable knowledge, information and data.

Regarding the overall financial resources spent, the partners are on a good track. Where appropriate, the individual organizations / companies shall take measures to compensate either overspending or underspending.

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### 7.3 Annex 1- PANTERA KPIs general visualisation

#### 7.3.1 Overall improvements and shortcomings

Website

Overall improvements	Reasons/measures for improvements
<b>The website is user-friendly, very easy and intuitive to use.</b>	We have decided to keep the design simple and refined so that it is accessible to a large general audience.
<b>The website is continually updated.</b>	The website is continually updated with events, workshops, news and resources (approved public deliverables, published papers, workshop presentations and agendas, project promotional materials, etc.)
<b>Analytics</b>	In terms of analytics, we can see a steady increase in terms of users on the website and page views (number of pages the users visit). Indeed, from the first trimester of 2019 to the last, the number of users increased by 50% and the number of page views by 35%.
<b>International audience</b>	Following the promotion of regional workshops, analytics show a lot of users come from the targeted regions (Latvia, Greece, Bulgaria, etc.). The working language of the website is English, but it is the ambition to attract stakeholders with other languages as well especially in the targeted regions, therefore links to publications from our partners in other languages can be found on the website as well.

Overall shortcomings	Reasons for shortcomings appearing	Actions to be taken to address shortcomings
Analytics – Bounce rate. Through the monitoring of the website analytics on Google Analytics, we have noticed a high bounce rate (the percentage of visitors to a particular website who navigate away from the site after viewing only one page). Most websites will see bounce rates fall somewhere between 26% and 70%, having 40% as an average. PANTERA’s average bounce rate in 2019 was 56% and 47% in 2020. We can see an improvement, but it could be better.	PANTERA can be associated with other brands, names that are not related at all to the project. We can speculate one of the reasons for the high bounce rate is this, as users come to the PANTERA website expecting another website, they will leave the website without visiting any other page.	There is not one particular solution to this, as the website is properly functioning and there we always care for the proper maintenance. As the bounce rate has decreased since last year, we can suppose with PANTERA’s awareness rising, the right audience is being more and more targeted and less users looking for other “PANTERA”s are coming to the website.
Lack of news on the website	Due to the COVID-19 situation,	As further elaborated

	<p>all workshops and events have been cancelled and considering most of PANTERA's news come from the workshops, there has been a lack of news to share on the website.</p>	<p>below, the consortium has decided to actively take part in the project's communication and promotion by proposing every week relevant content to be shared. This has been planned for Twitter initially but it could be applied to the website as well.</p>
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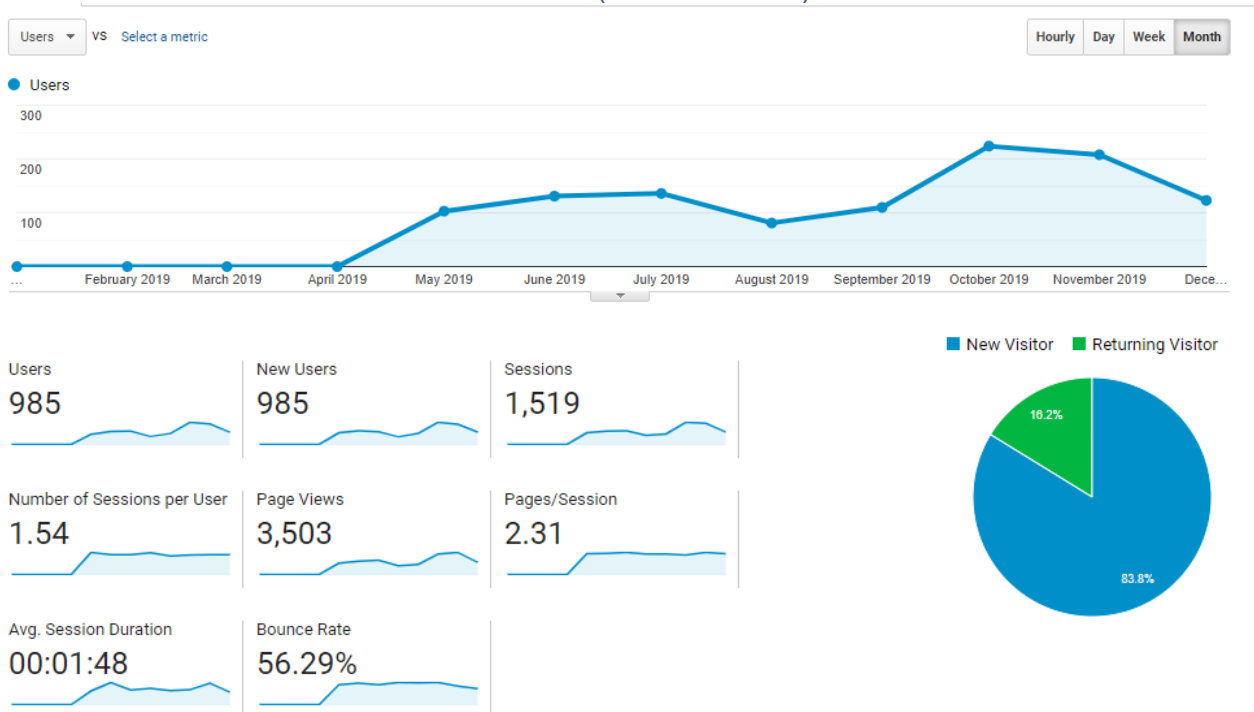
### 7.3.2 Social media and Newsletter

#### Additional actions for promoting PANTERA

Considering the current situation and the cancellation of the upcoming PANTERA workshops, the consortium has decided to come up with solutions to further promote the PANTERA project and activate this promotion especially through the use of social media. A plan of action has been decided upon, involving all partners from the consortium, to actively propose dissemination content that will be relevant and interesting for PANTERA's audience on social media. Each week, a specific partner will be sharing information in relation with the project's scope that can be shared on social media. Indeed, being active and continuing to share content even though workshops and events are being cancelled, will keep the audience's interest.

#### PANTERA Website

#### NUMBER OF USERS ON THE WEBSITE IN 2019 (MONTHLY VIEW)



The high bounce rate can be explained by a number of users who come to the website searching for PANTERA (the music band) especially from the US) and considering this is not the right website they were looking for, they just leave the website.



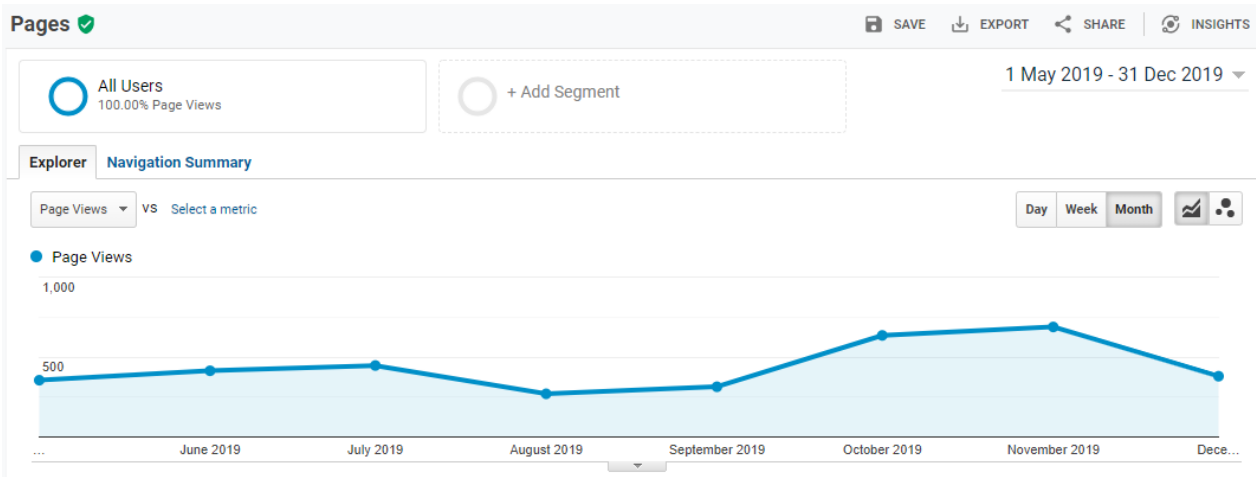
### Top 10 languages of the users in 2019

Language	Users	% Users
1. en-us	532	53.68%
2. en-gb	109	11.00%
3. bg-bg	44	4.44%
4. en-ie	32	3.23%
5. it-it	28	2.83%
6. de-de	24	2.42%
7. es-es	23	2.32%
8. de	21	2.12%
9. el-gr	16	1.61%
10. fr-fr	13	1.31%

### Top 10 countries of the users in 2019

Country	Users	% Users
1.  United States	188	18.73%
2.  Ireland	140	13.94%
3.  Bulgaria	87	8.67%
4.  Germany	63	6.27%
5.  Greece	46	4.58%
6.  Latvia	36	3.59%
7.  Italy	34	3.39%
8.  Belgium	33	3.29%
9.  United Kingdom	33	3.29%
10.  Cyprus	31	3.09%

### Number of pages visited by users (multiple pages per user) in 2019



*Detail of the page views in 2019*

Page	Page Views	% of Total
<span>Page Views</span> <span>3,503</span> <span>% of Total: 100.00% (3,503)</span>		
1. /	1,083	30.92%
2. /2019/10/01/join-the-pantera-dublin-workshop-irelands-smartgrid-energy-storage-and-local-energy-systems-landscape-research-innovation-roadmap/	347	9.91%
3. /about-pantera/	338	9.65%
4. /stakeholders/	283	8.08%
5. /project-data/	276	7.88%
6. /events/	193	5.51%
7. /resources/	184	5.25%
8. /news/	150	4.28%
9. /2019/07/15/pantera-workshop-an-innovative-approach-towards-unified-pan-europe-an-research-innovation-efforts-in-the-energy-sector-balkan-series-sofia-bg-2-july-2019/	148	4.22%
10. /2019/06/06/pantera-workshop-an-innovative-approach-towards-unified-pan-europe-an-research-innovation-efforts-in-the-energy-sector/	97	2.77%

*Detail of the devices used by users and the top acquisition channels in 2019*

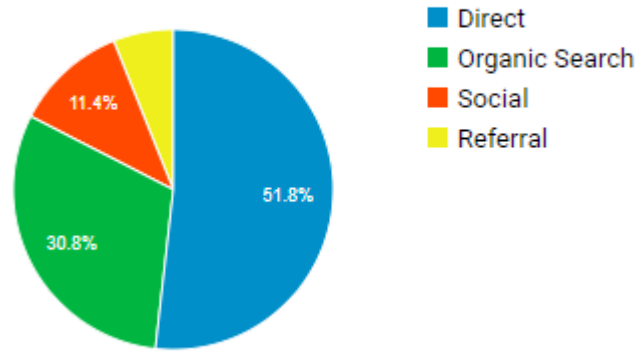
Sessions by device



Desktop	Mobile	Tablet
76.0%	22.6%	1.4%
↑49.2%	↑54.8%	↓14.3%

1 May 2019 - 31 Dec 2019 MOBILE OVERVIEW >

Top Channels



**Direct Traffic** = the traffic you get when someone visits your website by directly typing in the browser.

**Organic Traffic** = the traffic you get from search engines such as Google, Yahoo, Bing, etc. (e.g. When someone types PANTERA in Google)

**Referral traffic** = what you get from other sites who placed your link on their website.

**Social Traffic** = the traffic you get from social media websites like Facebook, Twitter, LinkedIn, etc.

Referral details (where the

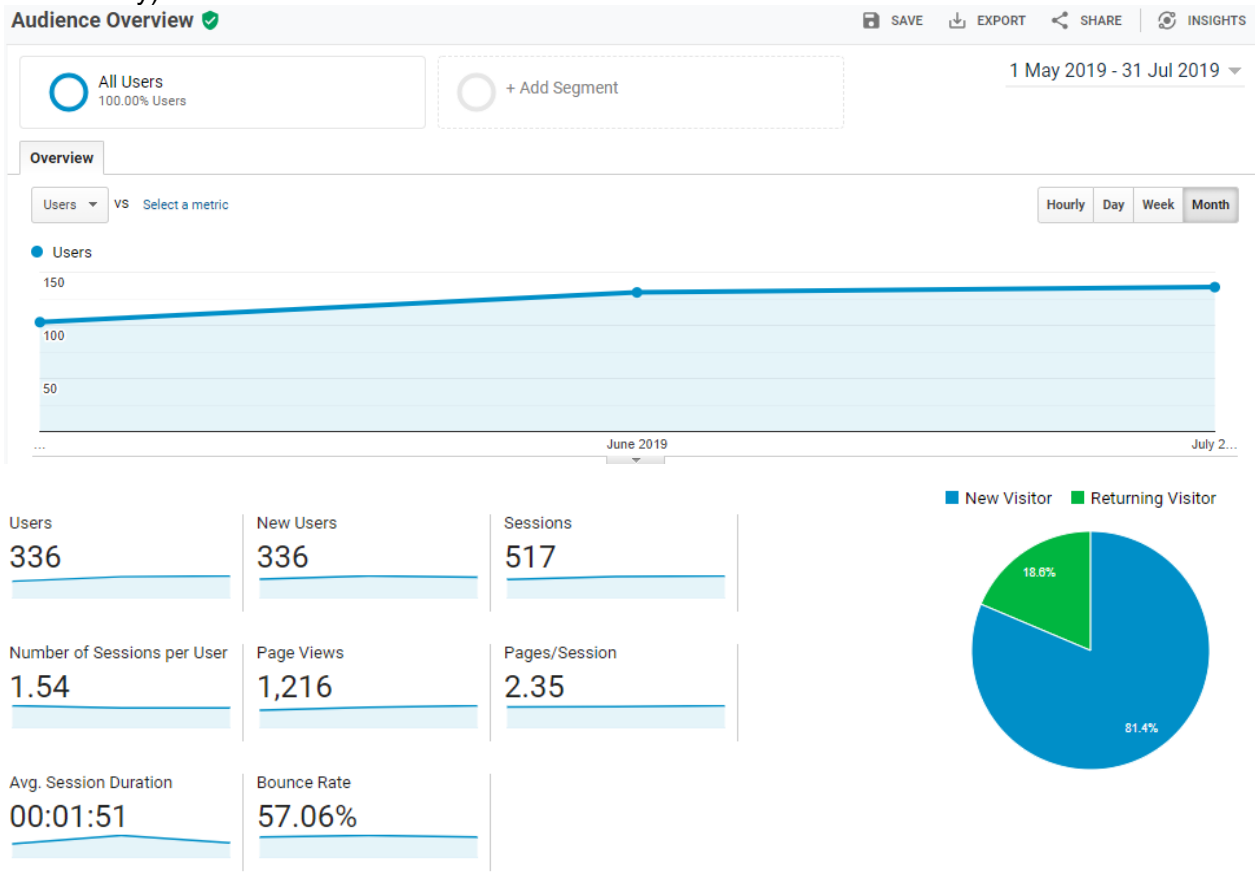
Source ?	Acquisition			Behaviour		
	Users ? ↓	New Users ?	Sessions ?	Bounce Rate ?	Pages/Session ?	Avg. Session Duration ?
	63 % of Total: 6.40% (985)	53 % of Total: 5.38% (985)	128 % of Total: 8.43% (1,519)	49.22% Avg for View: 56.29% (-12.56%)	2.48 Avg for View: 2.31 (7.73%)	00:03:32 Avg for View: 00:01:48 (95.98%)
1. der-lab.net	22 (33.85%)	19 (35.85%)	44 (34.38%)	27.27%	3.30	00:05:02
2. mail.google.com	4 (6.15%)	4 (7.55%)	5 (3.91%)	20.00%	2.20	00:14:40
3. mailchi.mp	4 (6.15%)	3 (5.66%)	4 (3.12%)	100.00%	1.00	00:00:00
4. baidu.com	3 (4.62%)	3 (5.66%)	3 (2.34%)	66.67%	1.33	00:00:01
5. derlab-repo.net	3 (4.62%)	2 (3.77%)	9 (7.03%)	33.33%	2.22	00:01:36
6. energyinstitute.ucd.ie	3 (4.62%)	2 (3.77%)	5 (3.91%)	80.00%	1.60	00:00:06
7. wallinside.top	3 (4.62%)	3 (5.66%)	3 (2.34%)	100.00%	1.00	00:00:00
8. mail.inbox.lv	2 (3.08%)	0 (0.00%)	5 (3.91%)	80.00%	2.00	00:00:08
9. powerindustry-bulgaria.com	2 (3.08%)	2 (3.77%)	3 (2.34%)	100.00%	1.00	00:00:00
10. sci.kit.edu	2 (3.08%)	2 (3.77%)	2 (1.56%)	0.00%	3.50	00:02:58

Social details (Which social media do the users come from)

Social Network ?	Acquisition			Behaviour	
	Users ? ↓	New Users ?	Sessions ?	Bounce Rate ?	Pages/Session ?
	<b>118</b> % of Total: 11.98% (985)	<b>99</b> % of Total: 10.05% (985)	<b>161</b> % of Total: 10.60% (1,519)	<b>60.87%</b> Avg for View: 56.29% (8.14%)	<b>2.06</b> Avg for View: 2.31 (-10.85%)
1. Facebook	55 (45.83%)	53 (53.54%)	61 (37.89%)	83.61%	1.39
2. LinkedIn	41 (34.17%)	36 (36.36%)	48 (29.81%)	52.08%	2.02
3. Twitter	24 (20.00%)	10 (10.10%)	52 (32.30%)	42.31%	2.87

### 7.3.3 Number of users on the website per trimester: 1 May 2019 – 31 July 2019

(It started in May because that's when the website was live and running, no users were accounted before May)

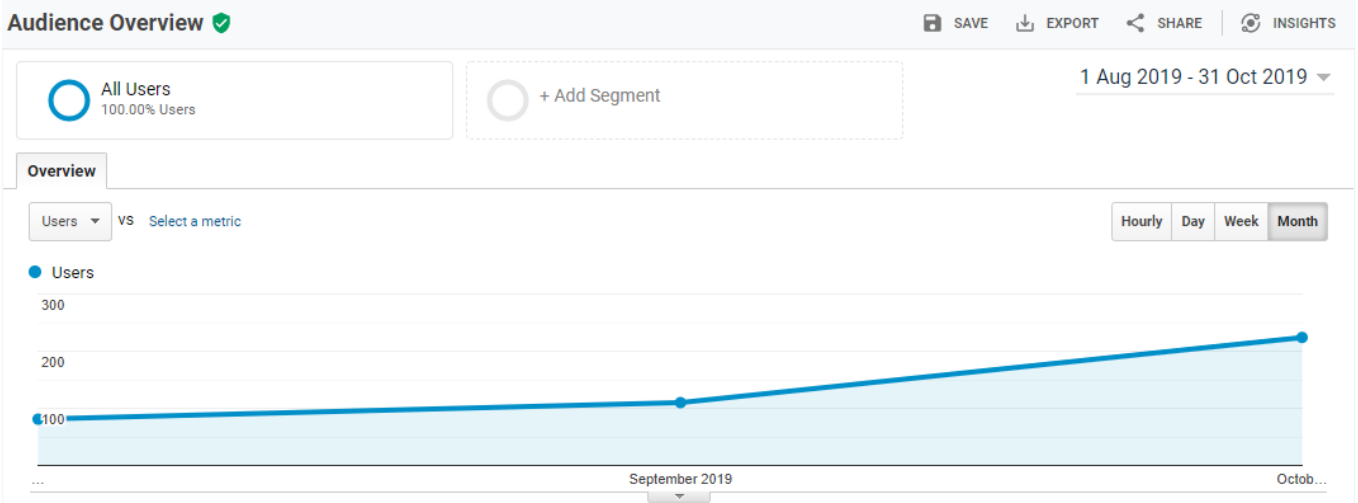
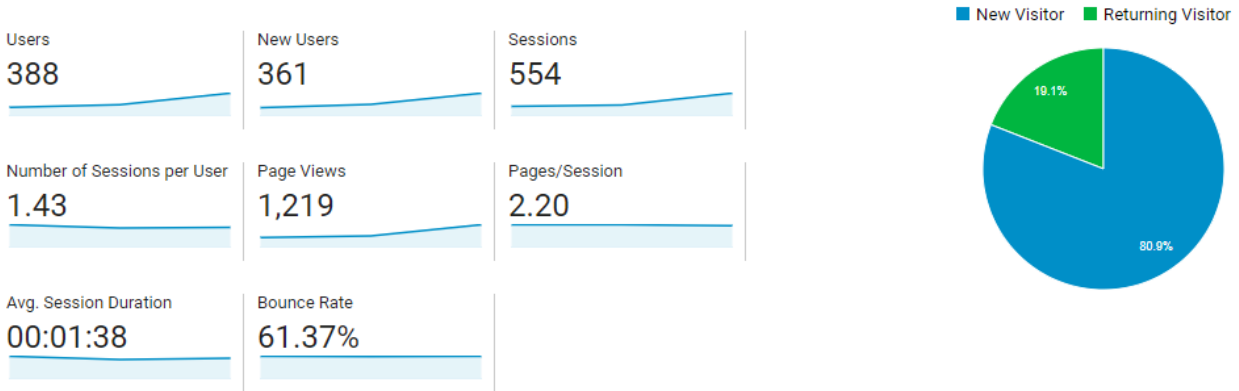


Country	Users	% Users
1.  United States	64	18.39%
2.  Bulgaria	62	17.82%
3.  Germany	29	8.33%
4.  Ireland	25	7.18%
5.  Greece	21	6.03%
6.  Belgium	14	4.02%
7.  Italy	13	3.74%
8.  Cyprus	12	3.45%
9.  Latvia	12	3.45%
10.  Austria	10	2.87%

Detail of the page views

Page	Page Views	% of Total
	1,216	100.00% (1,216)
1. /	387	31.83%
2. /about-pantera/	138	11.35%
3. /stakeholders/	130	10.69%
4. /project-data/	123	10.12%
5. /2019/06/06/pantera-workshop-an-innovative-approach-towards-unified-pan-europe-an-research-innovation-efforts-in-the-energy-sector/	75	6.17%
6. /resources/	75	6.17%
7. /events/	69	5.67%
8. /news/	56	4.61%
9. /2019/07/15/pantera-workshop-an-innovative-approach-towards-unified-pan-europe-an-research-innovation-efforts-in-the-energy-sector-balkan-series-sofia-bg-2-july-2019/	34	2.80%
10. /2019/01/23/official-kick-off-of-the-pantera-project/	32	2.63%

Number of users on the website per trimester: 1 August 2019 – 31 October 2019

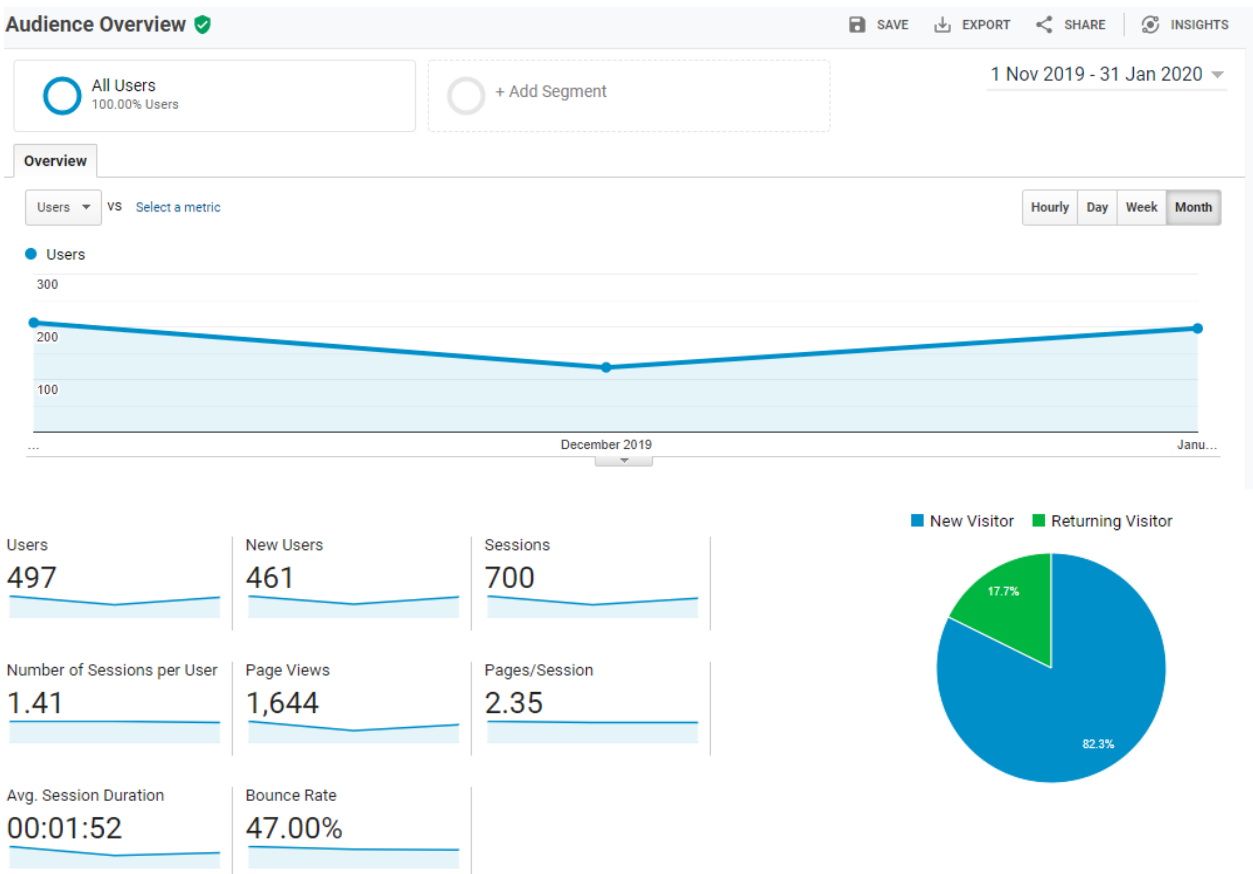


Country	Users	% Users
1.  United States	58	14.91%
2.  Ireland	39	10.03%
3.  Germany	24	6.17%
4.  Latvia	24	6.17%
5.  Belgium	20	5.14%
6.  Greece	19	4.88%
7.  France	17	4.37%
8.  Bulgaria	16	4.11%
9.  Cyprus	14	3.60%
10.  Spain	12	3.08%

Details of the page views

Page	Page Views	Page Views
	1,219 % of Total: 100.00% (1,219)	1,219 % of Total: 100.00% (1,219)
1. /	386	31.67%
2. /about-pantera/	134	10.99%
3. /stakeholders/	117	9.60%
4. /2019/10/01/join-the-pantera-dublin-workshop-irelands-smartgrid-energy-storage-and-local-energy-systems-landscape-research-innovation-roadmap/	106	8.70%
5. /project-data/	89	7.30%
6. /2019/07/15/pantera-workshop-an-innovative-approach-towards-unified-pan-european-research-innovation-efforts-in-the-energy-sector-balkan-series-sofia-bg-2-july-2019/	67	5.50%
7. /resources/	66	5.41%
8. /news/	57	4.68%
9. /events/	47	3.86%
10. /2019/09/17/public-consultation-for-d4-1-content-and-topics-for-dissemination-and-networking-activities-report/	29	2.38%

### 7.3.4 Number of users on the website per trimester: 1 November 2019 – 31 January 2020

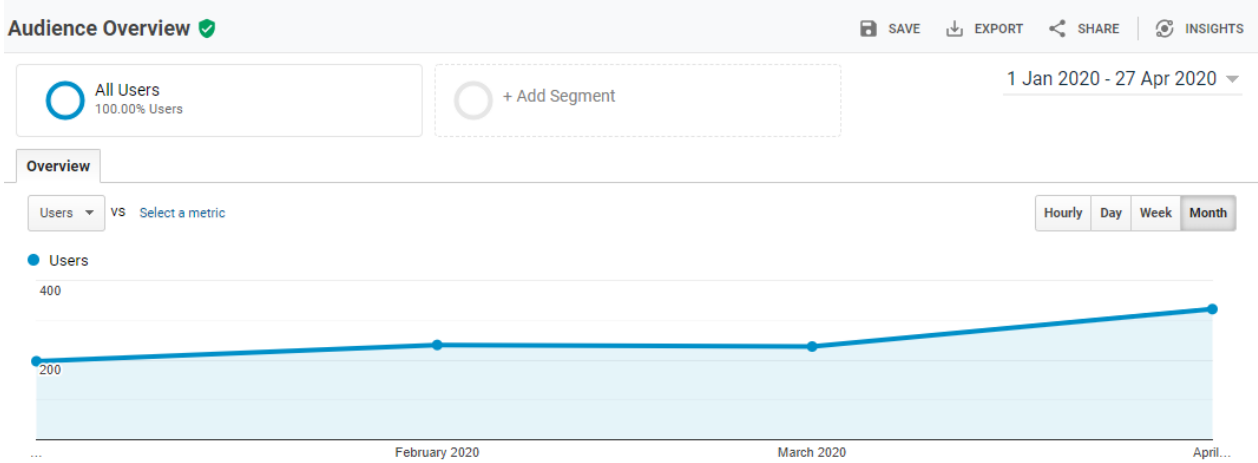


Country	Users	% Users
1.  United States	118	23.51%
2.  Ireland	99	19.72%
3.  Germany	31	6.18%
4.  Greece	25	4.98%
5.  Bulgaria	22	4.38%
6.  Spain	18	3.59%
7.  United Kingdom	18	3.59%
8.  Italy	17	3.39%
9.  Cyprus	15	2.99%
10.  France	14	2.79%

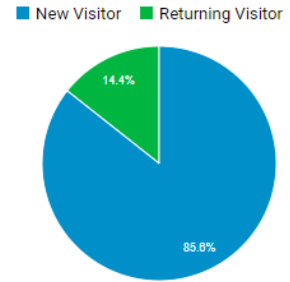
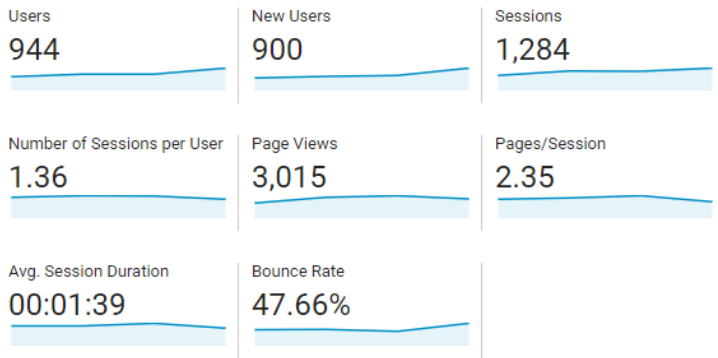
Detail of the page views

Page	Page Views	% of Total
		1,644 % of Total: 100.00% (1,644)
1. /	497	30.23%
2. /2019/10/01/join-the-pantera-dublin-workshop-irelands-smartgrid-energy-storage-and-local-energy-systems-landscape-research-innovation-roadmap/	252	15.33%
3. /events/	108	6.57%
4. /register-to-pantera-athens-workshop/	87	5.29%
5. /about-pantera/	83	5.05%
6. /project-data/	81	4.93%
7. /2020/01/16/join-the-pantera-athens-workshop-green-islands-as-a-driver-for-the-energy-transition-going-renewable-and-smart/	77	4.68%
8. /register-to-pantera-dublin-workshop/	69	4.20%
9. /2019/07/15/pantera-workshop-an-innovative-approach-towards-unified-pan-europe-an-research-innovation-efforts-in-the-energy-sector-balkan-series-sofia-bg-2-july-2019/	63	3.83%
10. /news/	58	3.53%

Number of users on the website in 2020 (monthly view)







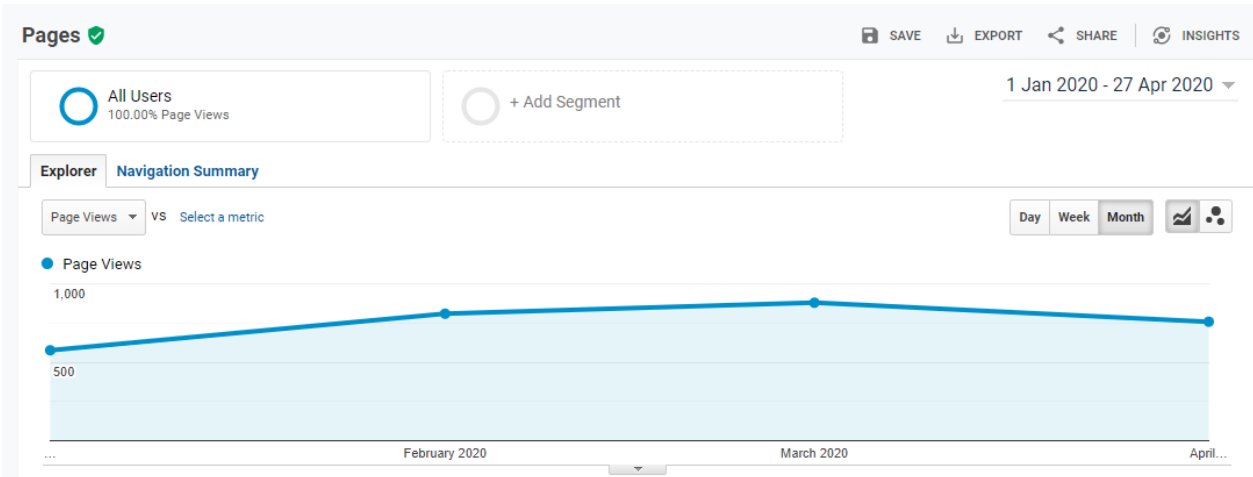
Top 10 languages of the users in 2020

Language	Users	% Users
1. en-us	450	47.57%
2. en-gb	103	10.89%
3. es-es	38	4.02%
4. it-it	35	3.70%
5. el-gr	29	3.07%
6. lv-lv	29	3.07%
7. de-de	26	2.75%
8. ro-ro	23	2.43%
9. de	21	2.22%
10. fr-fr	19	2.01%

Top 10 countries of the users in 2020

Country	Users	% Users
1.  United States	164	17.28%
2.  Latvia	91	9.59%
3.  Greece	70	7.38%
4.  Romania	67	7.06%
5.  Germany	59	6.22%
6.  Spain	58	6.11%
7.  Italy	47	4.95%
8.  France	37	3.90%
9.  Belgium	35	3.69%
10.  Bulgaria	33	3.48%

Number of pages visited by users (multiple pages per user) in 2020



**Detail of the visited pages in 2020**

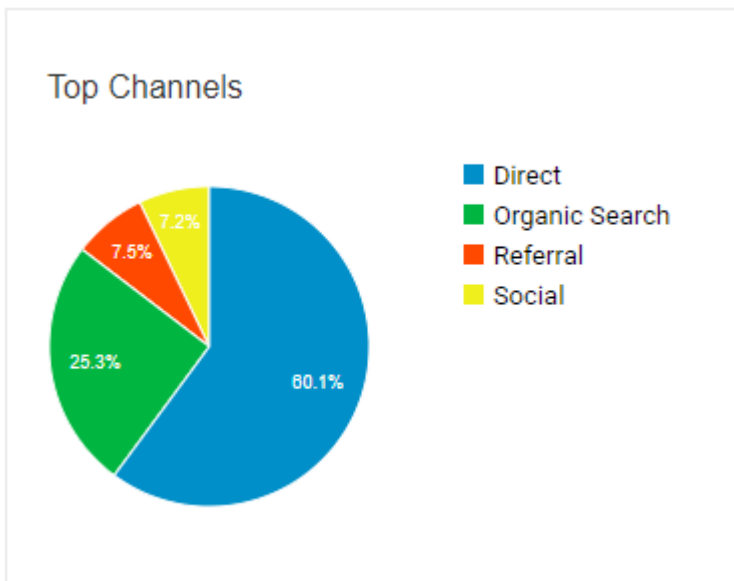
Primary Dimension: Page [Page Title](#) [Other](#)

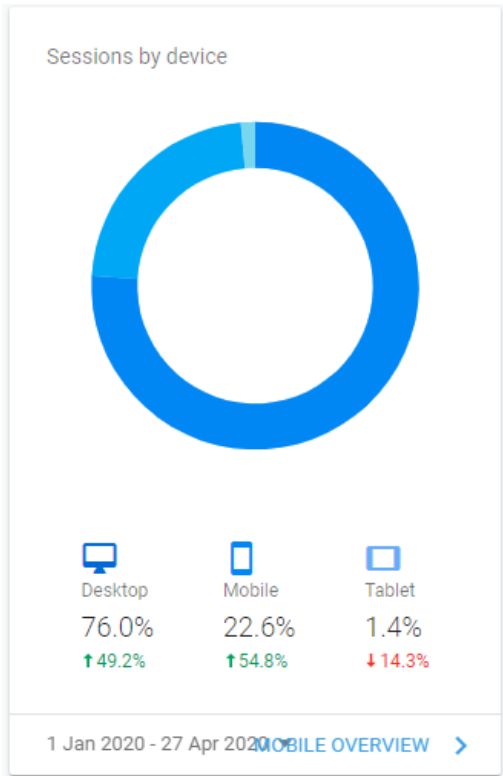
Secondary dimension Sort Type: Default

Page	Page Views	Page Views
	3,022 % of Total: 100.00% (3,022)	3,022 % of Total: 100.00% (3,022)
1. /	1,120	37.06%
2. /about-pantera/	223	7.38%
3. /2020/02/18/join-the-pantera-riga-workshop-energy-transition-in-the-baltic-states-funding-opportunities-for-smart-energy-research-and-innovation/	197	6.52%
4. /2020/01/16/join-the-pantera-athens-workshop-green-islands-as-a-driver-for-the-energy-transition-going-renewable-and-smart/	190	6.29%
5. /events/	168	5.56%
6. /project-data/	156	5.16%
7. /register-to-pantera-athens-workshop/	125	4.14%
8. /resources/	125	4.14%
9. /register-to-pantera-riga-workshop/	107	3.54%
10. /2019/12/11/pantera-workshop-pan-european-research-and-innovation-activities-for-smart-grids-energy-storage-and-local-energy-systems-dublin/	93	3.08%

( / is the PANTERA home page)

**Detail of the devices used by users and the top acquisition channels in 2020**





**Direct Traffic** = the traffic you get when someone visits your website by directly typing in the browser.

**Organic Traffic** = the traffic you get from search engines such as Google, Yahoo, Bing, etc. (e.g. When someone types PANTERA in Google)

**Referral traffic** = what you get from other sites who placed your link on their website.

**Social Traffic** = the traffic you get from social media websites like Facebook, Twitter, LinkedIn, etc.

### 7.3.5 Referral details

Source ?	Acquisition			Behaviour			Conversions		
	Users ? ↓	New Users ?	Sessions ?	Bounce Rate ?	Pages/Session ?	Avg. Session Duration ?	Goal Conversion Rate ?	Goal Completions ?	Goal Value ?
	73 % of Total: 7.73% (944)	64 % of Total: 7.11% (900)	113 % of Total: 8.79% (1,285)	36.28% Avg for View: 47.63% (-23.82%)	2.50 Avg for View: 2.35 (6.49%)	00:01:33 Avg for View: 00:01:39 (-6.42%)	0.00% Avg for View: 0.00% (0.00%)	0 % of Total: 0.00% (0)	US\$0.00 % of Total: 0.00% (US\$0.00)
1. <a href="#">viaa.gov.lv</a>	33 (45.21%)	31 (48.44%)	36 (31.86%)	30.56%	2.94	00:01:04	0.00%	0 (0.00%)	US\$0.00 (0.00%)
2. <a href="#">der-lab.net</a>	6 (8.22%)	5 (7.81%)	8 (7.08%)	25.00%	3.50	00:01:13	0.00%	0 (0.00%)	US\$0.00 (0.00%)
3. <a href="#">tu-sofia.bg</a>	4 (5.48%)	2 (3.12%)	20 (17.70%)	60.00%	1.90	00:02:17	0.00%	0 (0.00%)	US\$0.00 (0.00%)
4. <a href="#">apollo.rae.gr</a>	3 (4.11%)	3 (4.69%)	5 (4.42%)	0.00%	3.60	00:05:08	0.00%	0 (0.00%)	US\$0.00 (0.00%)
5. <a href="#">baidu.com</a>	3 (4.11%)	3 (4.69%)	3 (2.65%)	66.67%	1.33	00:00:03	0.00%	0 (0.00%)	US\$0.00 (0.00%)
6. <a href="#">ortus.rtu.lv</a>	3 (4.11%)	3 (4.69%)	4 (3.54%)	0.00%	4.25	00:03:47	0.00%	0 (0.00%)	US\$0.00 (0.00%)
7. <a href="#">derlab-repo.net</a>	2 (2.74%)	0 (0.00%)	6 (5.31%)	50.00%	1.83	00:05:03	0.00%	0 (0.00%)	US\$0.00 (0.00%)
8. <a href="#">mail.google.com</a>	2 (2.74%)	1 (1.56%)	2 (1.77%)	0.00%	3.50	00:00:46	0.00%	0 (0.00%)	US\$0.00 (0.00%)
9. <a href="#">mail.unitbv.ro</a>	2 (2.74%)	2 (3.12%)	2 (1.77%)	50.00%	1.50	00:00:02	0.00%	0 (0.00%)	US\$0.00 (0.00%)
10. <a href="#">mailchi.mp</a>	2 (2.74%)	2 (3.12%)	2 (1.77%)	50.00%	1.50	00:00:01	0.00%	0 (0.00%)	US\$0.00 (0.00%)

### 7.3.6 Social media details

Social Network ?	Acquisition			Behaviour		
	Users ? ↓	New Users ?	Sessions ?	Bounce Rate ?	Pages/Session ?	Avg. Session Duration ?
	70 % of Total: 7.42% (944)	59 % of Total: 6.56% (900)	80 % of Total: 6.23% (1,285)	62.50% Avg for View: 47.63% (31.23%)	1.95 Avg for View: 2.35 (-17.08%)	00:00:54 Avg for View: 00:01:39 (-45.34%)
1. Facebook	60 (85.71%)	55 (93.22%)	65 (81.25%)	70.77%	1.69	00:00:24
2. Twitter	6 (8.57%)	2 (3.39%)	8 (10.00%)	50.00%	3.12	00:05:17
3. LinkedIn	4 (5.71%)	2 (3.39%)	7 (8.75%)	0.00%	3.00	00:00:33

### Newsletter

## Audience

Current audience

PANTERA ▾

This audience has 114 contacts. 114 of them are subscribers.

November, 2019 (1)

<b>PANTERA Dublin Workshop</b> Regular · PANTERA Sent Tue, November 19th, 2019 9:45 am to 78 recipients by you	Sent	39.7% Opens	10.3% Clicks	View Report ▾
<b>PANTERA October 2019 (questionnaire subscribers)</b> Regular · PANTERA Tags: Questionnaire subscribers Sent Mon, October 7th, 2019 1:47 pm to 39 recipients by you	Sent	47.4% Opens	18.4% Clicks	View Report ▾
<b>PANTERA October 2019</b> Regular · PANTERA Sent Wed, October 2nd, 2019 2:44 pm to 29 recipients by you	Sent	46.4% Opens	10.7% Clicks	View Report ▾

### Social media

#### Twitter

PANTERA has an official Twitter account (@PanteraPlatform). Currently, the account has 91 followers, including: researchers from international universities, H2020 projects, research organizations and industries from the energy field, EU actors and stakeholders, etc.

Impressions: Number of times users saw a tweet on Twitter

Engagement: Number of times a user has interacted with a tweet (like, click, retweet, etc.)

Engagement rate: Engagement/impressions x 100

### PANTERA Platform

@PanteraPlatform

#H2020 funded. PANTERA aims at an integrated pan-European R&I community, active in the fields of #smartgrids, #storage and local energy systems.

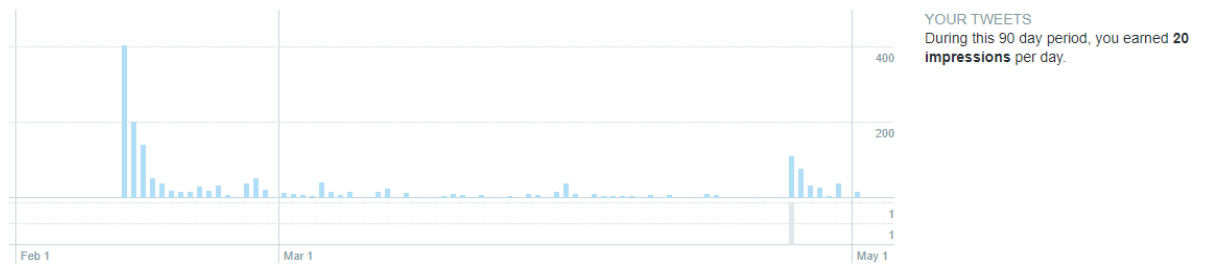
📍 Europe 🌐 [pantera-platform.eu](http://pantera-platform.eu) 📅 Joined January 2019

154 Following 92 Followers

### Impression in 2019

### Impressions, Engagement and Engagement Rate (1 February 2019-1 May 2019)

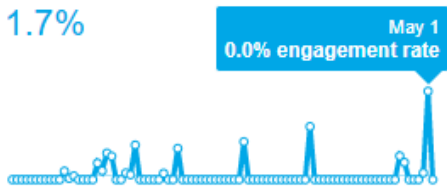
Your Tweets earned 1.8K impressions over this 90 day period



Tweets | Top Tweets | Tweets and replies | Promoted | Impressions | Engagements | Engagement rate

Tweet Content	Impressions	Engagements	Engagement rate
<b>PANTERA Platform</b> @PanteraPlatform · 24 Apr 2019 Are you active in the fields of #SmartGrids, #storage, local #energy systems? Do you want to contribute to a true #PanEuropean community in the R&I energy sector? Join us now >>> <a href="http://pantera-platform.eu/stakeholders">pantera-platform.eu/stakeholders</a> <a href="https://pic.twitter.com/eKsngYdog4">pic.twitter.com/eKsngYdog4</a> View Tweet activity	887	18	2.0%
<b>PANTERA Platform</b> @PanteraPlatform · 26 Feb 2019 Thanks @INTER_PLAN for the support! <a href="https://twitter.com/INTER_PLAN/status...">twitter.com/INTER_PLAN/sta...</a> View Tweet activity	333	4	1.2%
<b>PANTERA Platform</b> @PanteraPlatform · 14 Feb 2019 Thanks to @ESIPP_Research for their support! <a href="https://twitter.com/ESIPP_Research...">twitter.com/ESIPP_Research...</a> View Tweet activity	309	0	0.0%
<b>PANTERA Platform</b> @PanteraPlatform · 12 Feb 2019 PANTERA kick-off on 30-31 January 2019 in Nicosia (CY). A multi-dimensional platform of pan-European status, to become the single point of reference for smart grids in Europe #H2020 #EUprojects #smartgrids #smartGrid #electricitygrid #lowcarbon #storage <a href="https://pic.twitter.com/HCPyPRrcyU">pic.twitter.com/HCPyPRrcyU</a> View Tweet activity	1,400	67	4.8%

Engagement rate  
1.7%



Retweets  
6



On average, you earned **0 Retweets** per day

Link clicks  
12



On average, you earned **0 link clicks** per day

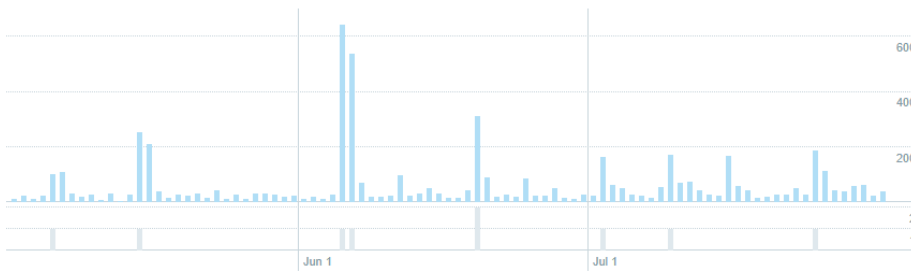
Likes  
15



On average, you earned **0 likes** per day





### Impressions, Engagement and Engagement rate (2 May 2019 – 31 July 2019)

Your Tweets earned **5.5K impressions** over this **91 day** period

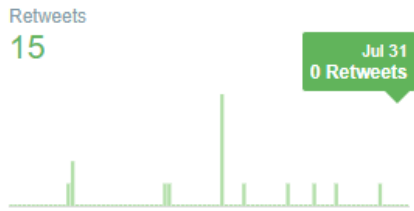
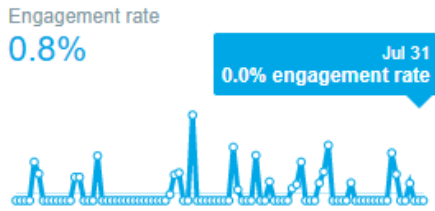


**YOUR TWEETS**  
During this 91 day period, you earned **60 impressions** per day.

	Tweets	Top Tweets	Tweets and replies	Promoted	Impressions	Engagements	Engagement rate
	<b>PANTERA Platform</b> @PanteraPlatform · Jul 24				564	11	2.0%
	Have a look at the outcomes of our first workshop, Balkan series and learn more about key challenges and opportunities in the region through presentations available online.  <a href="https://bit.ly/2JOn6Yz">bit.ly/2JOn6Yz</a>  <b>#research #EU #workshop #innovation #H2020 #Horizon2020 #smartgrids #energy #RI</b> <a href="https://pic.twitter.com/EbKafbMay7">pic.twitter.com/EbKafbMay7</a> View Tweet activity						
	<b>PANTERA Platform</b> @PanteraPlatform · Jul 9				1,423	21	1.5%
	Thanks for joining our first PANTERA workshop, bringing us one step closer to a truly integrated Pan European R&I community in the field of <b>#smartgrids</b> , <b>#storage</b> and local <b>#energysystems</b> .  <b>#EU #EUproject #PANTERA #energy #lowcarbon #workshop #H2020 #Horizon2020</b> <a href="https://pic.twitter.com/7ibN45B34Q">pic.twitter.com/7ibN45B34Q</a> View Tweet activity						
	<b>PANTERA Platform</b> @PanteraPlatform · Jul 2				525	6	1.1%
	The first PANTERA workshop is happening now! Not available? No problem, join live streaming 📺  Please register yourself to receive the connection details: <a href="https://bit.ly/2ZSOWbd">bit.ly/2ZSOWbd</a>  2 July 2019 9:00 AM - EEST  <b>#smartgrid #workshop #energy #h2020 #pantera</b> <a href="https://pic.twitter.com/evkP8Wr2qe">pic.twitter.com/evkP8Wr2qe</a> View Tweet activity						
	<b>PANTERA Platform</b> @PanteraPlatform · Jun 19				847	22	2.6%
	Live from the <b>#NetworkingVillage</b> at <b>#EUSEW19</b> with project officer Mario Dionisio, our project coordinator Venizelos Efthymiou and project partner Mohamed Shalaby.  <a href="https://bit.ly/2Zz9hCa">bit.ly/2Zz9hCa</a>  <b>#EUSEW #Brussels #H2020 #EU</b> <a href="https://pic.twitter.com/o3JILM95V1">pic.twitter.com/o3JILM95V1</a> View Tweet activity						

	<p><b>PANTERA Platform</b> @PanteraPlatform · Jun 19</p> <p>Don't miss <b>@PanteraPlatform</b> at the <b>#EUSEW19</b> Energy Fair today among projects and innovations shaping Europe's Energy Future! 🌐 EU</p> <p><a href="https://bit.ly/2Zz9hCa">bit.ly/2Zz9hCa</a></p> <p>📍 Residence Palace 📅 19 June 2019 🕒 14.00 - 18.00</p> <p><b>#EU #EnergyWeek #EUSEW #Brussels #Horizon2020 #H2020Energy</b> <a href="https://pic.twitter.com/4lCXmclRRu">pic.twitter.com/4lCXmclRRu</a></p> <p><a href="#">View Tweet activity</a></p>	517	5	1.0%
	<p><b>PANTERA Platform</b> @PanteraPlatform · Jun 6</p> <p>Register now to our first <b>#Workshop</b> "An innovative approach towards unified Pan European Research &amp; Innovation efforts in the energy sector"</p> <p>📅 2 July 2019 📍 Sofia, Bulgaria &gt;&gt;&gt; <a href="https://bit.ly/31gtfDt">bit.ly/31gtfDt</a></p> <p><b>#PanEuropean #h2020 #europeanproject #workshop #RI #energy #smartgrids #EU</b></p> <p><a href="#">View Tweet activity</a></p>	908	14	1.5%
	<p><b>PANTERA Platform</b> @PanteraPlatform · Jun 5</p> <p>PANTERA is excited to be part of <b>#EUSEW19</b> ! The <b>@euenergyweek</b> gathers stakeholders of sustainable energy in Europe: policy-makers, industry associations, companies, researchers and NGOs. Join us at the <b>#NetworkingVillage</b> from 📅 18 to 20 June 2019</p> <p><a href="https://bit.ly/2K0REaW">bit.ly/2K0REaW</a> <a href="https://pic.twitter.com/Zcw4HZ5Ar7">pic.twitter.com/Zcw4HZ5Ar7</a></p> <p><a href="#">View Tweet activity</a></p>	1,443	12	0.8%
	<p><b>PANTERA Platform</b> @PanteraPlatform · May 15</p> <p>PANTERA was presented at the <b>#MissionInnovation</b> Austria 2019 on the Innovation Stage on 9 May, as part of innovative projects in the regions and at the MI-Innovation Challenges Gathering on 10 May.</p> <p>&gt;&gt;&gt; <a href="https://bit.ly/2LKIPoj">bit.ly/2LKIPoj</a></p> <p><b>#EUproject #H2020 #MIA19 #ConferenceDays #TechDays</b> <a href="https://pic.twitter.com/you8dmdjzCV">pic.twitter.com/you8dmdjzCV</a></p> <p><a href="#">View Tweet activity</a></p>	1,008	12	1.2%





On average, you earned **0 Retweets** per day

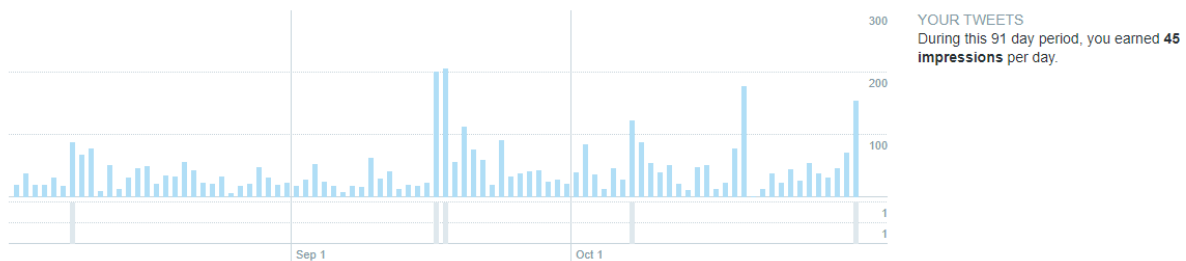


On average, you earned **0 link clicks** per day

On average, you earned **0 likes** per day

### Impressions, Engagement and Engagement rate (2 August 2019 – 31 October 2019)

Your Tweets earned **4.1K impressions** over this **91 day** period



Tweets | Top Tweets | Tweets and replies | Promoted | Impressions | Engagements | Engagement rate

**PANTERA Platform** @PanteraPlatform · Oct 31 1,093    8    0.7%

Check out PANTERA's latest publication "The role of **#Research** and **#Innovation** in the European Union's energy development" (Petijumu un **#inovāciju** loma Eiropas Savienības enerģētikas attīstība) published in EP Energija Un Pasaule.

[bit.ly/334cOuu](https://bit.ly/334cOuu)

**#Energija #izpēte** [pic.twitter.com/ehSU2xsusq](https://pic.twitter.com/ehSU2xsusq)

[View Tweet activity](#)

**PANTERA Platform** @PanteraPlatform · Oct 7 684    7    1.0%

PANTERA **#Newsletter** is there! It's packed with the latest news on the project's developments, activities, workshops to come and more.

Check it out [bit.ly/35efLu4](https://bit.ly/35efLu4)

Don't miss the next one [bit.ly/30UzBht](https://bit.ly/30UzBht)

**#EU #panteraplatform #research #innovation #h2020**  
[pic.twitter.com/4BFRgbSsVK](https://pic.twitter.com/4BFRgbSsVK)

[View Tweet activity](#)

**PANTERA Platform** @PanteraPlatform · Sep 17 743 5 0.7%

PANTERA opens a public consultation for D4.1 report on "Content and Topics for Dissemination and Networking Activities" and invites you to provide your feedback by e-mail to [consultation@pantera-platform.eu](mailto:consultation@pantera-platform.eu)

[bit.ly/2mmNMGN](https://bit.ly/2mmNMGN)

**#consultation #H2020 #Horizon2020 #European**  
[pic.twitter.com/rvR0yaGtjl](https://pic.twitter.com/rvR0yaGtjl)

[View Tweet activity](#)

**PANTERA Platform** @PanteraPlatform · Aug 8 522 9 1.7%

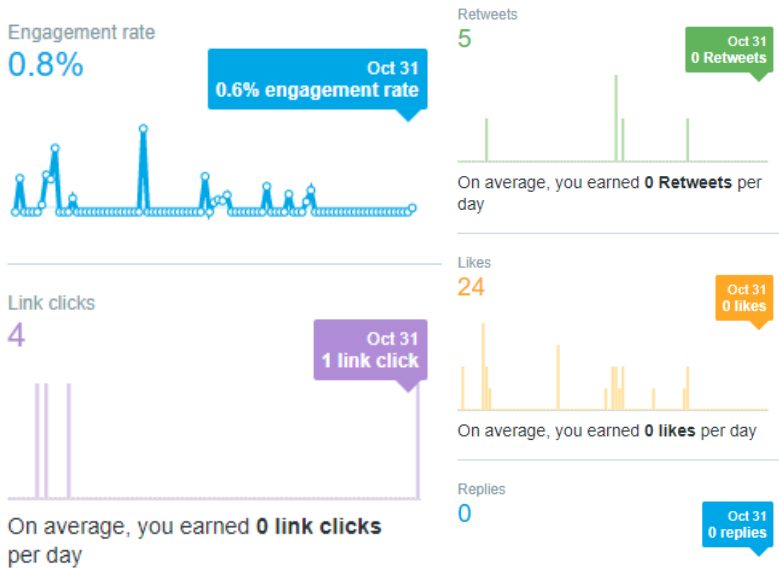
Are you active in the fields of smart grids, storage or local energy systems?

Do you want to contribute to a true Pan European energy community?

Visit our website and become a PANTERA stakeholder  
 >>> [pantera-platform.eu/stakeholders/](https://pantera-platform.eu/stakeholders/)

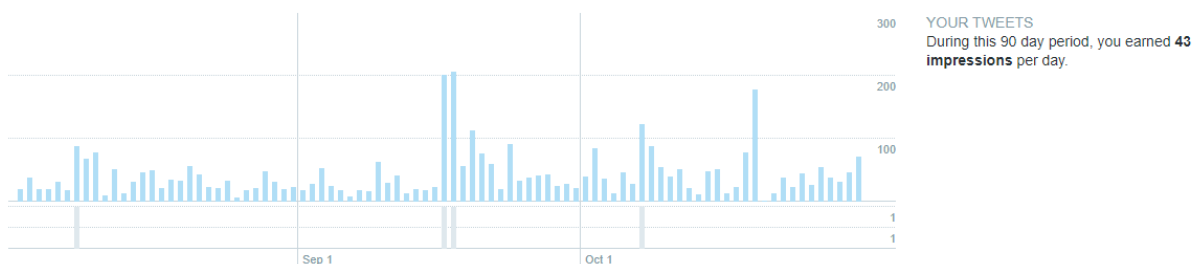
**#h2020 #eu #euproject #stakeholder #energy #community**  
[pic.twitter.com/fpFpbhnhF4](https://pic.twitter.com/fpFpbhnhF4)

[View Tweet activity](#)



### Impressions, Engagement and Engagement rate (2 August 2019 – 30 October 2019)

Your Tweets earned 3.9K impressions over this 90 day period



Tweets Top Tweets Tweets and replies Promoted Impressions Engagements Engagement rate

**PANTERA Platform** @PanteraPlatform · Oct 7 684 7 1.0%

PANTERA #Newsletter is there! It's packed with the latest news on the project's developments, activities, workshops to come and more.

Check it out [bit.ly/35efLu4](https://bit.ly/35efLu4)

Don't miss the next one [bit.ly/30UzBHt](https://bit.ly/30UzBHt)

**#EU #panteraplatform #research #innovation #h2020**  
[pic.twitter.com/4BFRgbSsVK](https://pic.twitter.com/4BFRgbSsVK)

[View Tweet activity](#)

**PANTERA Platform** @PanteraPlatform · Sep 17 743 5 0.7%

PANTERA opens a public consultation for D4.1 report on "Content and Topics for Dissemination and Networking Activities" and invites you to provide your feedback by e-mail to [consultation@pantera-platform.eu](mailto:consultation@pantera-platform.eu)

[bit.ly/2mmNMGN](https://bit.ly/2mmNMGN)

**#consultation #H2020 #Horizon2020 #European**  
[pic.twitter.com/rvR0yaGtjl](https://pic.twitter.com/rvR0yaGtjl)

[View Tweet activity](#)

**PANTERA Platform** @PanteraPlatform · Aug 8 522 9 1.7%

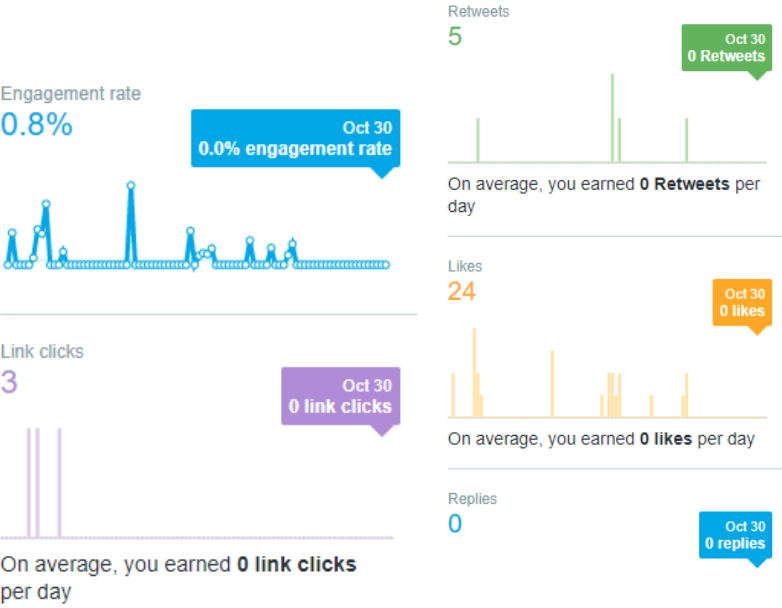
Are you active in the fields of smart grids, storage or local energy systems?

Do you want to contribute to a true Pan European energy community?

Visit our website and become a PANTERA stakeholder  
 >>> [pantera-platform.eu/stakeholders/](https://pantera-platform.eu/stakeholders/)

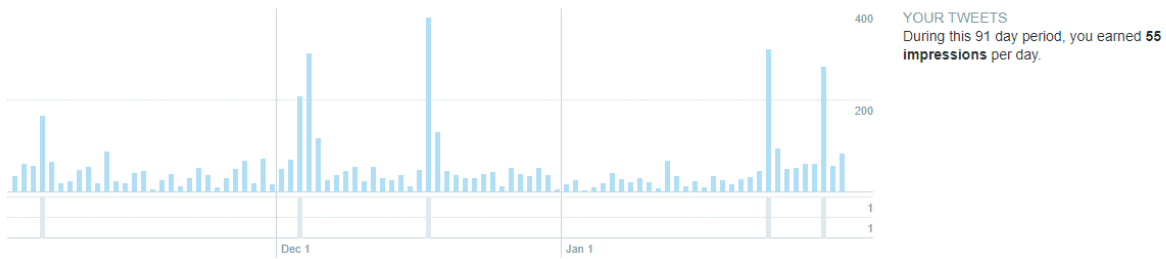
**#h2020 #eu #euproject #stakeholder #energy #community**  
[pic.twitter.com/fpFpbhnhF4](https://pic.twitter.com/fpFpbhnhF4)

[View Tweet activity](#)



Impressions, Engagement and Engagement rate (2 November 2019 – 31 January 2020)

Your Tweets earned 5.0K impressions over this 91 day period



Tweets | Top Tweets | Tweets and replies | Promoted | Impressions | Engagements | Engagement rate

Tweet Content	Impressions	Engagements	Engagement rate
<p><b>PANTERA Platform</b> @PanteraPlatform · Jan 29</p> <p>Save the date for the upcoming <b>#PANTERA Athens #Workshop</b>: "Green Islands as a driver for the <b>#EnergyTransition</b> – Going <b>#Renewable</b> and <b>#Smart</b>"</p> <p>Register now <a href="https://bit.ly/2vui8LP">bit.ly/2vui8LP</a></p> <p>📅 13 February 2020, 9:00-17:40 📍 Athens, Greece</p> <p><b>#H2020 #Europe #SmartGrids #greenisland</b> <a href="https://pic.twitter.com/ug3k9yxYIK">pic.twitter.com/ug3k9yxYIK</a></p> <p><a href="#">View Tweet activity</a></p>	566	17	3.0%
<p><b>PANTERA Platform</b> @PanteraPlatform · Jan 23</p> <p>New article on <b>@SINTEF</b> Blog, that perfectly conveys what <b>@PANTERA</b> is about: Establish a European forum of key R&amp;D players in the fields of <b>#smartgrids</b>, <b>#energystorage</b> and <b>#localenergysystems</b>, to smooth out the transition to a <b>#zeroemissions</b> society.</p> <p><a href="https://bit.ly/3ay1zyG">bit.ly/3ay1zyG</a> <a href="https://pic.twitter.com/Pna5sgH62L">pic.twitter.com/Pna5sgH62L</a></p> <p><a href="#">View Tweet activity</a></p>	314	9	2.9%
<p><b>PANTERA Platform</b> @PanteraPlatform · Dec 17</p> <p>Thank you for joining our latest PANTERA workshop in Dublin on 2 December 2019. Check out all the details and get access to presentations here: <a href="https://bit.ly/2M4a3D8">bit.ly/2M4a3D8</a></p> <p><b>#EU #EUresearch #PANTERA #innovation #energy #workshop #H2020 #Horizon2020 #smartgrids</b> <a href="https://pic.twitter.com/OSkIHgIHzp">pic.twitter.com/OSkIHgIHzp</a></p> <p><a href="#">View Tweet activity</a></p>	1,592	39	2.4%
<p><b>PANTERA Platform</b> @PanteraPlatform · Dec 3</p> <p>Highly relevant presentations, intense discussions: a fruitful <b>#workshop</b> for the PANTERA consortium. Thanks to <b>@ucddublin</b> for the perfect organisation.</p> <p><a href="#">📺</a> Stay tuned for more</p> <p><b>#workshop #research #innovation #EUproject #renewable #smartgrid #H2020 #Horizon2020 #Ireland #Europe</b> <a href="https://pic.twitter.com/JL8DL3GRgn">pic.twitter.com/JL8DL3GRgn</a></p> <p><a href="#">View Tweet activity</a></p>	1,292	67	5.2%

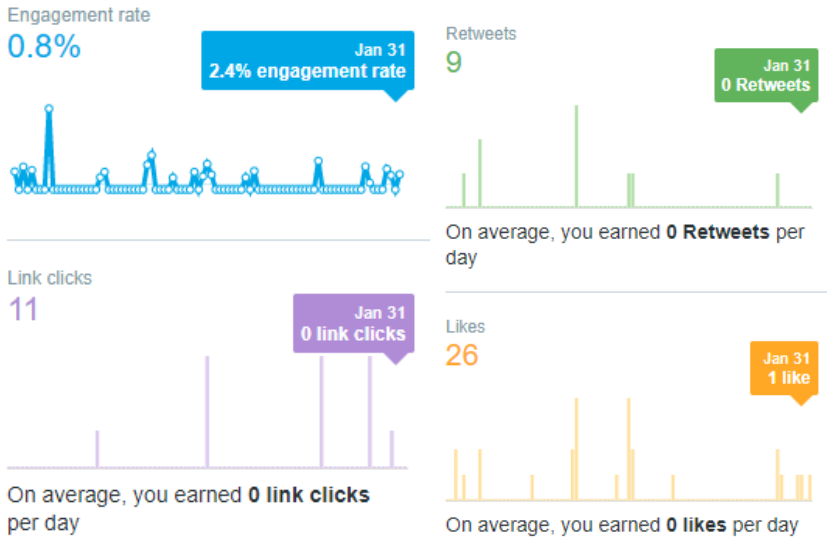
**PANTERA Platform** @PanteraPlatform · Nov 5 523 5 1.0%  
 Save the date for the upcoming #PANTERA Dublin #Workshop: Ireland's #Smartgrid, #EnergyStorage and Local #EnergySystems.

Share your experience and vision for the #future of Smart Grid #Research and #Innovation.

Register [lnkd.in/dTgdSQv](https://lnkd.in/dTgdSQv)

📅 2 December 2019, 9:00-16:30  
[pic.twitter.com/RFNLEylpcg](https://pic.twitter.com/RFNLEylpcg)

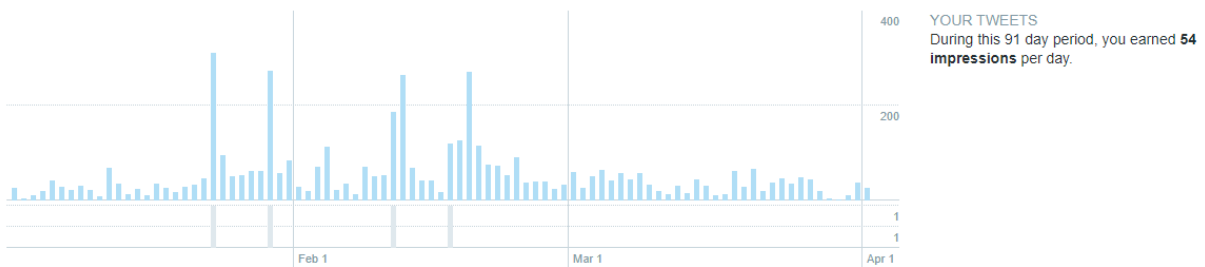
View Tweet activity



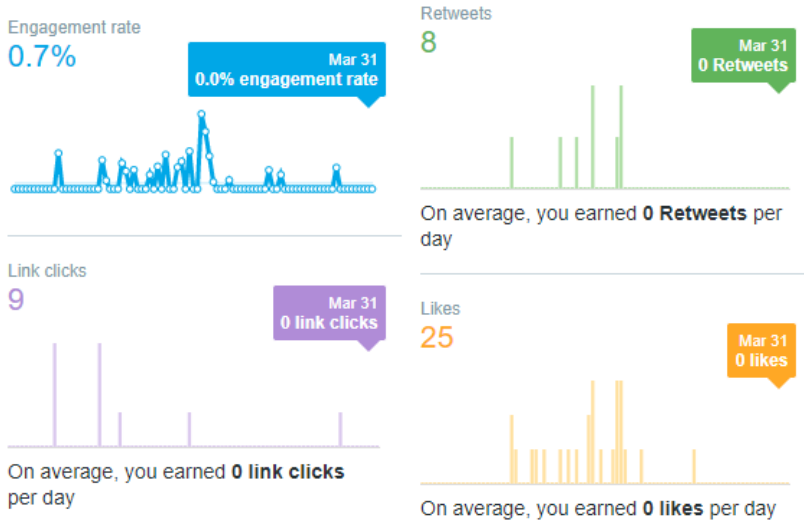
### Impression in 2020

Tweet activity 📅 Jan 2 – Apr 1, 2020 | 📄 Export data

Your Tweets earned **4.9K impressions** over this **91 day** period



Tweets		Top Tweets	Tweets and replies	Promoted	Impressions	Engagements	Engagement rate
	<p><b>PANTERA Platform</b> @PanteraPlatform · Feb 17</p> <p>Thank you for joining our latest <b>#PANTERA</b> workshop in Athens on February 13, 2020.   More details and the presentations will be available.</p> <p><b>#EU #EUresearch #innovation #energy #workshop #H2020 #Horizon2020 #smartgrids #Europe #renewable #athens #panteraplatform</b> <a href="https://pic.twitter.com/Ck2O8dFkkg">pic.twitter.com/Ck2O8dFkkg</a></p> <p><a href="#">View Tweet activity</a></p>	805	42	5.2%			
	<p><b>PANTERA Platform</b> @PanteraPlatform · Feb 11</p> <p>Only 2 days left until <b>#PANTERA</b> Athens <b>#Workshop</b>: "Green Islands as a driver for the <b>#EnergyTransition</b> – Going <b>#Renewable</b> and <b>#Smart</b></p> <p>Register now  <a href="https://bit.ly/2vui8LP">bit.ly/2vui8LP</a></p> <p><b>#EU #H2020 #EuropeanUnion #SmartGrids #greenisland #greece #registernow #energy #research #innovation</b> <a href="https://pic.twitter.com/ngZ5gC0i7l">pic.twitter.com/ngZ5gC0i7l</a></p> <p><a href="#">View Tweet activity</a></p>	483	14	2.9%			
	<p><b>PANTERA Platform</b> @PanteraPlatform · Jan 29</p> <p>Save the date for the upcoming <b>#PANTERA</b> Athens <b>#Workshop</b>: "Green Islands as a driver for the <b>#EnergyTransition</b> – Going <b>#Renewable</b> and <b>#Smart</b>"</p> <p>Register now  <a href="https://bit.ly/2vui8LP">bit.ly/2vui8LP</a></p> <p> 13 February 2020, 9:00-17:40   Athens, Greece</p> <p><b>#H2020 #Europe #SmartGrids #greenisland</b> <a href="https://pic.twitter.com/ug3k9yxYIK">pic.twitter.com/ug3k9yxYIK</a></p> <p><a href="#">View Tweet activity</a></p>	566	17	3.0%			
	<p><b>PANTERA Platform</b> @PanteraPlatform · Jan 23</p> <p>New article on <b>@SINTEF</b> Blog, that perfectly conveys what <b>@PANTERA</b> is about: Establish a European forum of key R&amp;D players in the fields of <b>#smartgrids</b>, <b>#energystorage</b> and <b>#localenergysystems</b>, to smooth out the transition to a <b>#zeroemissions</b> society.</p> <p> <a href="https://bit.ly/3ay1zyG">bit.ly/3ay1zyG</a> <a href="https://pic.twitter.com/Pna5sgH62L">pic.twitter.com/Pna5sgH62L</a></p> <p><a href="#">View Tweet activity</a></p>	314	9	2.9%			



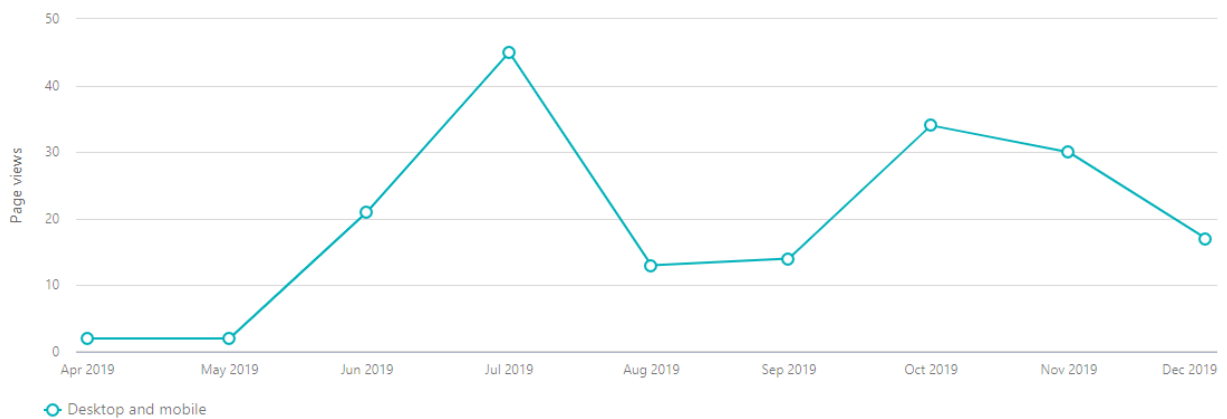
### LinkedIn

**PANTERA Platform**  
Research · 62 followers

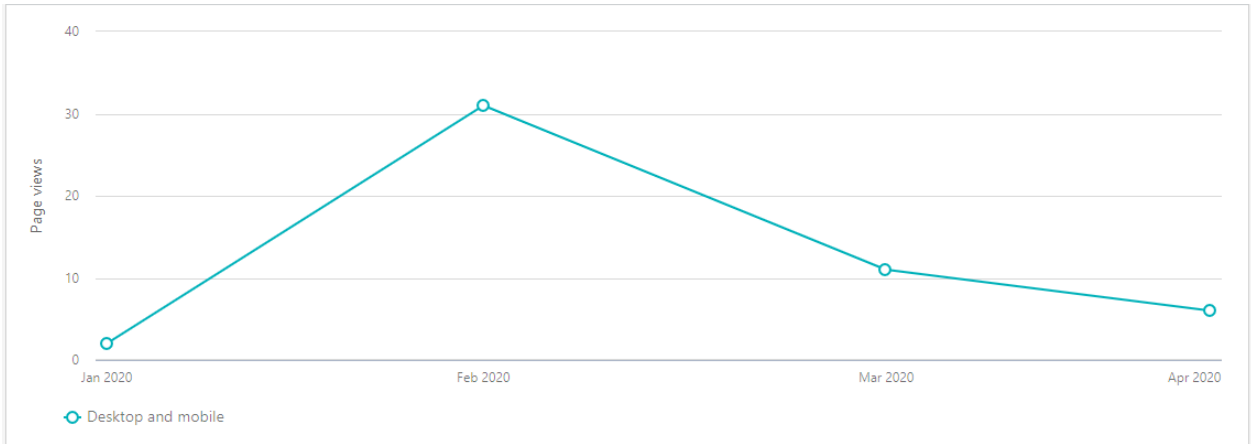
#H2020 funded. PANTERA aims at a truly integrated pan-European R&I forum.  
#smartgrids #storage and local energy systems

+ Follow Visit website Edit profile

### Number of visitors in 2019



### Number of visitors in 2020



### Visitors' top job functions in the last 12 months

Visitor demographics ⓘ Time range: Mar 31, 2019 - Mar 30, 2020 Data for: Job function

#### Top job functions

Job function	Visitors	% of Visitors
Research	60	29.7%
Business Development	24	11.88%
Engineering	24	11.88%
Education	22	10.89%
Operations	21	10.4%
Information Technology	13	6.44%
Media and Communication	13	6.44%
Marketing	10	4.95%
Program and Project Management	5	2.48%
Administrative	3	1.49%

### Visitors' top demographics in the last 12 months

Visitor demographics ⓘ Time range: Mar 31, 2019 - Mar 30, 2020 Data for: Location

#### Top locations

Location	Visitors	% of Visitors
Kassel Area, Germany	41	39.05%
Trondheim Area, Norway	8	7.62%
County Dublin, Ireland	7	6.67%
Berlin Area, Germany	5	4.76%
Barcelona Area, Spain	5	4.76%
Ontario, Canada	4	3.81%
Brussels Area, Belgium	4	3.81%
Murcia Area, Spain	4	3.81%
Madrid Area, Spain	3	2.86%
Aust-Agder County, Norway	3	2.86%

### Visitors' top industries in the last 12 months

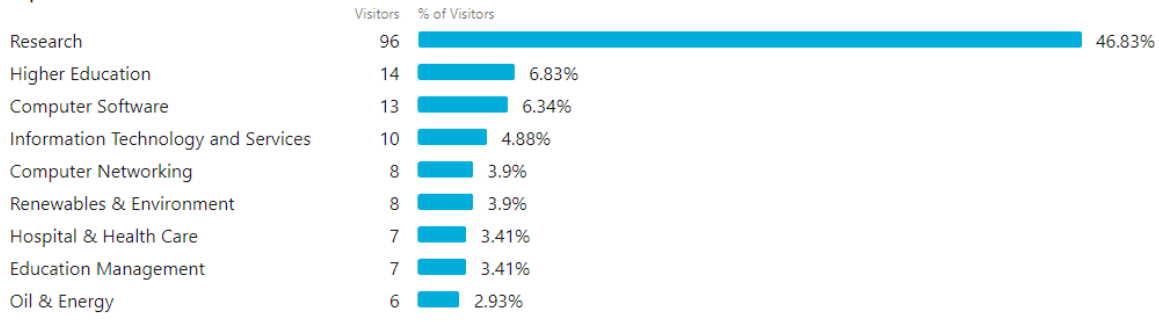


Visitor demographics

Time range: Mar 31, 2019 - Mar 30, 2020

Data for: Industry

Top industries



Number of impressions per post

Update engagement

Time range: Apr 27, 2019 - Apr 27, 2020

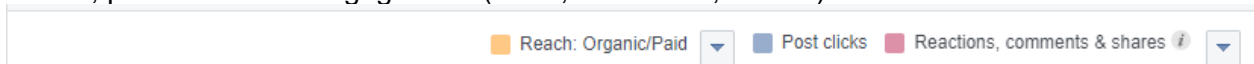
Show: 10

Update title	Posted by	Created	Impressions	Video views	Clicks	CTR	Reactions	Comments	Shares	Fol...
Thank you for joining our latest #PANTERA workshop in Athens on February 13, 2020... All followers	Melissa Setakhr	2/17/2020	218	-	31	14.22%	9	0	2	
Only 2 days left to register to the #PANTERA Athens #Workshop!... All followers	Melissa Setakhr	2/11/2020	58	-	1	1.72%	0	0	0	
Join the PANTERA Athens Workshop "Green Islands as a driver for the Energy Transiti... All followers	Melissa Setakhr	1/29/2020	169	-	1	0.59%	8	0	5	
A very interesting article on SINTEF Blog that perfectly conveys the context of... All followers	Melissa Setakhr	1/23/2020	71	-	4	5.63%	3	0	0	
PANTERA project will be taking part in the 12th international IET MEDPOWER... All followers	Melissa Setakhr	1/13/2020	51	-	1	1.96%	3	0	0	
Highly relevant presentations, intense discussions: a fruitful #workshop for the... All followers	Melissa Setakhr	12/3/2019	252	-	106	42.06%	10	0	3	
Save the date for the upcoming #PANTERA Dublin Workshop: Ireland's #Smartgrid... Sponsored	Melissa Setakhr	11/5/2019	17,320	-	38	0.22%	4	0	7	
Check out PANTERA's latest publication "The role of Research and Innovation in th... All followers	Melissa Setakhr	10/31/2019	157	-	8	5.1%	8	0	4	
PANTERA #Newsletter is there! It's packed with the latest news on the project's... All followers	Melissa Setakhr	10/7/2019	77	-	4	5.19%	2	0	1	
Many energy technologies are trying to answer similar R&D questions. There may... All followers	Melissa Setakhr	9/19/2019	188	-	8	4.26%	7	0	1	

Home - 16th international conference on the European energy market All followers	Melissa Setakhr	9/19/2019	93	-	5	5.38%	3	1	1
Public consultation for D4.1 "Content and Topics for Dissemination and Networking... Sponsored	Melissa Setakhr	9/17/2019	12,592	-	49	0.39%	7	0	10
Are you active in the fields of smart grids, storage or local energy systems? Do you... All followers	Melissa Setakhr	8/8/2019	162	-	5	3.09%	6	0	4
Many thanks MERLON_H2020 for your support and for attending the first... All followers	Melissa Setakhr	8/8/2019	85	-	8	9.41%	5	0	0
Have a look at the outcomes of our first workshop "Pan European Research and... All followers	Melissa Setakhr	7/24/2019	230	-	7	3.04%	11	0	3
We would like to thank you for attending our first PANTERA workshop, bringing us... All followers	Melissa Setakhr	7/9/2019	335	-	40	11.94%	11	0	3
Looking forward to PANTERA workshop 2 July 2019, Sofia, Bulgaria #smartgrid... All followers	Mohamed Shalaby	7/1/2019	98	-	3	3.06%	3	0	3
You would like to come to PANTERA workshop, but you can't 😞😞😞 No... All followers	Mohamed Shalaby	6/28/2019	123	-	6	4.88%	4	0	3
PANTERA - PAN European Technology Energy Research Approach All followers	Melissa Setakhr	6/19/2019	140	-	0	0%	4	0	2
PANTERA Workshop "An innovative approach towards unified Pan European... All followers	Melissa Setakhr	6/6/2019	63	-	4	6.35%	1	0	8
PANTERA at EU Sustainable Energy Week 2019 All followers	Melissa Setakhr	6/5/2019	71	-	2	2.82%	1	0	6
PANTERA's participation in Mission Innovation Austria 2019 All followers	Melissa Setakhr	5/15/2019	98	-	8	8.16%	6	0	2

Total average impressions (including sponsored posts) = 1484.13 impressions per post  
 Total average impressions (without sponsored posts) = 137 impressions (the number of times a post is viewed)  
 Average Total CTR: 6.64 % (click-through-rate is the number of clicks divided by the number of impressions)  
 We can see the higher CTR are linked to the posts regarding workshops. They are the subject most of the viewers are interested to learn more and therefore click on the link.  
 Facebook

Reach, post clicks and Engagement (Likes, comments, shares) in 2019



05/11/2019 13:29	Save the date for the upcoming #PANTERA Dublin Workshop:			20		3 13		<a href="#">Boost Post</a>
31/10/2019 09:42	Check out PANTERA's latest publication "The role of Research			17		1 8		<a href="#">Boost Post</a>
07/10/2019 15:18	PANTERA #Newsletter is there! It's packed with the latest news on the			16		0 4		<a href="#">Boost Post</a>
17/09/2019 15:25	PANTERA opens a public consultation for D4.1 report on			19		2 7		<a href="#">Boost Post</a>
08/08/2019 14:45	Are you active in the fields of smart grids, storage or local energy			91		5 7		<a href="#">Boost Post</a>
24/07/2019 15:56	Have a look at the outcomes of our first workshop "An innovative			18		0 3		<a href="#">Boost Post</a>
09/07/2019 15:09	We would like to thank you for attending our first PANTERA			129		27 9		<a href="#">Boost Post</a>
02/07/2019 12:18	The first PANTERA workshop is happening now! Not available? No			92		17 9		<a href="#">Boost Post</a>
06/06/2019 16:23	We are pleased to announce our first PANTERA Workshop! Register now			14		4 7		<a href="#">Boost Post</a>
05/06/2019 14:47	We are pleased to announce PANTERA will be part of #EUSEW19			13		1 13		<a href="#">Boost Post</a>
15/05/2019 12:48	PANTERA was presented at Mission Innovation Austria 2019 on the			77		7 8		<a href="#">Boost Post</a>
24/04/2019 13:20	Are you active in the fields of #SmartGrids, #storage, local #energy			103		8 4		<a href="#">Boost Post</a>
12/02/2019 15:23	PANTERA kick-off on 30-31 January 2019 in Nicosia (CY). A multi-			209		52 23		<a href="#">Boost Post</a>
11/02/2019 11:22	It's now easier to contact Pantera Platform.			15		0 2		<a href="#">Boost Post</a>
24/01/2019 16:04	Pantera Platform			0		0 1		<a href="#">Boost Post</a>

Reach, post clicks and Engagement (Likes, comments, shares) in 2020

Published	Post	Type	Targeting	Reach	Engagement	Promote
29/01/2020 14:45	Save the date for the upcoming #PANTERA Athens #Workshop:			126	9 10	<a href="#">Boost Post</a>
23/01/2020 12:13	A very interesting article on SINTEF Blog that perfectly conveys the			23	4 17	<a href="#">Boost Post</a>