D9.5 SECOND YEAR DISSEMINATION REPORT

Report

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TABLE OF CONTENTS

Executive Summary 6

1 Introduction 7

2 UPDATE: Image and Dissemination Materials 8

2.1 Posters/Banners 8

2.1.1 enCOMPASS Poster 8

2.1.2 enCOMPASS Roll Up Banner 8

2.2 App Video 9

3 Communication and Dissemination at the International Level 10

3.1 Online Channels 10

3.1.1 enCOMPASS Website 10

3.1.2 enCOMPASS Newsletters 10

3.1.3 Social Media Channels: Twitter @enCompassH2020 11

3.1.4 Social Media Channels: LinkedIn & SlideShare 12

3.1.5 Social Media Channels: NABU-Netz.de and Facebook 13

3.2 Partners' Channels 14

3.3 Press Releases 14

3.4 Scientific Publications 15

3.5 Networking and Outreach Activities 16

4 Communication and Dissemination in the Pilots 18

4.1 German Pilot 18

4.2 Greek Pilot 19

4.2.1 Households 19

4.2.2 Public Building WATT+VOLT Retail Store Thessaloniki 20

4.2.3 Public Building: WATT+VOLT Headquarters in Athens 21

4.2.4 Public Building: National Documentation Center in Athens [NHRF] 22

4.3 Swiss Pilot 23

5 Dissemination Activities 24

5.1 Conferences and events 24

5.2 Liaisons to other project and initiatives 25

6 Assessment of the Communications Implementation 27

6.1 Assessment of Dissemination KPIs 27

6.2 Assessment of Dissemination in the pilots 28

6.2.1 SHF 28

6.2.2 WVT 28
6.2.3 SUPSI 29
6.3 Assessment of Dissemination in international context 29
7 Conclusions 30

EXECUTIVE SUMMARY

This deliverable D9.5 contains the second year dissemination report for the enCOMPASS project on the preliminary communication and dissemination actions. It represents the fourth deliverable of the work package 9 *Communication and Dissemination* (WP9). WP9 defines and implements the communication and dissemination strategy of the project, disseminates results through the web, social media and other online and offline channels, at local level and at the international level and organizes events about the project. It also provides communication activities to support engagement of end-user communities and the enCOMPASS ecosystem. Finally, it presents articles to scientific conferences for publishing project results and cross-fertilizes enCOMPASS results with relevant H2020 EE, ICT and Collective Awareness (CAPS) projects.

This document describes the communication and dissemination actions performed during second year of the project and extends on and updates the work presented in D9.4 (First Year Dissemination Report). This includes an update on the image and dissemination materials (section 2), the communication and dissemination at the international level (section 3) via online channels (section 3.1), through partners' channels (section 3.2) and traditional media such as press releases (section 3.3). It also reports on scientific publications (section 3.4) and networking and outreach activities (section 3.5). Communication and dissemination about the pilots at the local level is reported in section 4, while disseminations activities such as events, conferences and outreach workshops are reported in section 5. According to the *Dissemination and Communication Plan* (D9.2) the second year activities are assessed in section 6, whereas conclusions and an outlook on next steps are given in section 7.

1 INTRODUCTION

This deliverable describes the actions performed in the implementation of the enCOMPASS communication and dissemination strategy and the communications tools used within the first year of the project. The deliverable is part of the activity of WP9. It includes the results of the active tasks of WP9:

- T9.1 Communication strategy and plan: for the initial definition of the project communication strategy (see D9.2) and the continuous monitoring of the communication and dissemination activities' effectiveness.
- T9.2 Dissemination material and tools: for the construction of the project's visual identity and the dissemination material as well as the project communication and dissemination through different channels.
- T9.3 Dissemination events: for the promotion of the project's results through workshops and conferences during the project lifetime, both at the local level and at the international level.

The deliverable is organized as follows: In section 2, records on usage and dissemination of the communication and dissemination material, such as posters, banners, and the app video, can be found. As part of a comprehensive online and offline dissemination strategy, all used channels also need to be monitored and documented. In section 3, online channels of the project, and partners' own channels that were used to communication and disseminate project results and activities, are recorded, as well as traditional offline channels, such as press releases, scientific publications, and networking and outreach activities.

As pilot projects in Greece, Switzerland and Germany play a major role in enCOMPASS, section 4 is dedicated to the communication and dissemination in the pilots, followed by an overview of overall dissemination activities (section 5). Last, but not least, in section 6 the dissemination is assessed in accordance with the stated communication and dissemination strategy (see D9.2), which leads to the conclusions and outlook of future actions in section 7.

2 UPDATE: IMAGE AND DISSEMINATION MATERIALS

2.1 POSTERS/BANNERS

2.1.1 enCOMPASS Poster

On the 27th of February 2018, enCOMPASS participated in the ICT for Energy Efficiency Contractors' meeting in Brussels organised by EASME. The #H2020EE event brought together the projects from the 2014, 2015, 2016 and 2017 calls from similar RIA/IA topics regarding energy efficiency. During the Contractors meeting the encompass poster (Figure 1) was presented for first time.

Figure 1: The enCOMPASS Poster

2.1.2 enCOMPASS Roll Up Banner

According to the encompass Poster creative design the encompass Banner is produced by WVT and already placed in the WATT+VOLT Retail Store in Thessaloniki, for the personnel to best disseminate the project's approach (see Figure 2 and **Errore. L'origine riferimento non è stata trovata.**).

Figure 2:enCOMPASS Rollup Banner Retail Store Thessaloniki

2.2 APP VIDEO

To help the pilot users utilize the enCOMPASS application for smart phones and tablets 4 instruction videos have been developed in 4 Languages[1]: English, Greek, German, and Italian (Figure 3 depicts a screenshot of the video).

Figure 3:enCOMPASS App Instructions Video

[1] The full videos are presented visiting the following link: http://www.encompass-project.eu/project-materials/videos/

3 COMMUNICATION AND DISSEMINATION AT THE INTERNATIONAL LEVEL

The communication and dissemination of the enCOMPASS project activities and results takes place via a range of communication channels, in line with the communication and dissemination strategy defined in D9.2. This includes the updates to the project website, new issues of newsletters, social channels, press and partners' channels. In this section, we review the different dissemination and the communication channels and report on the activities and results achieved in the second year. The presentation of individual channels only looks at the points that have changed since their description in D9.4 First Year Dissemination Report.

3.1 ONLINE CHANNELS

3.1.1 enCOMPASS Website

The enCOMPASS website (http://www.encompass-project.eu) is the main overall source of information for the project activities and achievements. It provides a brief, but impactful description of the project and of its main activities. During the second year of enCOMPASS, the website has been used to regularly inform about project progress and the results achieved with respect to the KPIs defined in the communications and dissemination strategy (described in D9.2) are given in Table 1. It is evident that in spite of slow website uptake during the first phase, the ambitious target set for the end of phase two has been met successfully.

Table 1: KPI-Check for Website

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M9-M24) targets	Phase 2 targets achieved
Number of unique visitors to the website (based on Google Analytics)	500	52	2.500	2.799
Number of multimedia downloads (website)	100	11	200	574

3.1.2 enCOMPASS Newsletters

The enCOMPASS project newsletter informs twice a year about the activities and achievements of the project to the social community as well as the general public. The form and structure of the newsletter have been outlined in D9.2 & D9.3. In the second year, two issues of the newsletter have been successfully released, reaching over 279.000 recipients (Table 2), greatly exceeding the original target for Phase 2. This was possible due to the chosen distribution strategy, which employed both the project specific channels (website, social channels etc.) and the existing online channels of the partners to spread the newsletter in a coordinated effort. For example, NABU alone through its social media channels reaches out to 234.801 followers through Facebook (111.655 followers at the time of writing), Twitter (122.000 followers of the official NABU Twitter account + 1.146 followers of the specific NABU Twitter Energy profile).

Table 2: KPI-Check for enCOMPASS Newsletters

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M9-M24) targets	Phase 2 targets achieved
Number of recipients of the enCOMPASS newsletter	2.000	37.264	3.000	279.170

3.1.3 Social Media Channels: Twitter @enCompassH2020

A clearly defined Twitter strategy has been set up to maximize the message and communication of the enCOMPASS project and described in *D9.2 Dissemination and communication strategy*. The enCOMPASS Twitter account (@enCompassH2020) has been created already in the first project year and used to facilitate the direct, easy and immediate communication and dissemination of project results and activities to a wide external audience. In order to maximize project visibility, the enCOMPASS Twitter account is not only used to share news, information and initiatives related to the broader area of the enCOMPASS project topics and project mission. As described in detail in D9.4, it also disseminates content and news coming from broader project-related topics such as, among others: energy efficiency, behavioral change for energy saving, pro environmental behavior, smart home, gamification, visualizations of energy consumption, energy saving tools and integrated energy management. In this way, we created a communication channel that provides direct informational value to an audience relevant to the project's areas of impact and interest. The success of this strategy is reflected in the achieved results that not only meet but exceed the established KPI targets (see Table 3). The Twitter strategy also aimed at identifying accounts with a broad reach in their existing social networks, in order to exploit network effects. During the second year of enCOMPASS, the base of followers and key multipliers has been grown further with followers coming from a wide range of energy related areas: businesses, NGOs, research institutes, global and local news publishers in the areas of energy, environment and sustainability, environmental/energy activists and opinion makers, scientific and educational resources.

Figure 3: Screenshot of the enCOMPASS Twitter page on 19 October 2018

At the end of M24 (end of strategy phase 2), the enCOMPASS Twitter account had produced 1096 tweets, gained 452 followers and achieved several thousand monthly impressions (e.g. 20.100 impressions for June 2018), thus meeting and greatly surpassing the relevant targets defined in D9.2 (see Table 3).

Table 3: KPI check for Twitter on 23 October 2017[2]

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Results at M9	Phase 2 (M9-M24) targets	Phase 2 targets achieved
Followers of the enCOMPASS Twitter account[3]	-	129	-	452
Posts on the enCOMPASS Twitter account	-	452	-	1.096
Direct followers of enCOMPASS social channels[4]	80	181	150	1.072
Posts on enCOMPASS social channels	100	496	200	1.800

3.1.4 Social Media Channels: LinkedIn & SlideShare

To communicate project activities and disseminate the results to a professionally oriented audience, we have been posting relevant project news and results to the major LinkedIn group for energy efficiency, the Energy Efficiency Expert group (https://www.linkedin.com/groups/2632450) with 18.000+ members. To post to the group, the enCOMPASS LinkedIn profile has been created and used (https://www.linkedin.com/in/encompass-project-470423142/). By sharing 704 posts with relevant contents, the group grew to a substantial size of 620 followers itself by the end of enCOMPASS year two, even if that was not a primary goal of the group.

Finally, the LinkedIn profile makes available and disseminates enCOMPASS presentations through SlideShare and vice versa (https://www.slideshare.net/encompassH2020/). See Figure 4 for a screenshot of the enCOMPASS profile on LinkedIn, and Figure 5 for a screenshot of the enCOMPASS SlideShare.

Table 4: KPI check for SlideShare

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M9-M24) targets	Phase 2 targets achieved
Presentations published on SlideShare	2	2	10	12

[3] Separate KPI targets for Twitter haven't been defined in D9.2 but the results are given here for better understanding.
[4] This KPI includes both Twitter and LinkedIn (as defined in the communication strategy, D9.2).

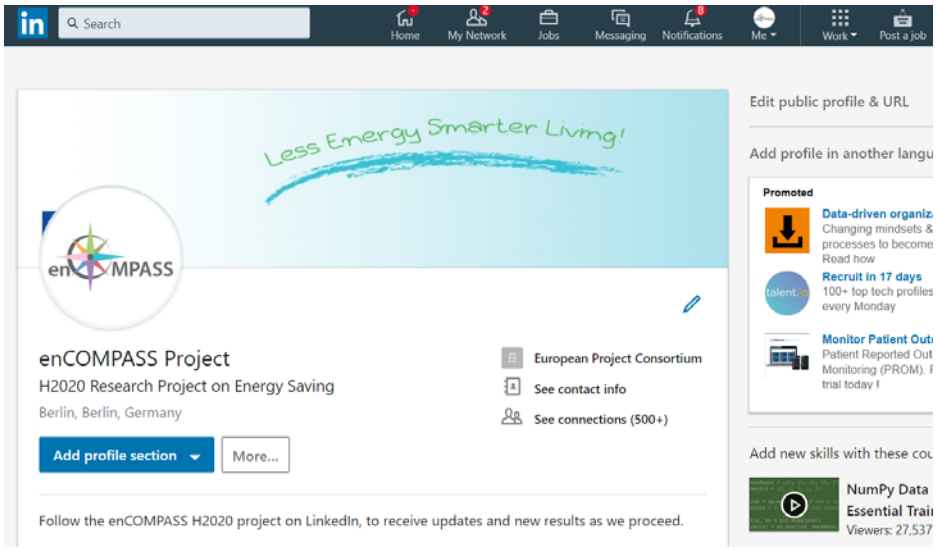

Figure 4: Screenshot of the LinkedIn enCOMPASS profile page on 19 October 2018

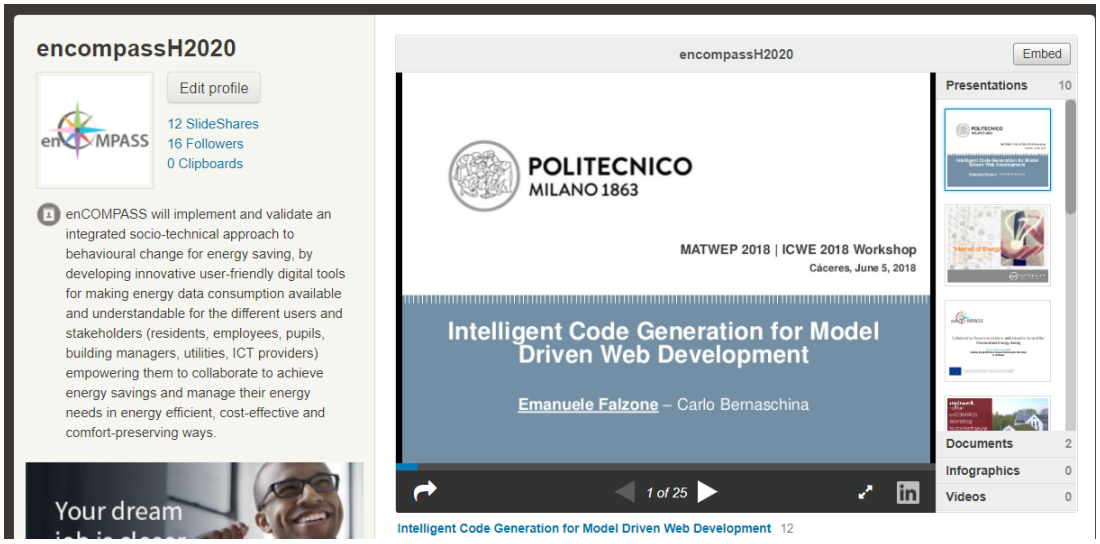

Figure 5: Screenshot of the enCOMPASS SlideShare on 19 October 2018

3.1.5 Social Media Channels: NABU-Netz.de and Facebook

NABU has got a tool named NABU-Netz.de which is a social network tool especially for NABU members and those interested in the work of NABU to discuss specific topics and to organize volunteering. Being a grassroots environmental organization NABU includes a number of its local groups, who as well as the volunteers are organized in the NABU-Netz. In addition, NABU-Netz provides space for discussions and communication for all members and non-members alike. Within NABU-Netz an engagement group with the subject “energy saving” is established. This group is used to disseminate project results to incentivize further energy savings (see for example Figure 6).

Figure 6: Screenshot of a blog-post on NABU-Netz announcing the Funergy board game

Additionally, the NABU Facebook page (https://www.facebook.com/Naturschutzbund) is used to communicate major project activities and disseminate main results as they become available to a broader audience.

In summary, with the performed actions on the different social channels the project was able to successfully meet the established KPI targets for the enCOMPASS social community members (Table 5). It is worth noting, that while this KPI considers only the direct followers and engagements on the different social channels, the overall reach of the activity on enCOMPASS social channels has been much higher: on Twitter alone, the project has been continuously reaching several thousand impressions (views), peaking at over 20.100 impressions in June 2018 (as reported in section 3.1.3).

Table 5: KPI-Check of enCOMPASS social community members (reach of all enCOMPASS social channels)

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M9-M24) targets	Phase 2 targets achieved
Number of enCOMPASS social community members reached (cumulative)	300	704	1.000	4.889

3.2 Partners' Channels

Part of the dissemination strategy is not only establishing new channels and communities, but also using existing channels from all partners to reinforce the communication effort. In the communication strategy (D9.2) all available partners channels are listed in table 10 and updated in D9.4 (First Year Dissemination Report). During second year of the project, the same comprehensive broad variety of partners' channels has been used to ensure the visibility of the enCOMPASS project by disseminating project content such as updates to the project, news, the newsletter, results, events, and reports of interest of partners contexts.

3.3 Press Releases

The project issues regularly press releases, both by the consortium as a whole, as well as by individual partners. Table 6 gives the KPI targets and achievements for the second project year, clearly overachieving its target with a total of 19 press releases delivered to traditional media outlets.

Table 6: KPI-Check of the press releases

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M9-M24) targets	Phase 2 targets achieved
Number of press releases delivered to traditional media (cumulative)	6	7	6	19

3.4 SCIENTIFIC PUBLICATIONS

Scientific publications in peer-review journals, international conferences and workshops is a key pillar of the enCOMPASS dissemination strategy and the respective KPI-assessment presented in Table 7 shows that the project has been successfully publishing to the scientific community. With regards to the KPI "Number of scientific publications in peer-review journals" it has to be noted that the high target of 4 journal papers already at month 24 has been overly optimistic given the fact that for almost all such publications evaluation data is needed and this data is only available from month 24 on. Consequently, publishing journal papers will be one of the main fields of work of scientific dissemination from month 25 on until the end of the project. For that purpose, the over-achievement of publications to international conferences and workshops in year 2 provides a good starting point.

Table 7: KPI-Check of the scientific publications

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M10-M24) targets	Phase 2 targets achieved
Number of scientific publications in peer-review journals	-	-	4	1
Number of scientific publications in peer-review international conferences and workshops	1	1	7	11

The following articles have been published or submitted and accepted for publication during the second year of enCOMPASS:

1. T. Vafeiadis, S. Zikos, G. Stavropoulos, D. Ioannidis, S. Krinidis, D. Tzovaras and K. Moustakas: "Machine Learning Based Occupancy Detection via the Use of Smart Meters," 2017 International Symposium on Computer Science and Intelligent Controls (ISCSIC), Budapest, 2017, pp. 6-12. doi: 10.1109/ISCSIC.2017.1
2. A. Vafeiadis, T. Vafeiadis, S. Zikos, S. Krinidis, K. Votis, D. Giakoumis, D. Ioannidis, D. Tzovaras, L. Chen, R. Hamzaoui: "Energy-based decision engine for household human activity recognition", IEEE Int. Conf. Pervasive Computing and Communication Workshops (PerCom Workshops), Athens, March. 2018.
3. P. Fraternali, F. Cellina, S. Herrera, S. Krinidis, C. Pasini, A. Emilio Rizzoli, C. Rottondi and D. Tzovaras: "A Socio-Technical System Based on Gamification Towards Energy Savings", IEEE International Conference on Pervasive Computing, 2018, Workshop on Pervasive Sensing for Sustainable Smart Cities and Smart Buildings, Athens, March 2018.
4. S. Albertarelli, P. Fraternali, J. Novak, A. Rizzoli and C. Rottondi: "DROP and FUNERGY - Two Gamified Learning Projects for Water and Energy Conservation", 11th European Conference on Games Based Learning, 5 - 6 October 2017, Graz, Austria.
5. C. Bernaschina: "How to cook an Agile Web Based Model Driven Environment in a night", International Conference on Web Engineering (ICWE'18), Cáceres, Spain. June 2018.

6. C. Bernaschina and E. Falzone: “Model Based Rapid Prototyping and Evolution of Web Application”, International Conference on Web Engineering (ICWE'18), Cáceres, Spain. June 2018.
7. C. Bernaschina and E. Falzone: “Intelligent Code Generation for Model Driven Web Development”, International Workshop on Maturity of Web Engineering Practices (MATWEP'18), International Conference on Web Engineering (ICWE'18), Cáceres, Spain. June 2018.
8. J. Novak, M. Melenhorst, I. Micheel, P. Fraternali, C. Pasini, S. Herrera, B. Hidasi: “Stimulating energy-saving behaviour through eco-feedback, adaptive gamification and personalized recommendations”, Proceedings of BEHAVE 2018 - 5th European Conference on Behaviour and Energy Efficiency, Zurich, Switzerland, September 2018.
9. M. Melenhorst, K. Koroleva, J. Novak: “Methaporical Visualizations of Energy Saving Impact for Behavioural Change: A Goal-Framing Approach and Results from an Online Crowd Evaluation”, Proceedings of BEHAVE 2018 - 5th European Conference on Behaviour and Energy Efficiency, Zurich, Switzerland, September 2018.
10. M. Quadrana, A. Karatzoglou, B. Hidasi, P. Cremonesi: “Recurrent Neural Networks with Top-k Gains for Session-based Recommendations”, Proceedings of 27th ACM International Conference on Information and Knowledge Management (CIKM) 2018, Torino, Italy (to appear). October 2018.
11. D. Dumciuviene, A. Cibinskiene, M. Melenhorst, J. Novak: „Determinants of sustainable energy consumption in schools”, Proceedings of Economy, Sustainable Development, and Energy International Conference (ESDEIC) 2018, Edinburgh, Scotland, U.K. June 2018
12. S. Albertarelli, P. Fraternali, S. Herrera, M. Melenhorst, J. Novak, C. Pasini, A.-E. Rizzoli and C. Rottondi: “A Survey on the Design of Gamified Systems for Energy and Water Sustainability.” Games. 2018; 9(3), 38.

3.5 Networking and Outreach Activities

PMI organized an outreach event/workshop (called Open Informatics) with students of the high schools, in which a seminar was held about IT-supported energy sustainability best practices and the game and gamification concepts designed in enCOMPASS were presented to the students.

EnCOMPASS researchers participated to the Energy Efficiency coordinators’ meeting organized by the EASME Unit in Bruxelles, where networking with other projects was performed and ideas and experience exchanged. As a result of the discussions held in the meeting, a short memorandum was sent to the EASME organizers.

A joint initiative with several other H2020 energy efficiency projects was executed, in order to coordinate the participation of the projects to the European Utility Week, one of the largest and most influential event in the energy sector. As a result of such initiative, a joint Hub Session was organized at EUW 2017, in Amsterdam, and a new Hub Session will be held at EUW 2018, in Vienna.

The involved projects that are collaborating / have collaborated to joint initiatives include: enCOMPASS, PENNY, ENTROPY, PeakApp, Energaware, Gaia, Charged, GreenPlay)

NHRF together with WVT organized the “**Building Energy Efficiency: Research and Innovation Workshop**” at June 19 2018. A significant event that promoted the visibility of the Encompass project was the Research & Innovation Workshop “Building Energy Efficiency”, which was organized on June 19th at EKT/NHRF premises by all seven (7) consortia currently carrying out projects in the field of energy efficiency on buildings funded under the EU commission research topic "Reducing energy consumption and carbon footprint by smart and sustainable use"

The project consortia actually were co-organizers. They all presented their work and progress and raised key issues for discussion. The consortia had chance to present and share their project findings on behavioral change aimed at energy efficiency, discuss and propose innovative business models to stimulate and sustain

energy efficiency, as well as exchange views on future opportunities in the upcoming research and innovation call for proposals in the context of the Horizon 2020 framework. Common issues faced by all projects as well as their different approaches were clearly demonstrated. There was also valuabe networking and knowledge sharing. The workshop had been an official "Energy Day", part of the Sustainable Energy Week initiative of the European Commission of activities and events, which promote clean energy transition.

4 COMMUNICATION AND DISSEMINATION IN THE PILOTS

At the local level, the information about the enCOMPASS pilots and their activities has been communicated and disseminated during year two to support participant recruitment and engagement. Information about the pilots has been communicated, through local newspapers and disseminated through institutional stakeholders. Business collaborations and participation of partners in scientific and economic forums also communicated and disseminated the enCOMPASS project at the local level.

4.1 GERMAN PILOT

In this section we report on the communication activities performed in the German pilot in the period spanning October 2017, when the last report D9.4 was issued, until the end of October 2018. Prior to this period most communication activities were aimed at the general public, in order to create awareness among the population about the scope and aims of the enCOMPASS project, so that a fertile ground could be prepared to start the recruitment stage.

Communication activities directed at the households were organized in four stages:

- Preselection of target users for recruitment (also discussed in the forthcoming deliverable D7.3);
- Invitation: personalized invitations to join the enrolled target users for intervention group, personalised invitations to a selected group to join the control group;
- Enrollment of requirement matching users, registered for the intervention group and control group;
- Engagement: continuous communication with the intervention group during the experiment phase. This activity is still in progress.

The selection of the target users in the first step has been done by screening all metered household customers of SHF's supply area (e.g. no commercial customers).

A personalized invitation was then sent by postal mail. The number of positive answers to the invitation was higher than the maximum amount of households to be equipped in the experiment. Thus, the number of participants was drawn by chance. The enrolled users were contacted to fill in a recruitment questionnaire further specifying their psychographic characteristics (e.g. the size of the household, the characteristics of the building, the type and number of appliances). At this stage, the participants gave their consent for the treatment of their data to the enCOMPASS project.

The enCOMPASS project was officially launched in Germany on the 13th of June 2018. The launch was announced sending a personalized email to all users who filled in the recruitment questionnaire, using an project-related Email account encompass@stwhas.de.

On the 19th of June a reminder was sent to all users who did not download and install the App. Another recall was sent on the 7th of August to acquire the last users not registered in the app.

During July and August 2018 the assignment of the smart meter IDs was repeatedly checked due consistency, because obviously some users were connected to the wrong smart meter ID. This was based on the fact that in SHF's user list (extracted from the CRM system) did contain old ID numbers. During September all the meter data of the users with failure in visualization of consumption data were checked by hand and compared to their individual contracts. After the internal review of the data, the change in the unique meter IDs was passed over to the encompass platform. The identified users were informed via Email during this investigation.

At the beginning of August, we announced the winners for the monthly competitions in June and July and active users (without consumption errors) kept saving energy, partially even if on holiday. From now on until

the end of the experiment SHF will keep sending one message per month engaging users to save energy and win the monthly competition.

Communication activities for the public building and the schools in Germany were much more customized and targeted and organized around workshops, following the approach used to elicit the requirements for the public buildings and the school version of the App.

A workshop was held with the employees of the Municipality of Haßfurt just before the launch of the enCOMPASS App for Public Buildings and the associated experiment. The App and the monthly energy saving competition was presented and the competing teams were formed. Figure 7 shows the enCOMPASS App as installed in the citizen offices of the townhall.

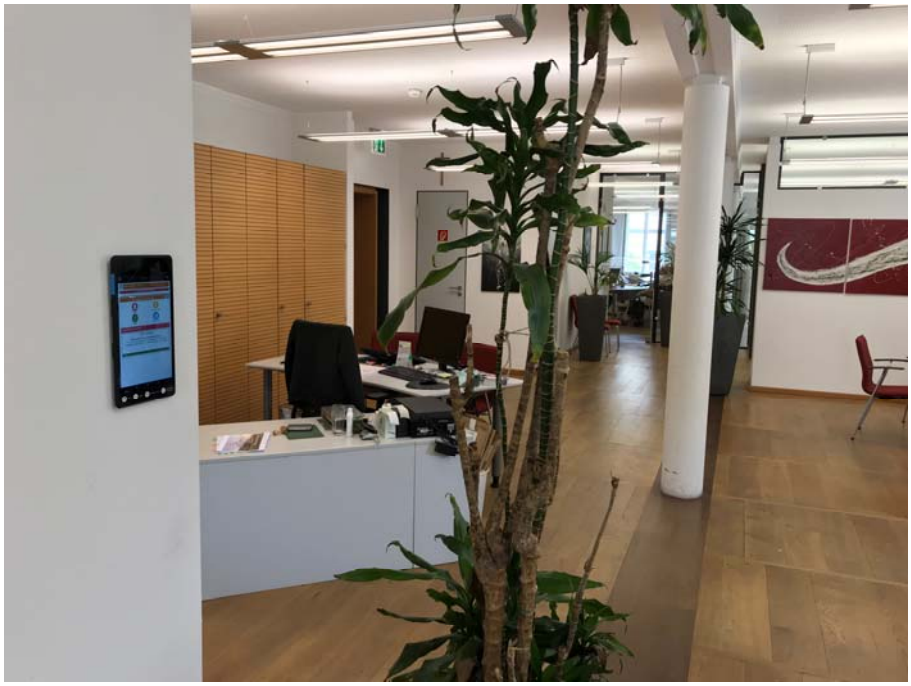

Figure 7: The enCOMPASS App installed in the townhall offices of Haßfurt

The **communication activities for the elementary school in Haßfurt** consists of two workshops that were held with the teachers Haßfurt. During the first meeting in November 2017 we presented the App functions and gathered feedback on how it could be integrated in the teaching activities. Before the start of the experiment we held another workshop in July 2018 where we presented the Funergy game, the App and agreed on the mechanics for the integration of the enCOMPASS project in the teaching activities.

The **communication activities for the elementary school in Wunsiedel** consists of one initializing meeting with the principal on the 14th of June to introduce and gain acceptance for the project. After this was successful, one workshop was done with the teachers in July 2018. There SHF and EIPCM presented the App functions and gathered feedback on the usability in the lessons. Also the Funergy game was presented and on the mechanics for the integration of the enCOMPASS project in the teaching activities was discussed.

4.2 GREEK PILOT

4.2.1 Households

The WATT + VOLT Thessaloniki Retail Store served as the main dissemination point for the households' user engagement and the pilot roll out procedure. Both, existing and new customers visiting the store where introduced to the enCOMPASS project and - upon their acceptance – asked to sign the GDPR compliant

consent forms. The Retail Store personnel helped the visitors on subscribing to the enCOMPASS questionnaires.

Furthermore, an ambitious and pioneering business partnership has been established between WATT+VOLT and PAOK Basketball Team on the project that is called “PAOK ENERGY”. During the collaboration the first PAOK ENERGY Store opened its gates in Thessaloniki on January of 2018. Potential enCOMPASS users visiting the PAOK ENERGY Store were asked to take part in the enCOMPASS pilots in Thessaloniki, gaining a smart watt kit or to join a game experience in PAOK Sports Arena. Among the enCOMPASS household subscribers were all the PAOK Basketball Players’ (see Figure 5).

Figure 8: PAOK BC Players on PAOK ENERGY STORE

4.2.2 Public Building WATT+VOLT Retail Store Thessaloniki

All the personnel of the Retail Store of WATT+VOLT has been trained on using the application to save energy and the 2 groups of employees are to gain the effectiveness trophy. (Figure 9).

Figure 9:Retail Store Team Members

The enCOMPASS Roll Up banner has been placed to the retail Store main reception desk, where the smartwatt devices are settled with the Tablet running the enCOMPASS App (Figure 9). Finally the second Retail Store Group tablet has been setup on the main corridor of the Retail Store's administration offices (Figure 11).

Figure 10:enCOMPASS - smartwatt

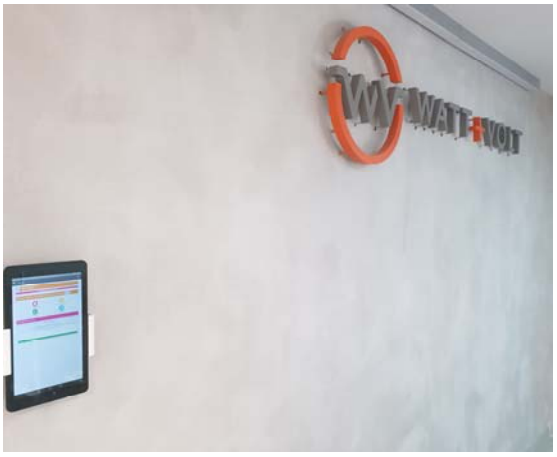

Figure 11: Retail Store App Offices

4.2.3 Public Building: WATT+VOLT Headquarters in Athens

The WATT+VOLT Headquarters in Athens is among the Public Buildings in the Greek Pilot. Several workshops and presentation have been held here to the companies employees, while the mailing list of the employees (about 240 recipients) is used to disseminate the project progress, as described in D9.4.

The application itself is setup on tablets located where the competing teams (divided by personnel per floor) work and use the installed tablets running the enCOMPASS app (Figure 12, Figure 13).

Figure 12:enCOMPASS App in WVT HQ's

Figure 13:enCOMPASS App in WVT HQ's

4.2.4 Public Building: National Documentation Center in Athens [NHRF]

EKT/NHRF users have been employees of the National Documentation Center, which has its offices in the 6th floor and at the ground floor, within the library of the building of the National Hellenic Research Foundation (NHRF). Furthermore, there has been an effort to engage users among the regular visitors of the library of the NHRF. Several meetings with users as a total and in small groups have been held to support their onboarding to the pilot.

The users in each floor have been divided into two teams, competing between each other at the floor level. Motivating users to get engaged has been challenging, mainly due to the NHRF building itself which is an old building, build in the 1950s, in which little can be done for energy saving due to the construction of the building (with various open spaces, where many rooms are interconnected with common electricity switches etc.). Also lighting is necessary throughout the day for users to be able to work because rooms do not provide enough light. Only few actions can be done actively to save energy, mainly actions related to energy saving after the users have left the building and not while they are at work, for example by remembering to switch off all electricity devices (apart from refrigerator) when the last users leaves his/her office.

It was the significance of those actions of energy saving relating to minimizing energy consumption after the users have left the office, that triggered more participation, because the impact of such actions was clearer. Furthermore, what turned out a very useful idea that triggered the motivation of users is to treat the application as a tool which provides advice and ideas for energy saving at home and not only in the NHRF building itself where users work. Also, the competition among teams has offered a motivation for their participation, but it has had less impact on their decision to get engaged.

The difficulties for energy saving in an open space have affected also the motivation for provisional users among the library visitors. Still we have insisted again in the significance of smaller scale energy saving actions such as switching off lamps at library desks (which most users do anyway but a few forget it). We have also

introduced the possibility of library users suggesting new ideas for saving energy to the current teams of users among EKT/NHRF employees.

4.3 SWISS PILOT

Communication activities during the first year of enCOMPASS were aimed at the general public, in order to create awareness among the population about the scope and aims of the enCOMPASS project, so that a fertile ground could be prepared to start the recruitment stage (see D9.4). During the second year, the subsequent **communication activities directed at the households** were organized in three stages:

- Selection: of target for recruitment (also discussed in the forthcoming deliverable D7.3);
- Invitation: personalised invitations to join the intervention group, open invitations to a selected group to join the control group;
- Engagement: continuous communication with the intervention group during the experiment phase. This activity is still in progress.

The selection of the target has been done by screening all metered users of SES in the Contone district of Gambarogno who matched the requirements for participating in the experiment (e.g. no secondary homes and no commercial contracts).

A personalized invitation was then sent by mail by SES and those who positively answered to the invitation filled in a recruitment questionnaire further specifying their psychographic characteristics (e.g. the size of the household, the characteristics of the building, the type and number of appliances). At this stage, the participants gave their consent for the treatment of their data to the enCOMPASS project.

The enCOMPASS project was officially launched in Switzerland on the 4th of June 2018. The launch was announced sending a personalized email to all users who filled in the recruitment questionnaire, using the commercial marketing platform “MailChimp”. Thanks to MailChimp it is possible to track how many users actually open the email and click on the links it may contain and 91 % of the 75 invited users opeend the first email.

On the 11th of June a reminder was sent to all users who did not download and install the App and the last call was sent out on the 18th of June. By then 100 % of the recipients have received and read the email.

During July the metering infrastructure had some problems, so we had to use the communication channel to notify users of the malfunction, and later on, of its resolution.

At the beginning of August, we sent an email announcing the winners for the monthly competitions in June and July and we motivated the users to keep saving energy, even if on holiday (80.3 % of the users opened the email). At the beginning of September, we sent a “welcome back” message (77.5 % of opens). We will from now on keep sending one message per month announcing the monthly winners until the end of the experiment.

The **communication activities for the public building** and the school were much more customized and targeted and organized around workshops, following the approach used to elicit the requirements for the public buildings and the school version of the App.

A workshop was held with the employees of the Municipality of Gambarogno in Magadino just before the launch of the enCOMPASS App for Public Buildings and the associated experiment. The App and the monthly energy saving competition was presented and the competing teams were formed.

The **communication activities for the school** consist of two workshops that were held with the Teachers of the School in Cadepezzo in the Muncipality of Gambarogno. During the first meeting in June we presented

the App functions and gathered feedback on how it could be integrated in the teaching activities. Before the start of the experiment we held another workshop in August where we presented the Funergy game and agreed on the mechanics for the integration of the enCOMPASS project in the teaching activities.

5 DISSEMINATION ACTIVITIES

This section gives an overview of a participation of members of the project consortium at conferences or events to network and communicate about the enCOMPASS project.

5.1 CONFERENCES AND EVENTS

Part of the dissemination strategy is to attend conferences, workshops and other events to network and to present project results. Table 8 demonstrates that the enCOMPASS consortium has been successful at promoting the project at public events and also achieved its target for organizing events for external audiences.

Table 8: KPI-Check of the public events

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M10-M24) targets	Phase 2 targets achieved
Presence at public events[5]	1	5	3	35
Number of events organized for external audiences	1	2	4	4

On a more detailed level, Table 9 shows a selection of the most important scientific and industry conferences attended by members of the enCOMPASS consortium presenting the project to a wide audience.

Table 9: List of main events and conferences attended by project members

Conference / Event	Place and Date	Partners attending
VKU Stadtwerke Kongress 2017	Mainz, 12.-13.9.2017	SHF
European Utility Week 2017	Amsterdam 3.-5.10.2017	PMI, WVT, CERTH
11th European Conference on Games Based Learning	Graz, 5.-6.10.2017	EIPCM
International Conference on Energy Science and Electrical Engineering (ICESEE) 2017	Budapest, 20.-22.10.2017	CERTH
International Symposium on Computer Science and Intelligent Controls (ISCSIC), 2017	Budapest, 20.-22.10.2017	CERTH
Essen Game Show 2017	Essen, 6.11.2017	KAL
Triennale di Milano 2018	Milan, 16.2.2018	KAL
Contractors Day at EASME 2018	Brussels, 22.2. 2018	PMI, EIPCM
IEEE International Conference on Pervasive Computing (PerCom) 2018	Athens, 19.-23.3.2018	CERTH
BDEW - German association of Energy and Water industries	Potsdam, 24.4.2018	EIPCM

5

(meeting of working group "Digitalization")		
PLAY Modena 2018	Modena, 6.-8.4.2018	KAL
Mobistyle joint meeting	Milan, 24.4.2018	PMI
Expoapa 2018	Bucharest, 14.-16.5.2018	SMOB
EU Sustainability Week 2018	Brussels, 30.5. – 5.6.2018	NABU, EIPCM
International Conference on Web Engineering (ICWE'18)	Caceres, 5.-8.6.2018	PMI
Economy, Sustainable Development, and Energy International Conference (ESDEIC) 2018	Musselburgh, 25.-27.6.2018	KTU
BEHAVE 2018 5th European Conference on Behaviour and Energy Efficiency	Zurich, 5.-7.9.2018	EIPCM
Thessaloniki International Fair 2018	Thessaloniki, 8.-16.9.2018	WVT
ARA IT&C event	Baile Govora, 9.-10.10.2018	SMOB
Spiel 2018	Essen, 25.-26.10.2018	KAL

Table 10 lists those events that enCOMPASS partners organized or co-organized for external audiences in order to further disseminate project results.

Table 10: List of events for external audiences (co-)organized by project members

Conference / Event	Place and Date
EIPCM chaired a session on Games-based learning at the 11th European Conference on Games Based Learning ECGBL	Graz, 5.10.2017
Ceremonial opening of the first PAOK ENERGY Store in Thessaloniki as part of WVT's sponsorship of PAOK Basketball team	Thessaloniki, 15.1. 2018
WVT co-organized and sponsored the Enertgy Efficiency Conference 2018	Marousi, 27.6.2018
NHRF organised the infoday "Open Science: key issues and future prospects" in the frame of Greece National OpenAIRE project (the European infrastructure for the support of Open Science)	Athens, 12.6.2018

5.2 LIAISONS TO OTHER PROJECT AND INITIATIVES

enCOMPASS has established a collaboration with the PENNY Project (Grant n. 723791 — H2020-EE-2016-2017/H2020-EE-2016-RIA-IA, social and financial barriers to energy efficiency — PENNY). The agreement will allow behavioral economics researchers of the PENNY Project to extend and exploit one of the gamification solutions developed by enCOMPASS for executing a behavioral change experiment in schools, with both pupils and their parents. The collaboration will be implemented by PMI, who is coordinator of enCOMPASS and partner of PENNY. KAL will also support the activities, by illustrating the concept of the FUNERGY game, developed in enCOMPASS.

Thanks to the liaison with PENNy, enCOMPASS had the opportunity to get in contact with a very innovative utility company (Qurrent, established in the Netherlands). The approach and deliverables of enCOMPASS have been discussed with Qurrent management, who expressed interest in the idea of using real games to engage people in behavioral change activities.

EnCOMPASS attended the plenary meeting of the Mobistyle project, held in Milan. During that meeting, enCOMPASS coordinator gave a talk to the partners of Mobistyle, sharing with them the project experience in the use of gamification and real games for energy saving.

Several outreach activities have been jointly organized with other H2020 projects in the energy efficiency area, including participation to the European Activity Week and to the Global IOT Forum. The involved projects that are collaborating / have collaborated to joint initiatives include: enCOMPASS, PENNY, ENTROPY, PeakApp, Energaware, Gaia, Charged, GreenPlay)

6 ASSESSMENT OF THE COMMUNICATIONS IMPLEMENTATION

6.1 ASSESSMENT OF DISSEMINATION KPIS

As already anticipated in the previous sections reporting on the results of the different types of activities on the different channels, the communication and dissemination strategy (as defined in D9.2) was successfully implemented during the second year and almost all of the defined goals were reached. Table 11 gives an overview of those communication and dissemination goals quantified in KPIs, as defined in *D9.2 Communication and Dissemination Plan*. The results for the first phase (M1 – M9) have already been reported in the *Progress Report (D1.2)* and in the *First year dissemination report (D9.4)*. For the sake of completeness, table 11 includes the communication and dissemination targets as well as the achievements both for phase1 as well as for phase 2 and the results achieved. As can be seen from the table, almost all goals for these periods as measured by the KPIs have been met. The only exception being the KPI "Number of scientific publications in peer-review journals" where the target – as explained before in section 3.4 – has been set too high by mistake given that the evaluation data for journal publications is only available from month 24 on.

Table 11: KPIs for communication and dissemination

KPIs for communication and dissemination	Phase 1 (M1-M9) targets	Phase 1 targets achieved	Phase 2 (M10-M24) targets	Phase 2 targets achieved	Total of M24 achieve-ments
Presence at public events	1	5	3	35	40
Citizen and stakeholder engagement workshops/meetings	4	6	4	24	30
Communications with public authorities/public building managers	3	8	6	18	25
Communications with environmental NGOs	3	3	6	16	19
Communication with utilities and technology providers	3	14	6	77	91
Number of events organized for external audiences	1	2	4	4	6
Number of events attended representing the project	2	5	4	35	40
Citizen, school pupils, PAs and stakeholder communications reach	100	32.250	40.000	386.546	386.564[6]
enCOMPASS social community members	300	704	1.000	4.877	4.877
Reach of the extended enCOMPASS social community	-	-	10.000	21.622	21.622
Number of scientific publications in peer-review journals	-	-	4	1[7]	1

[6] The high number of the project's potential citizen, school pupils, PAs and stakeholder communication reach has been achieved by actively and jointly communicating through partners' individual social media channels (Twitter, Facebook, LinkedIn), customers databases of utility partners and networks of other partners.

[7] One more journal paper has been submitted to IEEE Access but not accepted due to the fact that no evaluation data was yet available at the date of submission. This will be re-submitted as soon as the intermediate user awareness evaluation data has been obtained (collection started at month 24 according to plan).

Number of scientific publications in peer-review international conferences and workshops	1	1	7	11	12
Number of special sessions/workshops at international conferences	-	1	1	1	2
Number of press releases delivered to traditional media	6	7	6	19	26
Number of unique visitors to the website (based on Google Analytics)	500	52	2.500	2.799	2.799
Number of multimedia material downloads (website)	100	11	200	574	574
Number of recipients of the enCOMPASS newsletter	2.000	37.264	3.000	279.170	279.170[8]
Number of direct followers of enCOMPASS social channels	80	181	150	1.072	1.072
Number of posts on direct enCOMPASS social channels	100	496	200	1.813	1.813

6.2 Assessment of Dissemination in the pilots

6.2.1 SHF

Compared to the Swiss pilot, SHF did not use the tool "Mailchimp" to measure the dissemination effectiveness in the pilot. Therefore, the assessment of dissemination cannot be reported in numbers. In general, active users do also read the communications and ask questions via telephone or the project specific Email address.

Dissemination is currently not aimed at the general public. This will be done at the end of the first experimental period (before Release 2 of the encompass platform) to report and visualize first initial results of the pilot. This will be communicated to local and national media, to widen the scope of encompass project. Additionally, these first results will be presented in meetings with stakeholders of the energy industry to show the impact of the encompass attempt.

6.2.2 WVT

The dissemination effectiveness in the Greek pilot is mainly qualitatively monitored through the regular direct contact and interaction with the users who visit the WVT Retail Store in Thessaloniki. An appropriate infrastructure has been installed (see Section 4.2 for more details) enabling the dissemination process.

As regards the users in Athens, a communication through telephone or e-mail has been established.

As is the case of the other two pilots, the dissemination campaign of year two does not concern the general public. More concrete results are required (as the ones of the first experimental period) in order to proceed with a more massive dissemination strategy to local and national mass media.

[8] The high number of newsletter recipients greatly exceeding its initial target was made possible to a large degree by the extensive stakeholder base of NABU (one of Germany's largest environmental NGO) accompanied by the successful enCOMPASS Social Media strategy which enabled a very broad distribution of the enCOMPASS newsletters.

6.2.3 SUPSI

As discussed in Section 4.3, the only tool we can use to measure the dissemination effectiveness in the Swiss Pilot are the reports provided by the marketing platform Mailchimp. The open rate of the period messages sent to the users varies from 90 % to 77 % according to the subject of the email and the timing. In general, we can say that those users who are actively using the app also read the communications.

Dissemination is therefore endemic and it is not currently aimed at the general public. This is going to change at the end of the first experimental period (before Release 2 of the platform will be launched) because by then some first initial results will be available and they will be communicated to local and national media, in case they confirm our experimental hypotheses.

6.3 ASSESSMENT OF DISSEMINATION IN INTERNATIONAL CONTEXT

Dissemination at the international level has taken place mostly through the online channels, including the enCOMPASS website (http://www.encompass-project.eu/), the project newsletter, social networks such as Twitter and LinkedIn, through the publication of scientific papers and the attendance of international conferences by members of the project. Events were attended by members of the consortium representing the project, such as the International Conference on Web Engineering, European Sustainability Week 2018, Energy Efficiency Conference as well as further workshops/meetings with different types of audiences (including citizens, public administrations, building managers etc.) have been performed. Four scientific publications have been published. Furthermore, with NABU-Netz.de and the NABU-Facebook-Account a specific community is reached and project content is disseminated. As depicted in Table 11 all related KPIs were reached.

7 CONCLUSIONS

In this deliverable we have reported the communication and dissemination activities we have implemented during the second year of the project. Such activities have been organized along the following directions:

- Workshops presenting the project to citizens in the pilots, and receiving relevant feedback and workshops presenting the project's objectives, results and methods to interested utilities, smart home providers, municipal decision-makers, social innovators, and the public
- Preparing demos, videos and materials on enCOMPASS approach (with a "showing better than telling" approach);
- Management of various social media channels, with different targets and different communication styles: from the broadcast, terse and compact style of "tweets" on Twitter, to more articulated discussions on the LinkedIn portal, and NABU-Netz.de.
- Dissemination on traditional media, from local press, to radio interviews.
- Scientific dissemination, delivering a set of contributions to international conferences and also to scientific journals now that evaluation data from the pilots is becoming available for such publications, including also the ongoing dissemination of the slide presentations on the social media SlideShare
- Presentation of the project at different events, including scientific conferences, industry events and citizen and stakeholder workshops.

Thus the strategic phase 2 to create a more targeted engagement with the reference audience, from citizens, utilities, smart home provider, to public bodies & social innovators has been successfully completed and this report provides the basis for our future activities. In accordance with the dissemination strategy, the scale up phase will start with the submission of this report, aiming to maximize target industry and social awareness on enCOMPASS and to develop an exploitation strategy to access other sustainability challenges and post-project exploitation scenarios.

Assessing the quantifiable communication and dissemination goals the in D9.2 outline strategy is giving the right guideline for good communication. Almost all targets have been met or even overachieved. It is promising, that the reach of citizen, school pupils, PAs and stakeholder communications has been an order of magnitude higher than targeted. The same goes for the reach of the newsletter as well as the monthly impressions achieved on the social channels. Such results suggest that a lot of the potential of the available channels is already being well exploited for effective communication and dissemination of the project.

Therefore, the plan for phase three laid out in D9.2 will be continued as planned with no changes required (see *D9.2 Dissemination and Communication Plan*).