



SOPHIA

Sustainable Off-grid solutions for
Pharmacies and Hospitals In Africa

FINAL DISSEMINATION, COMMUNICATION AND CAPACITY BUILDING STRATEGY PLAN (M48)

DELIVERABLE D8.5

VERSION 1.0

PROJECT ACRONYM	SOPHIA
PROJECT TITLE	SUSTAINABLE OFF-GRID SOLUTIONS FOR HOSPITALS AND PHARMACIES IN AFRICA
FUNDED UNDER	H2020-EU.3.3
PROJECT URL	http://www.sophia4africa.eu/
COORDINATOR	UNIVERSITY OF APPLIED SCIENCES KARLSRUHE
PROJECT DURATION	01/10/2021 – 30/09/2025 (48 MONTHS)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101036836.

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KEYWORDS	Communication and dissemination, capacity building
DISSEMINATION LEVEL ¹	PU
DUE DATE OF DELIVERABLE	30/09/2025
ACTUAL SUBMISSION DATE	30/09/2025

¹PU = Public

PP = Restricted to other program participants (including the Commission Services)

RE = Restricted to a group specified by the consortium (including the Commission Services)

CO = Confidential, only for members of the consortium (including the Commission Services)*

DOCUMENT HISTORY

DATE	VERSION	CHANGE HISTORY
29/09/2025	1.0	First version submitted to EC



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EXECUTIVE SUMMARY

The SophiA project aims to provide sustainable off-grid energy supplies and clean drinking water for rural and remote health facilities in Africa, thereby accelerating sustainable development, growth and economic transformation, and ensuring improved access to energy and health services for all. SophiA has developed and locally manufactured innovative, modular, flexible, affordable and efficient solar containers to equip rural health centres in four different climatic regions, offering sustainable solutions adapted to the African context and transferable to Sub-Saharan Africa. Led by Hochschule Karlsruhe (HKA), the SophiA consortium consists of 13 project partners from three European countries (France, Germany and Switzerland) and four African countries (Burkina Faso, Cameroon, South Africa and Uganda).

This report was produced within the framework of Work Package 8 “Communication, Dissemination and Capacity Building”, led by the International Institute of Refrigeration (IIR). It consolidates all actions undertaken during the entire duration of the project (M1–M48), building upon the guidelines and objectives initially set in D8.1, and updated successively in D8.2, D8.3 and D8.4. The purpose of this final review is to demonstrate how the project has met its communication, dissemination and capacity building objectives, ensuring the widest possible visibility and impact of its results.

Over the four years, the SophiA partners have implemented a wide range of dissemination tools, including the official website, newsletters and e-newsletters, scientific publications, social media, videos, events, and capacity building activities. These actions resulted in significant outreach: nearly 60,000 website views, 13 e-newsletters and 7 newsletters published, over 1,000 combined social media followers, 34 project videos, and more than 278'000 downloads of communication materials. In addition, the consortium actively participated in more than 80 international and regional events and produced over 15 scientific publications, all in open access.

The D8.5 Final Communication, Dissemination and Capacity Building Strategy Plan confirms that the targets set at the beginning of the project have been reached or exceeded in most areas. It provides evidence of the impact of communication and dissemination activities in enhancing the visibility of SophiA's results and ensuring their exploitation by a broad range of stakeholders across Europe and Africa.



1. INTRODUCTION

SophiA aims to provide sustainable off-grid energy supplies and water free of bacteria and viruses for rural and remote health facilities in Africa, thereby accelerating the sustainable development, growth and economic transformation, and ensuring improved access to energy and health services for all.

Using various technologies, such as photovoltaics, solar thermal, electrical and thermal storage, water treatment and natural refrigerants with low global warming potential, SophiA will develop and manufacture locally innovative, modular, affordable and efficient solar powered systems for providing:

- safe and clean drinking water, free of bacteria and viruses, and deionised water for medical purposes;
- hot water and steam production for thermal requirements of the hospitals;
- cooling of medicines and food at +5°C;
- low temperature storage of blood plasma and vaccines at -30°C;
- ultra-low temperature storage of sensitive medication (e.g. some Covid-19 or Ebola vaccines) at -70°C.

In addition, PV MedPort, a simple and 100% solar-powered solution will be developed and tested as a mobile health care station in small remote areas in 4 different geographical conditions in Africa.

SophiA systems will be manufactured in Africa and will provide for the first-time innovative solutions based on climate-friendly natural refrigerants to cover cooling demand for three different temperature ranges (-70°C, -30°C and +5°C). The systems will be tested and demonstrated at four rural hospitals in remote regions throughout the African continent covering the major geographical regions and different climatic conditions in Burkina Faso, Cameroon, Malawi and Uganda.

This report presents the final version (M48) of the communication, dissemination and capacity building strategy, providing a comprehensive overview of the tools and channels used throughout the project to engage with different target audiences. It consolidates all developments and achievements carried out during the four years of the project and serves as the conclusive reference document for communication, dissemination and capacity building activities.



2. COMMUNICATION, DISSEMINATION AND CAPACITY BUILDING WORK PACKAGE

The project progress and results are communicated and disseminated to our target and key actors. The communication, dissemination and capacity building strategy plan developed within WP8 ensures that the results reach the right target audience in a format and at a time that increases awareness about the SophiA project.

The main objectives of WP8 are:

- to raise interest about SophiA concepts to potential stakeholders in Europe and Africa;
- to give visibility to SophiA objectives, activities and benefits;
- to raise awareness about SophiA aims, evolution and results through different communication channels;
- to show external actors how they will/could benefit from the innovative results of the SophiA project and/or how they can integrate these results in their future research activities or commercial products;
- to strengthen the partners' reputation in their communities on regional, national, and international level;
- to engage key stakeholders and decision makers from Uganda, Cameroon, Burkina Faso, Malawi and other African countries;
- to facilitate know-how and technology transfer;
- to pave the way for a future uptake of SophiA through addressing the different target groups with tailored methods.

2.1 WP 8 deliverables and tasks

A good coordination between the three activities shown in Figure 1 will ensure the achievement of project targets.

The tasks planned within WP8 are covering the entire project period of 48 months and support all other on-going activities:

- Task 8.1: Development of the Communication, Dissemination and Capacity Building Strategy Plan (IIR, all partners) (M1-M4);



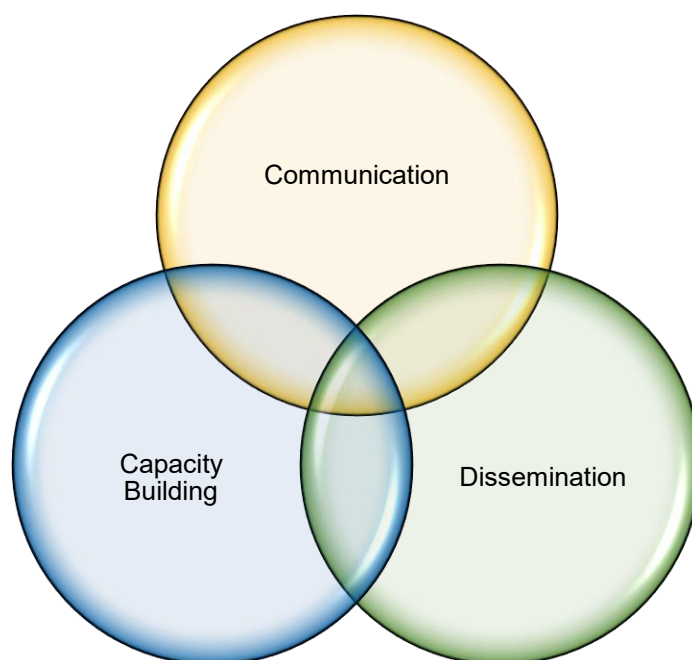


Figure 1: Combination between communication, dissemination and capacity building.

- Task 8.2: Development of the visual identity, website, production of communication supports and delivery of communication activities (IIR, all partners) (M1-M48);
- Task 8.3: Organisation and/or participation in workshops, conferences, exhibitions and trade shows in national, regional and international events (IIR, all partners) (M12-M48);
- Task 8.4: Organisation of demonstration site launch days and seminars (IIR, all partners) (M24-M48);
- Task 8.5: Elaboration of a handbook for building SophiA systems on-site (Everflo, all partners) (M18 – M46);
- Task 8.6: Educational and technical training sessions (2iE, all partners) (M24-M48);
- Task 8.7: Scientific publications, articles in specialised magazines and press releases (IIR, all partners) (M12-M48);
- Task 8.8: Development of the Knowledge Exchange Network (SEZ, all partners) (M6-M48).

The deliverables planned within WP 8 are presented in Table 1. Detailed actions within different tasks for communication, dissemination and capacity building are presented in Figure 2.



D8.5: Final, dissemination, communication and capacity building strategy plan (M48)

Table 1: List of deliverables planned within WP8.

Deliverables	Type	Due date	Submitted	Lead
D8.1 Dissemination, Communication and Capacity Building Strategy (IIR, M4)	Public	M4	18/02/22	IIR
D8.2 Dissemination, Communication and Capacity Building Strategy Plan Review (M12)	Public	M12	03/11/2022	IIR
D8.3 Dissemination, Communication and Capacity Building Strategy Plan Review (M24)	Public	M24	29/09/2023	IIR
D8.4 Dissemination, Communication and Capacity Building Strategy Plan Review (M36)	Public	M36	30/09/2024	IIR
D8.5 Final Dissemination, Communication and Capacity Building Strategy Plan (M48)	Public	M48	30/09/2025	IIR
D8.6 SophiA training manuals	Confidential	M48	30/09/2025	2iE
D8.7 Handbook for building SophiA systems on-site 1st edition	Public	M31	30/09/2025	Everflo
D8.8 Handbook for building SophiA systems on-site 2nd edition	Public	M48	30/09/2025	Everflo



Communication

- Target groups (Task 8.1)
- Key messages and information package (Task 8.1)
- Visual identity and branding (Task 8.1 and 8.2)
- Communication tools and support materials: Word and PowerPoint templates, brochures, poster, newsletters, e-newsletters, website, videos, social media (Task 8.1 and 8.2)

Dissemination

- Dissemination events: workshops, conferences, exhibitions, tradeshow and final conference (Task 8.3)
- Demonstration site launch days, seminars (Task 8.4)
- Scientific and technical publications (Task 8.7)
- Press releases (Task 8.7)

Capacity Building

- Handbook for building SophiA systems on-site 1st and 2nd edition (Task 8.5)
- Training sessions and show rooms (Task 8.6)
- Demonstration site launch days, seminars (Task 8.4)
- Knowledge Exchange Network (Task 8.8)

Figure 2: Detailed actions for communication, dissemination and capacity building.

2.2 Partners involved in WP8

The communication and dissemination tasks within WP8 (Tasks 8.1, 8.2, 8.3, 8.4 and 8.7) are led by IIR, while capacity building tasks are led by EVERFLO (Task 8.5), 2iE (Task 8.6) and SEZ (Task T8.8). WP8 is based on an interactive collaboration between all partners. An overview about the level of involvement of partners in WP8 activities is given in Table 2.

Table 2. Partners involvement and roles in WP8.

Project Partner – short name	Role
HKA	WP contributor
SPF-OST	WP contributor
Makerere University	WP contributor
2iE	Task leader
Steinbeis	Task leader
MPHC	WP contributor
IIR	Work Package leader
Operieren in Afrika	WP contributor
Everflo	Task leader
Kovco	WP contributor
Martin Systems	WP contributor
Simply Solar	WP contributor
Raach Solar	WP contributor



3. THE FINAL COMMUNICATION, DISSEMINATION AND CAPACITY BUILDING STRATEGY PLAN

The first deliverable D8.1 provided guidelines for all communication, dissemination and capacity building actions planned for the project. It also included actions to transfer knowledge obtained from the project results to each target audience. Moreover, it described the capacity building plan. The first update (D8.2) presented a review of several actions related to three main activities from WP8 (communication, dissemination and capacity building) to maximise the project scope, framework and results visibility. It contained a description of all dissemination activities that took place during the first year of the project. The second update (D8.3) included new activities and results such as updates on SophiA's technologies on the official website or analysis on the growth of followers on SophiA's social medias. The third update (D8.4) for the communication, dissemination and capacity building strategy plan reported on the consolidation of activities carried out during the third year of the project, including the organisation of international events, the production of promotional materials and the reinforcement of stakeholder engagement. It also assessed the effectiveness of the communication tools developed and proposed adjustments to further enhance the project's visibility.

The final report (D8.5) provides a comprehensive overview of all actions implemented throughout the project's lifetime. It highlights the impact of dissemination activities, the reach of communication tools, and the results achieved in terms of capacity building. Furthermore, it demonstrates how the strategy has contributed to raising awareness about SophiA technologies, strengthening the knowledge transfer to target audiences, and supporting the long-term sustainability of the project outcomes.

3.1 The Communication Strategy Plan

The SophiA project communication is a key element to guarantee a large visibility of the project scope and to ensure that relevant stakeholders are reached at a wide extent. Both the communication and dissemination strategies are developed in a way to maximize the use of existing physical meeting points (conferences, trade fairs, seminars, workshops, etc.), software tools (website, publications, etc.), as well as existing communication platforms and media channels.



3.1.1 Communication tools

Website

The SophiA website has demonstrated strong visitor engagement and consistent growth, as highlighted by recent Google Analytics data (Figure 3). Over the analysed period, the site has accrued nearly **60,000 page views**, reflecting robust interest and active user interaction.

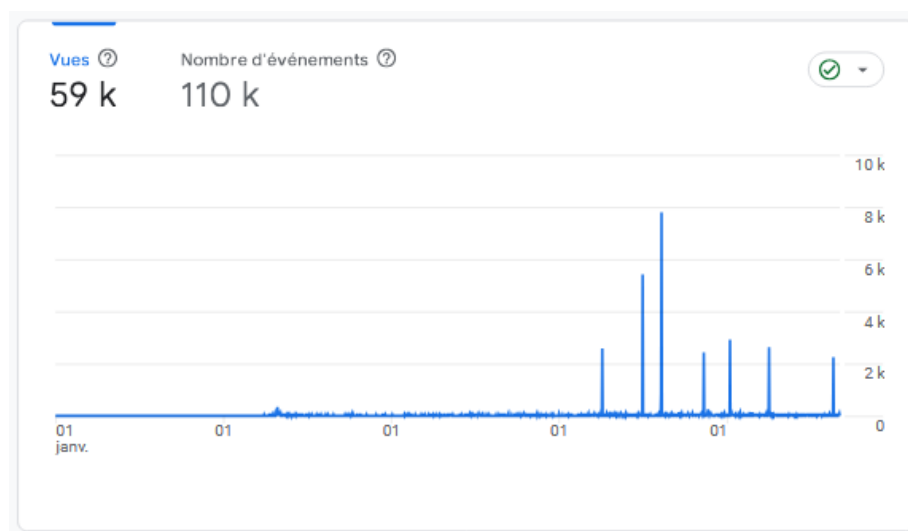


Figure 3 : Evolution and total SophiA website page views since the beginning of the projet.

The average engagement time per user stands at around **2 minutes and 17 seconds**, indicating visitors not only arrive but also explore the content meaningfully (Figure 4).

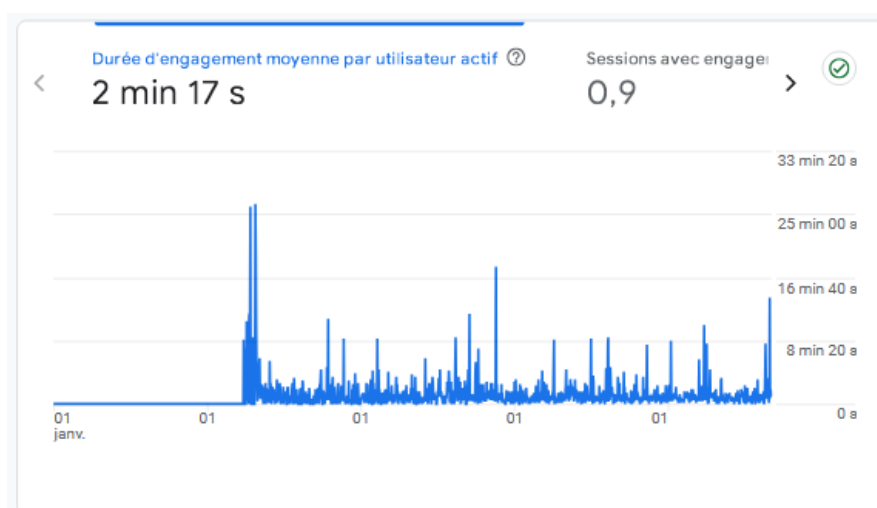


Figure 4 : Engagement time per user on the SophiA website.



Notably, the number of active users reached close to **9,000**, with a balanced mix of new and returning visitors, which underscores both the website's reach and its ability to retain audiences (Figure 5).



Figure 5 : Number of active users on the SophiA website.

Traffic sources display a healthy diversity: direct visits account for a significant share, complemented by organic search, referrals, and social media, all driving a steady flow of sessions to the site (Figure 6). This data collectively confirms the site's effectiveness in engaging its audience and its growing visibility in the digital landscape.

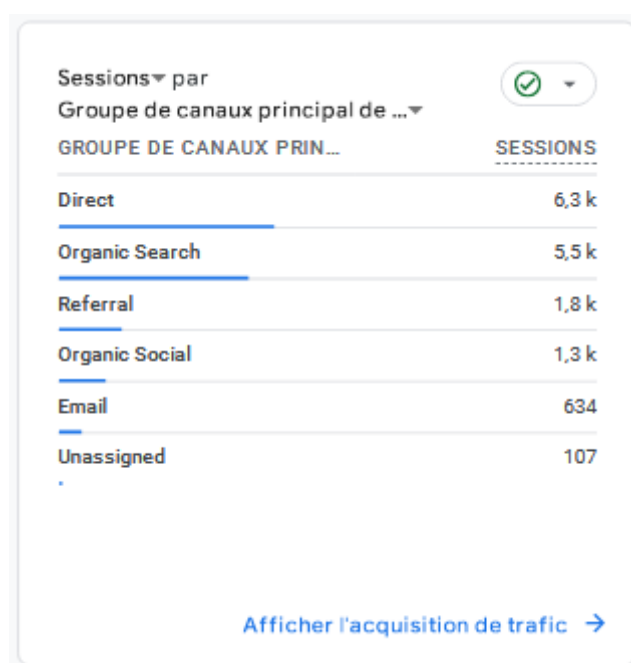


Figure 6 : SophiA's website traffic sources.



The SophiA website hosts a rich collection of content with **161 news** articles available in French, English, and German. Throughout the project, **128 upcoming events** have been announced, keeping the community informed and engaged.

Since the beginning of the project, there has been a remarkable total of **278'738 downloads** (Figure 7), with an average daily download count of 236, reflecting strong and sustained interest in the resources provided.

[?] Total Downloads 278 738	[?] Daily Average Downloads 236	[?] Most Downloaded D1.1 – NEEDS ASSESSMENT IN MEDICAL CARE CENTRES IN AFRICA
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Figure 7 : Downloads data.

Social media

X, LinkedIn, Facebook, and YouTube channels were set up at the beginning of the project. Table 3 shows the final followers/ subscribers and the total number of publications and the progression.

Table 3: Social media subscribers.

Social Media	M12	M24 (% = growth rate)	M36 (% = growth rate)	M48 (% = growth rate)	Total number of publications
X/Twitter	117	179 + 52.99 %	192 + 7.26 %	211 +9,90 %	283
LinkedIn	226	495 + 119.03 %	591 + 19.39 %	756 +27,92 %	191
Facebook	9	19 +111.1 %	42 + 121.05 %	48 +14,29 %	48 (stopped in February 2025)
Youtube	10	25 +150 %	34 + 36 %	46 +35,29 %	34 videos



The monitoring of SophiA's social media channels between M12 and M48 highlights a steady and sustained growth across all platforms, reflecting the effectiveness of the project's communication efforts and the regular provision of content.

X/Twitter showed continuous but moderate growth after M24, reaching a total of 211 followers (+80% overall). With 283 posts published, this platform was systematically used to share updates, project news and highlight events, ensuring consistent visibility in the scientific and professional spheres.

LinkedIn proved to be the most impactful channel, with followers more than tripling between M12 and M48 (+234.5% overall). This underlines its role as the main professional networking platform for academia, industry and policymakers. The high number of posts (191) shows the strategic focus placed on LinkedIn throughout the project.

Facebook saw rapid growth at first, but quickly showed its limits. Despite a fourfold increase in followers, the platform generated very few views and interactions. As a result, the decision was taken to stop posting on Facebook and instead concentrate efforts on channels that reached a more engaged audience, such as LinkedIn, Twitter and YouTube.

YouTube became an important tool for visual and training-oriented communication, with followers more than quadrupling and 34 videos published. This format allowed SophiA to present its technologies in an accessible way and document project activities in a dynamic format.

It is also important to note that the increase in engagement towards the end of the project is a natural outcome: more events were organised, more technologies were installed, and more results were available to share. Consequently, communication efforts intensified, which translated into higher interactions and stronger visibility.

Furthermore, partners were actively encouraged to share SophiA's social media publications on their own platforms, thereby amplifying the project's outreach. They were also invited to contribute directly with their own posts, following the SophiA Social Media Guideline developed earlier in the project. This collaborative approach not only diversified the content but also strengthened the project's visibility across different networks and audiences.

In summary, the results confirm that SophiA's social media strategy was well implemented and adaptive. By focusing efforts on the most effective platforms and leveraging the contribution of partners, the project maximised its outreach, engaged diverse stakeholders, and successfully documented its progress and results.



Project videos

Since the last reporting period, the [SophiA YouTube channel](#) has been enriched with a series of new videos documenting manufacturing processes, installations, trainings, and project updates in Africa. These videos serve as both a visibility and a knowledge transfer tool, making the project's achievements accessible to a wide audience in a dynamic format.

Recent uploads (after January 2025) focused particularly on container manufacturing in Malawi and Uganda (Figure 8), with multilingual versions (English, French, Luganda) to adapt content to local audiences. This approach demonstrates the project's effort to ensure inclusivity and local outreach.

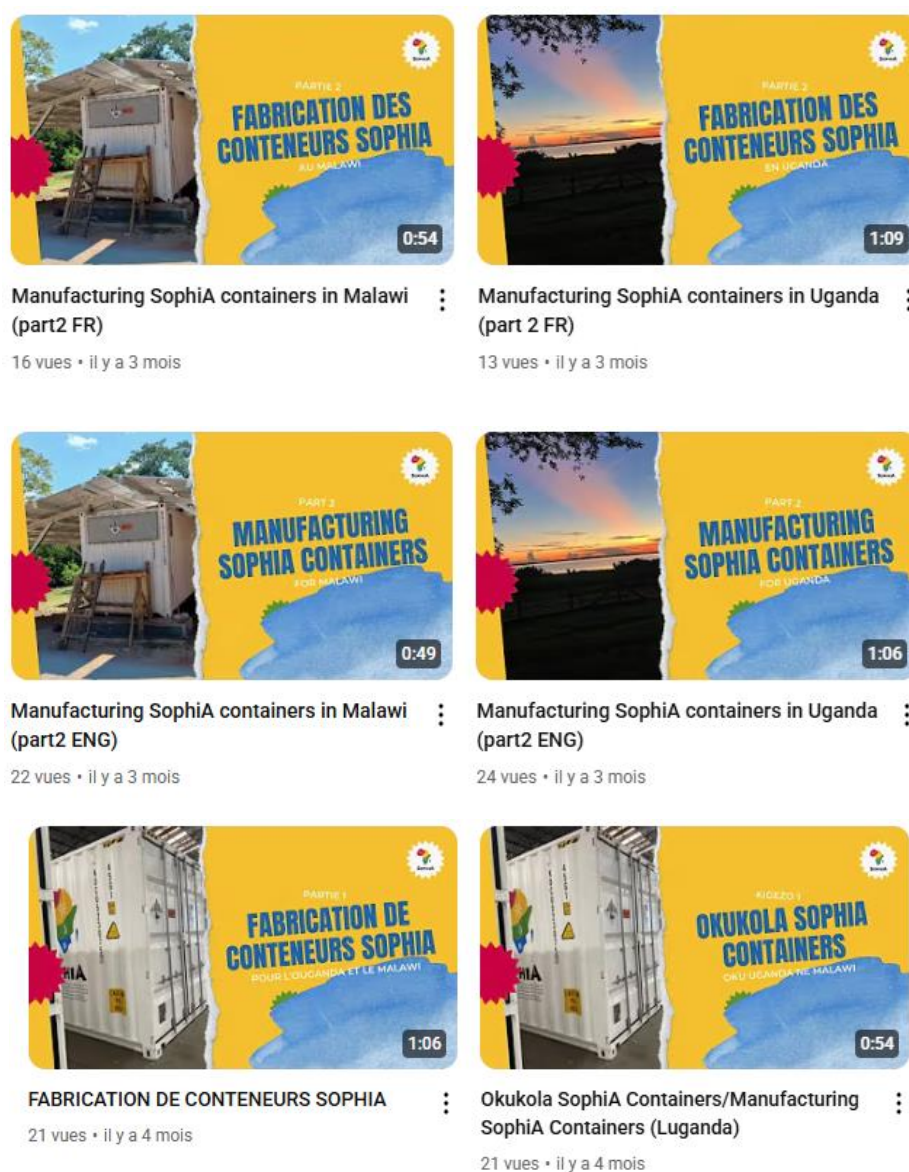


Figure 8 : SophiA Youtube videos on the containers manufacturing.



Installation reports in Cameroon and Malawi (2024–2025) have also been documented in short, accessible clips, attracting a higher number of views, especially in English (Figure 9). These concise formats make the content easier to share on social media and useful for stakeholders who need quick project insights.



Figure 9 : SophiaA YouTube videos on the containers' installation.

Hospital-focused content (Figure 10), such as the video on Edea Hospital in Cameroon (29 views in less than one month), shows the direct application of SophiaA technologies in healthcare, highlighting the project's impact on real communities.



Figure 10 : Edea Hospital (Cameroun) video.

Human-focused content like interviews with researchers, engineers, and university representatives (Figure 11) continues to generate significant engagement, with some interviews surpassing 100 views. The interview of the Vice-Rector of the University of Yaoundé 1 reached 280 views, confirming that institutional testimonials resonate strongly with audiences.



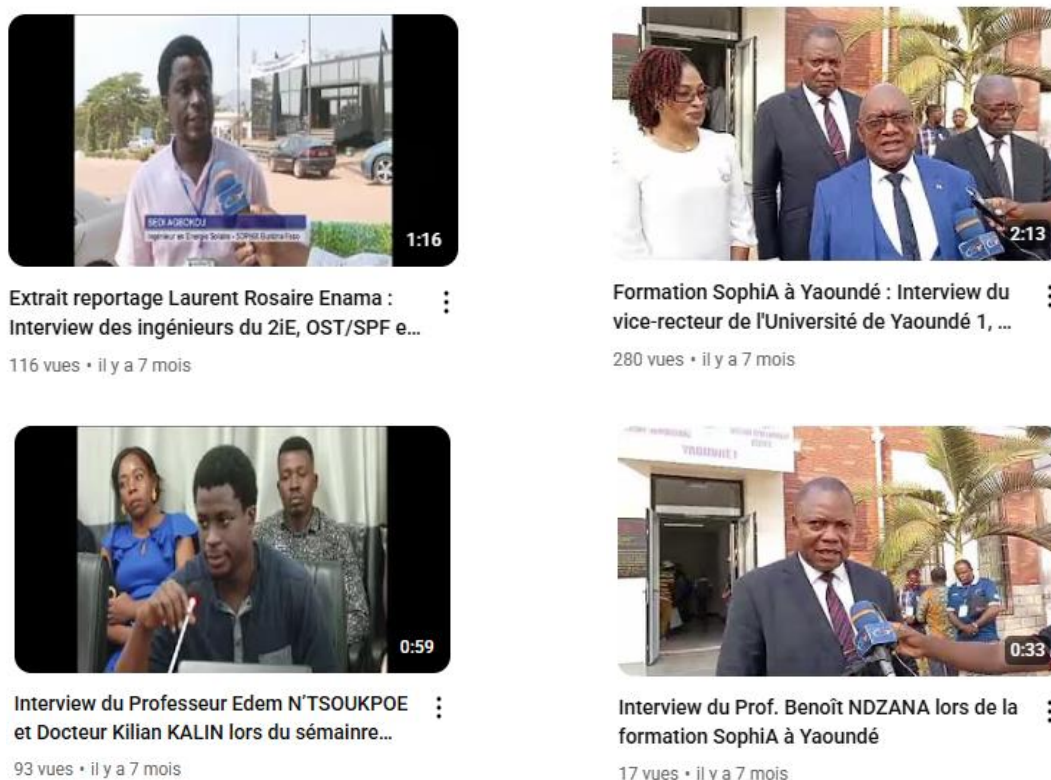


Figure 11 : Interviews in Cameroon.

From a broader perspective, the You Tube strategy has proven successful:

- The channel now contains 34 videos and has 46 subscribers. While the number of subscribers remains modest, the real impact is visible through the steady growth in views across videos. Many viewers watch the videos directly from newsletters and LinkedIn posts, without necessarily subscribing to the channel, which explains this difference.
- What matters most is therefore the view count and engagement rather than the subscriber base. For example, several recent videos quickly gathered dozens of views despite being online for only a few weeks.
- Multilingualism and varied formats (short clips vs. in-depth presentations) ensured that the videos could serve multiple purposes: technical demonstration, partner dissemination, training material, and awareness raising.
- The increase in views and engagement (Figure 12) in recent months correlates with the intensification of field activities, installations, and training sessions. As more



tangible results became available, communication through video naturally gained in relevance and impact.

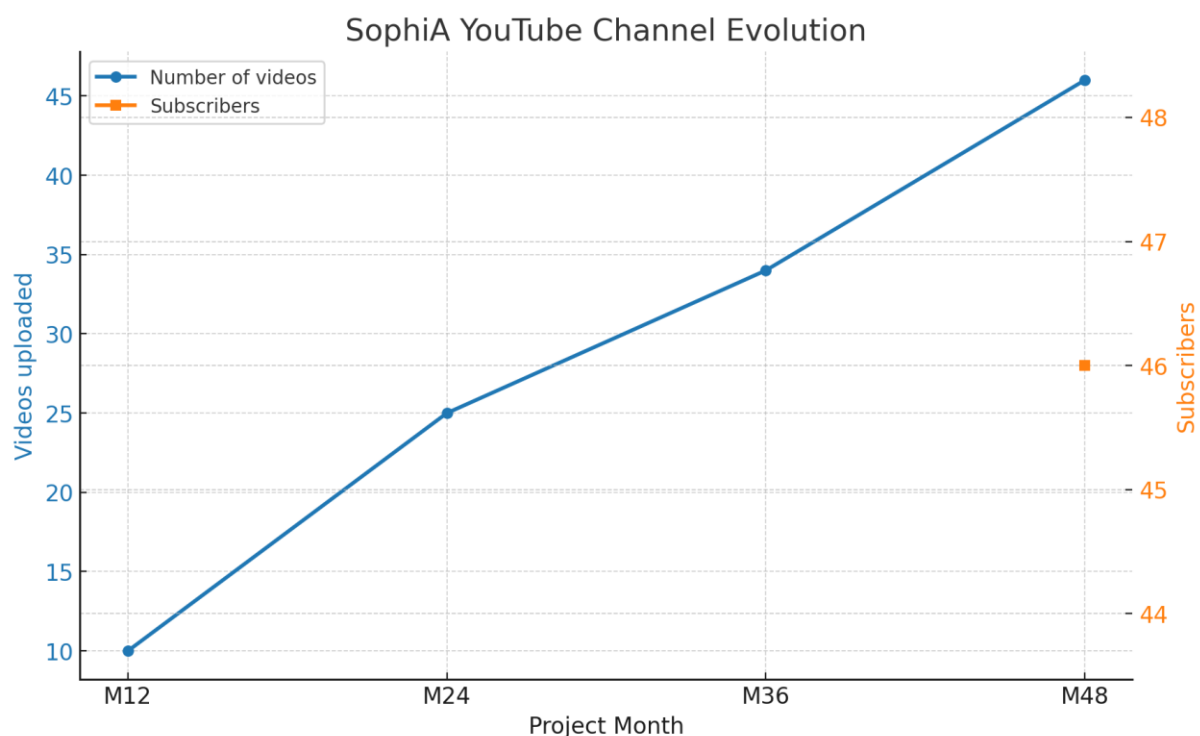


Figure 12 : SophiA YouTube Channel Evolution.

3.1.2 Communication Support Materials

The communication supports are tools to be used as promotional materials to communicate important key messages and information packages of the project. In all communication supports, both the SophiA logo and graphic charter are applied.

Newsletter

The newsletters were produced every six months to maintain a permanent and regular information about the project progress and achieved milestones. The five first newsletters were posted on the website (Figure 13) and relayed on the social medias. Website users still have the possibility to sign up to the newsletter. One last newsletter will be released at the end of the project.



Articles	Brochures	Videos	Newsletter
SophiA Newsletter 1 (EN) – No. 1, English version, Oct. 2022 SophiA Newsletter 1 (FR) – No. 1, French version, Oct. 2022 SophiA Newsletter 2 (EN) – No. 2, English version, April. 2023 SophiA Newsletter 2 (FR) – No. 2, French version, April. 2023 SophiA Newsletter 2 (DE) – No. 2, Deutsch version, April. 2023 SophiA Newsletter 3 (EN) – No. 3, English version, Oct. 2023 SophiA Newsletter 3 (FR) – No. 3, French version, Oct. 2023 SophiA Newsletter 3 (DE) – No. 3, Deutsch version, Okt. 2023 SophiA Newsletter 4 (EN) – No. 4, English version, March. 2024 SophiA Newsletter 4 (FR) – No. 4, French version, March. 2024 SophiA Newsletter 4 (DE) – No. 4, Deutsch version, March. 2024 SophiA Newsletter 5 (FR) – No. 5, French version, Sept. 2024 SophiA Newsletter 5 (EN) – No. 5, English version, Sept. 2024 SophiA Newsletter 5 (DE) – No. 5, Deutsch version, Sept. 2024			

Figure 13: List with the SophiA newsletters in different languages.

e-Newsletters

The SophiA project distributed a total of 13 e-newsletters, designed via Mailchimp, all freely accessible on the official website in the [Downloads > Newsletter](#) section since July 2022. Each issue was published in both French and English to maximize reach among African and European partners, as well as the broader international community.

Publication Statistics

- Total Published: 13 newsletters between July 2022 and September 2025
- Accessibility: All newsletters are available in open access from the dedicated website section.
- Frequency: Initially released quarterly, the circulation was stepped up to a bimonthly schedule in the final six months to support the project's closing stages and increased visibility of its results.
- Languages: Each edition was provided in both French and English for inclusive communication.
- Platform: Mailchimp was used for distribution, enabling detailed analytics (open rate, reader geolocation, link clicks).



- Average Open Rate: Varied between 36% and 48% across the project, with an upward trend for the most recent newsletters, reflecting better audience targeting.

Region Opens (%)

The majority of SophiA newsletter opens originated from European countries, at around 57%, with 38% attributable to African recipients and a minor portion (5%) from other regions (Figure 14).

- Top European countries (France, Belgium, Switzerland, UK) accounted for 53% of total opens.
- Top African countries (Morocco, Tunisia, Senegal, Côte d'Ivoire, Cameroon, Algeria) made up 35% of opens.
- The remaining audience came from Canada and other locations.

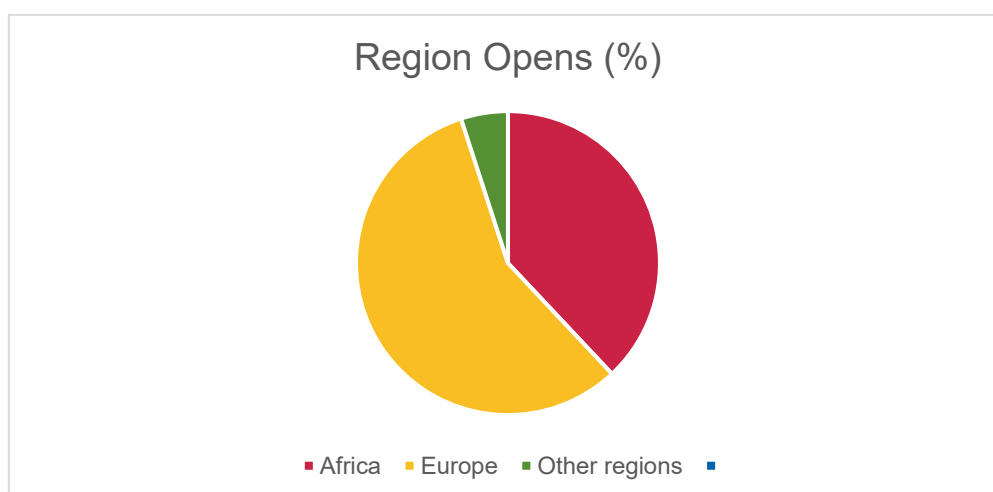


Figure 14 : Distribution of SophiA newsletter openings by continent.

The SophiA newsletter's impact was strongest in Europe, especially France, but remained significant in North and West Africa, reflecting substantial interest on both continents.

Gender and Age Range Analysis

Newsletters targeted at women consistently achieved higher open rates than those sent to men, especially for themes related to practical life, health, or social initiatives.

Event-themed editions (launches, open days, workshops) also performed well, driven by clear calls to action such as registrations and downloads.



Editions focused on associative life, sport and culture proved particularly engaging for the 26 - 55 age group, peaking during large local events or partnerships with recognized organizations.

Evolution and Engagement Dynamics

During the last six months of the SophiA project, the publication frequency was intensified, which resulted in increased audience engagement, evidenced by more interactions (higher click rates on videos, documents and social media links).

Latest E-Newsletter

The most recent newsletter highlighted “*Updates from SophiA in Uganda and Malawi*”, reporting on advances in both countries. It also promoted newly produced You Tube videos presenting technical and social project outcomes from the field.

Next Steps and Closure

A final closing newsletter is scheduled for the project’s conclusion. This issue will summarize the major achievements, showcase online resources and videos, and invite readers to stay engaged via SophiA’s platforms following project completion.

The e-newsletters have been instrumental in boosting visibility and disseminating SophiA’s results over the past three years. The communication strategy allowed for adjustment of frequency, languages and contents in line with project phases and targeted audiences, guaranteeing effective and inclusive outreach.

SOFACTs

The SOFACTs, are released to summarise the scientific papers about SophiA that have been published so far in a visual and innovative way and to contribute to the communication and dissemination of the SophiA results.

Currently, six SOFACTs are downloadable on the website in the “Downloads” category, tab “articles”, under the conference papers (Figure 15). The SOFACTs are also published on Social Media.



Press Releases:

- Press Release – November 2nd, 2021 – Participants of the international EU research project SophiA support family of the deceased African pioneer. – English version: [Press release \(Nov. 2021\)](#) / French version: [Communiqué de presse \(nov. 2021\)](#) / German version: [Pressemitteilung \(Nov. 2021\)](#)
- Press Release – October 20, 2021 – New EU funded project began on October 1st, 2021: "SophiA – Sustainable off-grid solutions for pharmacies and hospitals in Africa". – English version: [Press release \(Oct. 2021\)](#) / French version: [Communiqué de presse \(oct. 2021\)](#) / German version: [Pressemitteilung \(Okt. 2021\)](#)

Journal Papers:

- "Overview of solar thermal technology development and applications in West Africa: focus on hot water and its applications" – N'TSOUKPOE, K. E., LEKOMBO, S. C., KEMAUJOUR, F., KO, G. K., & El Hadji Bamba, D. I. A. W. (2023), *Scientific African*, e01752 – DOI: <https://doi.org/10.1016/j.sciaf.2023.e01752>

Conference Papers:

- "Potential applications of CO2 systems in developing countries with high ambient temperature" – GL2022 Conference Paper – DOI: [10.18462/iir.gl2022.0019](https://doi.org/10.18462/iir.gl2022.0019)
- "Self-sufficient Propane-CO2 cascade with two-phase thermosiphon – Simulation of an evaporating two-phase flow with variable heat transfer coefficient" – GL2022 Conference Paper – DOI: [10.18462/iir.gl2022.0036](https://doi.org/10.18462/iir.gl2022.0036)
- "Modelling and simulation of heat sink cascade CO2 systems in low-income countries with high ambient temperature", COLOMBO I., KAUFFELD M., SCHMID O., ALLOUCHE Y., KIGGUNDU N., PAURINE A., MAIDMENT G., N'TSOUKPOE K. E., ICR 2023, DOI [10.18462/iir.icr.2023.0661](https://doi.org/10.18462/iir.icr.2023.0661)
- "SophiA: Sustainable off-grid solutions for Pharmacies and Hospitals in Africa – Self-sufficient cascade system in combination with a thermal energy storage charged by a two-phase thermosiphon", SCHMID O., MELITO E., KAUFFELD M., ICR 2023, DOI [10.18462/iir.icr.2023.00447](https://doi.org/10.18462/iir.icr.2023.00447)
- "SophiA: Sustainable Off-Grid Technologies for Drinking and Deionised Water for Hospitals in Africa"- Sneha De, Duc N. Dinh, Jan Hoinkis. Technoscape 2023 " [Link to the paper](#)"

SOFACTs:

- [SOFACT 1](#) – Potential applications of CO2 systems in developing countries with high ambient temperature
- [SOFACT 2](#) – Overview of solar thermal technology development and applications in West Africa: Focus on hot water and its applications
- [SOFACT 3](#) – Modelling and simulation of heat sink cascade CO2 systems in low-income countries with high ambient temperature
- [SOFACT 4](#) – Self-sufficient cascade system in combination with a thermal energy storage charged by a two-phase thermosiphon
- [SOFACT 5](#) – Sustainable Off-Grid Technologies for Drinking and Deionised Water for Hospitals in Africa

Figure 15: "Article" tab, "Downloads" category with the latest e-SophiA News.

In Figure 16, one example of SOFACT is shown.

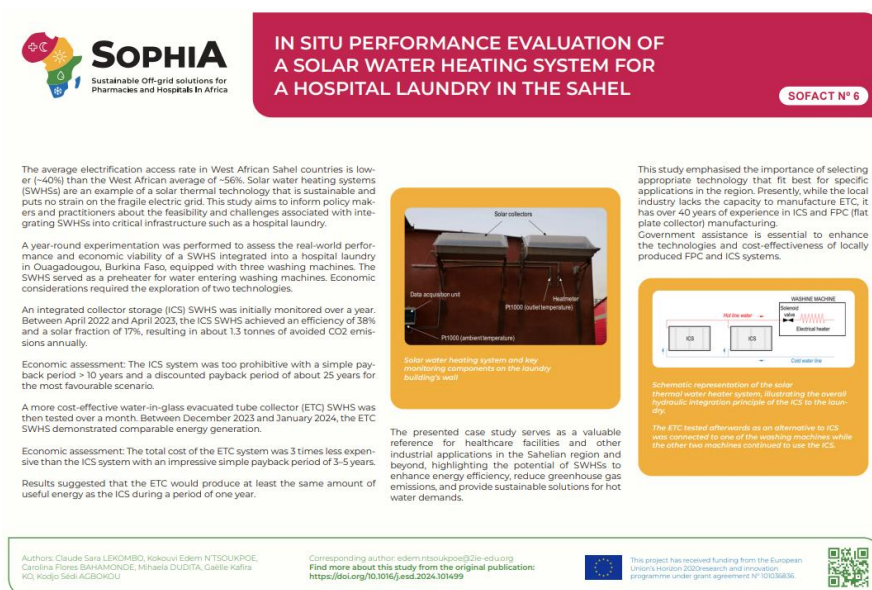


Figure 16: SOFACT n.° 6.

Promotional items

Following the development of the SophiA thermal bottle by Everflo, a SophiA Cup has been designed and provided to all the partners at the M24 meeting. A hashtag was created: #sophiacup associated with the #sophiabottle. This hashtag helps and encourages partners



and stakeholders to post about the SophiA promotional items when travelling around the world to meet up, attracting visibility on the project. See how much the SophiA bottle travelled in this [compilation video](#) posted on Youtube (Figure 17):



Figure 17: SophiA bottle on the tour.

The IIR has created SophiA t-shirts featuring the logo on the front and a QR code on the back. These are distributed to our partners to wear during events, training sessions, launch days, and other occasions, helping to boost brand visibility and foster a sense of unity.

3.1.3 Communication timeline and KPIs

Figure 18 illustrates the suggested communication timeline initially stated in the GA and the KPIs are shown in Table 4.



D8.5: Final, dissemination, communication and capacity building strategy plan (M48)



Figure 18: Suggested timeline for the communication materials.

Table 4: Communication KPIs to date from the SophiA Monitoring tool.

Indicator name	Target (KPI)	Number reached	Details	Total
SophiA website	30 000	~59 000	Page views	~59 000
SophiA visual identity and branding	30 000 views of communication supports	278 738	Downloads from SophiA website	
SophiA visual identity and branding	2 Posters	2	1 technical poster 1 general poster	
	1 Rolled up banner	1	1 digital version and printed	
	7 Newsletters	5	In English, French and German versions	
	14 E-newsletters	13	In English only,	
	>1500 copies of Brochure/Flyers distributed	3000	SophiA brochure developed in French and English printed and distributed to all partners at the M18 meeting	
	3 types of Brochure/Flyers	2	1 brochure, 1 flyer for the Burkina launch day	
Social medias	300 followers on X	211	Followers	1061
	300 followers on LinkedIn	756		
	300 followers on Facebook	48		
	80 subscribers on YT	46	Subscribers	
	500 Posts in all social media	283	Posts on Twitter	571
		34	Youtube videos	
		191	Linkedin posts	
		63	Facebook posts	
Project videos	1 project videos 5 tutorial videos 3 testimonial videos	34	https://www.youtube.com/@sophia4afri.ca313/videos	



Overall, the communication activities carried out within SophiA have successfully met and in many cases exceeded the objectives set at the beginning of the project. The website largely outperformed expectations, reaching 60'000 page views against a target of 30'000. Similarly, SophiA's visual identity and communication materials generated remarkable visibility, with more than 278'000 downloads, far beyond the 30'000 initially foreseen. All planned materials such as posters, brochures, flyers and banners were developed and effectively disseminated, ensuring a consistent and professional branding throughout the project. The newsletters and e-newsletters were regularly produced and widely shared, becoming a central tool for engaging both African and European audiences.

On social media, although some platforms like Facebook and YouTube did not fully reach the ambitious follower targets, the overall activity was intense, with more than 1'000 followers combined and over 570 posts published. Importantly, the 34 videos uploaded to YouTube played a key role in disseminating the project's technical results and documenting activities on the ground, with growing visibility towards the end of the project. The strong performance on LinkedIn and X/Twitter confirmed the relevance of these platforms to engage with the project's main audiences.

In conclusion, the indicators clearly demonstrate that the SophiA project has achieved its communication goals. The project not only delivered on its commitments but also maximised its visibility and impact, ensuring that results and knowledge produced will continue to be accessible and valuable to stakeholders beyond the project's lifetime.

3.2 The Dissemination Strategy Plan

The dissemination strategy aims to publish all project public results and outcomes. It provides specific messages to specific target groups with a particular background. These groups consist mainly of academia, developers, operators and industrial communities, who shall make beneficial use of the disseminated results and data to further develop their own studies or develop a final product and make it available for the end users and general public. The dissemination activities can be performed through the participation to scientific events (conferences, seminars, workshops, etc.) or through publication in peer-reviewed journals, technical magazines and press releases. The dissemination constitutes a bridge to the project findings to be further explored.

In the final reporting period, dissemination activities were consolidated and expanded to ensure the widest possible reach of SophiA's results. This included the presentation of project achievements at international conferences and specialised workshops, the publication of



scientific papers and articles in peer-reviewed journals and technical magazines, and the distribution of press releases to a broad audience. The project's online platforms, such as the official website and social media channels, were also continuously updated to reflect the latest outcomes, thereby increasing the project's visibility among target groups.

The final plan also focused on capitalising on the knowledge generated during the project and facilitating its uptake by relevant stakeholders. Special emphasis was placed on engaging with academia and industrial communities to encourage the exploitation of SophiA's results beyond the project's lifetime. By ensuring a comprehensive dissemination of outcomes, the project has successfully created a solid basis for future developments, collaborations, and technology transfer.

3.2.1 Dissemination monitoring tool

To ensure effective planning, execution and continuous reporting of dissemination activities, a dissemination monitoring tool in the form of an Excel spreadsheet was developed by the WP8 leader (IIR). Throughout the project, partners were regularly asked to report their dissemination activities in this tool, which was uploaded on MS Teams to guarantee simultaneous updates from all consortium members. The main objective of this tool was to keep track of all dissemination and communication activities implemented during the project's lifetime.

During the course of the project, the monitoring tool (MT) was updated by IIR to make it more user-friendly, following feedback from partners who initially encountered difficulties in reporting their activities. Several improvements were progressively introduced.

Read me first sheet

First, the "Read me first" sheet (Figure 19) has been updated to give clearer instructions on how to use the MT.





How to use the SophiA monitoring tool

These are instructions for all partners to fill in the monitoring tool in a structured, organised and uniform way so that WP8 can provide with a clear tracking of the project promotional and dissemination activities.

Please follow the guidance below to provide with your input. If you do have any question please contact Ina Colombo (IIR) at i.colombo@iifir.org

Preliminary informationn
If you want to have access to the multichoice option in the drop-down lists, please deactivate the macros as explained the excel sheet "MACROS"
This monitoring tool is to be updated <u>monthly</u>
Make sure you are editing the <u>online version</u> of the monitoring tool on Sharepoint. This is the only version that should be modified by partners. Please edit this file in your excel app on your desktop, press the "edit anyway" option and save your changes online. Please <u>do not try to download this file, work on an off-line version and try to upload it again.</u>
Please ignore the 2 following sheets : ➤ KPI suivi ➤ Drop-down list
The MT has 5 excel sheets you can interact with: ➤ "Website publications" to report all SophiA related publications on the partners official websites ➤ "Events" to report all the events the partners organised or participated in to promote the project ➤ "Scientific publications" to report the academic journal and conference papers written by the partners ➤ "Dissemination activities" to report all different types of publications by the partners promoting the projects (Newsletters, Media, Press releases & EU channels Publications) ➤ "So Me" to report all the partners posts and views, likes and reposts ➤ Upcoming events" to collect information about the new events promoting the project ➤ "Planned Publications" to report all the planned publications in conferences or journals

Figure 19: Read me first worksheet of the MT.

Macro sheet

A "MACRO" sheet (Figure 20) has also been introduced to allow multiple-choice options in drop-down lists (e.g., selecting several dissemination activities or multiple partners involved in an event). As this function required specific settings, IIR prepared a short user guide.



D8.5: Final, dissemination, communication and capacity building strategy plan (M48)

How to activate the MACROS

You have to follow these steps if you want to be able to use the multichoice option in the drop-down lists, only possible if you activate the MACROS. Otherwise, you will not have the possibility to choose different items in the drop-down lists.

If you encounter difficulties please reach out to : l.colombo@iifir.org

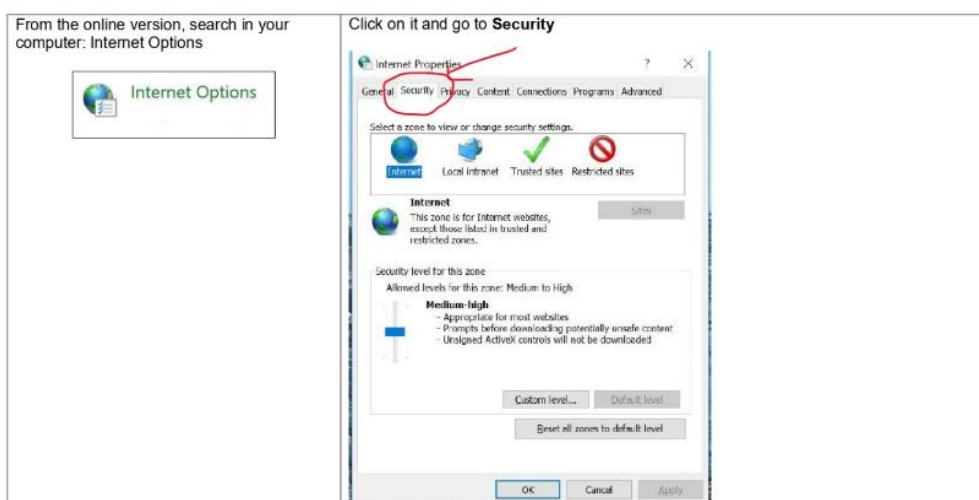


Figure 20: Macros worksheet of the MT.

KPI sheet

The IIR also added to compare the agreed targets (KPIs) defined at the beginning of the project with the actual progress of communication, dissemination and capacity building activities (Figure 21). This sheet was managed by IIR only.

SophiA Dissemination, Communication & Publications Monitoring Tool V2										
Rechercher des outils, de l'aide et bien plus encore (Alt + Q)										
Fichier Accueil Insertion Partager Mise en page Formules Données Révision Affichage Aide Dessin										
Calibri (Corps) 11 A⁺ Coller Presse-papiers Police Habillage Fusionner et centrer Alignement Général Mise en forme conditionnelle Mettre sous forme de tableau Styles de cellule Insérer										
Annuler Revenir en arrière										
18 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19										
A B C D E F G H I J K										
Indicator name Target (KPI) Number reached Details Total Updated 05/09/2025										
Communication KPI	SophiA website		30 000	~ 59 000	Page views	~ 59 000	x	Legend:		
	SophiA visual identity and branding		30 000 views of communication supports	278 738	Downloads from SophiA website		x			
	SophiA visual identity and branding	2 Posters	2	1 technical poster			x	Reached		
		1 Rolled up banner	1	1 digital poster			x	Late		
		7 Newsletters	5	In English, French and German versions			x	On track		
		14 E-newsletters	13	In English only			x			
		>1500 copies of Brochure/Flyers distributed	3000	SophiA brochure developed in French and English printed and distributed to all partners at the M18 meeting			x			
	Social medias	3 types of Brochure/Flyers	2	1 brochure, 1 flyer for the Burkina launch day			x			
		300 followers on X	211	Followers			x			
		300 followers on LinkedIn	756				x			
		300 followers on Facebook	48				x			
		80 subscribers on YT	46	Subscribers			x			
	Project videos	500 Posts in all social media	283	Posts on Twitter			x			
			34	Youtube videos			x			
			191	Linkedin posts			x			
			63	Facebook posts			x	stopped		
	Project videos		1 project videos	34	https://www.youtube.com/@sophia4africa313/videos		x			
			5 tutorial videos							
			3 testimonial videos							

Figure 21: KPI worksheet of the MT.

Website publications sheet

The MT has 5 excel sheets the partners can interact with.



D8.5: Final, dissemination, communication and capacity building strategy plan (M48)

The “Website publications” (Figure 22) is designed for partners to report SophiA-related publications on their official websites, including links and number of views, to be integrated into the final KPI assessment.

No	Partners	URL link of the page	Number of views
SophiA Website			
1	HKA	https://www.h-ka.de/suche?i=0&id=72&tx_solr%5Bq%5D=sophia	Demandeur à Gérard
2	SPF-OST	https://www.ost.ch/de/systemseiten/suche?i=0&id=21&tx_solr%5Bq%5D=sophia	Statistics in KPI sheet
3	MAK	https://news.mak.ac.uk/7s=sophia	
4	ZIE	https://www.zie-edu.org/un-nouveau-projet-finance-par-lue-a-debut-le-1er-octobre-2021-sophia-solutions-hors-reseau-durables-pour-les-pharmacies-et-les-hopitaux-en-afrique/	
5	SEZ	Together, we go further - Karlsruhe University of Applied Sciences and Steinbeis Europa Zentrum cooperate in two major research projects with a focus on Africa - Steinbeis EN (steinbeis-europa.de)	38 page visits
		Sophia - New EU funded project began on October 1st, 2021 - Steinbeis EN (steinbeis-europa.de)	44 page visits
		Gemeinsam vorankommen - Die Hochschule Karlsruhe und das Steinbeis Europa Zentrum	62 page visits
		Nachhaltige Energieversorgung und sauberes Wasser für Afrika - Steinbeis DE	148 page visits
		Sustainable off-grid solutions for rural hospitals in Africa (SOPHIA) - Steinbeis EN	71 page visits
		Nachhaltige netzunabhängige Lösungen für ländliche Krankenhäuser in Afrika	118 page visits
6	MPHC	https://ifir.org/fr/doc/sophia-solutions-durables-hors-reseau-pour-les-pharmacies-et-les-147817	Statistics in KPI sheet
7	IIR	https://ifir.org/fr/actualites/projet-sophia-avancees-des-tests-du-laboratoire-hka	
		https://ifir.org/fr/actualites/if-partenaire-dans-deux-nouveaux-projets-finances-par-l-ue-sophia-et-enough	
		https://ifir.org/fr/actualites/nc2021-les-communications-des-projets-enough-index-et-sophia-sont-disponibles-en-ligne	
		https://ifir.org/fr/actualites/un-nouveau-projet-finance-par-l-ue-a-debut-le-1er-octobre-2021-sophia-solutions-hors-reseau-durables-pour-les-pharmacies-et-les-hopitaux-en-afrique/	

Figure 22: Website publications worksheet of the MT.

Events sheet

An “Events” sheet (Figure 23) made reporting more practical, with simplified event-type categories and the possibility to indicate multiple partners involved in the same event.

No	Partner	Participating Partner(s)	Type of Events	Name of Event	URL Link of event	Place City/Country if Onsite event	World Region Reached
3	MAK	MAK	Conference (o)	Trier de A à Z	https://twitter.com/Makerere/status/1468449761275688708?s=20&t=KUG-n9Z-0gbgVpNYhf2F6g	Kampala, Uganda	Eastern Africa
4	HKA	SEZ, IIR	Joint events w	Trier par couleur	https://eurafinstitute.org/	Karlsruhe/ Germany	Europe
4				Affichage du tableau	https://twitter.com/SophiA4Africa/status/1485960636152659979?s=20&t=KUG-n9Z-0gbgVpNYhf2F6g		
5	ZIE	IIR	Conference (p)	Effacer le filtre de « Type of Events »	https://x.com/SophiA4Africa/status/1499665670061101057?s=20&t=2aMPI6j2kgyx8COYhWkCQA	Ouagadougou/ burkina Faso	West Africa
6	HKA	HKA	Conference (o)	Filtrer par couleur	https://steinbeis2igmbh.sharepoint.com/p/r/sites/ExternSophiA/SharePointDocuments/General/01%20Project%20Overview/05%20Project%20Meetings/02%20M6%20Partner%20Meeting/Presentations/00_SophiA_M6_meeting_ALL.pptx?d=wa81b60f9375a4318b2813e17413e6402&csf=1&web=1&e=LnKGIH	Karlsruhe/ Germany	Europe
6				Filtres textuels	https://twitter.com/SophiA4Africa/status/1507274891057414160?s=20&t=KUG-n9Z-0gbgVpNYhf2F6g	Rotterdam, Netherlands	Europe
7	IIR		Conference (p)	Rechercher			

Figure 23: Events worksheet of the MT.



D8.5: Final, dissemination, communication and capacity building strategy plan (M48)

Scientific publications sheet

A “Scientific publications” sheet (Figure 24) was created to report all academic journal papers and conference contributions produced during the project.

List of Scientific Publications							
No	Partner	Participating Partner(s)*	Type of Scientific Publication*	Title	Author(s)	Main Author	D.O.I
1	IIR	ZIE, MAK	SOPHIA : European funded project for vaccine storage in Africa:		M. Kauffeld; I. Colombo	I. Colombo	https://doi.org/10.1016/j.vaccine.2021.08.010
2	ZIE		Overview of solar thermal technology development and applications in West Africa: focus on hot water and its applications		N'TSOUKPOE, K. E., LEKOMBO, S. C., KEMAUSUOR, F., KO, G. K., & El Hadji Bamba, D. I. A. W.	N'TSOUKPOE, K. E.,	https://www.sciencedirect.com/science/article/pii/S0020717921001499
3	ZIE		In situ performance evaluation of a solar water heating system for a hospital laundry in the Sahel		Lekombo, C. S., N'Tsoukpoe, K. E., Bahamonde, C. F., Dudita, M., Ko, G. K., Agbokou, K. S.	Lekombo, C. S.,	https://doi.org/10.1016/j.sci.2021.101499
4	HKA		Natural Refrigerants: Applications and Practical Guideline		Eckert, Michael; Kauffeld, Michael; Siegmund, Volker (Ed.)	Eckert, Michael; Kauffeld	
5	IIR		Potential applications of CO2 systems in developing countries with high ambient temperature		Ina COLOMBO, Yossr ALLOUCHE, Kokouvi Edem N'TSOUKPOE, Oliver SCHMID, Michael KAUFFELD	Colombo	http://dx.doi.org/10.1016/j.sci.2021.101499
6	HKA		Laboratory Pilot of Sophia Water Technologies for Drinking and Deionised Water		Sneha DE, DUC N. Dinh, Oliver SCHMID; Michael KAUFFELD, Bartolo GABRIELE, Alberto FIGOLI, Jan HOINKIS	Sneha De	
7			Dissemination activities		Ina COLOMBO, Yossr ALLOUCHE, Kokouvi		

Figure 24: Scientific publications worksheet of the MT.

Dissemination activities sheet

The “Dissemination activities” sheet (Figure 25) included a “number of views” column, helping IIR consolidate data on media articles, newsletters, press releases and publications in EU channels.

List of (e)Newsletters, Media coverage, Press releases, Articles in Technical Journals & EU Channel Publications							
No	Partner	Participating Partner(s)*	Type of Disseminations	Year/Date of Publication	Available in Open Access?	Title	URL Link
1	IIR		Sophia Newsletter, eSophiaNews	2022	Yes	e-Sophia: Discover the Sophia Demonstration Site Hospitals	https://mailchi.mp/sophia4africa.eu/1st-e-sophia-newsletter
2	IIR		News in Partner's Newsletters	2022	Yes	e-Sophia:WHAT HAS SOPHIA ACHIEVED IN ONE YEAR?	https://mailchi.mp/sophia4africa.eu/2nd-e-sophia-newsletter
3	IIR		Press Release	2023	Yes	e-Sophia:Sophia wishes you a happy new year 2023	https://mailchi.mp/sophia4africa.eu/e-sophia-news-13
4	IIR		Media (e.g. Radio, TV, malchimp campaigns) Video/Film	2023	Yes	e-Sophia:Catch up on Sophia	https://us3.campaign-archive.com/?u=a8c99ef820cc46f59fcaacc7878&id=612e19b945
5	IIR		Publication in EC communication channels Publication in Technical Journals SoFact Other	2023	Yes	e-Sophia:Sophia celebrates WRD	https://mailchi.mp/sophia4africa.eu/e-sophia-news-5th-edition
6	IIR		Sophia Newsletter, eSophiaNews	2023	Yes	e-Sophia:Watch the Sophia presentation video!	https://us3.campaign-archive.com/?u=a8c99ef820cc46f59fcaacc7878&id=e803496404
7	IIR		Sophia Newsletter, eSophiaNews	2024	Yes	e-Sophia:The Sophia team wishes you a happy New Year!	https://mailchi.mp/sophia4africa.eu/te-ad-the-e-sophia-news-7th-edition?e=UNIQID
8	IIR		Sophia Newsletter, eSophiaNews	2024	Yes	e-Sophia:The containers are now in Burkina Faso!	https://mailchi.mp/sophia4africa.eu/te-ad-the-e-sophia-news-8th-edition

Figure 25: Dissemination activities worksheet of the MT.



So Me sheet

A “So Me” sheet (Figure 26) used to collect information about posts, views, likes and reposts across partners’ social media accounts. This ensured an accurate follow-up of social media KPIs.

List of Social Media posts							
No	Partner*	Type of Social Media	Title	URL Link	Number of views	Number of Likes and Reposts	
1	Drop-down list	Multichoice Drop-down list					
2	1	IR	YouTube	Projects on clean & efficient refrigeration solutions for food & healthcare in developing countries	https://youtu.be/yZ_YESmP-hE7si=UjEX6_y3eG2kGb-C	9	
3	2	IR	YouTube	Introduction to the SophiA project (EN & FR)	https://youtu.be/VlKfxEg40Y?si=OAHQOGHf257Lr0L		
4	3	IR	YouTube	SophiA New year 2024	https://youtu.be/qGRNmlTVabQ?si=gG0lbh_ii0-yj1By		
5	4	IR	YouTube	Summary of the SophiA Project	https://youtu.be/4-zF2Qzywd0?si=857nH56j3-TcU9uA		
6	5	IR	YouTube	Discover this project that is accelerating sustainable development in Africa	https://youtu.be/vTtt25R6Kw?si=N_y0Qh9CdnhvU2-F		
7	6	IR	YouTube	Introduction to the SophiA project in Jula	https://youtu.be/ItYlGsOf9Xw?si=bHBIKyIC4z8z3-ex		
8	7	IR	YouTube	Nouvelle technologie SophiA : Solar Steam from Scheffler Reflectors	https://youtu.be/Mkp3WUWFIAM?si=OIT_Tun8IF4zAa		
9	8	IR	YouTube	Les conteneurs SophiA arrivent à l'hôpital Leo	https://youtu.be/CciXHCwBCmk?si=jB-fnZQB8SsaQjgbs		
10	9	IR	YouTube	Nouvelle technologie SophiA : PVmedPort	https://youtu.be/yK5AKpaZCq?si=n0W4gQSF8Ew_83k		
11			Nouvelle technologie SophiA : Solar Steam from	https://youtu.be/G_HZaGSnfIQ?si=QJ_2			

Figure 26: So Me worksheet of the MT.

Upcoming events sheet

An “Upcoming events” sheet (Figure 27) listed potential conferences, workshops and meetings to attend, with details on dates, location, type of promotion, partners involved and estimated reach. This list was regularly updated and made available on the SophiA website until 2025.

List of upcoming events									
Year	Main Partner	Other partners	Event + URL link	Dates	Location (city, country)	Types of event	Type of promotion	Proof of action	
Drop-down list	Drop-down list	Drop-down list				Drop-down list	Drop-down list	Drop-down list	
2024	IR		Interclima French Exhibition 2024 https://www.interclima.com/en-gb.html	30/09 - 03/10	Paris, France	Exhibition	Display & distribution COM supports, SophiA workshop, SophiA training	Article in Website, Article in Newsletter	
2024	IR		Refoold India 2024 https://refoold.in/	03/10 - 05/10	Kolkata, India	Exhibition	Short presentation via partners' presentation		
2024	IR	HKA	Chiliventa 2024 https://www.chiliventa.de/en	08/10 - 10/10	Nuremberg, Germany	Conference	Display & distribution COM supports		
2024	IR		4th International Workshop on Cooling System for HTS Applications (IWC-HTS 2024) https://smartconf.jp/content/4th-IWC-HTS/	23/10 - 25/10	Matsue, Japan	Workshop	Short presentation via partners' presentation		
2024	IR		MOP 36 https://ozone.unep.org/meetings/thirti-y-sixth-meeting-parties	28/10 - 01/11	Bangkok, Thailand	Conference	Display & distribution COM supports		
2024	IR		COP29 https://cop29.az/en	11/11 - 22/11	Baku, Azerbaijan	Conference	Display & distribution COM supports		
			SIFA Exhibition - Le salon du froid et de ses				Display &		

Figure 27: Upcoming events worksheet of the MT.



Planned Publications sheet

A “Planned Publications” sheet (Figure 28) was created to report all the planned publications in conferences or journals upcoming. The partners shall come back to this sheet to mention when the publication has been submitted.

	Where (conferences or journals)	When	Who	Title	Submitted
3	ICR2023	August 2023	Ina COLOMBO*, Yossr ALLOUCHE, Michael KAUFFELD, Kokouvi Edem N'TSOUKPOE, Nicholas KIGGUNDU, Graeme MAIDMENT, Alex PAURINE	Modelling and simulation of heat sink cascade CO2 systems in low-income countries with high ambient temperature	Yes
4	ICR2023	August 2023	Oliver SCHMID*, Elena MELITO, Michael KAUFFELD	SophiA: Sustainable off-grid solutions for Pharmacies and Hospitals in Africa – Self-sufficient cascade system in combination with a thermal energy storage charged by a two-phase thermosiphon	YES
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Figure 28: Planned Publications worksheet of the MT.

By the end of the project, the monitoring tool had become an essential instrument for consolidating all dissemination actions, comparing them to initial targets, and ensuring transparent reporting to the European Commission. It provided the basis for the final KPI analysis, confirming that most dissemination and communication objectives were successfully achieved or exceeded.

3.2.2 Dissemination activities

The different SophiA dissemination activities extracted from the dissemination monitoring tool are shown in Table 5 which summarizes the results since the beginning of the project:

Table 5: List of Dissemination activities.

List of Dissemination activities	TOTAL
News in Partner's Newsletters	24
SophiA Newsletter, eSophiANews	13



List of Dissemination activities	TOTAL
Press Release	3
Media (e.g. Radio, TV, mailchimp campaigns)	1
Video/Film	1
Publication to EC communication channels	2
Publication in Technical Journals	3
SoFact	6

3.2.3 Scientific Publications

The number of the different type of publications is shown in Table 6.

Table 6: List of the Scientific Publications.

List of the Scientific Publications	TOTAL
Article in conference proceedings	6
Article in Peer-Reviewed Journal	3
Book / Monograph/ Chapter in a Book	1
Editorial journal	1
Academic poster	4
Thesis / Dissertation	7
Others	0

3.2.4 Events

The summary of the different SophiA events, as well as the number of participation in each kind of events is shown in Table 7.



Table 7: List of SophiA events.

List of Events	TOTAL
Conference (organisation)	2
Conference (presentation)	36
Conference (participation only)	10
Workshop (organisation/participation)	14
Training (organisation/participation)	7
Meeting (organisation/organisation)	26
Demonstration/Launched day	7
Trade Fair/exhibition (organisation/presentation/participation)	7
Joint events with other projects EU/H2020/national	5
Event meant for general public (organisation/presentation/participation)	5
Other event (organisation/presentation/participation)	10

3.2.5 Timeline

Figure 29 illustrates the suggested dissemination timeline (including the capacity building), for the scientific publication, trainings, dissemination in events, press releases.



Figure 29: Suggested timeline for the capacity building materials.



Most of the targets stated in the GA (Page 31) for the dissemination have been reached (Table 8), except of the technical publications in specialised magazines/journals. This target was not reached as the technical partners have been busy with the development and installation of the containers in all demo sites. However, it is planned to publish the ready SOFACTs in technical journals. Also, the target set for each partner to attend at national level 2 events per year (excluded academic conferences) was over estimated because not all partners were able to attend industrial fairs, workshop or demonstration days.

Table 8: Dissemination KPIs to date from the SophiA Monitoring tool.

Academic papers	7	4	Academic Posters	15
		6	Article in conference proceedings	
		1	Editorial in Peer review journal	
		3	Articles in peer review journal	
Articles in magazines	20	6	SOFACT	9
		3	Publication in technical journals/magazines	
Press releases	16	3	Press releases	15
		13	E-newsletter	
Participation in academic conferences	> 20 conferences	25	Publications in conference	27
		2	Conference (participation only)	
	> 500 participations	24000	Events'participants reached	
Participation in industrial fairs, workshop and demonstrations	> 2 events per year per partner	14	Workshop (organisation/participation)	114
		7	Training (organisation/participation)	
		26	Meeting (organisation/organisation)	
		1	Demonstration/Launched day	
		7	Trade Fair/exhibition (organisation/presentation/participation)	
		2	Event meant for general public (organisation/presentation/participation)	
		1	Conference (organisation only)	
		36	Conference (presentation)	
		10	Conference (participation only)	
		10	Other event (organisation/presentation/participation)	
	500 stakeholders reached	136000	Events'participants reached	
SophiA final event	1 event		Final SophiA conference	
	> 100 participants			



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Direct contact with ministers and public bodies	> 8 meetings with relevant ministries	37	Principally African ministers or high commissioners	
Collaboration with others projects	>3 meetings	23	Sisters' Projects	



4. CAPACITY BUILDING AND KNOWLEDGE EXCHANGE NETWORK

4.1 Capacity Building Strategy

The building capacity strategy aims to ensure the technical understanding of potential end users of the different SophiA systems and components. The beneficiaries of SophiA capacity building activities will be included in the SophiA Knowledge Exchange Network. This network also includes participants and partners of other (sister) projects, organisations, companies, academic groups, clusters and initiatives with similar goals, activities or technologies as SophiA.

The SophiA capacity building strategy will evolve during the project, considering the (new) stakeholders needs. The initial stakeholder groups are:

- students from SophiA academic partners;
- local and regional stakeholders from hospitals, water sanitation and agricultural companies from West, East, Central and Southern African regions;
- start-ups, innovators, technological companies and other industrial players.

Depending on the audience addressed, the following activities are planned:

- educational and training sessions about SophiA solar, water and refrigeration technologies;
- elaboration of a training manual;
- development of training support materials;
- train-the-trainer courses;
- handbooks for building SophiA systems on site;
- demonstration site launch days and seminars.

4.1.1 Demonstration Site Launch Days and Seminars

Since the beginning of the project, the consortium agreed on the organisation of Demonstration Site Launch Days in Burkina Faso, Cameroon, Malawi, and Uganda. This activity is related to Task 8.4: *Organisation of Demonstration Site Launch Days* and is led by the IIR. The goal is to gather national, regional, and international participants in these events, including policymakers, municipalities, EU Delegations, companies, planners, researchers, developers, operators, end users, journalists, and the general public.



The first Demonstration Site Launch Day already took place in Burkina Faso on June 27, 2025 (Figure 30) and was attended by more than 200 people. The inauguration happened in the morning followed by a training session in the afternoon. Animated system demonstrations were produced to explain the principles of the demonstration sites. Both formal and informal invitees were gathered, such as the region governor, the regional director of health, village chiefs, the Minister of Energy, the Minister of Health, the Minister of Water and Environment, as well as university students. A master of ceremonies was present to host the day. Invited guests gave speeches and interviews. An online questionnaire, accessible via a link or QR code, was proposed to benefit from travel compensation. Interviews with the participants were recorded to gather feedback, and the event was widely promoted to ensure a maximum number of participants.



Figure 30: Inauguration day at Léo hospital.

More recently, the *inauguration of the SophiA container at the Mua Mission Hospital in Malawi* (Figure 31) marked another major milestone. In the week leading up to the event, the SophiA team worked closely with the hospital to complete final preparations, including amplifying the mobile signal at the outreach pharmacy, reprogramming the IP of the battery system, adjusting the PV string layout, and commissioning the water cooler. Following intensive testing, the container was officially inaugurated in the presence of distinguished guests who expressed strong appreciation for the potential of SophiA's technologies to improve community resilience



and healthcare services. The ceremony was made possible thanks to the outstanding support of the hospital staff and the dedication of Fr. Isaac, head of the hospital, who coordinated this remarkable event.



Figure 31: Inauguration day at Mua Mission Hospital in Malawi.

Looking ahead, the next Demonstration Site Launch Day will take place at Buvuma Health Center IV in Uganda on Tuesday, 30 September 2025, coinciding with the commissioning of the solar kitchen facilities.

Meanwhile, the SophiA project has entered an exciting new phase in Cameroon with the official inauguration of its sites, marking a significant step in strengthening sustainable medical



refrigeration in the country. Launch ceremonies have already been held at the PVmedPort sites of Ekekam (9 September 2025, Figure 32) and Nomayos (11 September 2025, Figure 33), with the Edea site inauguration to follow shortly.



Figure 32 : PVmedPort launch at Ekekam in Cameroon on 09/09/2025.





Figure 33 : PVmedPort launch at Nomayos in Cameroon on 11/09/2025.

These events brought together project partners, local stakeholders, and community members to celebrate the arrival and installation of innovative refrigeration technologies designed to support medical services in rural areas.

4.1.2 Handbook for building SophiA systems on-site

Two handbooks have been developed to support the local usage and long-term sustainability of SophiA systems, thereby contributing to local economic development. The handbooks are specifically addressed to two main audiences: (i) the end users and technicians operating the



SophiA systems on a daily basis, and (ii) the staff responsible for maintaining and servicing the systems to ensure reliability over time.

This activity is linked to Task 8.5: *Elaboration of a handbook for building SophiA systems on-site*, which has been led by Everflo since M18.

Everflo coordinated the development process by first defining the framework and key sections of the document, which include: *Introduction, Container Layout, PV System, Refrigeration System, Water Treatment System, PVsteamCube, and SCADA Control System* (Figure 34). Each section provides a detailed description of the subsystem, procedures for on-site assembly, safety warnings, operating instructions, maintenance requirements, troubleshooting guidance, and electrical documentation. The handbooks are written in English, supplemented with photos and visual representations to ensure clarity and accessibility for local technicians. For the local technicians, French versions of some parts of the handbook were created.

The contributions of technical partners were essential to ensure accuracy and completeness:

- Raach Solar, with assistance from SPF-OST, created the PV system documentation, including the on-site assembly of the PV support frame.
- Everflo was responsible for the container layout and refrigeration sections. The HKA refrigeration team contributed their expertise on natural refrigerants to prepare the safety warnings.
- The HKA water team developed the water treatment section, building on their experience in South Africa and the results of laboratory and field tests.
- Simply Solar, supported by SPF-OST, documented the PVsteamCube system.
- The SCADA control system section was prepared by SPF-OST, updated following the installation and commissioning of the first container.

The handbook draft was circulated via the SophiA SharePoint to allow all partners to contribute and review.

These handbooks are expected to serve as a lasting resource beyond the end of the project, ensuring that SophiA systems can be effectively operated, maintained, and replicated by local actors.



2. CONTAINER LAYOUTS

The following section visually depicts the refrigeration container and water container internal layouts. The subsequent sections will refer to the rooms and systems shown below.

2.1 Refrigeration Container

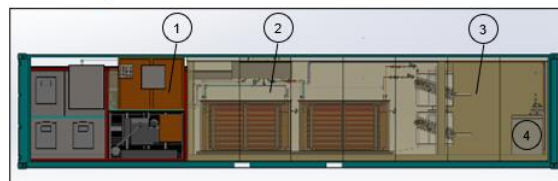


Figure 1: Refrigeration Container Layout

1. Plant Room / Electrical Room
2. +5 °C Cold Room
3. -30 °C Freezer Room
4. -70 °C Chest Freezer

2.2 Water Container

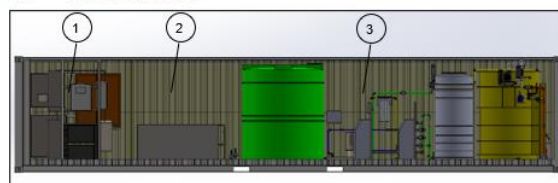


Figure 2: Water Container Layout

1. Electrical Room
2. PV Steam Cube Room
3. Water Treatment Room

Figure 34: Examples of Chapters in the SophiA handbook.

4.1.3 Educational and training sessions

The first local training of technicians in Burkina Faso began on 23 June in Kombissiri and continued until 28 June in Léo, with the participation of 28 people, including 24 men and 4 women.

In Kombissiri (23–26 June), participants were divided into two rooms to follow four of the six modules offered: *Water Treatment* and *Refrigeration* in parallel, and *Photovoltaic Solar* and *Solar Water Heaters* in parallel. The two final modules (*SCADA* and *PVsteamCube*) were followed by all participants (Figure 35 - Figure 41). At the end of this phase, a feedback session was organized with participants to collect their impressions of the SophiA project.

Training continued in Léo on 27–28 June, where the group attended the inauguration of the containerized systems for sustainable cold storage and water treatment at the Medical-Surgical Center Clinique Dr Sedogo. They then discovered the two SophiA containers (refrigeration and water treatment), PVsteamCube thermal storage, and



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Scheffler reflector, under the supervision of two technicians. The session closed with the award of certificates on 28 June 2024.

2iE

ATELIER DE FORMATION CONTINUE

Thème : Formation sur les solutions énergétiques durables et le traitement de l'eau pour les établissements de santé en milieu rural et isolé

Kombissiri et Léo – Burkina Faso, du 24 au 28 juin 2024

PROGRAMME PREVISIONNEL

Semaine 1	Lundi 24 juin	Mardi 25 juin	Mercredi 26 juin	Jeudi 27 juin	Vendredi 28 juin
Lieu de travail		Kombissiri		Léo	
08h00 - 10h00	Accueil des participants • Présentation des participants et recueil de leurs attentes • Présentation des objectifs et du programme	Traitement de l'eau (Salle 1) Seyram SOSSOU Réfrigération (Salle 2) ABOUBAKAR GOMNA	Chauffe-eaux solaires (Salle 1) K. E. NTSOUKPOE Photovoltaïque (Salle 2) K. S. AGBOKOU	Inauguration	Travaux pratiques Conteneurs SophiA et systèmes connexes P. SEOGO & D. KABORE
10h00 - 10h30	PAUSE CAFE				
10h30 - 12h30	Traitement de l'eau (Salle 1) Seyram SOSSOU Réfrigération (Salle 2) ABOUBAKAR GOMNA	Chauffe-eaux solaires (Salle 1) K. E. NTSOUKPOE Photovoltaïque (Salle 2) K. S. AGBOKOU	SCADA (Tous) K. S. AGBOKOU	Inauguration	Travaux pratiques Conteneurs SophiA et systèmes connexes P. SEOGO & D. KABORE
12h30 - 13h30	PAUSE DE JEUNER				
13h30 - 15h30	Traitement de l'eau (Salle 1) Seyram SOSSOU Réfrigération (Salle 2) ABOUBAKAR GOMNA	Chauffe-eaux solaires (Salle 1) K. E. NTSOUKPOE Photovoltaïque (Salle 2) K. S. AGBOKOU	PVSteamCube (Tous) D. KABORE	Travaux pratiques Conteneurs SophiA et systèmes connexes P. SEOGO & D. KABORE	Evaluation Clôture de la formation Retour des participants sur Ouaga

POJ-BNA V2 du 18/02/2015

☐ Cours théorique
 ☐ TD/TP
 ☐ Table ronde
 ☐ Sortie terrain ou Visite

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Figure 35 : First local training schedule in Burkina Faso, June 23 – June 28, 2024.



Figure 36: Launch of the first training session for local technicians in Burkina Faso.





Figure 37: Water treatment training class.



Figure 38: Practical work on local simple and vacuum tube solar water heaters.



Figure 39: Training participants taking part in the inauguration ceremony in Léo, 2024.



Figure 40: Awarding of certificates to participants of the SophiA training.



Figure 41: Group photo with participants and trainers in Leo, June 28, 2024.

From September 9 to 13, the International Sustainability Summer School 2024 (Figure 42) took place in Karlsruhe under the direction of Prof. Dr. Michael Kauffeld and Dr. Mihaela Dudita - Kauffeld. We are proud to have welcomed 36 students from all over the world: Burkina Faso, Cameroon, France, Germany, Greece, Malaysia, Mexico, Romania, South Korea, Switzerland, Turkey, Uganda and Vietnam.

During the summer school, the students had the opportunity to explore and engage with the topic of sustainability from diverse perspectives. The program featured a series of lectures delivered by experts from industry, the city of Karlsruhe, and local institutions. Students, doctoral candidates and lecturers from HKA and the partner universities also contributed to the program.

On top of the lectures, the internationals were able to take part in inspiring excursions to regional companies and institutions, explore the city of Karlsruhe and actively work on sustainability topics themselves in group work.



The first day focused on the topic of global sustainability. In this context, Robert Szilinski (esentri AG and Chairman of the Association of Founders at the HKA) explained why sustainability is not possible without digitalization. Further presentations were given by Henrik Nordborg and André Podleisek from the SophiA partner university, OST – Eastern Switzerland University of Applied Sciences.

Tuesday featured additional engaging presentations and workshops. After lunch in the KIT canteen, the participants visited the refrigeration system on site. The rest of the afternoon consisted of assignments in the laboratory for refrigeration technology and heat pumps at HKA. In the evening, the students explored Karlsruhe and visited the BREEZE cooling station of HKA and the “Schlosslichtspiele”, a yearly light show at the castle of Karlsruhe.

Wednesday began with lectures and workshops. The group then visited the battery laboratory and the roller dynamometer at Karlsruhe University of Applied Sciences. The afternoon included an excursion to the company Vulcan. Together with Thorsten Hauck, the group first visited the geothermal power plant in Insheim, followed by a tour in Landau, where they observed how lithium is extracted from geothermal water. The next stop was a visit to Daimler in Wörth, where HKA doctoral student Josy Laier gave an insight into e-mobility at Daimler Trucks.

The last two days allowed the students to learn about the element water (visit to the Federal Institute for Hydraulic Engineering - BAW, led by Michael Gebhardt and Elke Petersson) and to experience the topic of global climate change interactively: As part of an excursion to the Klima Arena in Sinsheim and the “Climate Fresk” workshop led by Prof. Dr. Olivier Schecker, the students learned about the complex connections of global climate change.

The Sustainability Summer School was generously funded by different donors: Güntner, Ipetronik, Obrist Engineering, Refolution, Rivacold, THE SCHAUFLEER FOUNDATION, VDE Publishing, Valerius Fünér Foundation, “Verbund der Stifter” Foundation at HKA, and Wirtschaftsförderung Karlsruhe.



Figure 42: Participants and trainers from i3s Summer School, Germany 2024.



Another major capacity-building programme was held in Cameroon from 20–24 January 2025 at the University of Yaoundé I (Figure 43). This five-day training gathered 35 participants (including 8 women, representing 22.85%), such as lecturers and researchers from universities across the country, representatives from the Ministry of Water and Energy, and biomedical engineers. The programme included theoretical lectures and practical workshops on photovoltaic solar energy, refrigeration, solar thermal systems (Figure 44), SCADA, water treatment, and the PVsteamCube. Participants also assembled and operated renewable energy devices and received practical materials for future teaching. The training concluded with a certificate ceremony led by the University's Vice-Rector, marking a milestone in knowledge and technology transfer in Cameroon.



Figure 43: Capacity building workshop and train the trainers session in Cameroon.



Figure 44: Capacity building workshop and train the trainers session in Cameroon.



The next i3s summer school on sustainability was organized by SPF-OST together with HKA from September 8 to 12, 2025, in Rapperswil-Jona, at OST Campus Rapperswil. This 4th edition of the summer school focused on climate protection measures and sustainability. By collaborating with international experts and utilizing interactive learning methods, participants gained new knowledge and skills related to technical solutions for reducing our ecological footprint.

The 4th edition of the Summer School bears the name Noble Banadda International Sustainability Summer School, in recognition of an extraordinary individual from Makerere University, Uganda, who significantly contributed to the success of the SophiA project proposal – the EU-funded initiative that led to the creation of i3s. This year in 2025, the HKA Karlsruhe and OST – Eastern Switzerland University of Applied Sciences invited 60 students from various disciplines and countries to learn about SophiA (Figure 45).



Figure 45: SophiA at the i3s summer school in Switzerland (September 2025).

The host for 2025 was OST – Eastern Switzerland University of Applied Sciences in Rapperswil-Jona. OST campus is located directly on Lake Zurich in the charming town of Rapperswil, known for its historic castle and its surroundings, which invites for exploration and outdoor activities. The students delved deeply into the topics of industrial heat pumps, solar technology, energy technology, PFAS, and sustainability management.

Topics and Highlights from the program included:

- Sustainability (promotion, implementation, financing)
- Renewable energy: solar, water, wind
- Energy storage
- Sustainable cooling and heat pump technology
- Clean water
- Technologies for the Global South
- EU Project SophiA
- Visits and workshops at OST on SophiA lab prototypes, SCADA, solar thermal and photovoltaics



"The i3s Sustainability Summer School changed my life," says Joel Ikabat (Figure 46) from Uganda at the OST in Rapperswil-Jona. "Before the event, I didn't know much about sustainability. Today, sustainability aspects flow into my thoughts and actions." Joel participated in the i3s in Karlsruhe as a student a year ago. He now works at the Ministry of Agriculture, Animal Industry, and Fisheries in Uganda. He was invited to this year's i3s at the OST as a speaker and shared his experiences with the 60 students.



Figure 46: Joel Ikabat from Ministry of Agriculture in Uganda at i3s summer school 2025.

"In Uganda, a large portion of our food spoils before it reaches people because it isn't consistently refrigerated. I was able to apply my knowledge from the summer school about new, more environmentally friendly refrigerants to my team and establish contact with Karlsruhe University of Applied Sciences, which specializes in this area, among other things." He adds: "If we're implementing new technologies in Uganda, why not choose sustainable ones from the start?"

From heat pumps to PFAS - i3s summer school 2025

The program included specialist lectures, workshops, and excursions. The students intensively explored the topics of industrial heat pumps, solar technology, energy technology, PFAS, and sustainability management. Among other things, they visited the production facilities of Everllence (until recently MAN Energy Solution) in Zurich and the Werdhölzli wastewater treatment plant in Zurich.



Figure 47: i3s summer school participants at the mega-heat pumps factory Everllence.



From sustainability to energy, water and PFAS - it is these kinds of challenges – and potential solutions – that were intensively discussed over a week at the i3s Summer School.

Launched four years ago as a joint project between SophiA partners SPF-OST and HKA, the i3s summer school took place for the second time at OST this year in September 2025. Oklahoma State University also participated, providing participants with online lectures.

The students included not only young people from SophiA countries – i3s was open to students all over the world. A group of 60 participants from 15 countries on four continents gathered in Rapperswil-Jona.

Science and industry represented

In addition to lecturers from OST, other renowned experts from various universities accompanied the students. Among them was Prof. Saman Nimali Gunasekara from Stockholm University and a board member of the International Solar Energy Society (ISES). Dr. Rajendra Shende, former director of the United Nations Ozone Action Programme and a key player in the implementation of the Montreal Protocol, Prof. Josef Noll from the University of Oslo and Prof. Nicholas Kiggundu from Makerere University participated in Rapperswil, acting as role models for the participants. Representatives from Sustainia, Raach Solar, Truma, Carbon-Connect AG, and Güntner also gave presentations or organized workshops.

Almost as important as the technical input, however, was the supporting program. The students got to know the city of Rapperswil-Jona – after a brief welcome from Mayor Barbara Dillier – through a scavenger hunt. A highlight of the week was the dinner at Rapperswil Castle with an alphorn reception (Figure 48) and a sunset boat trip from Zurich to the OST campus.



Figure 48: i3s summer school participants celebrating cultural diversity in Switzerland.

Strengthening Global Collaboration

"With the Summer School, we bring together students from different continents and cultures with a common goal: learning, exchanging ideas, and developing solutions for a sustainable future," says Dr. Mihaela Dudita-Kauffeld from the SPF Institute for Solar Technology, who organized the i3s summer school on behalf of OST. "This unique experience not only deepens



technical knowledge, but also fosters lasting connections that will strengthen global collaboration in the field of sustainability."

Dr. Rajendra Shende could see a great potential in this generation of students and offered them some encouraging words: "Your diversity, your skills as digital natives, and your unwavering belief in a sustainable future represent the most important resource we must use to address existential threats such as climate change, biodiversity loss, and environmental pollution."

The 4th International Summer School on Sustainability i3s was a success. 60 students from 15 countries on four continents participated during 5 full days to expert lectures, workshops, and excursions. This edition of the summer school received financial support from Advansor, Jaeggi-Hybrid, SSP Kälteplaner AG, Rivacold, Valerius Fünér Stiftung, VDE Verlag and Verbund der Stifter an der Hochschule Karlsruhe.

Final SophiA Events took place in September, bringing together partners from Africa and Europe for training, strategic discussions, and technical excursions. "Africa Rising: Solar-Powered Solutions for Cooling, Water, and Food in Hospitals and Communities" – the events started with a three-day Train – the – Trainers (Figure 49), which gathered more than 30 participants from Burkina Faso, Cameroon, Malawi, and Uganda alongside HKA, SPF-OST, IIR, Raach Solar, 2iE. Thanks to an incredible effort from SophiA partner Brendan Prestage from Kovco in South Africa and Madi Sakandé, president of U-3ARC (Union Of Associations of African Actors In Refrigeration And Air-Conditioning (U-3ARC), 10 refrigeration technicians from U - 3ARC in Cameroon, DR Congo, Malawi, Mali, Niger, Nigeria, Sierra Leone, Tunisia, Uganda and Zambia could join in person. The sessions strengthened local expertise and knowledge exchange, while national representatives also presented their efforts to phase out R22, underlining the crucial role of natural refrigerants in sustainable cooling.



Figure 49 : Train the trainer session in Karlsruhe, Germany.



The two-day consortium meeting (17–18 September 2025, Figure 50) organized by HKA and SPF-OST followed the Train-the-Trainers at Hochschule Karlsruhe. Day 1 opened with Dr. Med. Frank Mentrup, Lord Mayor of the City of Karlsruhe, Prof. Dr. Franz Quint, Prorector for Research, Cooperations and Quality Management at HKA, Maria Laura Trifiletti, Project Officer - Horizon Europe Energy from the *European Climate, Infrastructure and Environment Executive Agency (CINEA)* and Professor Michael Kauffeld (HKA, SophiA project coordinator).



Figure 50 : Consortium at the SophiA Final Event 2025, Germany and online.

Sophia technical developments were introduced by the technical partners from Oliver Schmid (HKA), Kirsten Laaks (Everflo), Mihaela Dudita-Kauffeld (SPF-OST), Kokouvi Edem N'TSOUKPOE and Kodjo Sédi AGBOKOU (2iE), and Heike Hoedt (Simply Solar), followed by Sarah Bimbona (Makerere University), Madi Sakandé (U-3ARC), and Jürgen Raach (Raach Solar) who shared the tangible benefits of SophiA installations in African hospitals. Partners including SPF-OST, IIR, Everflo, and 2iE presented the training and capacity-building efforts, while discussions on policy and sustainability of EU funded projects.

Day 2 featured contributions from sister projects (SESA, ENERGICA, REFFECT AFRICA, SteamBioAfrica) and funding perspectives from Philippe Schild (European Commission), Léonard Lévêque (EU flagship project LEAP-RE), Rasmus Larsen (Sustainia), and Francisca Rodrigues (IIR). The “Leaders4Future” session, led by Monique Baha (IIR) with testimonies from Heike Hoedt (SophiA partner Simply Solar), Kirsten Laaks (SophiA partner Everflo), and Sneha De (HKA), celebrated women and youth in refrigeration, before closing with awards (Figure 51) and discussions on “SophiA II”.





Figure 51 : Awards ceremony at the SophiA Final Event 2025, Germany and online.

The event concluded with an excursion to BITZER Headquarters and the SCHAUFLEER Academy (Figure 52), hosted by Volker Stamer, SCHAUFLEER Academy director. Participants toured the showroom and engaged in specialized workshops on hydrocarbon safety, compressor failure analysis, and the basics of refrigeration, supported by experts including Alexander Garbe, Simon Beck, and Hanna Brandstetter. The day ended with a factory tour led by Manuel Kuttruff and Oliver Filp and the presentation of certificates of attendance.



Figure 52 : SophiA partners enjoying the BITZER training.

4.1.4 SophiA Knowledge Exchange Network

Since the establishment of the SophiA Knowledge Exchange Network (KEN) in M6, SEZ and other project partners have focused on fostering collaboration, knowledge sharing, and



aligning efforts towards common objectives. This groundwork has enabled meaningful synergies across projects. The key activities and meetings that took place from M6-M24 were documented in D8.3 and activities from M25-M36 in D8.4.

This section now summarizes the key activities and meetings that took place since M36, categorized by the organizing bodies Green Deal Support Office (GD-SO), and other collaborative initiatives. The activities described herein reflect the network's ongoing commitment to establishing strong partnerships, addressing common challenges, and amplifying the project's impact.

Green Deal Projects Support Office (GD-SO) and the Clean Energy Working Group (WG)

The **Green Deal Projects Support Office (GD-SO)** aims to support the 73 projects that received financial support through the European Green Deal funding call. Its primary objectives are to raise awareness of the funded projects, facilitate collaboration between them, enhance networking opportunities and promote knowledge exchange.

The **Clean Energy Working Group (WG)** within the GD-SO consists of 16 projects drawn from five different European Green Deal Calls. These projects focus on energy decarbonisation, specifically through the development and deployment of innovative technologies aimed at advancing renewable energy solutions and their integration into existing energy systems.

Since the start of the project, SophiA actively participated to and benefitted a lot from the different meetings organized either by the WG or – more generally – by the GD-SO. These exchanges very much helped to share knowledge, gathered experiences throughout project work and foster synergies between them.

From M36 to M48 the project participated in the following activities:

- **4 November 2024 – 6th meeting of the Clean Energy Working Group (WG)**

Focused on project progress updates and consortium collaboration, with sessions on working cultures in Africa, mediation techniques, conflict management, and effective communication.

SophiA presented its plan to develop a policy brief on sustainable refrigeration and solar thermal technologies, inviting contributions from other projects. The idea of a joint closure webinar on African projects was also introduced by SophiA, later scheduled for 18 November 2025.



- **7 April 2025 – 7th meeting of the Clean Energy Working Group**

Discussions centered on the final WG Action Plan and the impact assessment of GD-SO.

SophiA presented its success story (first container installation in Burkina Faso, May/June 2024) and the draft concept for its policy brief. After the meeting an additional contact with the sister project SESA could be established, regarding a potential policy brief on clean cooking for Africa.

- **17 April 2025 – SophiA Success Story**

The SophiA success story was published on the European Commission's Research & Innovation website: [Transforming healthcare in rural Africa through sustainable energy solutions | Research and Innovation](#)

- **13 May 2025 – GD-SO Network of Multipliers**

The GD-SO has been hosting its [Network of Multipliers](#) webinar on 13th May 2025. As SophiA is finishing its activities soon, the project has been invited to participate. The audience of the Network of Multipliers is stakeholders and interested parties, both within and external to the GD-SO and Green Deal call-funded projects, and it is an excellent platform to increase project impact and connect with a wider audience.

- **15 May 2025 – Joint closure webinar, 1st planning meeting**

The first planning meeting for the joint closure webinar was organized by GD-SO, based on SophiA's proposal during the 6th Clean Energy WG meeting. GD-SO will lead the organisation with input from participating projects. The webinar, open to the public by registration and including Commission representatives, is scheduled for 18 November 2025.

- **23 June 2025 – GD-SO Board of Coordinators Meeting**

This policy-focused meeting convened project coordinators to exchange experiences, discuss policy priorities, and share results with policymakers.



Other Collaborative Meetings and Activities

- **6-12 October 2024 – LEAP-RE Stakeholder Forum 2024**

SophiA project partner 2iE actively participated in this AU-EU cooperation forum on renewable energy, contributing to discussions on challenges and opportunities for sustainable energy. More info here: [2iE at LEAP-RE Stakeholder Forum 2024 - SophiA 4 Africa](#)

- **27-29 November 2024 – SophiA participation at ECOWAS Sustainable Energy Forum**

The International Institute of Refrigeration (IIR) organized a hybrid workshop on solar cooling and heating, attended by over 70 participants (half of them students). On 29 November, 2iE moderated a panel on energy modelling, featuring contributions from related projects. The IIR was awarded the prestigious ECREE Award for its outstanding contribution through SophiA. More info here: [SophiA wins ECREE Award for Solar Cooling and Heating Efforts in Africa - SophiA 4 Africa](#)

- **5 May 2025 – SophiA Knowledge Exchange Network Meeting**

The SophiA Knowledge Exchange Network Meeting represented an exchange and discussion about key aspects of the SophiA project work and as such an opportunity to share insights from different individual perspectives and other related projects. The focus of the discussions was put on post-project visions, ideas and challenges. Participants ranged from project partners, over members of the SophiA advisory board, to interested individuals and related projects as part of the Knowledge Exchange Network.

- **20-21 May 2025 – Final project event of SESA & ENERGICA**

SophiA project partners SPF-OST, IIR and Raach Solar participated to the event in Brussels to exchange ideas and showcase the innovative SophiA solutions for clean energy and sustainable development.

- **17-18 September 2025 – SophiA final project event**

The SophiA final project event took place on 17 and 18 September in Karlsruhe and online, featuring different thematic sessions with high external participation. On Thursday, 18th September, one dedicated session on GD-SO and SophiA sister projects focused on the collaborative work between the related projects, giving the floor to their representatives showcasing their project work and thoughts on future post-project activities.

Over the past 48 months, the SophiA project has actively engaged in collaboration and knowledge exchange activities, both within GD-SO structures and through independent initiatives. These efforts generated valuable discussions, new insights into common



challenges, and opportunities for joint solutions. Social media engagement further reinforced these exchanges, enabling continuous updates, event promotion, and the identification of additional collaboration opportunities.

4.1.5 Capacity building timeline

Figure 48 illustrates the suggested capacity building timeline, including educational and technical session, showrooms, handbooks and knowledge exchanges.



Figure 53: Suggested timeline for the capacity building materials.

The targets stated in the GA (Page 31) for the capacity building have been all reached (Table 9).

Table 9: Capacity building KPIs to date from the SophiA Monitoring tool.

Demo launch days	4 Demo launch days	4	Launch days	
	>30 participants in each	~40	Burkina Faso	
		~50	Malawi	
		~50	Uganda	
		~50	Cameroun	
Handbook	1 handbook with 2 editions	2		
Organisation and/or participation to trainings	Training of 60 local and regional operators (30% women)	160	4 summer schools (~40 participants each)	245
		22	Simply Solar training in August	
		28	Training in Burkina Faso (10% of women)	
		35	Training in Cameroun (8% of women)	
	Yearly meetings	16	16 meetings	



D8.5: Final, dissemination, communication and capacity building strategy plan (M48)

SophiA Knowledge exchange network meetings (yearly)	>20 participants	60		
Showrooms	4 (in Burkina Faso, Uganda, Cameroon and Malawi) after the end of the project	4	Burkina Faso, Uganda, Cameroon and Malawi)	



5. CONCLUSIONS

This report (D8.5) presents the updated progress of the communication, dissemination, and capacity-building activities led by the IIR as Work Package 8 (WP8) leader. Since the beginning of the project, a strategy has been implemented and progressively improved in order to maximize the visibility and impact of SophiA's results, both within the consortium and towards external stakeholders.

The dissemination monitoring tool, designed at the start of the project, has proven to be a useful instrument to plan, track, and report activities. While some partners encountered difficulties in its use due to the quantity of information required, regular updates, clearer instructions, and the addition of new features (e.g. KPI sheet, macro-options) have improved its functionality. Lessons learned highlight that future projects would benefit from nominating a dedicated “communication monitoring” responsible per partner and from designing the tool directly based on the KPIs agreed at the project's launch. In addition, the use of external forms automatically feeding into Excel (e.g. JotForm) could further simplify reporting and ensure that no dissemination activities are left untracked.

Annual meetings, one-to-one exchanges with partners, and continuous dialogue within WP8 have also been instrumental to maintain cohesion and ensure that information is shared effectively. The numerous events, publications, newsletters, social media campaigns, and training sessions conducted to date demonstrate the consortium's strong commitment to dissemination and capacity building.

Beyond the technical achievements, the training activities in Burkina Faso (2024) and Cameroon (2025), as well as the *Train the Trainers* course during the SophiA Final Week in Karlsruhe (September 2025), illustrate the project's capacity to transfer knowledge and empower local actors. These initiatives will ensure that SophiA technologies can be further adopted, replicated, and taught in partner countries, multiplying their long-term impact.

A key reflection as the project enters its final phase is how to ensure the value of SophiA's results after the end of EU funding. Results have limited impact if they are not used, disseminated, or exploited. Maintaining the SophiA living labs “alive” should therefore remain a central focus. Further use of SophiA results are planned through commercialization, through replication in new projects, or through policy, standardization, training and education activities ensuring societal benefits. The consortium should remain active in communicating the project's



outcomes, identifying new opportunities for application, and engaging with target groups even after the official project end.

Finally, lessons learned from WP8 underline that effective communication requires tailoring messages to audiences, focusing on the project's main results, and maintaining visibility across the different phases of the project. The European Commission provides a wide range of support tools, and engaging with Project Officers or Green Deal Support Offices can help ensure that dissemination efforts remain impactful.

In conclusion, the SophiA consortium has built a strong and coherent communication and dissemination framework, which has already produced significant outcomes.





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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N. 101036836.

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