



SOPHIA

Sustainable Off-grid solutions for
Pharmacies and Hospitals In Africa

DISSEMINATION, COMMUNICATION AND CAPACITY BUILDING STRATEGY PLAN REVIEW (M24)

DELIVERABLE D8.3

VERSION 2.0

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 (HKA)
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.

SOPHIA CONSORTIUM

NO.	BENEFICIARY	ADDRESS	MAIN CONTACT
1	 	HOCHSCHULE KARLSRUHE (HKA) Moltkestr. 30, DE-76133 Karlsruhe, Germany	Coordinator: Prof. Dr.-Ing. habil. Michael Kauffeld michael.kauffeld@h-ka.de
2		OST - OSTSCHWEIZER FACHHOCHSCHULE (SPF-OST) Oberseestrasse 10, CH-8640 Rapperswil, Switzerland	Dr. Mihaela Dudita mihaela.dudita@ost.ch
3		MAKERERE UNIVERSITY (MAK) Main Campus, PO Box 7072, 256 Kampala, Uganda	Prof. Dr. Nicholas Kiggundu kiggundu@caes.mak.ac.ug
4		FONDATION 2iE ASSOCIATION (2iE) Rue de la Science, PO Box 01BP594, 01 Ouagadougou, Burkina Faso	Dr.-Ing. habil. Kokouvi Edem N'Tsoukpoe edem.ntsoukpoe@2ie-edu.org
5		STEINBEIS INNOVATION GMBH (SEZ) Steinhäuserstr. 12, DE-76135 Karlsruhe, Germany	Dr. Anthony Salingre anthony.salingre@steinbeis-europa.de
6		MINISTERE DE LA SANTE PUBLIQUE (MPHC) Boulevard Rudolph Manga Bell Yaounde, Cameroon	Ms. Jeanne Aurélie Abomo Ayinda aureliejeannea@yahoo.fr
7		INSTITUT INTERNATIONAL DU FROID (IIR) Boulevard Malesherbes 177, FR-75017 Paris, France	Ms. Ina Colombo i.colombo@iifiir.org
8		OPERIEREN IN AFRIKA EV (Oia) Wirthstrasse 11, DE-79110 Freiburg, Germany	Prof. Bernhard Rumstadt b.rumstadt@gmail.com
9		EVERFLO(PTY)LTD (EVERFLO) 10 McLaren Way Racing Park, 7441 Milnerton, South Africa	Mr. Evert Potgieter evert@everflo.co.za
10		KOVCO PTY LTD (KOVCO) Century City, PO Box 134, 7446 Century City, South Africa	Mr. Brendan Prestage bprestage@kovco.co.za
11		MARTIN SYSTEMS GMBH (MS) Address: Friedrichstrasse 95, DE-10117 Berlin, Germany	Dr.-Ing. Jose Ordonez jose-ordonez@martin-systems.com
12		SIMPLY SOLAR SCHEFFLER TECHNOLOGIES AND CONSULTING (SISO) Graf von Werdenbergstrasse 6, DE- 89344 Aislingen, Germany	Ms. Heike Hoedt h.hoedt@simply-solar.de
13		RAACH SOLAR GMBH (RS) Stellwinkel 1, DE-88451 Dettlingen an der Iller, Germany	Mr. Jürgen Raach juergen.raach@raachsolar.com

DOCUMENT INFORMATION

RESPONSIBLE PARTNER	IIR
AUTHOR (S)	Ina Colombo (IIR), Bérénice Hugues (IIR), Kodjo Sédi Agbokou (2iE), Kokouvi Edem N'Tsoukpoe (2iE)
REVIEW	Elodie Bhuller (HKA), Mihaela Dudita-Kauffeld (OST - SPF)
APPROVAL	Mihaela Dudita-Kauffeld (OST - SPF)
KEYWORDS	Communication and dissemination, capacity building
DISSEMINATION LEVEL ¹	PU
DUE DATE OF DELIVERABLE	30/09/2023
ACTUAL SUBMISSION DATE	29/09/2023

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
29/09/2023	1.0	First version submitted to EC
09/09/2025	2.0	Second version submitted to EC

1. TABLE DES MATIÈRES

SOPHIA CONSORTIUM	2
DOCUMENT INFORMATION.....	3
DOCUMENT HISTORY	3
EXECUTIVE SUMMARY	7
2. Introduction	8
3. Communication, Dissemination And Capacity Building Work Package.....	9
3.1 WP 8 deliverables and tasks	9
3.2 Partners involved in WP8	12
4. The Communication, Dissemination and Capacity Building Strategy Plan Review	12
4.1 The SophiA DIS&COM group.....	12
4.2 The Communication Strategy Plan.....	13
4.2.1 Communication tools	13
4.2.2 Communication Support Materials	22
4.2.3 Communication timeline.....	31
4.3 The Dissemination Strategy Plan	32
4.3.1 Dissemination monitoring tool.....	32
4.3.2 Dissemination events at a national, regional and international levels	34
5. Capacity Building and Knowledge Exchange Network.....	37
5.1 Capacity Building Strategy	37
5.1.1 Capacity building timeline	37
5.1.2 Demonstration Site Launch Days and Seminars	38
5.1.3 Handbook for building SophiA systems on-site	38
5.1.4 Educational and training sessions.....	38
5.2 SophiA Knowledge Exchange Network	48
6. Conclusions.....	51
7. Annexes	52
7.1 Annex 1.....	52
7.2 Annex 2.....	53
7.3 Annex 3.....	54



LIST OF FIGURES

Figure 1: Combination between communication, dissemination and capacity building.....	10
Figure 2: Detailed actions for communication, dissemination and capacity building.....	11
Figure 3: SophiA Technologies category and its four tabs.....	13
Figure 4: SophiA Cooling Container.....	14
Figure 5: SophiA Solar Water Container.....	15
Figure 6: SophiA Solar Technologies.....	16
Figure 7: HKA Laboratory Test.....	16
Figure 8: SophiA Downloads page.....	17
Figure 9: Home page – Goals section.....	17
Figure 10: Evolution of followers/subscribers on social media.....	19
Figure 11: YouTube analytics from 13/09/2022 until 13/09/2023.....	19
Figure 12: X analytics for September 2023.....	20
Figure 13: LinkedIn impressions from 13/09/2022 to 13/09/2023.....	20
Figure 14: LinkedIn number of subscribers from 13/09/2022 to 13/09/2023.....	21
Figure 15: Facebook profil views from 13/09/2022 to 13/09/2023.....	21
Figure 16: Poster EN – Goals section (updated).....	23
Figure 17: Technical rolled up banner shown during the ICR2023 Congress in Paris.....	24
Figure 18 SophiA brochure - after modifications.....	25
Figure 19: SophiA newsletters on the website.....	25
Figure 20: The first SophiA newsletter.....	26
Figure 21: The second SophiA newsletter.....	26
Figure 22: e-SophiA new on the website.....	27
Figure 23: e-SophiA news n.° 2 and 3.....	27
Figure 24: e-SophiA news n.° 4 and 5.....	28
Figure 25: "Article" tab, "Downloads" category.....	29
Figure 26: Draft of the SOFACT n.° 1.....	30
Figure 27: SophiA Bottle on the tour travelling worldwide.....	31
Figure 28: Suggested timeline for the communication materials.....	32
Figure 29: Suggested timeline for the capacity building materials.....	38
Figure 30: Participants of the summer school (2022).....	40
Figure 31: SophiA water technologies during the summer school (2022).....	40
Figure 32: Solar technologies in Africa presented by SophiA partner 2IE.....	41
Figure 33: SophiA and OST-SPF lab visits in Rapperswil, Switzerland.....	41
Figure 34: First internal SophiA “Train the trainers” Cape Town, South Africa.....	42
Figure 35: More than 30 participants (onsite and online) during the “Train the trainers”.....	43
Figure 36: Visits to the SophiA systems from Everflo factory, South Africa.....	43
Figure 37: SophiA partners during the first “Train the trainers” workshop at Everflo.....	44
Figure 38: Sustainable heating and cooling technologies in SophiA.....	45
Figure 39: Storytelling and the power of words session during the summer school.....	46
Figure 40: SophiA communication support materials to promote the project.....	46
Figure 41: SophiA solar thermal technologies introduced to African engineers (2023).....	47
Figure 42: SophiA communication support materials used to introduce the project (2023).....	47
Figure 42: SophiA dissemination activities.....	52
Figure 42: List of potential peer-reviewed journals.....	53
Figure 42: READ ME FIRST Guideline.....	54



LIST OF TABLES

Table 1: List of deliverables planned within WP8.....11

Table 2. Partners involvement and roles in WP8. 12

Table 3. List of dissemination activities.....33

Table 4. List of scientific publications.....33

Table 5: List for the potential events for SophiA from October 2022 to October 2024.....35

Table 6: Sessions held by SophiA partners during the International Summer School, 2022. 39

Table 7: Sessions held by SophiA partners during the International Summer School, 2023. 45



EXECUTIVE SUMMARY

SophiA project aims to provide sustainable off-grid energy supplies and clean drinking water 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. SophiA will develop and locally manufacture innovative, modular, flexible, affordable and efficient solar containers to provide the local population in four rural health centres located in four different climatic regions where help is most needed, offering sustainable solutions adapted to the African context and then transferable to the whole of 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 made within the frame of Work Package 8 “Communication, Dissemination, and Capacity Building”, led by the International Institute of Refrigeration. Its purpose is to formalise all dissemination actions planned for the project, to provide guidelines on the approach and to set out the key dates associated with planned events. The aim of this strategy review is to make sure that the goals of the D8.1 initial strategy on the communication, dissemination and capacity building are reached. The strategy on the communication, dissemination and capacity building adopted by the SophiA partners is to ensure that information is shared with appropriate audiences on a timely basis using the most effective mean and that the maximum return on investment is provided for all financing parties – the consortium partners and the European Commission.

This document is an update of deliverable D8.2 and it includes the activities performed to guarantee maximal dissemination of the project’s results from M12 (September 30th, 2022) until M24 (September 30th, 2023). Communication support materials have been improved (website updates), and new materials have been developed (SOFACTs). Using these communication support materials, the consortium partners have so far presented, organised, participated in more than 50 conference, workshops, trainings or meetings. Technical partners published 14 publications.

The D8.3 Communication, Dissemination and Capacity Building Strategy Plan Review (M24) is a living document, to be lastly updated in M36.



2. 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 describes the M24 update of the communication, dissemination and capacity building strategy, including the main tools and channels used in the project to address different target audiences. It is a living document that will be further updated to incorporate the project developments.



3. 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.

3.1 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);



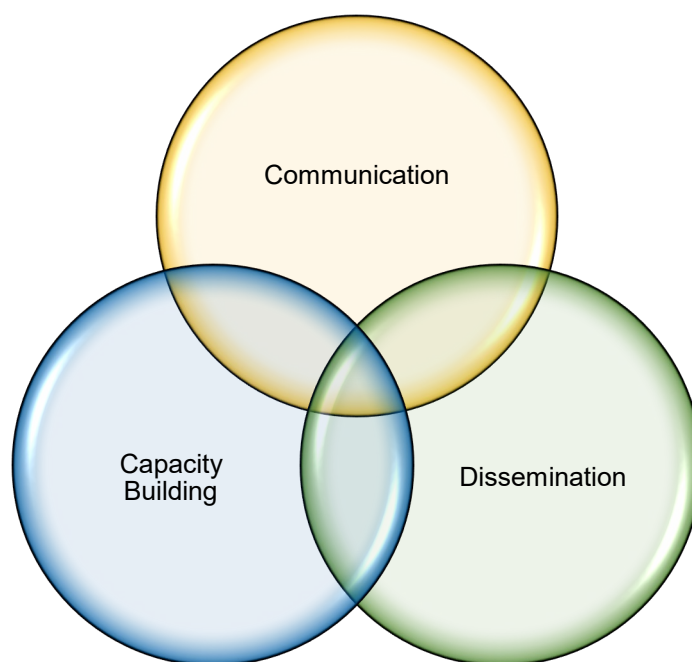


Figure 1: Combination between communication, dissemination and capacity building.

- 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.



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	04/10/2022	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	Not Yet	IIR
D8.5 Final Dissemination, Communication and Capacity Building Strategy Plan (M48)	Public	M48	Not Yet	IIR
D8.6 SophiA training manuals	Confidential	M48	Not Yet	2iE
D8.7 Handbook for building SophiA systems on-site 1st edition	Public	M31	Not Yet	Everflo
D8.8 Handbook for building SophiA systems on-site 2nd edition	Public	M48	Not Yet	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.



3.2 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
OST-SPF	WP contributor
MAK	WP contributor
2iE	Task leader
SEZ	Task leader
MPHC	WP contributor
IIR	Work Package leader
OiA	WP contributor
EVERFLO	Task leader
KOVCO	WP contributor
MS	WP contributor
SISO	WP contributor
RS	WP contributor

4. THE COMMUNICATION, DISSEMINATION AND CAPACITY BUILDING STRATEGY PLAN REVIEW

The 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) includes new activities and results that are highlighted. The next update for the communication, dissemination and capacity building strategy plan is in M36.

4.1 The SophiA DIS&COM group

A “SophiA DIS&COM” group composed of 10 members of the consortium was formed initially to develop the design of communication supports. At the beginning of the project, the group has participated to online meetings every 3 weeks, at least until the website was set-up. Now



that the dissemination and communication activities are well implemented, the DIS&COM group does not meet regularly, but punctually, when needed. The DIS&COM group met for one hour on the following dates: 03/11/2022; 02/03/2023; 31/08/2023. The group has been kept informed of all dissemination activities such as publications, conference papers, press releases, etc. in order to keep track of these activities and to ensure that all knowledge sharing activities are in line with the agreed guidelines.

4.2 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.

4.2.1 Communication tools

3.2.1.1 Website

SophiA Technologies

A new category was added, between the “About SophiA” and the “Partners” categories: the “SophiA Technology” category. This new category is composed of four tabs. Each one of them represent a technology of the SophiA containers. A short text, along with an illustration, explains the technology.

For now, the category is only available in French and in English. The German version is in progress.

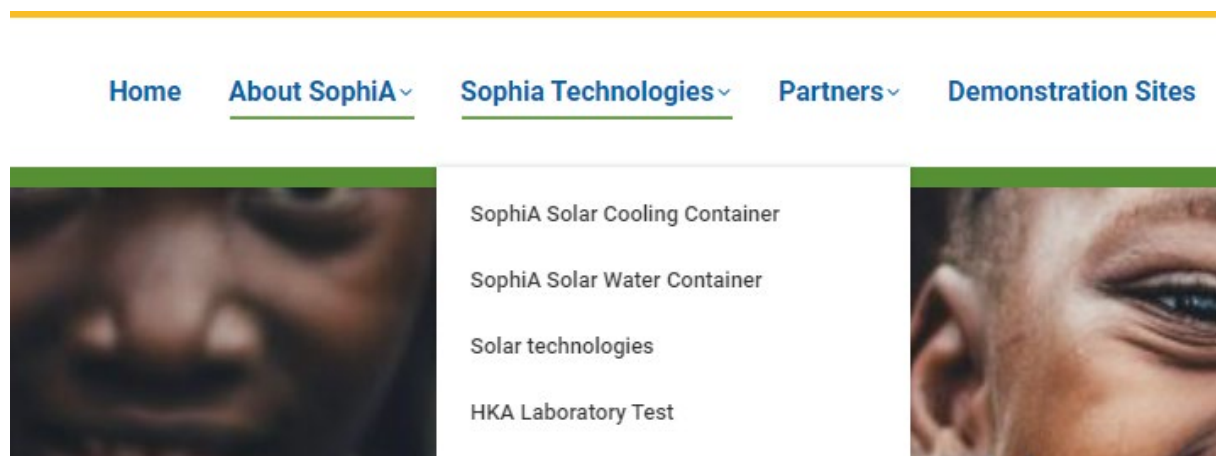


Figure 3: SophiA Technologies category and its four tabs.



SophiA Solar Cooling Container



Figure 4: SophiA Cooling Container.



SophiA Solar Water Container

SophiA Solar Water Container

Home / SophiA Solar Water Container

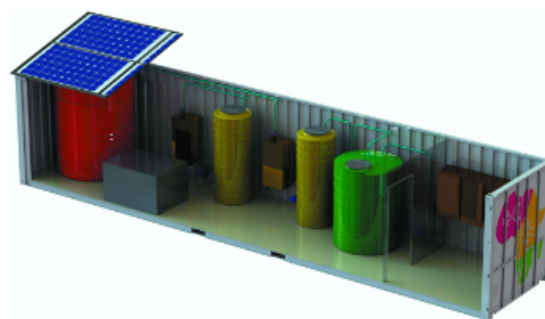
Solar Water Container

The water treatment container is designed to produce hygienically clean and cooled drinking water as well as demineralised water for steam production and for different applications in the selected SophiA hospitals. It is equipped with an ultrafiltration (UF) membrane technology and a membrane capacitive deionisation (MCDI) system. The storage and buffer tanks in the container are equipped with an ultraviolet (UV) system for disinfection purpose. A cooler is placed at the outlet to provide cooled drinking water to the consumer.

The UF technology includes the latest Cube® filters manufactured by the SophiA partner Martin Systems GmbH. They use polyethersulfone (PES) based membranes that can successfully remove organic and inorganic impurities while retaining the mineral content of inlet water. The UF membranes produce excellent and consistent water quality, regardless of turbidity variations of the influent water quality. Moreover, the water after filtration is free from any biological contamination. An UF system with Cube® membrane module from Martin Systems is currently being tested in the laboratories from University of Applied Sciences Karlsruhe (Hochschule Karlsruhe – HKA).

The UF treated water in the buffer tank is passed through the MCDI unit, which is based on a novel desalination technology. Deionised water with electrical conductivity below 20 µS/cm can be produced. It can be safely used for sterile and pharmaceutical applications in the hospitals. Moreover, the deionised water will be used to generate steam using the PVSteamCube produced by SophiA partner Simply Solar GbR. Ultrapure water can be further obtained from the produced deionised water by passing it through end filters like polishing cartridge or ion exchangers. By applying the MCDI system to the UF treated water, drinking water with optimised mineral content is obtained. The resulted water quality meets the guidelines for drinking water quality stipulated by the World Health Organisation (WHO). The drinking water and deionised water production is tested in a prototype system at HKA laboratories. The lab-tests are conducted using model water based on the water samples collected from all 4 demonstration sites of SophiA containers. The quality and impurities present in the water samples were analysed both in the labs of HKA in Germany and at the Institute for Solar Technology of the Eastern Switzerland University of Applied Sciences (OST-SPF).

The water treatment process in the container operates autonomously. All water tanks in the container are provisioned with level sensors to prevent any overflow. The water treatment container is completely powered by photovoltaics and lithium-ion batteries with an overall monitoring and smart energy management system.

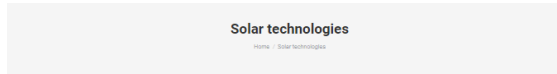


- | | |
|------------------------------------|--|
| 1- PV-Power systems | 5- Buffer tank for UF treatment |
| 2- Storage tank for drinking water | 6- Ultrafiltration (UF) tank |
| 3- Deionised water storage tank | 7- Capacitive deionisation (CDI) modules |
| 4- Solar steam generator | |

Figure 5: SophiA Solar Water Container.



Solar Technologies



Solar Hot Water Generation

For the generation of hot water to be used in the hospital's bathrooms and kitchens, the X-Sol collector was chosen. It is a very robust and simple yet efficient solar collector. The collector consists of a hot water storage and an attached solar thermal collector that heats the storage water. The system needs no pump as the water can circulate through the collector, driven by natural convection. Each collector has a capacity of 102 l. For higher consumption, more collectors can be easily connected in series. The system is designed to be installed with existing overhead water storage tanks commonly used in the target countries.

Solar Steam from Photovoltaics: PVsteamCube

Photovoltaic electricity is used to heat up a well-insulated metal block, where it is stored in form of heat up to 400°C. The metal block serves as heat exchanger, generating steam on demand at any time. Storage media is either aluminium or iron. Considering the needs of the hospitals selected as demo site, a 400Wp PVsteamCube was developed by the Sophia partner Simply Solar. This will be integrated into the water container and it will use deionized water. The PVsteamCube provides steam to hospital consumers with a temperature demand higher than what solar hot water collectors can provide. Consumers can be the autoclaves, hospital laundry and hospital kitchen.



Solar Steam from Scheffler Reflectors

Fully automated Scheffler Reflectors of the latest generation developed by the Sophia partner Simply Solar will also be used to produce steam. Each reflector of 2.5 m² focuses onto a steam-generator from cast aluminium, generating steam any time the sun shines. The steam generators serve as interim storage allowing to buffer fluctuating sunshine intensities. The system is modular and can be adapted to different steam demands by adding individual reflectors. It presents an alternative to the PVsteamCube and it can be locally manufactured.



PVmedPort

The PVmedPort is an autarkic station powered by photovoltaic modules. It can be either used to power (or provide additional power) to existing small health facilities, it can be used for outreach programs (awareness campaigns, health and education programs, vaccination campaigns) or implemented as a completely equipped energetically self-sufficient station (e.g. a dispensary or a pharmacy).

Four versions of PVmedPort are developed in the framework of Sophia for different applications:

- PVmedPort power
- PVmedPort for mobile vaccination campaigns
- PVmedPort multimedia
- PVmedPort pharmacy

Depending on the application, the equipment and interior of each version is different.

The PVmedPort is scalable and can be implemented in modules of 2kW peak, each providing up to 3kW of electric power.

Figure 6: Sophia Solar Technologies.

HKA Laboratory Test

Water Treatment Technologies

Typically used for membrane bioreactors, the submerged ultrafiltration (UF) membrane module from Sophia partner Martin Systems GmbH produces hygienically safe drinking water by rejecting suspended organic and inorganic impurities. Ultrasound (US) radiation can keep the treated water disinfected for storage. The UF technology is demonstrated by Martin Systems' 0.45 m² Aqua Mini Cube and 5.25 m² RM6 modules setup in the laboratory of HKA to filter water from model turbid suspension.



Figure 1: Ultrafiltration system with submerged Cubes® RM6 from Martin Systems GmbH setup in the laboratory of HKA University of Applied Sciences Karlsruhe (Photo Courtesy: Duc N. Dinh)

Typically used to treat brine solution, the membrane capacitive deionization (MCD) technology is being studied at HKA to produce deionized water having conductivity below 20 µS/cm for steam production.

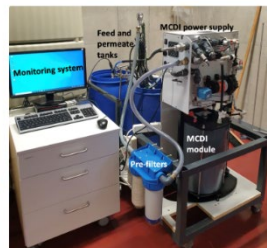


Figure 2: Membrane capacitive deionization (MCD) C12 module from Vohler AG setup in the laboratory of Hochschule Karlsruhe (Photo Courtesy: Paul Ratz)



Cooling Chamber

In order to simulate the working conditions of the Sophia refrigeration system in different climate zones, a small refrigeration cell instead of a 40-foot container is being set up in the laboratory of the University of Applied Sciences in Karlsruhe (HKA). Components are therefore placed outside the cell. The propane circuit is enclosed and ATEX-classified ventilation constantly draws in air to ensure safe operation. A plate heat exchanger acts as a propane condenser. By regulating the water mass flow, the condensing temperature can be adjusted to simulate different ambient temperatures to which the air condenser is exposed in Africa. Insulating panels divide the cell into +5°C and -30°C chambers. Electrical heating elements simulate the conduction of ambient temperature heat into the refrigerated container. The evaporator of the R744 cycle is housed in an enclosure with an innovative flap system. During the defrost cycle, the flap to the -30°C chamber is closed, while the flap to the +5°C room opens. In this way, defrosting removes heat from the room. A conventional freezer modified with an expansion vessel and an ethane compressor cools to -70°C, when placed in the 30°C chamber. During testing, high-pressure shutdown is achieved when the ambient air is at -25°C. To allow the operator of the cooling container a wider range of temperature settings, the ethane is mixed with a small amount of propane. New tests will show how the freezer performs with the new refrigerant, while the rest of the refrigeration cascade is being built.

Figure 7: HKA Laboratory Test.



“Downloads” Tab

The names of the article’s categories have changed. “Videos” and “SophiA reports” have replaced respectively “Educational Materials” and “Public Reports” (Figure 8).

Documents are regularly added, in the three language versions of the website.

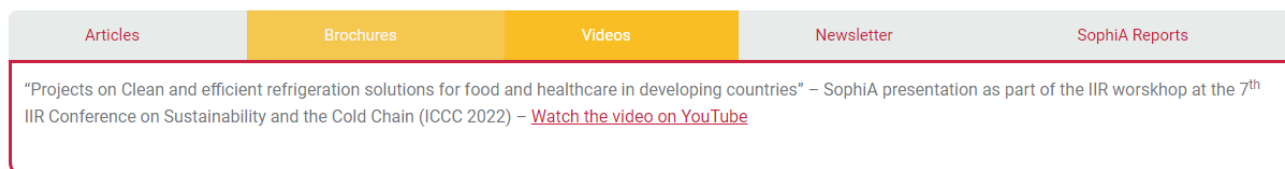


Figure 8: SophiA [Downloads](#) page.

General modifications

Following the advancement of the containers development and producing, the information about the containers was improved. “Distilled water” was replaced by “deionised water” and the sentence “cooling of surgical and intensive care units” was deleted. These modifications happened everywhere on the website, as well as in the brochures and posters. Modifications were made in the three language versions of the website.

OUR GOALS

SophiA will enable African populations to sustainably increase their quality of life by providing to rural and remote health facilities access to:

-  Safe, clean drinking water and deionised water for medical purposes
-  Hot water and steam production for hospital thermal requirements
-  Cooling of medicines and food at +5°C
-  Low temperature storage of blood plasma at -30°C
-  Ultra-low temperature storage of sensitive medication at -70°C
-  Emergency electricity supply for surgical and intensive care units

Figure 9: Home page – Goals section.



Further website development

The Sophia website has been fully developed, but it needs some additional and/or continuous update on the “Demonstration Sites”, “News & Events” and “Downloads” webpages. An additional webpage for the “SophiA Technologies” is also under development for the German version of the website.

3.2.1.2 Social media

Facebook, Twitter, and YouTube channels were set up at the beginning of the project. Links to the project social media tools are given below with the current followers/ subscribers.

- <https://twitter.com/SophiA4Africa>: 163 followers (117 at M12)
- <https://www.linkedin.com/company/sophia4africa/>: 417 followers (226 at M12)
- <https://www.facebook.com/sophiA4Africa>: 15 followers (9 at M12)
- https://www.youtube.com/channel/UC5lmLr_7q-qsrJy2zKi5PEA: 14 subscribers (10 at M12)

As demonstrated in Figure 10, the number of followers/subscribers for the LinkedIn accounts has almost doubled since the last review (D8.2). Twitter, rebranded as X, has slightly increased.

Concerning the YouTube account, no video was posted for a whole year (last one was in April 2022). But the SophiA Introductory video was posted recently, and it will definitely increase the number of subscribers, even if it is still too soon to appreciate the numbers.

Communication and engagement with Facebook has proven to be more complicated, both due to its fall in popularity among several age groups in favor of other social media channels such as Instagram and TikTok and complications to reach an interested and engaged audience. But the few subscribers are well engaged and follow the project by liking the posts.



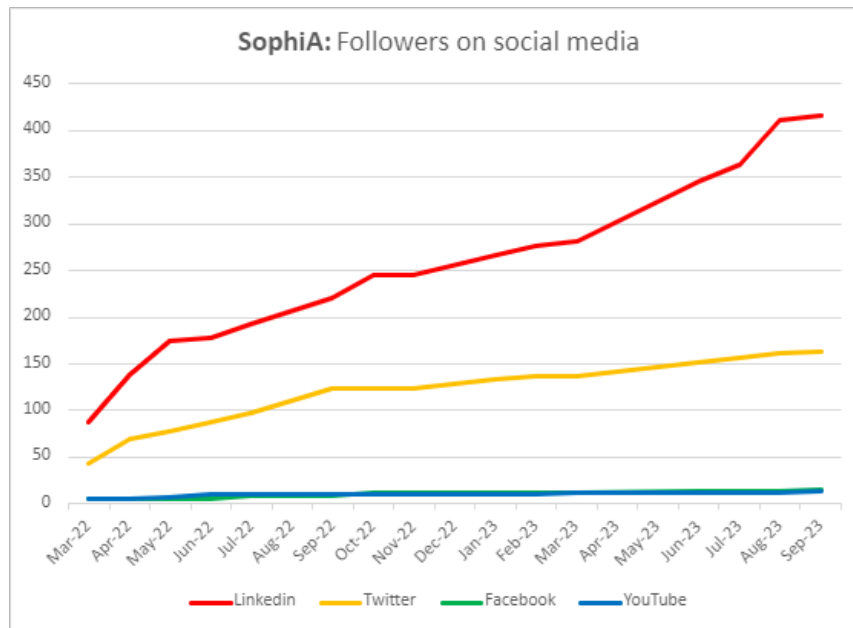


Figure 10: Evolution of followers/subscribers on social media.

Publication of various posts had impacts on the number of visitors as shown in the analytics:

YouTube

Analytics:

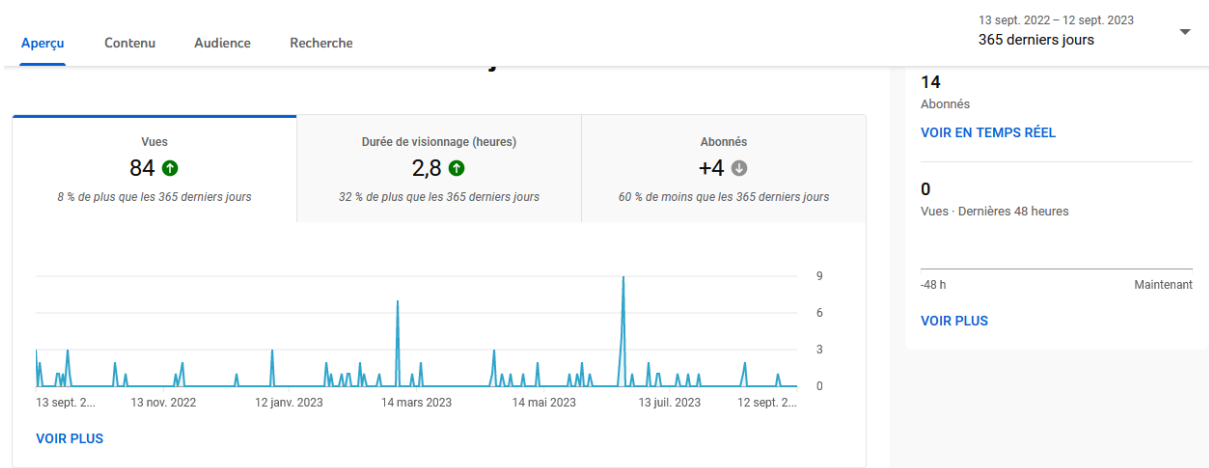


Figure 11: YouTube analytics from 13/09/2022 until 13/09/2023.

The Figure above shows that the number of views grew by 8% since the first year.



X (Twitter)

Analytics:

At the time of writing this deliverable D8.3, X Analytics was under maintenance, hence limited data.



Figure 12: X analytics for September 2023.

LinkedIn

Analytics:

Indicateurs

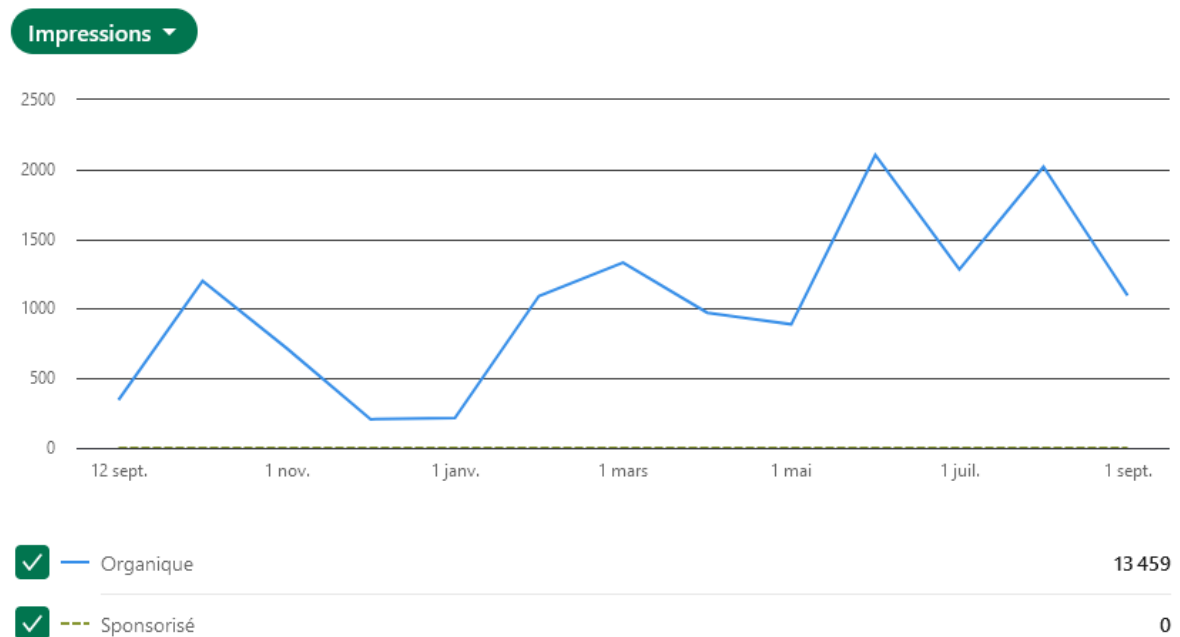


Figure 13: LinkedIn impressions from 13/09/2022 to 13/09/2023.

Figure 14 shows that the posts are visible by a lot of people, even if they are not subscribers to the SophiA account. The posts have a increased popularity.



L'essentiel sur les abonnés ?

417

Nombre total d'abonnés

196

Nouveaux abonnés au cours des 365 derniers jours

Statistiques des abonnés ?

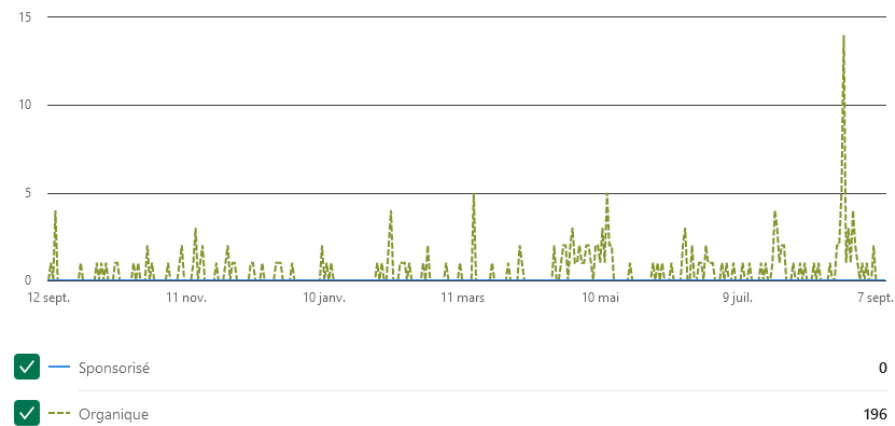


Figure 14: LinkedIn number of subscribers from 13/09/2022 to 13/09/2023.

Since M12, the number of followers almost doubled. Thanks to the regularity of posts, the LinkedIn account is popular. There was a peak in subscriptions at the time of the IIR International Congress of Refrigeration 2023 (21th-25th August, 2023).

Facebook Analytics:

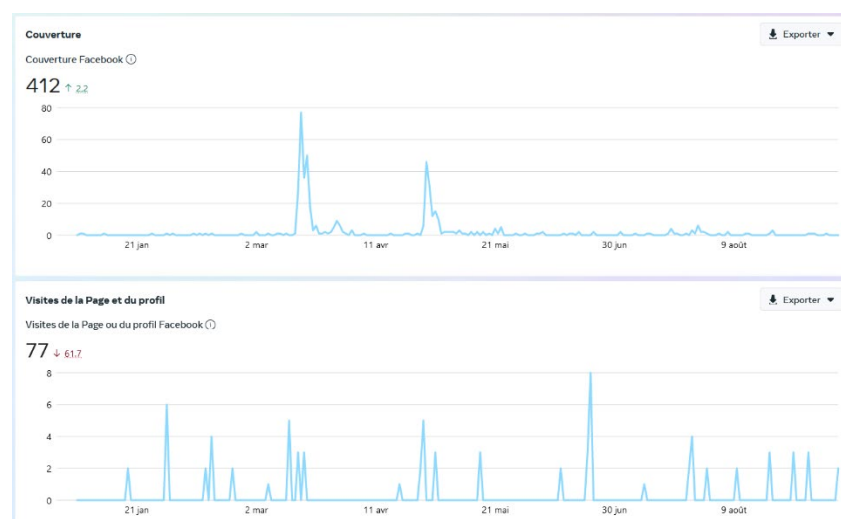


Figure 15: Facebook profile views from 13/09/2022 to 13/09/2023.



Partners are encouraged to share the SophiA social media publications on their own platforms. They are also invited to contribute to the SophiA social media with their own posts using the SophiA Social Media Guideline previously developed.

3.2.1.3 Project videos

Project videos will be produced and published throughout the duration of the project and will be dedicated to the project activities. The videos will aim to introduce the project background and scope to the different stakeholders and will present the project progress. They will also constitute a key tool enabling virtual visits to the SophiA facilities and demo sites.

The introductory video was posted few days ago on various platforms. It presents the SophiA project, explains its goals and shows the pilots countries and the partners. As the target audience is the general public, the video uses a popularization methodology. Furthermore, the storytelling uses elements of African culture, such as visual and musical elements of African art. The voiceover is in English, and English and French subtitles are available. The video was posted on YouTube, and then reposted on every social media, and on the website. It was also promoted through e-SophiA news. This video and its promotion will help the YouTube account to gain a great visibility (it is still too soon to appreciate the numbers).

The development of the other videos will be launched after the delivery of the first one, taking into account its communication results. It is planned to develop further:

- at least, five tutorial videos displaying different characteristics of the technology (for example, solar system, refrigeration system, water treatment, solar panels and overall systems, etc.). These tutorial videos will be suitable for technical as well as general audiences and will ensure a global reach.
- at least, three testimonial video clips (30 seconds each), primarily for social media platforms, featuring an end-user and how the SophiA system has helped them solve a problem. The tutorial videos will be filmed at the launched ceremonies of the containers.

4.2.2 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.



3.2.2.1 Templates

The Microsoft Word template for public and confidential reports, as well as the PowerPoint template are regularly used by the partners.

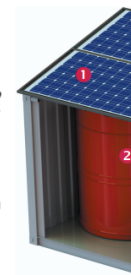
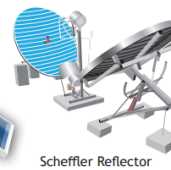
3.2.2.2 General/technical poster and rolled up banner

The technical poster has been modified to match the technical concept developments. “Distilled water” was replaced by “deionised water”, and the sentence “cooling of surgical and intensive care units” was deleted. These changes were made in the three languages.

- 0° Ultra-low temperature storage of sensitive medication at -70 °C
- 0° Low temperature storage of blood plasma at -30 °C
- * Cooling of medicines and food at +5 °C

SophiA Solar Water Container

- 1 PV-Power systems
- 2 Storage tank for drinking water
- 3 Deionised water storage tank
- 4 PVsteamCube
- 5 Buffer tank for UF treatment
- 6 Ultrafiltration (UF) tank
- 7 Capacitive deionisation (CDI) modules



- Safe, clean drinking water and deionised water for medical purposes
- Hot water and steam production for hospital thermal requirements
- Emergency electricity supply for surgical and intensive care units

Figure 16: Poster EN – Goals section (updated).

A rolled banner template with similar content of the poster was also developed in order to be displayed in strategic locations.





Figure 17: Technical rolled up banner shown during the ICR2023 Congress in Paris.

3.2.2.3 Brochure

The brochure has been modified to match the technical concept developments. “Distilled water” was replaced by “deionised water”, and the sentence “cooling of surgical and intensive care units” was deleted. These changes were made in the three languages.

SophiA Technologies

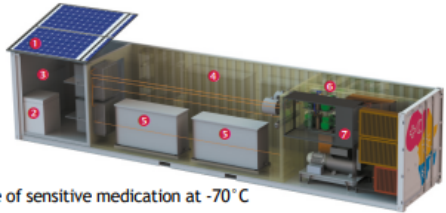
SophiA will enable populations to sustainably increase their quality of life by providing to rural and remote health facilities in Africa access to:

- Safe, clean drinking water and deionised water for medical purposes
- Hot water and steam production for hospital thermal requirements
- Cooling of medicines and food at +5°C
- Low temperature storage of blood plasma at -30°C
- Ultra-low temperature storage of sensitive medication at -70°C
- Emergency electricity supply for surgical and intensive care units

The final goal of SophiA is to develop two reliable, plug-in, modular container solutions that can be easily integrated into existing buildings and infrastructure

SophiA Solar Cooling Container

- PV-Power systems
- Storage at -70°C
- Storage at -30°C
- Storage at +5°C
- Thermal energy storages
- Machinery room
- Emergency lithium batteries



- ❄️ Ultra-low temperature storage of sensitive medication at -70°C
- ❄️ Low temperature storage of blood plasma at -30°C
- ❄️ Cooling of medicines and food at +5°C



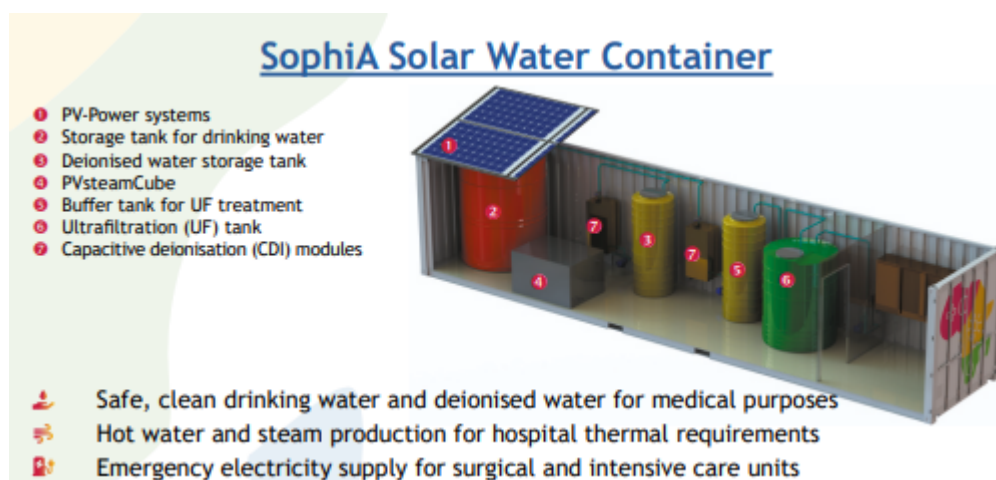


Figure 18 SophiA brochure - after modifications.

3.2.2.4 Newsletter

The newsletters are produced every six months to maintain a permanent and regular information about the project progress and achieved milestones. The three first newsletters were posted on the website and relayed on the social medias. Website users have the possibility to sign up to the newsletter.

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			

Figure 19: SophiA newsletters on the website.





Figure 20: The first SophiA newsletter.



Figure 21: The second SophiA newsletter.



3.2.2.5 E-Newsletters

Four new e-SophiA news were published since the first one in July 2022. They are available to download on the website.

e-SophiA News

[1st e-SophiA News](#) – Jul. 2022

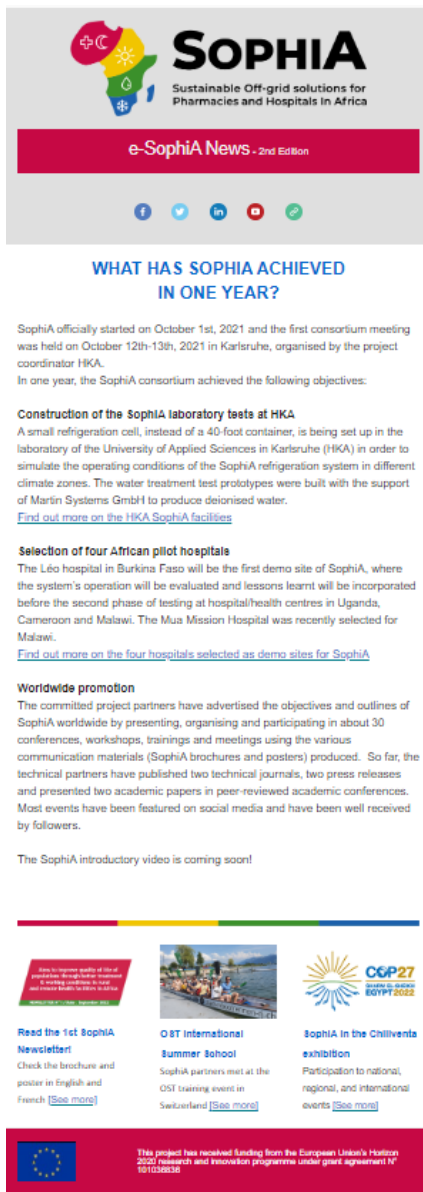
[2nd e-SophiA News](#) – Oct. 2022

[3rd e-SophiA News](#) – Jan. 2023

[4th e-SophiA News](#) – Mar. 2023

[5th e-SophiA News](#) – Jun. 2023

Figure 22: e-SophiA new on the website.



SOPHIA
Sustainable Off-grid solutions for Pharmacies and Hospitals In Africa

e-SophiA News - 2nd Edition

WHAT HAS SOPHIA ACHIEVED IN ONE YEAR?

SophiA officially started on October 1st, 2021 and the first consortium meeting was held on October 12th-13th, 2021 in Karlsruhe, organised by the project coordinator HKA. In one year, the SophiA consortium achieved the following objectives:

Construction of the SophiA laboratory tests at HKA
A small refrigeration cell, instead of a 40-foot container, is being set up in the laboratory of the University of Applied Sciences in Karlsruhe (HKA) in order to simulate the operating conditions of the SophiA refrigeration system in different climate zones. The water treatment test prototypes were built with the support of Martin Systems GmbH to produce deionised water.
[Find out more on the HKA SophiA facilities](#)

Selection of four African pilot hospitals
The Léo hospital in Burkina Faso will be the first demo site of SophiA, where the system's operation will be evaluated and lessons learnt will be incorporated before the second phase of testing at hospital/health centres in Uganda, Cameroon and Malawi. The Mua Mission Hospital was recently selected for Malawi.
[Find out more on the four hospitals selected as demo sites for SophiA](#)

Worldwide promotion
The committed project partners have advertised the objectives and outlines of SophiA worldwide by presenting, organising and participating in about 30 conferences, workshops, trainings and meetings using the various communication materials (SophiA brochures and posters) produced. So far, the technical partners have published two technical journals, two press releases and presented two academic papers in peer-reviewed academic conferences. Most events have been featured on social media and have been well received by followers.

The SophiA introductory video is coming soon!

Read the 1st SophiA Newsletter!
Check the brochure and poster in English and French [\[See more\]](#)

OST International Summer School
SophiA partners met at the OST training event in Switzerland [\[See more\]](#)

SophiA in the Chiliventa exhibition
Participation to national, regional, and international events [\[See more\]](#)

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



SOPHIA
Sustainable Off-grid solutions for Pharmacies and Hospitals In Africa

e-SophiA News - 3rd Edition

SophiA wishes you a happy new year 2023
SophiA vous souhaite une bonne et heureuse année 2023
SophiA wünscht Ihnen ein glückliches neues Jahr 2023

SophiA b'aw fo san kura 2023 la
2023 yum paiga yinga, a SophiA n puusd yamb ne y taabo
Wänd na köd vëere n köd sê yiid vëere, laafi la sunoogo

SophiA di wish you happy new year 2023
Mbong mbong ngou'suh
Mbembe mbu; Barka bey hitandééré hesré

SophiA inawatakia heri ya mwaka mpya wa 2023

Learn more about SophiA!
Check the brochure and poster in English, French and German [\[See more\]](#)

SophiA at COP27
SophiA was promoted in the IIR booth during the COP 27 [\[See more\]](#)

SophiA at Euromembrane
Key results from the laboratory test were presented [\[See more\]](#)

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

Figure 23: e-SophiA news n.º 2 and 3.



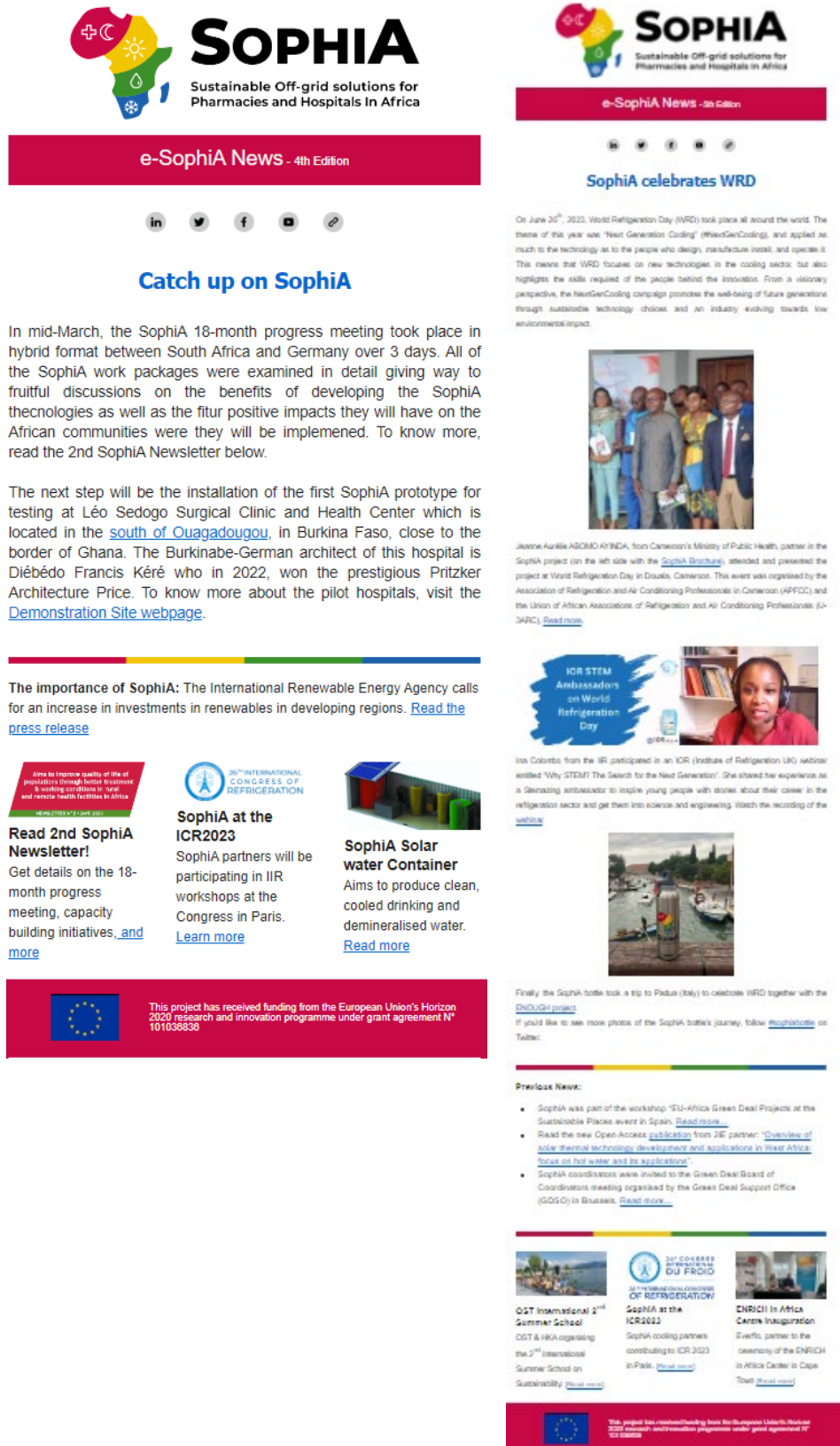


Figure 24: e-SophiA news n.° 4 and 5.



3.2.2.6 SOFACTs

The SOFACTs, a new communication support, is currently being developed. The idea is to present 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.

The SOFACTs aims at the scientific community, thus the scientific language will be kept. It is hoped that the SOFACTs will reach a wider audience of academics and stakeholders, who can then turn to the more comprehensive academic papers. The IIR scientific writer is in charge of summarizing the academic papers, in accordance with their authors. Currently, four SOFACTs are in preparation. The three first ones will be posted soon at a rate of once a month.

The SOFACTs will be posted on the website, in the “Downloads” category, tab “articles”, under the conference papers. This section is yet to be created. Furthermore, the SOFACTs will be published on Social Media.

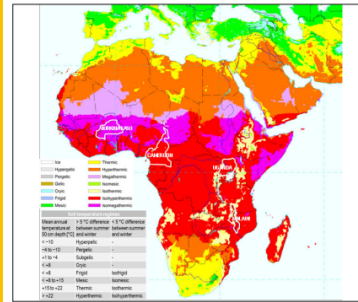
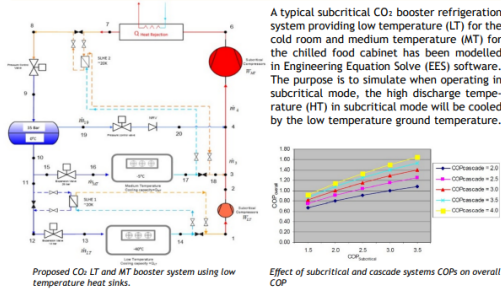
Articles	Brochures	Videos	Newsletter	SophiA Reports
Press Releases: - Press Release – November 2nd, 2021 – Participants of the international EU research project SophiA support family of the deceased African pioneer. – English version: Press release (Nov. 2021) / French version: Communiqué de presse (nov. 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) Conference Papers: “Potential applications of CO2 systems in developing countries with high ambient temperature” – GL2022 Conference Paper – DOI: 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 “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. (2023), <i>Scientific African</i>, e01752 – DOI: https://doi.org/10.1016/j.sciaf.2023.e01752				

Figure 25: “Article” tab, “Downloads” category.



SOFACT N° 1

To overcome the drawbacks of transcritical operation at high ambient temperatures, cascaded solutions are a viable, well-proven and energy-efficient solution in which the CO₂ system operates as the lower stage of a cascade refrigeration system, allowing CO₂ condensation at temperatures well below the critical temperature, i.e. 31 °C. The COP of the system can be improved by rejecting excess heat to the ground, instead of using a secondary refrigerant.



Corresponding author: i.colombo@iifir.org.
 Find more about this study from the original publication: [10.18462/iifir.g2022.0019](https://doi.org/10.18462/iifir.g2022.0019)

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

sophia4africa.eu



Figure 26: Draft of the SOFACT n.° 1.

3.2.2.7 Promotional items

The thermal bottle designed and sponsored by SophiA partner Everflo, continue to travel around the world. The “SophiA Bottle on the Tour” X (ex-Twitter) campaign is a success, and a hashtag was created: #sophiabottle. This hashtag helps and encourages partners and stakeholders to post themselves about the SophiA Bottle on the Tour. It also attracts more people and increases the SophiA visibility.

The SophiA bottle visited many countries, among others Italy, Morocco, Cameroon, Switzerland. The bottle also met a cat 😊.



Figure 27: SophiA Bottle on the tour travelling worldwide.

4.2.3 Communication timeline

Figure 28 illustrates the suggested communication timeline, including SophiA e-Newsletter, Newsletters, videos, website and brochures.





Figure 28: Suggested timeline for the communication materials.

4.3 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-user 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.

4.3.1 Dissemination monitoring tool

To allow an effective planning, execution, and continuous reporting of dissemination activities, a dissemination monitoring tool in the shape of an Excel Spreadsheet has been developed by the WP8 leader (IIR). Partners are asked by the WP8 leader (IIR) to regularly report. The document includes instructions in the READ ME FIRST tabulation (Annex 3). The document has been uploaded to MS Teams to guarantee a simultaneous update of the file from all partners. The main objective of this tool is to keep track of all dissemination activities of the project. It will also facilitate the comparison of current activities to the original dissemination plan. The final established list of dissemination activities and scientific publications will be



included in the Final Communication, Dissemination and Capacity Building Report (D8.5, M48).

3.3.1.1 Dissemination activities

Table 3 lists the different dissemination activities extracted from the dissemination monitoring tool. The three columns show respectively: the results for the first year (until M12, September 2022); the results from M12 to M24; and the results since the beginning of the project.

Table 3. List of dissemination activities.

<u>Dissemination activities</u>	<u>To M12</u>	<u>From M12 to M24</u>	<u>TOTAL</u>
Organisation and/or Participation to Conferences	2	4	6
Organisation and/or Participation to Workshops	5	2	7
Organisation and/or Participation to Trainings	1	1	2
Organisation and/or Participation to Meetings	3	4	7
Presentation (non-academic) to Conferences, Workshops, Exhibitions etc...	7	4	11
Participation in activities with other H2020 projects (Cluster, Sisters' projects ...)	3	7	10
Participation to General Public Events (Exhibitions, Trade Fairs etc..)	1	2	3
Distribution/Display of communication support materials	5	5	10
Promotion in Social Medias	32	27	59
News/Articles in Partner Organisation Website	11	5	16
News/Articles in Partner Organisation Newsletters	7	9	16
Input in Project Newsletters (including E-newsletters)	1	15	16
Media (e.g. Radio, TV, mailchimp campaigns)	0	1	1
Policy makers Outreach	1	4	5
Video/Film	0	3	3
Brokerage Events	0	0	0
Pitch Events	0	0	0
Others	0	0	0

3.3.3. Publications

The dissemination monitoring tool includes a tabulation for scientific publications, as listed in Table 4..

Table 4. List of scientific publications.

Scientific and Technical Publications	To M12	M12 to M24	TOTAL
Article in Peer-Reviewed Journal	1	1	2
Publication in conference proceedings	2	2	4
Poster	1	1	2
Book / Monograph	1	0	1
Press release	2	0	2



Scientific and Technical Publications	To M12	M12 to M24	TOTAL
Publication in Technical Journals/Magazines	2	1	3
Chapter in a Book	0	0	0
Thesis / Dissertation	0	0	0
Others	0	0	0

4.3.2 Dissemination events at a national, regional and international levels

The monitoring tool also includes an extensive list potential events to attend in order to promote and disseminate the project findings. The list also provides information about the event's date, location, type, type of the project promotion, partner involved, and number of people potentially reached. The list is regularly updated and covers events until 2025.



D8.3: Communication, dissemination, and capacity building strategy plan review

Table 5: List for the potential events for SophiA from October 2022 to October 2024.

IIR	2023	Europe	October 10-12	Paris, France	SIFA Interprofessional Refrigeration and its Applications Trade Show https://iifir.org/en/events/sifa-2024-interprofessional-refrigeration-and-applications-trade-show	Trade fair	Display & distribution COM supports	4,000	Article in Newsletter
							SophiA presentation		Social media
IIR	2023	Asia	October 12-14	Chennai, India	REFCOLD India 2023 https://iifir.org/en/events/refcold-india-2023	Conference	Short presentation via partner's presentation	10,000	Social media
							Display & distribution COM supports		
IIR	2023	North Africa	November 13-15	Alger, Algeria	Mega Clima Algeria 2023 https://iifir.org/en/events/mega-clima-algeria-2023	Conference	Short presentation via partner's presentation	3,000	Social media
							Display & distribution COM supports		Others
IIR	2024	Asia	April 8-10	Beijing, China	https://en.cr-expo.com/?gclid=EAlaIqBChMItYLOJa4_gIV4gUGAB0lCwp2EAAVASAAEgI7YPD	Exhibition	Short presentation via partner's presentation	3,000	Social media
IIR	2024	Oceania	April 21-24	Jeju, Korea	11th Asian Conference on Refrigeration and Air Conditioning https://acra2022.scimeeting.cn/en/web/index/	Conference	Short presentation via partner's presentation	5,000	Social media
IIR	2024	Europe	May	Paris, France	14th IIR Conference on Phase-Change Materials and Slurries for Refrigeration and Air Conditioning	Conference	Short presentation via partner's presentation	2,000	Social media
							Display & distribution COM supports		
IIR	2024	Oceania	June	Tokyo, Japan	8th IIR Conference on Sustainability and the Cold Chain (ICCC 2024)	Conference	Display & distribution COM supports	5,000	Social media
							SophiA workshop		Article in Newsletter
IIR	2024		June 26	Worldwide	World Refrigeration Day https://worldrefrigerationday.org/	Conference	Short presentation via partner's presentation		Article in Newsletter
IIR	2024	North & Central America	July 15-18	West Lafayette, Indiana, USA	-19th International Refrigeration and air conditioning conference at Purdue	Conference	Short presentation via partner's presentation	5000	Article in Newsletter
							SophiA presentation		Social media
IIR	2024	North & Central America	August 11-14	College Park, Maryland, USA	16th IIR-Gustav Lorentzen Conference on Natural Refrigerants (GL 2024)	Conference	SophiA workshop	3000	Article in website
							SophiA presentation		Social media
IIR	2024	Asia	August 27-30	Shenzhen, China	China Heat Pump Conference 2024	Conference	Display & distribution COM supports		Social media
IIR	2024	Europe	September	Bratislava, Slovakia	11th IIR Conference on Compressors and Refrigerants	Conference	Short presentation via partner's presentation	1,000	Social media
IIR	2024	Oceania	September	Baotou, China	10th IIR Conference on Caloric Cooling and Applications of Caloric Materials (Thermag)	Conference	Short presentation via partner's presentation	1,000	Social media
HKA	2024	Europe	To be confirmed	Brussels, Belgium	EU Sustainable Energy Week 2022, 2023, 2024 and 2025	Conference	Display & distribution COM supports	5,000	Social media
							SophiA workshop		Article in Newsletter
SEZ		Europe		Brussels, Belgium	BRIDG initiative meetings	Workshop	SophiA presentation	5,000	Social media
									Article in Newsletter
HKA	2024	Europe	October	Nuremberg, Germany	Chillventa 2024	Trade fair	SophiA presentation	5,000	Social media
									Agenda workshop/training

D8.3: Communication, dissemination, and capacity building strategy plan review

IIR	2025	Europe	June 12-13	Milan, Italy	Centro Studi Galileo conference https://www.centrogalileo.it	Conference	Display & distribution COM supports	2000	Article in Newsletter
							Short presentation via partner's prese		Social media
IIR	2025		June 26	Worldwide	World Refrigeration Day https://worldrefrigerationday.org/	Conference	short presentation via partner's presentation	1000	Article in Newsletter

5. CAPACITY BUILDING AND KNOWLEDGE EXCHANGE NETWORK

5.1 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.

5.1.1 Capacity building timeline

Figure 29 illustrates the suggested capacity building timeline, including educational and technical session, showrooms, handbooks and knowledge exchanges.





Figure 29: Suggested timeline for the capacity building materials.

5.1.2 Demonstration Site Launch Days and Seminars

A Demonstration Site Launch Day will be organised in Burkina Faso, Cameroon, Malawi and Uganda. National, regional and international participants will be invited to these events. This includes policy makers, municipalities, EU Delegations, companies, planners, researchers, developers, operators, end users, journalists and the general public. The consortium will also use this opportunity to organise international seminars on the cold chain. This will be done by the IIR Working Group “Cold Chain in Hot Countries”.

This activity is related to the Task 8.4: Organisation of Demonstration Site Launch Days and Seminars which will start in M24 and will be led by the IIR.

5.1.3 Handbook for building SophiA systems on-site

Two handbooks will be set up to support local production of SophiA systems, and thus, contribute to a sustainable local economic development. The handbooks are addressed to both European and African companies which intend to commercialise the SophiA systems.

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

5.1.4 Educational and training sessions

This activity is related to the Task 8.6: Educational and technical training sessions, led by 2iE. The educational and training materials will be developed by the main partners involved in the design of SophiA technologies. This includes HKA, Simply Solar and OST-SPF from Europe, and 2iE, Makerere University and Everflo from Africa. Depending on the needs, other partners can and will be involved any time during the project. This activity is related to the Task 8.6: Educational and technical training sessions, led by 2iE.



July 2022 - First edition of the International Sustainability Summer School, Rapperswil, Switzerland

The International Summer School on Sustainability, organised by OST-SPF, together with HKA, took place from 25-29 July 2022 at the OST Campus Rapperswil. 30 students from Germany, Switzerland and Romania attended the Summer School. This educational activity addressed the needs of students from SophiA academic partners, the first category of stakeholders identified, on various topics such as clean technologies for heating, cooling and electricity production, as well as water treatment). This event was a good opportunity for SophiA partners to present all SophiA technologies to an international audience. Students expressed their interest to work on this project. HKA held presentations about the overall SophiA concept, the refrigeration as well as water technologies. Simply Solar and OST-SPF about the solar technologies and 2iE about solar energy in Africa and thermochemical energy storage.

Table 6 presents the sessions held by SophiA partners during the summer school.

Table 6: Sessions held by SophiA partners during the International Summer School, 2022.

Nr.	Title	Lecturer
1.	SophiA Solar Technologies – Planning and Designing	Heike Hoedt, Simply Solar
2.	Contribution of Solar Thermal to Sustainable Energy Services in West Africa	Kokouvi Edem N'TSOUKPOE, 2iE
3.	Photovoltaic Thermal (PVT) Collectors	Daniel Zenhäusern, OST-SPF
4.	SophiA Refrigeration Technologies	Oliver Schmidt, HKA
5.	SophiA water purification	Jan Hoinkis, Sneha De, HKA
6.	Thermochemical heat storage	Kokouvi Edem N'TSOUKPOE, 2iE
7.	Visit at OST Campus, including the SPF outdoor testing lab and the SophiA solar lab facilities	Mihaela Dudita, Daniel Zenhäusern, OST-SPF





Figure 30: Participants of the summer school (2022).

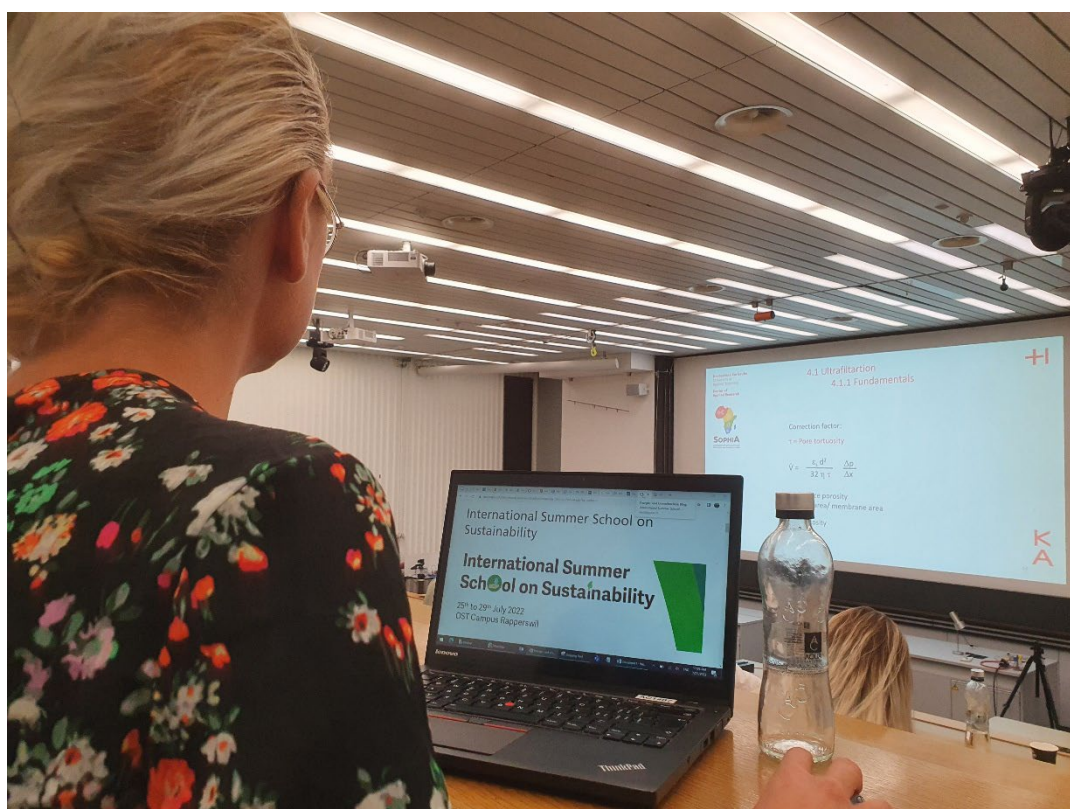


Figure 31: SophiA water technologies during the summer school (2022).



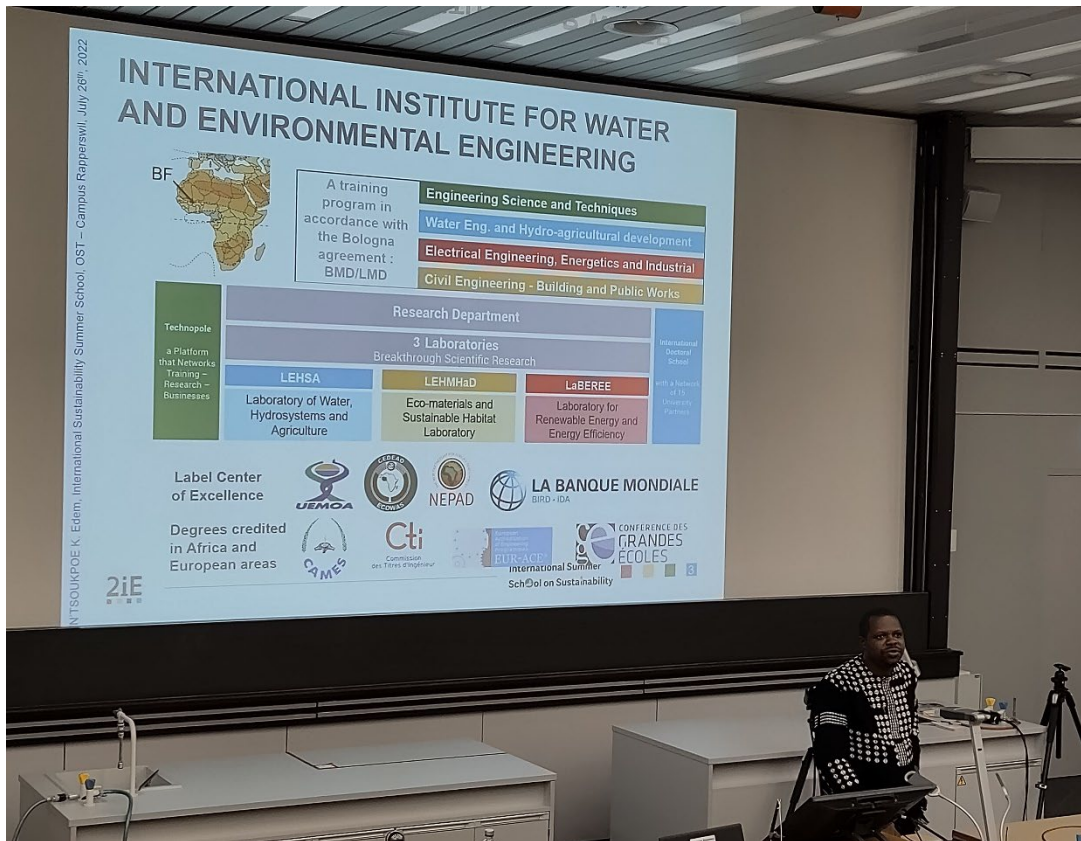


Figure 32: Solar technologies in Africa presented by SophiA partner 2iE.

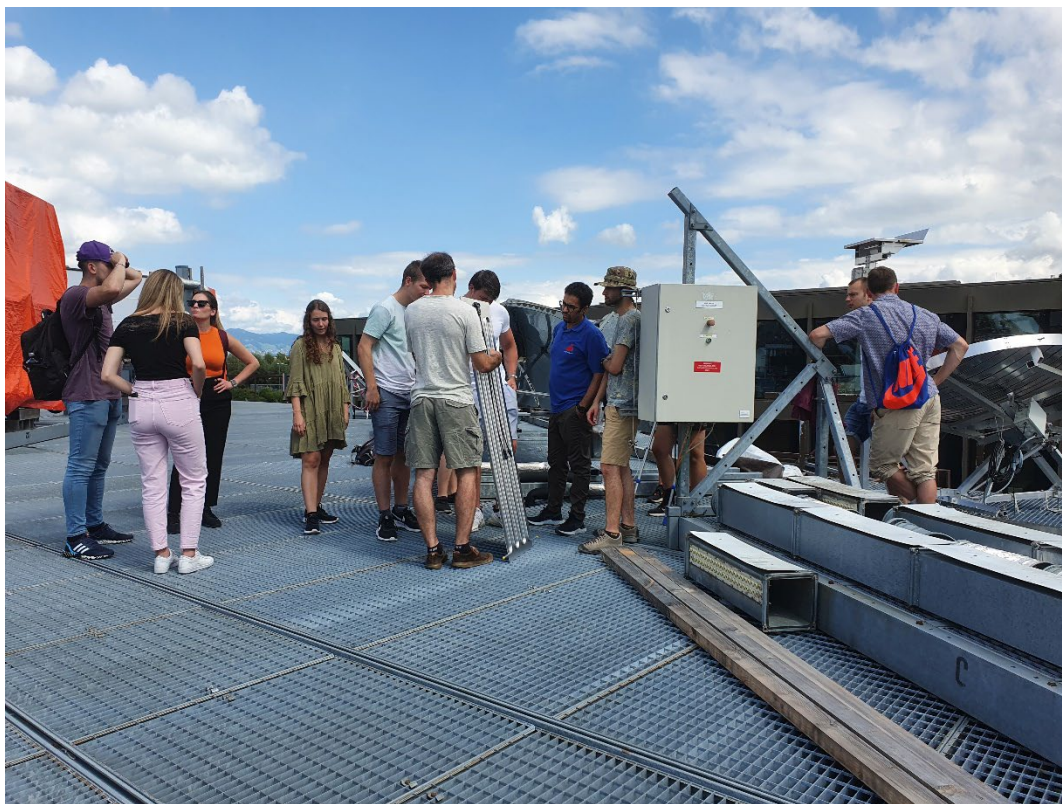


Figure 33: SophiA and OST-SPF lab visits in Rapperswil, Switzerland.



March 2023 – “Train the trainers” during SophiA M18 meeting, Cape Town, South Africa

Held from March 15 to 17, 2023, the first “Train the trainers” activity took place in hybrid format between South Africa, Germany and Switzerland (Figure 34). Most of the SophiA consortium partners met in Cape Town, South Africa, at the facilities of Everflo, and those partners who could not travel joined the meeting online from the Karlsruhe University of Applied Sciences in Germany or from Eastern University of Applied Sciences in Switzerland. The partners responsible for Capacity Building (2IE, HKA and OST-SPF) provided this first internal “Train the Trainers” workshop which focused on the main topics and technologies of the project: refrigeration, water treatment, solar PV and solar thermal (Figure 35). This was an important step in the preparation of the material and content for the training activities that SophiA will organise for external stakeholders later in the project. The theoretical sessions were complemented by practical activities at Everflo factory, where representatives of SophiA partners Everflo and Kovco showed the SophiA containers components (Figure 36). With more than 30 participants in total, the first “Train the trainers” was an excellent opportunity for SophiA consortium to explore and get a deeper understanding of all SophiA technologies (Figure 37).



Figure 34: First internal SophiA “Train the trainers” Cape Town, South Africa.





Figure 35: More than 30 participants (onsite and online) during the “Train the trainers”.



Figure 36: Visits to the SophiA systems from Everflo factory, South Africa.



Figure 37: SophiA partners during the first “Train the trainers” workshop at Everflo.

July 2023, Second edition of the International Sustainability Summer School, Brasov, Romania

34 students from five different countries (Germany, France, Romania, Switzerland and Sudan) attended the second edition of the International Summer School on Sustainability in Braşov, Romania from July 24 to 28, 2023, jointly organized by – HKA, OST and UNITBV, the Transilvania University Braşov - Romania. Throughout the week, students had the unique opportunity to discuss with leading experts in the fields of sustainable energy technology, environmental engineering and biodiversity. Presentations discussed sustainable energy systems, wastewater treatment, energy storage, artificial intelligence for agriculture, and green computing. Andreas Reber and Kanchan Bohara (OST) shared their expertise on solar-powered systems, while Andre Podleisek (OST) presented a roadmap to carbon neutrality. Michael Kauffeld (HKA) spoke about sustainable heating and cooling solutions as developed and tested in the project SophiA for African hospitals Jan Hoinkis (HKA) presented the development and construction of the solar-powered SophiA water treatment system. This year's Sustainability Summer School was not only about sustainability and science, but also about personal growth. William Andersons (TOASTMASTERS Brasov) gave a talk on overcoming the fear of public speaking and Bianca Stefanescu (AIESEC Brasov) conducted a workshop on brand management and entrepreneurship. Team building activities created the spirit of a community with the same goal: to inspire the new generation to create a better and more sustainable world.



Table 7 presents the sessions held by SophiA partners during the summer school.

Table 7: Sessions held by SophiA partners during the International Summer School, 2023.

Nr.	Title	Lecturer
1.	Energy game	Kanchan Bohara (OST)
2.	Carbon neutrality roadmap	André Podleisek (OST)
3.	Sustainable heating & cooling solutions and their application in EU SophiA project	Michael Kauffeld (HKA)
4.	Solar active houses	Kanchan Bohara (OST)
5.	Plan your own solar photovoltaic system	Andreas Reber (OST)
6.	Water treatment technologies and their application in SophiA	Jan Hoinkis, Sneha De (HKA)



Figure 38: Sustainable heating and cooling technologies in SophiA.





Figure 39: Storytelling and the power of words session during the summer school.



Figure 40: SophiA communication support materials to promote the project.



August 2023, Training and demonstration on SophiA solar technologies at Simply Solar

22 African engineers from a postgraduate course at Hochschule Weihenstephan-Triesdorf had the opportunity to attend a theoretical and practical session about solar technologies used in SophiA, with a focus on solar thermal and solar cooking, at the facilities of SophiA partner Simply Solar in Aislingen, Germany, 21-22 August 2023.



Figure 41: SophiA solar thermal technologies introduced to African engineers (2023).



Figure 42: SophiA communication support materials used to introduce the project (2023).



5.2 SophiA Knowledge Exchange Network

Since M6, SEZ and other project partners have created the SophiA Knowledge Exchange Network (KEN), which aims to further increase collaboration, knowledge sharing, learning and building towards common goals. The SophiA KEN has first been focusing on attending clustering meetings and exchanges with other projects and networks in order to identify common ground and similar challenges in the daily work. These exchanges have set the foundation for fruitful collaborations. In recent months, the following activities can be highlighted:

- On 25th January 2022, SophiA was one of the four African Green Deal funded projects represented in the “Energy research projects in cooperation with Africa”, an online meeting organised by the European Climate, Infrastructure and Environment Executive Agency (CINEA Energy research projects in cooperation with Africa) funded by the European Commission.
- On 8th June 2022, the Green Deal Projects Support Office (GD-SO) organized the first “Clean Energy Working Group Meeting”, to which members of HKA, SEZ and OST-SPF participated. The event took place online and opened the floor to all participating similar projects to first present themselves and then establish contacts and discussions with each other in different breakout sessions.
- On 17th August 2022, there was a bilateral exchange between SophiA and the SteamBioAfrica project. SteamBioAfrica is one of several already identified related projects to SophiA. Focussing on solid biofuel as a secure and sustainable alternative to fossil coal in Namibia, Botswana and South Africa. Although the project’s technical content differs from SophiA, many approaches and activities have similarities. In the call with Huw Parry, Innovation Lead of SteamBioAfrica, members from SEZ and IIR identified several exchange opportunities on common activities and respective best practices, in particular ethics aspects in H2020 projects, water purification techniques, gender equality and social inclusion, as well as general communication and dissemination activities. Both parties agreed to further exchange in these areas and to support one another.
- On 4th October 2022, SophiA participated to the 1st LEAP-RE Stakeholder Forum, which took place in hybrid format in Pretoria, South Africa and online. Members of HKA, IIR and SEZ participated to the event online, presented the project and introduced the audience to the project’s interest for collaboration, especially concerning capacity building activities, market uptake, as well as dissemination and networking activities.



- On 9th November 2022, ENERGICA, one of the projects related to SophiA held their 2nd Consortium Meeting in Nairobi and had invited SophiA together with the other so called 'sister projects' to present themselves and participate. After a short Q&A with the audience, SophiA then also participated to a workshop where common problems and possible best practices have been discussed together between the participating projects.
- On 8th March 2023, there was an exchange between SophiA (represented by HKA and SEZ), and DESIREE (Demand side management, Social Infrastructures, Renewable and Energy Efficiency). The purpose of DESIREE is to support and create enabling conditions for innovative business models in targeted African countries, e.g. Uganda, which is also a partnering country and demo site for the containers built during the SophiA project. The meeting was interesting for all sides, and it was agreed to keep in touch and exchange again at a later stage of the project when commercialization of the containers will start.
- On 29th March 2023, the GD-SO Clean Energy Working Group organized a communication coordination meeting where SophiA attended. The event took place online and allowed a common exchange about questions and best practices concerning communication activities of the different projects. Furthermore, GD-SO provided to the participants helpful information about EU support activities, like promotion of news and events via the GD-SO website and planned training sessions concerning social media, storytelling and stakeholder engagement.
- On 3rd May 2023, the GD-SO Clean Energy Working Group organized their third meet-up, which SophiA attended as well. The purpose of the meeting was to give the projects the opportunity to provide updates about the implementation of actions, discuss issues and bottlenecks encountered and learn more about success stories and challenges between each other.
- From 14th-16th June 2023, the Sustainable Places Conference 2023 took place in Madrid, Spain as a hybrid event. SophiA was part of a collaborative workshop called "EU-Africa Green Deal Projects" with REFFECT Africa, ENERGICA and SteamBioAfrica. Every project had the opportunity to present itself and discuss together about Africa-Europe energy collaboration, market uptake of sustainable energy technologies and capacity building at local level. Irene Robles García from SEZ participated on site. The project received a lot of interest from the audience, as well as, valuable insights into the activities of the other sister projects.

In addition to these meetings, SEZ members will participate in three additional events in the following months:



- 2nd LEAP-RE Stakeholder Forum (hybrid), 10-13 October 2023.
- Invitation of related projects to SophiA to the M24 consortium meeting 17/18 October 2023.

Over the last 18 months, building collaboration and knowledge exchange activities to which SophiA participated led to some fruitful discussions and new insights into common challenges and possible solutions. Connection in social media also helped to stay up to date with each other's progress, information about upcoming interesting events and further collaboration opportunities.

Throughout the next years, own activities and meetings will be organised, based on the results identified in the first step. The Knowledge Exchange Network intends to meet once a year, online and when possible, on-site, in combination with other project activities, workshops or events. Where deemed useful and necessary for members of the Network, different speakers or experts will be invited to join the meetings. Between meetings, SophiA partners will continue to maintain the contact and collaboration with the Knowledge Exchange Network members. This will include, for example, the distribution of communication material including news or articles.



6. CONCLUSIONS

This report (D8.3) describes the review of the communication, dissemination and capacity building strategy plan (D8.1) drafted by the IIR work package leader and updated the first review (D8.2). The initial strategy on the communication, dissemination and capacity building adopted by the SophiA partners is to ensure the maximum return on investment provided for all financing parties – the SophiA consortium partners and the European Commission.

The communication strategy plan highlights the target group and stakeholders and the general SophiA key message.

The Sophia website has been updated, and new content is regularly added, especially on News & Events and Downloads pages. An additional webpage for the “SophiA Technologies” has been added.

The SophiA social media LinkedIn and X (ex-Twitter) accounts are very active, thanks to the #Sophiabottle. Traffic on YouTube account will increase with the publication of the SophiA introductory video.

Brochures and posters were updated. Newsletters and e-newsletters are regularly published. A new communication support, the SOFACTs, was launched and published on the website.

The SophiA consortium is fully committed to fulfil the dissemination strategy plan. Partners have so far presented, organised, participated in about more than 50 conference, workshops, trainings or meetings, at which they also have displayed and distributed communication support materials since the beginning of the project. So far, technical partners published 14 publications.

Several training and education activities were held in the second year of the project and the Knowledge Exchange Network task leaders have attended and participated to collaboration meetings, focusing on knowledge sharing and learning purposes.

This communication, dissemination and capacity building strategy plan strategy plan is a living document, and it will be updated throughout the project by the WP8 leader as part of D8.2 Communication, Dissemination and Capacity Building Strategy Plan Review (M36), based on the information provided by the partners through the dissemination monitoring tool. The final Communication, Dissemination and Capacity Building Strategy Plan (M48) will summarise all project achievements.



7. ANNEXES

7.1 Annex 1

SophiA List of Dissemination Activities																
Participant	Type of Dissemination Activities (max.2 per event)	Name of Event, Publication, etc.	Place City/Country	Date (From)	Date (To)	Formats of Events	Organiser/ Publisher	Title and/or Description of Dissemination Activity	URL Link	Link on SharePoint	Type of Audience	Size of audience	Policy make reached (if)	World Reg Reached		
Click on Cell and Use of Drop-down		Drop-down list below						Drop-down list below								
1	HKA	SPP-OST, MAK, ZIE, SEI, HPMG, IIR, OIA, EVERILO, KOVCO, HS, SISO, RS	Organisation and/or Participation to Meeting	SophiA Kick-Off meeting day 1	Karlsruhe Germany	12/10/21	13/10/21	Hybrid	HKA	Partners participation to the Kick off meeting	https://twitter.com/SophiA4Africa/status/1447946399289418389?c=203&utm_source=twitter&utm_medium=referral	Consortium	40	3	Europe and Africa	
1	HKA	SPP-OST, MAK, ZIE, SEI, HPMG, IIR, OIA, EVERILO, KOVCO, HS, SISO, RS	Promotion in Social Media	SophiA Twitter		13/10/2021	N/A	HKA	SophiA Kick-Off meeting Day 2 on Twitter	https://twitter.com/SophiA4Africa/status/1449232384872250707?c=203&utm_source=twitter&utm_medium=referral		1500		Europe and Africa		
2	IIR	HKA, SPP-OST, SEI	Press release	SophiA Press Release 1	Paris France	21/10/21	N/A	IIR	New EU funded project began on October 1st, 2021 "SophiA - Sustainable off-grid solutions for pharmacist and hospitals in Africa"	https://www.medicalnewstoday.com/articles/542642#section:october-1st-2021-news:curtainable-off-grid-solutions-for-pharmacists-and-hospitals-in-africa	Scientific community, General Public, Policy Makers	6000		59	Worldwide	
2	IIR	HKA, SPP-OST, SEI	Promotion in Social Media	SophiA Press Release 1	Paris France	21/10/21	N/A	IIR	Discover the new EU funded project "SophiA"	https://twitter.com/SophiA4Africa/status/1451113545432637471?c=203&utm_source=twitter&utm_medium=referral https://www.linkedin.com/feed/update/urn:li:activity:65195104535694423	Public media, Potential end-users, Courtiers				Worldwide	
3	HKA	HKA	News/Article in Partner Organisation Website	HKA website	Karlsruhe Germany	18/10/21	N/A	HKA	Forschungsprojekt zur Entwicklung nachhaltiger und energieautonomer Kühl- und Heizsysteme für afrikanische Krankenhäuser startet	https://www.karlsruhe.de/de/medien/medienbulletin/medienbulletin/2021/10/aktuelle-ereignisse/2021-10-18-forschungsprojekt-sophia				2	Europe and Africa	
4	HKA	HKA	Publication in Technical Journal/Magazine	Badische Neueste Nachrichten (BNH)	Karlsruhe Germany	19/10/21	N/A	HKA	SophiA soll bei Impfstoffherstellung helfen	https://www.bnh.de/aktuelle-ereignisse/2021/10/aktuelle-ereignisse/2021-10-19-sophia-soll-bei-impfstoffherstellung-helfen					Partner's Country	
5	IIR	IIR	News/Article in Partner Organisation Website	Publication on IIR Project's webpage	Paris France	1/10/21	N/A	IIR	SophiA in the IIR Region of project's webpage	https://iir.ec.europa.eu/signals-project				60	Worldwide	
6	MAK	MAK	Organisation and/or Participation to Workshop	MAK launch of SophiA day	Kampala, Uganda	9/12/21		Hybrid	MAK	Launch of the Sustainable Off-grid Solutions for Pharmacies and Hospitals in Africa (SophiA) project.	https://twitter.com/MAKMakerere/status/1463440761279688703?c=203&utm_source=twitter&utm_medium=referral	Scientific community, Civil Society, Public	500		2	Europe and Africa
6	MAK	MAK	Promotion in Social Media	MAK launch of SophiA day	Kampala, Uganda	9/12/21		N/A	MAK	SophiA Africa official launch day by @Makerere	https://twitter.com/SophiA4Africa/status/146344789192497796?c=203&utm_source=twitter&utm_medium=referral					
7	IIR	HKA	Promotion in Social Media	SophiA Social Media	Paris France	22/12/21	27/12/21	N/A	IIR	All started at the @SophiA4Africa kick-meeting in October after our descent in vacation in the lake Zürich! Fallau the SophiA Battle on the Tour!	https://twitter.com/SophiA4Africa/status/147262229766582225?c=203&utm_source=twitter&utm_medium=referral		20		Worldwide	
7	IIR	HKA	Promotion in Social Media	SophiA Social Media	Paris France	22/12/21	27/12/21	N/A	IIR	The @SophiA4Africa Battle on Christmas 2021 trip!	https://twitter.com/SophiA4Africa/status/147533464263249170?c=203&utm_source=twitter&utm_medium=referral		20		Worldwide	
8	IIR	IIR	Promotion in Social Media	SophiA Social Media	Paris France	6/1/22	11/1/22	N/A	IIR	SophiA Battle on the Tour in Guadeloupe and attending SophiA Battle on the Tour attending CLIMPEO workshop	https://twitter.com/SophiA4Africa/status/1478170741166793485?c=203&utm_source=twitter&utm_medium=referral https://twitter.com/SophiA4Africa/status/147962202395048383?c=203&utm_source=twitter&utm_medium=referral https://twitter.com/SophiA4Africa/status/1480934556563011023	Scientific community, Industry, General Public, Investors	30		Worldwide	

READ ME FIRST

Communication & Dissemination

Sci ...

Figure 43: SophiA dissemination activities from the SophiA Dissemination, Communication & Publications Monitoring Tool V1.xlsm

7.2 Annex 2

SophiA List of Scientific Publications																	
No	Partne rs	Type of Publication	D.O.I	SharePoint Link	Year of Publication/confe rence	Available in Open Access?	Title	Author(s)	Conference/Workshop (if publication in conference) and place	Title of the Journal / Proceedings/Boo k series	Volume/issue and year (if journal paper)	Relevant Pages	Publisher	Publisher website Link	ISSN and/or ISBN	Impact Factor (IF)	CiteScore
		Click on Cell and Use of Drop-down list					Drop-down list										
1	HKA	Article in Peer-Reviewed Journal	https://doi.org/10.1016/j.intdis.2021.03.010	https://www.sophia-project.eu/2021/03/010	2021	Yes - available in Gold Open Access	SOPHIA: European funded project for vaccine storage in Africa:	M. Kauffeld, I. Calamba		International Journal of Refrigeration	Volume 129, October 2021	Pages v-vii	Elsevier	https://www.sciencedirect.com/journal/international-journal-of-refrigeration	ISSN: 0140-7007	3.629	6.5
2	HKA	Book / Monograph			2022	Yes - available in Gold Open Access	Natural Refrigerants: Applications and Practical Guideline	Eckert, Michael; Kauffeld, Michael; Siegmund, Volker (Ed.)							ISBN 978-3-8007-9330-7, e-book: ISBN 978-3-8007-9331-4		
3	IIR	Publication in conference proceeding	https://doi.org/10.11462/jir.2022.0019		2022	Yes - available in Gold Open Access	Potential application of CO ₂ in developing countries with high ambient temperature	Ike COLOMBO, Yerr ALLOUONE, Kakaoui Edouard, NITSCHKE, Oliver, SCHMID, Michael KAUFFELD	GL2022 IIR-Gustav Lorentzen Conference on Natural Refrigerants June 13-15 Trondheim, Norway	IIR-Gustav Lorentzen Conference on Natural Refrigerant			IIR		ISSN: 0151-1637		
4	HKA	Publication in conference proceeding	https://doi.org/10.11462/jir.2022.0019		2022	Yes - available in Gold Open Access	Caracade with two-phase thermariphan - Simulation of an evaporating two-phase flow with variable heat transfer coefficient*	SCHMID O., NITSCHKE T., MELITO E., GUND S., KAUFFELD M.	GL2022 IIR-Gustav Lorentzen Conference on Natural Refrigerants June 13-15 Trondheim, Norway	IIR-Gustav Lorentzen Conference on Natural Refrigerant			IIR		ISSN: 0151-1638		
5																	
6																	
7																	
8																	
9																	

Figure 44: List of potential peer-reviewed journals from the SophiA Dissemination, Communication & Publications Monitoring Tool V1.xlsm.

7.3 Annex 3



Welcome to SophiA monitoring tool!



SOPHIA

These are instructions for all partners to help you filling 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/hesitation please contact Ina Colombo (IIR) i.colombo@iifir.org

General
This monitoring tool is to be updated on a monthly basis.
Make sure you are editing the online version 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 **do not** try to download this file, work on an off-line version and try to upload it again.
The workbook has 2 excel sheets: one "**Communication & Dissemination**" to report the **communications and the dissemination events** (non-academic conferences, publications in technical magazines, press release, social media...). Another one "**Scientific Publications**" to report the **academic journal and conference papers**.

To report "Communication & Dissemination activities" do the following

1. Open the "Communication & Dissemination" worksheet.
2. There, if you have participated during the last month to a dissemination activity, please provide input, else do not edit and close the file.
3. If editing: Go to the next blank row and do the following:

In column (B) "partners", click on the blank partner cell, a drop-down list sign will appear , press that one and select your organisation.
In column (C) "participating partners", click on the blank partner cell and select other partners participating to the dissemination activity (possible multi-selection) else leave blank.
In column (D) "Type of Dissemination Activities", it is recommended to only report 2 activities mentioned in column (E) "Name of Event, Publication, etc." below, but if necessary, please insert an additional row. To report an activity, click on the cell, and select from the drop list.
In column (E) include the name of the event (if non-academic conference for expel) or the title of the publication (if in press release/technical magazines, social media).
In column (F) include the city and country of the event.
In columns (G) and (H) Indicate the event starting and ending date, respectively.
In column (I) indicate the format of the event, mainly when reporting communication activities in conferences, workshops, meetings...select the format of the event from the drop list. Do the same for the second event if applicable. Else put Non applicable or leave blank.
In column (J), write the name of the organiser or publisher.
In column (K) include the title of your activity (expel. name of your presentation, title of the magazine publication ...) and provide with a short description about the performed activity. If title not applicable, only provide with the short description.
In column (L) provide with the URL link. In column (M) provide with a link for the Proof Documents located on Teams: **General --> Collaboration WP8 --> Task WP8 --> T 8.1 DCCB Strategy Plan --> Proof Documents --> Your organisation --> Publications**
In column (N), click on the blank cell and select the type of audience from the drop list (possible multi-selection).
Select the size of the audience in column (O) if known, else give an approximative number (You can check on the event website).
In column (P) mention the number of policy makers reached if known.
In the column (Q), select the world region reached through your dissemination activity from the drop list.

To report "Scientific publications" do the following:

1. Open the "Scientific publications" worksheet.
2. There, if you have participated during the last month to a dissemination activity with an academic scientific publication, please provide input, else do not edit.
3. If editing: Go to the next blank row and do the following:

In column (B) "partners", click on the blank partner cell, a drop-down list sign will appear , press that one and select your organisation.
In column (C) select the type of the publication from the drop list.
In column (D) Select the DOI if available.
In column (E) Provide with a link to the PDF document on Teams : **General --> Collaboration WP8 --> Task WP8 --> T 8.1 DCCB Strategy Plan --> Proof Documents --> Your organisation --> Publications**
In column (F) Indicate the year of publication if journal paper or the year of the conference if conference paper.
In column (G) Indicate if this is an open access publication from the drop list.
In column (H) Indicate the title of the journal/conference paper.
In column (I) List the authors in the order as listed in the publication.
If conference paper, specify the conference name and place in column (J).
Specify the title of the journal (if journal paper) or title of the proceedings (if conference paper) in column (K).
If journal paper, provide with volume, issue and year in column (L).
Indicate the publication pages in the volume/proceedings in column (M).
Indicate the publisher in column (N).
Indicate the publisher website link in column (O).
In column (P) indicate the ISSN/ISBN (information might be found in the publisher website)
In column (Q) indicate the impact factor, if journal paper (information might be found in the publisher website)
In column (R) indicate the sitescore, if journal paper (information might be found in the publisher website)

Figure 45: READ ME FIRST Guideline.





sophia4africa.eu

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

Disclaimer: The sole responsibility for the content of this paper lies with the authors.

It does not necessarily reflect the opinion of the European Commission (EC).

The EC is not responsible for any use that may be made of the information it contains.

© SOPHIA. All rights reserved.

Any duplication or use of objects such as diagrams in other electronic or printed publications is not permitted without the author's agreement.