



SOPHIA

Sustainable Off-grid solutions for
Pharmacies and Hospitals In Africa

DISSEMINATION, COMMUNICATION AND CAPACITY BUILDING STRATEGY PLAN REVIEW

DELIVERABLE D8.2

VERSION 1.0

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¹PU = Public

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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)*

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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 presents several actions and activities undertaken since the beginning of the project until M12 that guarantee maximal dissemination of the project’s results. Most of communication supports have been developed (website, social medias, brochure, newsletter, poster and rolled up banner). Using communication support materials, the consortium actively disseminates the SophiA project through various publication channels such as presentations, organisations and participations in conferences, workshops, trainings and meetings. Some articles in technical journals/magazines have been published and some presentations have been held at academic conferences. Dissemination enhancement activities will be carried out when the results are obtained.

The D8.2 Communication, Dissemination and Capacity Building Strategy Plan Review (M12) is a living document, regularly updated in M24 and 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 distilled water for medical purposes;
- hot water and steam for thermal requirements of the hospitals;
- cooling of surgical or intensive care units;
- cooling of medicines and food at +5°C;
- low temperature storage of blood plasma at -30°C;
- ultra-low temperature storage of sensitive medication (e.g. some Covid-19 or Ebola vaccines) at -70°C.
- emergency electricity supply for use during power grid failure.

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 M12 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);



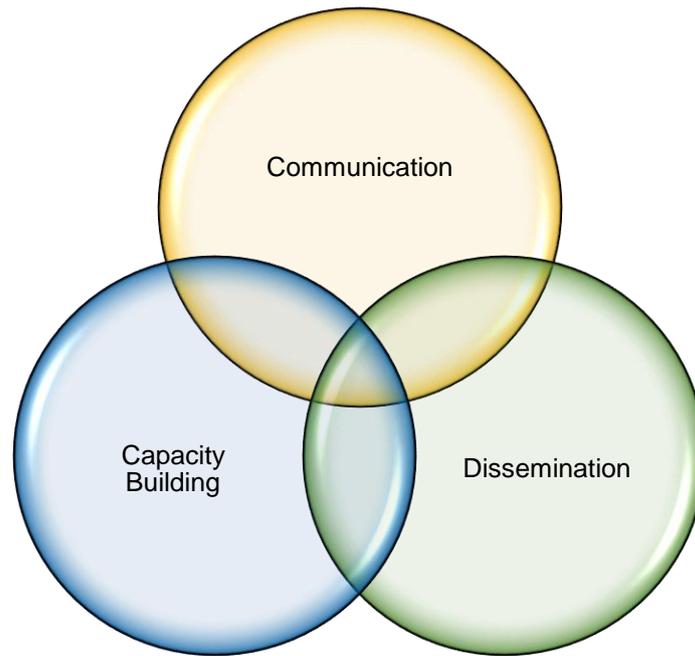


Figure 1 Combination between communication, dissemination and capacity building during the project lifetime

- 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.



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	Not Yet	IIR
D8.3 Dissemination, Communication and Capacity Building Strategy Plan Review (M24)	Public	M24	Not Yet	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

Table 1 List of deliverables planned within WP8

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.

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

Table 2 Partners involvement and roles in WP8

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 includes actions to transfer knowledge obtained from the project results to each target audience. Moreover, it described the capacity building plan.

This review document (D8.2) presents 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 contains a description of all dissemination activities that took place during the first year of the project. The communication, dissemination and capacity building strategy plan will be reviewed again annually (M24 and M36) throughout the project duration by the WP8 leader.

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. Each



meeting starts with an agenda prepared by IIR. Furthermore, IIR prepares the meeting minutes to summarize what was discussed and to outline next tasks for the partners. The DIS&COM group met for one hour on the following dates: 03/10/21, 17/10/21, 17/11/21, 13/01/22, 10/02/22, 01/06/22, 07/09/22. The group has been kept informed of all dissemination activities such as publications, conference papers, press releases, etc. to keep track of 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

Home page

Figure 3 shows the entire homepage. The first fifth (a) of the page is a banner with an automatic display dedicated to the main project aims. The webpage designer favoured to highlight four key aims with a descriptive text and a representative picture for each message at the bottom right of the banner in order to avoid an overload of information (see Figure 4). Concise, clear, and easy messages, which are automatically displayed one after the other every few seconds, become the eye-catching section of the homepage. The visitor can also display all the four key messages by clicking on the four pictures.

The second fifth (b) is dedicated to a small summary about the project including the main objectives, also here prioritising short texts. The introductory video once ready (~ M13) will replace the temporary six images currently used as placeholders.

The third fifth (c) of the homepage gives a glance about the goals and achievements of SophiA. The banner “subscribe to our newsletter!” in section (d) is placed just before the four demonstration sites currently represented by the flags of the pilot countries. Clicking the “view all demo sites” button directs the visitor to the “Demonstration Sites” tab.

The fourth fifth (e) shows all 13 partners of the SophiA consortium.



The last fifth (f) of the homepage is devoted to the most recent news. The latest news is highlighted compared to older ones. Clicking the “read more” button directs the reader to the “News & Events” tab.

a)



b)

ABOUT THE PROJECT

A stand-alone solution

The objective of the SophiA project is 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.

The EU-funded SophiA project will develop containerised solutions for hospitals using natural refrigerants, solar thermal energy and photovoltaics. This will make it possible for health care units to access carbon-neutral energy for electricity, heating and the cooling of medicine, as well as safe and clean drinking water, increasing quality of life in a sustainable way.

The systems will be manufactured in Africa, and they will be tested at four rural hospitals in remote regions of the continent. Project results will accelerate sustainable development, growth and economic transformation in Africa



[Learn More about SophiA](#)



c)



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 distilled water for medical purposes
-  Hot water and steam production for hospital thermal requirements
-  Cooling of surgical or intensive care units
-  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 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 with ethane, -30°C with CO₂, and +5°C with propane).

d)



OUR DEMO SITES

Four hospitals will be equipped with the SophiA-Systems as demo sites.

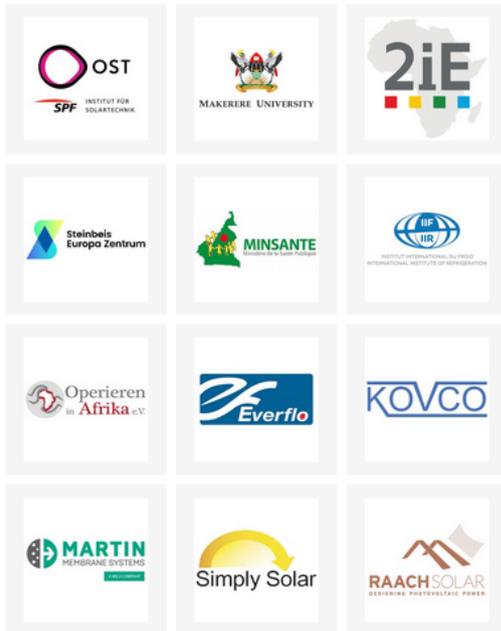
The systems will be tested and demonstrated at four rural hospitals in remote regions throughout the African continent covering the major geographical regions and different climatic conditions in Burkina Faso, Cameroon, Malawi and Uganda.

These field experiences allow us to adjust and make our manufacturing concepts more reliable.

[View all demo sites](#)



e)



OUR PARTNERS

13 partners from three European and four African countries

The SophiA consortium consists of thirteen carefully selected partners, building a strong multi-national and interdisciplinary team, well balanced between academia and industry. Covering all competences needed for research, design, development, integration, implementation and demonstration of the SophiA systems, the consortium is well set to deliver promising project results.

Project coordinator:



Karlsruhe University of Applied Sciences (HKA) is a state-owned institution of higher education. The University is very active in the area of applied research. The Institute of Refrigeration, Air-Conditioning and Environmental Engineering (IKKU) is the coordinator of the SophiA project.

f)

LATEST NEWS

What SophiA is up to!



SophiA workshop at GL 2022

Actualités • 22 June 2022

A very interactive SophiA workshop took place on the first day of the 15th IIR-Gustav Lorentzen Conference on Natural Refrigerants (GL 2022), in Trondheim (Norway) on June 13-15, 2022. SophiA partners (HKA and IIR) explained the benefits of this European Commission funded project on the African populations but also the complexity and constraints of CO2...

[Read more](#)



SophiA presentation during the ICCC 2022 IIR workshop "Projects on Clean and efficient refrigeration solutions for food and healthcare in developing countries"

Uncategorized • 17 May 2022

On April 13, 2022, during the 7th IIR International Conference on Sustainable Development and the Cold Chain (ICCC 2022), the...



SophiA promoted at SICRO

Exhibition • 11 April 2022

Our partner, the 2iE Institute, participated in the SICRO international exhibition of air conditioning and refrigeration in Ouagadougou, Burkina Faso...



Reward for Francis Kéré

Actualités • 11 April 2022

Francis Kéré won the Pritzker, Architecture Prize in 2022. Francis Kéré is the architect who designed the new hospital in...



ASHRAE Winter Conference & AHR Expo

Conference, Conference • 11 April 2022

SophiA took part in the 2022 ASHRAE Winter Conference & AHR Expo in Las Vegas. Didier Coulomb, Director General of...

Figure 3 [SophiA website homepage](#)



Figure 4 presents the four key messages “Better Healthcare”, “Clean Energy Technologies”, “Clean Water Facilities” and “Clean Cooling Solutions”. Each message is illustrated by a picture, respectively: medical doctors operating (a), PV solar panels (b), girl drinking clean and safe water (c), blood plasma cooling conservation (d).

a)



BETTER HEALTHCARE

Sustainably improve quality of life of populations through better treatment and working conditions in rural and remote health facilities in Africa.

[LEARN MORE](#)

Better Healthcare for Africa | Clean Energy Technologies | Clean Water Facilities | Clean Cooling Solutions

b)



CLEAN ENERGY TECHNOLOGIES

Use renewable, flexible and modular plug-in energy systems for delivering continuously and reliably energy for heating, cooling, water treatment and electricity

[LEARN MORE](#)

Better Healthcare for Africa | Clean Energy Technologies | Clean Water Facilities | Clean Cooling Solutions

c)



CLEAN WATER FACILITIES

Provide drinking water free of viruses and bacteria, as well as soft water and steam/hot water

[LEARN MORE](#)

Better Healthcare for Africa | Clean Energy Technologies | Clean Water Facilities | Clean Cooling Solutions



d)



Figure 4 SophiA key messages and photos in homepage

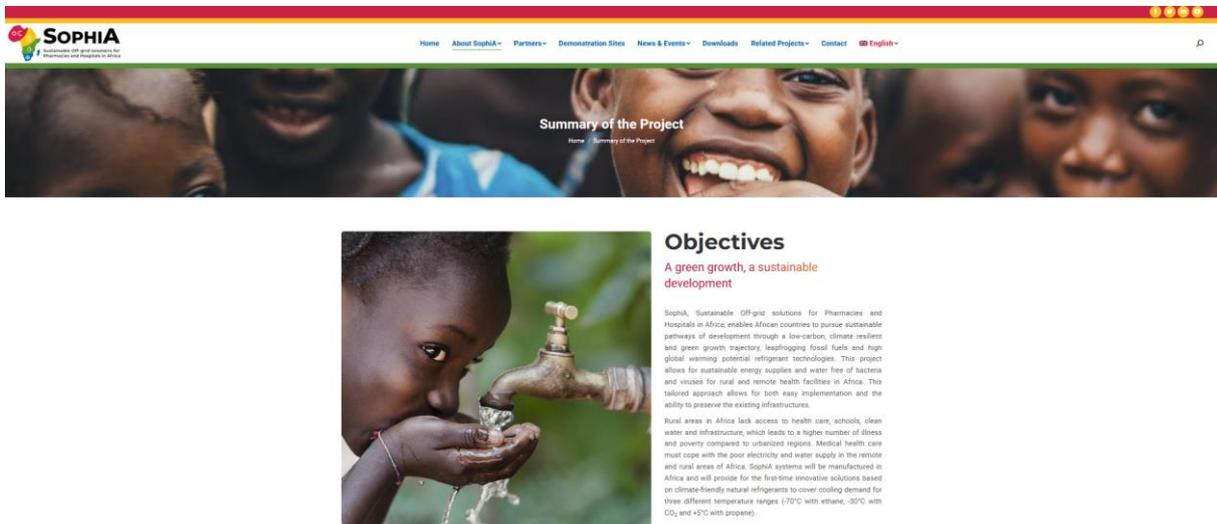
About SophiA” tab

The “About SophiA” tab is composed of three sub-categories: “Summary of the Project”, “Governance” and “Work Packages”.

Summary of the Project

The “Summary of the Project” sub-category (Figure 5) includes more specific information about the project objectives (a), technologies (b), locations (c) as well as the actors behind the project (funding body and partners) (d).

(a)



(b)

Technologies

An agile and respectful approach

Using various green technologies, SophiA will develop and manufacture locally innovative, modular, affordable and efficient solar powered systems for providing:

-  Safe, clean drinking water and distilled water for medical purposes
-  Hot water and steam production for thermal requirements of the hospitals
-  Cooling of surgical or intensive care units
-  Cooling of medicines and food at +5°C
-  Low temperature storage of blood plasma at -30 °C
-  Ultra-low temperature storage of sensitive medication (E.g. some Covid-19 vaccines) at -70°C
-  Emergency electricity supply for surgical and intensive care units



(c)



Where?

Four pilot locations

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.

Based on the results from four field tests, a version will remain available for demonstrations and a training guidebook will enable local companies to build SophiA on site and continue to develop local value-chains in different African countries creating numerous jobs. In addition to supporting this supply chain, SophiA will have the opportunity to strengthen partnerships between universities, the private sector, farmers and policymakers for the solar activity programme and will provide impetus for further collaboration in the future.

Capacity-building and appropriate financing solutions will be ensured by the involvement of private and public European and African organisations. The SME-partners from Europe and Africa will have the opportunity to generate growth by entering new market segments.



(d)

Who is behind the SophiA project?

A Europe/Africa partnership



The SophiA project is funded by the European Commission – Horizon 2020 in support of the European Green Deal under topic LC-GD-2-3-2020. It is coordinated by Hochschule Karlsruhe (HKA) and has a duration of 4 years.

The SophiA consortium consists of 13 partners from three European and four African countries.



Figure 5 The [Summary of the project](#) page

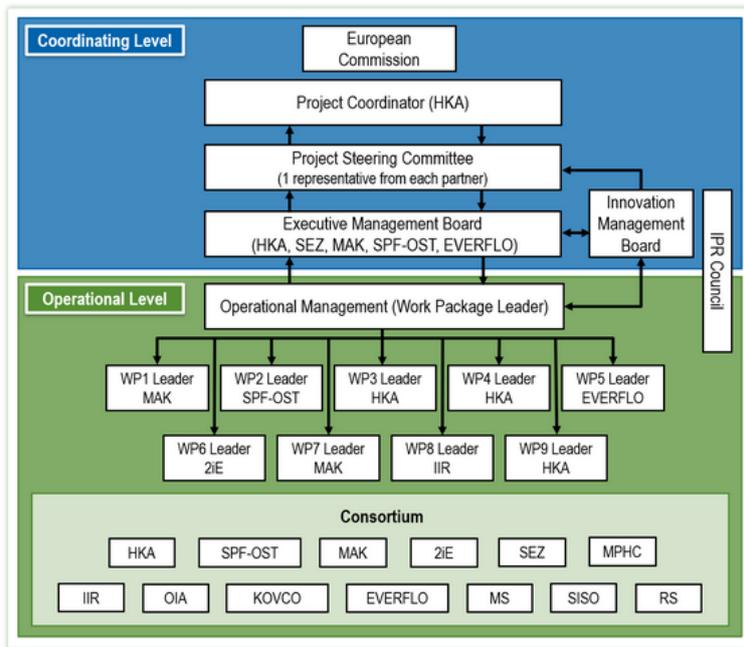
Governance

The “Governance” sub-category (Figure 6) describes the consortium structure, showing clearly the Coordination level (Project Coordinator, Steering Committee and Executive Management Board) and Operation Management with Work Package Leaders.

How we work!

The work in SophiA is organised via a simplified decision-making mechanism involving all project partners.

The organizational structure of the SophiA project includes the following consortium bodies:



- **Project Coordinator (HKA)** is the legal entity acting as the intermediary between the Parties and the Funding Authority (European Commission). HKA will be responsible for the project coordination, especially with respect to technical and scientific developments, and will monitor all project activities and timeline.
- **Project Steering Committee** is the decision-making body of the consortium. The Project Steering Committee is formed by one member of each partner. The specific member to represent each organisation was confirmed during the project kick-off meeting.
- **Executive Management Board** is the supervisory body for the execution of the Project which shall report to and be accountable to the Project Steering Committee. The EMB is formed of HKA, SEZ, SPF-OST, EVERFLO and MAK.

[See list of partners](#)

- **Operational Management** aims to assist the Project Steering Committee and the Coordinator in the provision of an effective and successful operational workflow. It will in itself be formed of:
 - **Work Package Leaders Group** Group to ensure the operational workflow at Work Package level.
 - **Innovation Management Board**, responsible of developing the innovation management plan and ensuring that this is pursued. The IMB oversees Intellectual Property (IP) issues.

Figure 6 [Governance](#) description page

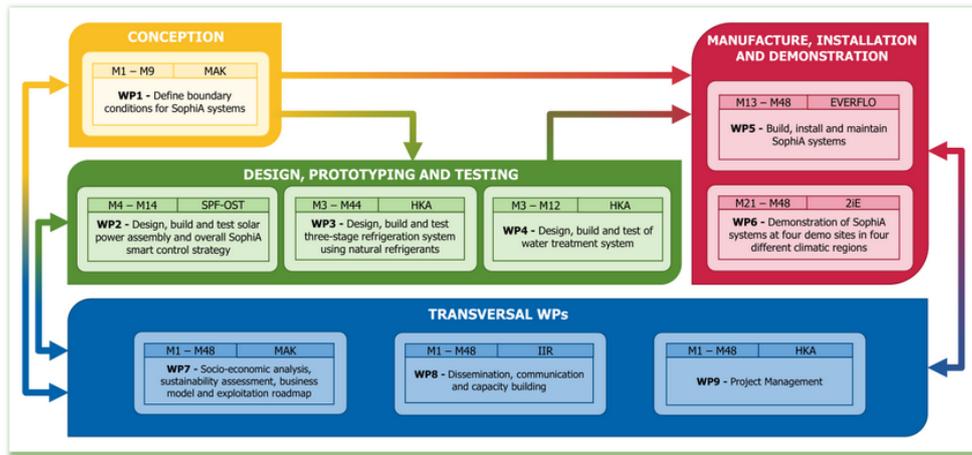


Work Packages

The sub-category "Work Packages" gives an overview of the different nine Work Packages (WP), mentioning their titles, their respective action period and their leaders (a). The table (b) briefly describes the WP objectives.

(a)

Nine Work Packages (WP) have been defined to fulfill the objectives and obtain the foreseen results of SophiA project as described below.



(b)

WPs	Title	Main Objectives
1	Define boundary conditions for SophiA systems	Investigate the needs of hospitals / medical stations in different urban and rural areas in four African countries: Burkina Faso, Cameroon, Malawi and Uganda. These will be used to derive specifications for SophiA water, cooling and electricity systems.
2	Design, build and test solar power assembly and overall SophiA smart control strategy	Design, build and test the solar power assembly and overall SophiA smart control strategy on laboratory scale.
3	Design, build and test three-stage refrigeration system using natural refrigerants	Design, build and test the three-stage refrigeration system using natural refrigerants on laboratory scale and will assess the benefits of using ice thermal energy storage instead of battery storage.
4	Design, build and test of water treatment system	Develop new infrastructures to produce clean drinking water free of bacteria and viruses.
5	Build, install and maintain SophiA systems	Design, build and install SophiA systems for the four field tests as well as maintain SophiA systems.
6	Demonstration of SophiA systems at four demo sites in four different climatic regions	Demonstrate SophiA systems at four demo sites in four different climatic regions in Africa.
7	Socio-economic analysis, sustainability assessment, business model and exploitation roadmap	Perform environmental and social impact assessment (ESIA) and business model.
8	Dissemination, communication and capacity building	Develop synergy activities in common EU projects, i.e. communication, dissemination, as well as capacity building.
9	Project Management	Coordinate activities.

Figure 7 The [Work Packages](#) page



“Partners” Tab SophiA Partners

The 13 partners are listed in the order specified in the Grant Agreement. Each partner is displayed with the institution name, logo and short summary text (~40 words). Clicking on the logo redirects the visitor to the institution webpage.



	<h3>Karlsruhe University Of Applied Sciences (HKA)</h3> <p>Karlsruhe University of Applied Sciences (HKA) is a state-owned institution of higher education. The University is very active in the area of applied research. The Institute of Refrigeration, Air-Conditioning and Environmental Engineering (IKKU) manages the SophiA project. It has a staff of 9 Professors and approximately 40 scientists and engineers. In addition, HKA/IKKU develops the refrigeration and water treatment systems for SophiA systems.</p> <p>https://www.h-ka.de/</p>
	<h3>Eastern Switzerland University Of Applied Sciences (OST), Including Institute For Solartechnology (SPF)</h3> <p>Eastern Switzerland University of Applied Sciences (OST) has a strong applied research activity, distributed over 18 research institutes. The Institute for Solar Technology (SPF) conducts research and development of innovative energy technologies and includes an accredited Testingcenter with a focus on solar thermal and photovoltaic applications.</p> <p>https://www.spf.ch/</p>
	<h3>Makerere University (MAK)</h3> <p>Makerere University is a public university located in Kampala, Uganda. Ranked among the top five universities in Africa, Makerere has a strong track record in research and publications. Three colleges at Makerere University are part of the SophiA project, namely: the College of Agricultural and Environmental Sciences, the College of Humanities and Social Sciences and the College of Business and Management Studies.</p> <p>https://www.mak.ac.ug/</p>
	<h3>Institut International D'Ingénierie De L'Eau Et De L'Environnement (2iE)</h3> <p>2iE is a non-profit international organization located in Ouagadougou (Burkina Faso) and established as a High Education and Research Institute 50 years ago. 2iE's education and research areas cover Energy, Water, Sanitation, Hydro-agricultural development and Civil Engineering.</p> <p>https://www.2ie-edu.org/</p>
	<h3>Steinbeis Europa Zentrum (SEZ)</h3> <p>Steinbeis Europa Zentrum (SEZ) has amassed more than 30 years of innovation consulting experience with a focus on international markets and EU research funding. SEZ is also a partner in the Enterprise Europe Network of the European Commission.</p> <p>https://www.steinbeis-europa.de/</p>



	<p>Ministry Of Public Health In Cameroon (MPHC)</p> <p>The Ministry of Public Health of Cameroon (MPHC) has developed and implemented the Government Health Policy focused on Health Promotion, Governance and Strategic management of the Health System.</p> <p>https://www.minsante.cm/</p>
	<p>International Institute Of Refrigeration (IIR)</p> <p>The International Institute of Refrigeration (IIR) is the only independent intergovernmental (59 member countries) science and technology-based organisation which promotes knowledge of all refrigeration fields. The IIR promotes and disseminates worldwide the outcomes of international, European and national funded projects.</p> <p>https://iifir.org/en</p>
	<p>Operieren In Afrika (OIA)</p> <p>Operating in Africa e.V. (OIA) is a German NGO founded in 2002 by Prof. Bernhard Rumstadt. In 2014, the organization opened its own surgical clinic near Léo, Burkina Faso. The clinic is staffed year-round by African personnel, while several international aid missions of 1-2 weeks are organized annually to train people.</p> <p>http://www.operiereninafrika.de/</p>
	<p>Everflo</p> <p>Everflo (Pty) Ltd is a manufacturer of Marine & Industrial refrigeration systems. They specialise in Flow Ice, RSW (Refrigerated Sea Water) and Industrial ammonia systems. They design, manufacture, install, commission and service marine and industrial refrigeration systems.</p> <p>https://www.everflo.co.za/</p>
	<p>Kovco</p> <p>Kovco (Kovco Pty Ltd) is the largest independent Refrigeration and Air Conditioning Wholesaler in Southern Africa. Established in 1935, the business has evolved to 10 branches through Southern Africa. As a group, they have manufacturing, distribution and sales of all items related to our trade.</p> <p>https://www.kovco.co.za/</p>
	<p>Martin Membrane Systems (MS)</p> <p>MARTIN produces innovative and high-quality low pressure membrane filters for wastewater and water treatment. MARTIN also offers low-cost, robust, compact, and mobile drinking water treatment systems based on modular membrane filters for remote and rural areas.</p> <p>https://www.martin-membrane.de/</p>
	<p>Simply Solar, Scheffler Technology And Consulting (SISO)</p> <p>Simply Solar provides consulting, training and R&D services in solar technologies. Simply Solar also carries out project implementation and technology transfer to manufacturers all over the world. Customers often come from the processing sector.</p> <p>https://www.simply-solar.de/</p>
	<p>RAACH SOLAR (RS)</p> <p>RAACH SOLAR engineers, procures, delivers, installs and maintains turn-key and tailor-made photovoltaic systems worldwide such as open area power plants, BIPV, carports, battery storage systems, AC mini grids, solar pumping, street lights, charging stations for EVs and consulting services.</p> <p>https://raachsolar.com/</p>

Figure 8 The [Partners](#) Webpage



Advisory Board

The “Advisory Board“ sub-category mentions the role of the advisory board members, as well as their logos and link to advisory board members’ websites. At the moment, it is missing some advisory board members.

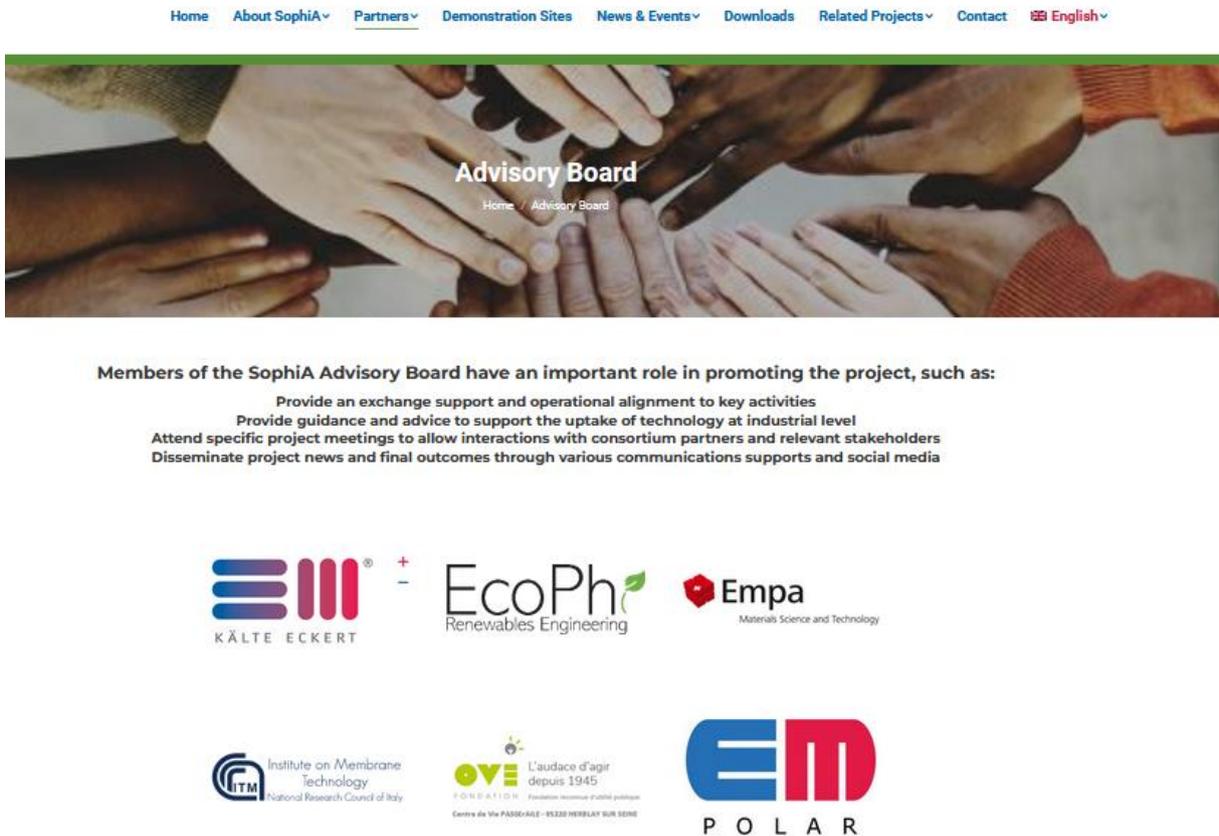
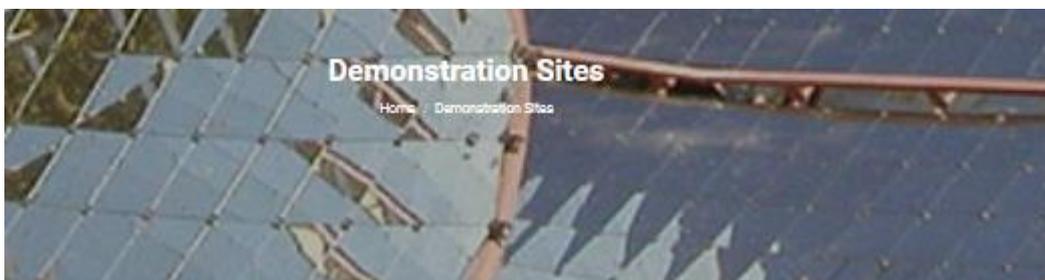


Figure 9 [SophiA Advisory Board](#) page

“Demonstration Sites” Tab

This page includes the four demonstration sites, where the SophiA Systems will be installed, with the country flags of the pilot hospital facilities, as well as a short location description.

Clicking on “Read more” allows to get a comprehensive overview of each hospital



The SophiA 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.



Burkina Faso

The Léo hospital was built under the direction of the association "Operieren in Afrika e.V." which is a partner of the SophiA project.

[Read more ▶](#)



Uganda

Buvuma Hospital is located on the main island of the Buvuma Islands in Lake Victoria.

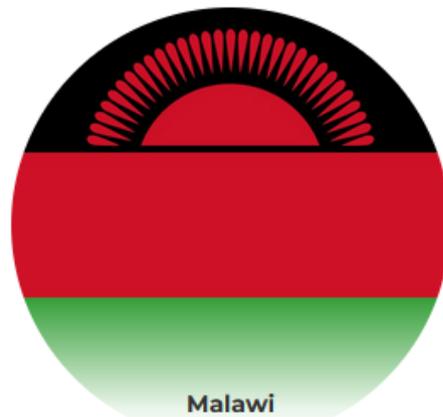
[Read more ▶](#)



Cameroon

Ad Lucem Hospital is located in the village of Otélé, Cameroon, in an equatorial climate.

[Read more ▶](#)



Malawi

Mua Mission Hospital is a health facility located in Malawi

[Read more ▶](#)

Figure 10 The [Demonstration Sites](#) page

The page dedicated to each hospital offers a title, a short summary, as well as specific information and if existing, the hospital website (Figure 11). Each page is illustrated with pictures.



Burkina Faso

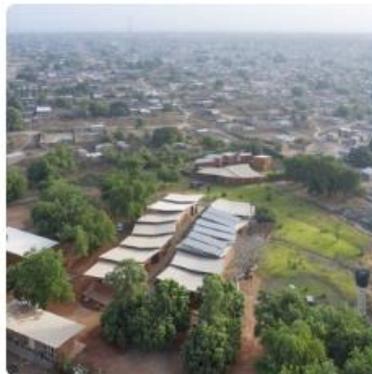
Home / Project / Burkina Faso

Although the Léo hospital is excellently equipped, it was selected as the first site for SophiA technology. The background is a reliable communication with the users. Since the SophiA technology is being developed from scratch, it is likely that there will be failures in the first prototype. The hospital already has back-up systems to compensate for disruptions in case of an emergency.

Visit website

Location

The hospital was built under the direction of the association "Opereieren in Afrika e.V." which is also a partner of the SophiA project. The association has been organizing surgical campaigns of specialized medical doctors, such as urologists and plastic surgeons, since 2000. After 13 years of using the medical facilities in the city of Léo, it was agreed to build its own hospital. The star architect Diébédó Francis Kéré, who was born in Burkina Faso, was recruited as the architect. The hospital has been in operation since 2014. During the winter months, when there is little rain, the surgical campaigns continue to take place. This involves familiarizing the hospital's permanent staff with the surgical procedures and training them on new techniques. The organization and the hospital are financed exclusively by donations and in-kind donations of medical equipment.



Catchment

The catchment area of the hospital comprises about 60,000 inhabitants around Léo. However, the hospital is also known beyond the region, which is why many patients travel a long way to be treated there. The hospital can provide assistance especially for pregnant women. The mortality rate of new-borns in the maternity ward has fallen to a European level.

Figure 11 A Detailed content provided for the [Burkina Faso Hospital](#)

“News & Events” Tab

This tab consists of three sub-categories:

The “News” page contains all the project news, such as participation in regional and international events conferences, EU events, forums, expo... (see Figure 12)

The “Upcoming Events“ page contains future events that SophiA will participate to (Figure 13).

The “View Detail” button allows to open a dedicated page to the event with event details, registration link etc. Webpage visitors can synchronise events with their own Outlook and/or Google Calendar. It is also possible to share these events via social media.

Once an event is passed, it will be placed automatically in the third sub-category “Previous Events“.





Figure 12 The [News](#) page



October 2022



SophiA partners at Chillventa 2022

Come and meet us during Chillventa 2022, the world's leading ...

11 - 13 Oct

- 📅 All Day
- 📍 NürnbergMesse GmbH
Messezentrum 1
90471 Nürnberg, Germany
Nuremberg, Germany

View Detail

November 2022



SophiA participating to the SIFA exhibition

The SIFA is an important annual event in the industrial ...

08 - 10 Nov

- 📅 All Day
- 📍 Eurexpo - Palais des congrès de Lyon
France

View Detail

August 2023



SophiA workshop during the ICR 2023

In August 2023, the 26th IIR International Congress of Refrigeration ...

21 - 25 Aug

- 📅 All Day
- 📍 Palais des congrès, Paris
France

View Detail

JUNE 2022



HKA/OST SUMMER SCHOOL: LOOKING FOR SPONSORS



SOPHIA CELEBRATING THE WORLD REFRIGERATION DAY



15TH IIR-GUSTAV LORENTZEN CONFERENCE ON NATURAL REFRIGERANTS

APRIL 2022



THE 7TH IIR INTERNATIONAL CONFERENCE ON SUSTAINABILITY AND THE COLD CHAIN (ONLINE)

Frühere Ereignisse

JULY 2022



HKA/OST SUMMER SCHOOL: LOOKING FOR SPONSORS

JUNE 2022



SOPHIA CELEBRATING THE WORLD REFRIGERATION DAY



15TH IIR-GUSTAV LORENTZEN CONFERENCE ON NATURAL REFRIGERANTS

APRIL 2022

Figure 13 The Upcoming Events page



SophiA partners at Chillventa 2022

Home / Event / SophiA partners at Chillventa 2022

CHILLVENTA

International Exhibition
Refrigeration | AC & Ventilation | Heat Pumps

Nuremberg

11 – 13.10.2022

Come and meet us during **Chillventa 2022**, the world's leading exhibition for refrigeration technology.

This will be the occasion to know more about the SophiA project which will be presented among the top experts, key players and industry associations from the international refrigeration, AC, ventilation and heat pump community.

The IIR will be on the DKV shared booth (Hall 9/n° 9-327)

Find out more about Chillventa: <https://www.chillventa.de/en>

+ Add to Google Calendar

+ iCal / Outlook export

Upcoming events

OCTOBER 2022

HILLVENTA OCT 11 - 13 2022

SOPHIA PARTNERS AT CHILLVENTA 2022

Nürnberg

NürnbergMesse GmbH
Messezentrum 1 90471 Nürnberg,
Germany

NOVEMBER 2022

SIFA NOV 09 - 10 2022

SOPHIA PARTICIPATING TO THE SIFA EXHIBITION

Eurexpo - Palais des congrès de
Lyon

AUGUST 2023

SOPHIA WORKSHOP DURING THE ICR 2023

Palais des congrès, Paris

Figure 14 Details about each event provided

“Downloads” Tab

This page includes all public documents available for download for the website visitor. Downloads are classified as articles, brochures, educational materials, newsletters and public reports, (see Figure 15).





Figure 15 [Downloads](#) page

“Related Projects” Tab

Green Deal Projects

The Green Deals Projects page refers to five projects, including SophiA funded under the European Union’s Horizon 2020 research and innovation programme which focusses on energy in the African continent. REFFECT, SESA, SteamBio Africa and ENERGICA as well as the LEAP-RE project, the so called SophiA sister projects, are offered a platform on the SophiA webpage to promote our collaboration in the area of dissemination (Figure 16).



Figure 16 [SophiA sister projects](#) promotional poster



SophiA Knowledge Exchange Network (KEN)

Figure 17 is the page of the SophiA Knowledge Exchange Network (KEN) which is primarily intended to provide a platform for the exchange of relevant project content within a group of experts as part of the project.

The SophiA Knowledge Exchange Network (KEN) is primarily intended to provide a platform for the exchange of relevant project content within a group of experts. The group is composed of similar project's coordinators, members of relevant organisations, companies or academia. Its main tasks include not only the identification and promotion of successful case studies, technical and economical best practices, but also the search for synergies between dissemination and communication activities. Opportunities to achieve a faster market uptake will also be discussed.

The partners will participate in commission and working groups to share the results with public authorities at the local, national and European level. They will also contribute to joint information and dissemination activities to exploit synergies and increase the overall visibility of H2020 supported actions. All discussion meetings and events will be reported on the SophiA website.

If you are interested to join the SophiA KEN, please contact:

Irene Robles Garcia
 Steinbeis Europa Zentrum (KEN Task leader)
 Email: irene.roblesgarcia@steinbeis-europa.de



Figure 17 [SophiA KEN](#) web page

“Contact” Tab

The website visitor can contact the coordinator through a contact form by mentioning their name, email, telephone and message (Figure 18). The coordinator receives the message, answers the request and/or forwards it to a partner who is in charge of receiving the messages and answering questions. The page also includes the links to the SophiA social media accounts. All website technical issues are to be communicated to the IIR.

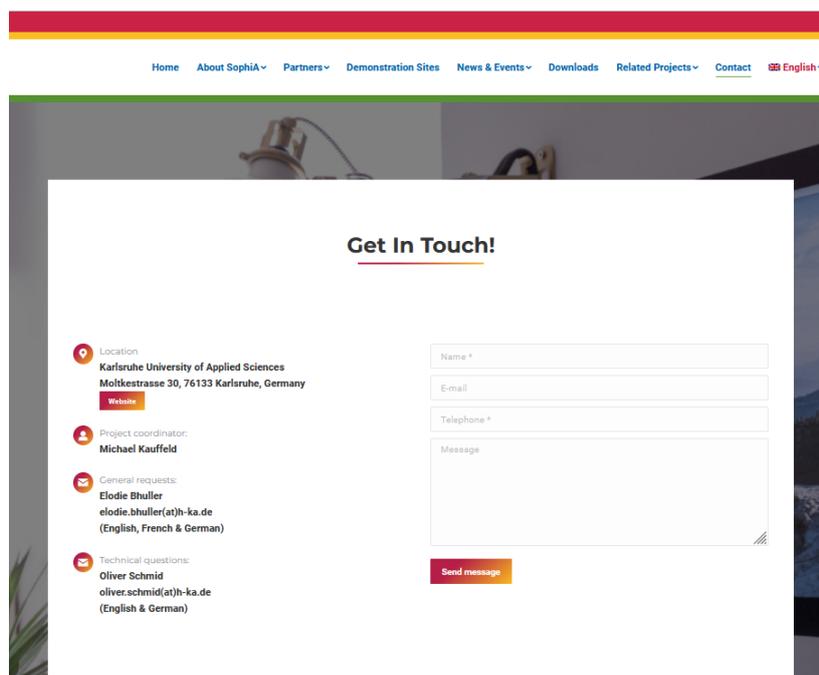


Figure 18 The website [Contact](#) page



Further website development

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

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>: 117 followers
- <https://www.linkedin.com/company/sophia4africa/>: 226 followers
- <https://www.facebook.com/sophiA4Africa>: 9 followers
- https://www.youtube.com/channel/UC5ImLr_7q-qsrJy2zKi5PEA: 10 subscribers

As demonstrated in Figure 19, the number of followers/subscribers for the Twitter and LinkedIn accounts has significantly increased after the publication of several posts.

Due to lack of personnel on the IIR Communication department over the last six months, the Facebook account has been deactivated but will soon be re-activated. The number of YouTube subscribers will definitely increase, when the SophiA Introductory video will be developed, uploaded and promoted.

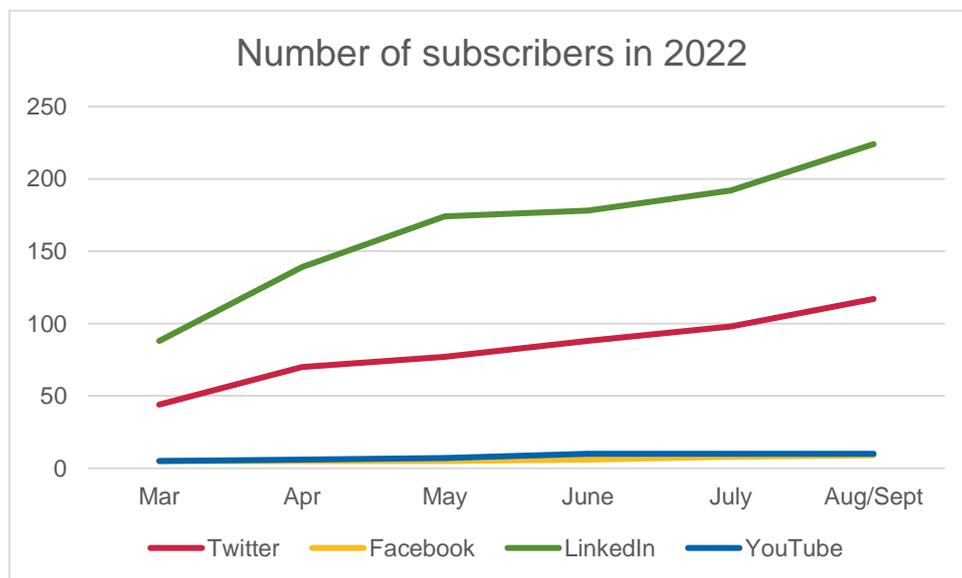


Figure 19 Number of followers/subscribers per month in 2022

Dedicated thumbnails for different social media channels were developed in accordance with the graphic chart and the social media rules. Such improvements and publication of various posts had impacts on the number of visitors as shown in the analytics:



YouTube

Before:



After:



New Video Thumbnails:



Analytics:

Your channel got 81 views in the last 365 days



Your top content in this period

Content		Average view duration	Views
1	 Projects on clean & efficient refrigeration solutions for food & healthcare in devel... 21 Apr 2022	1:38 (10.6%)	50
2	 Oliver Schmid HSKarlsruhe SophiA EurafriacalInstitute 20 Apr 2022	1:29 (6.6%)	31

[SEE MORE](#)

Twitter

Before:



After:



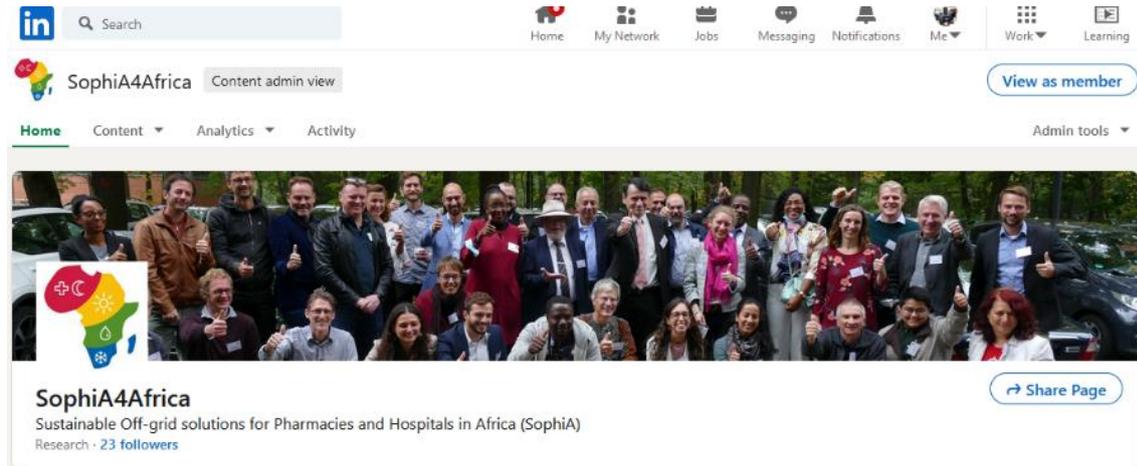
Analytics:

28 day summary with change over previous period

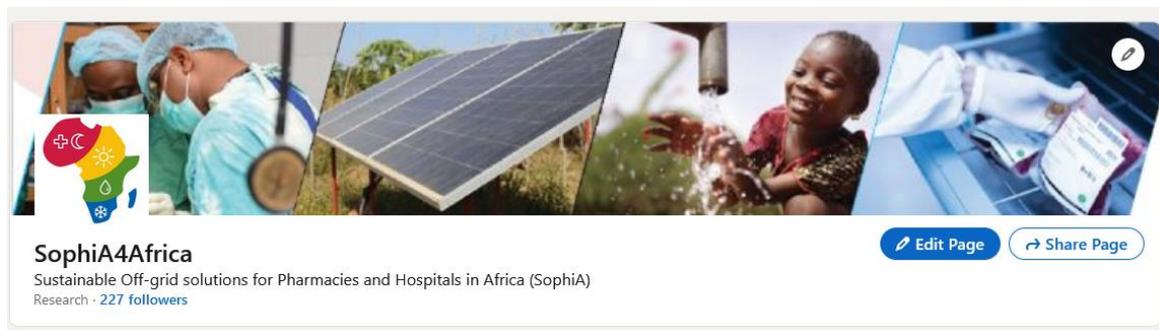


LinkedIn

Before:



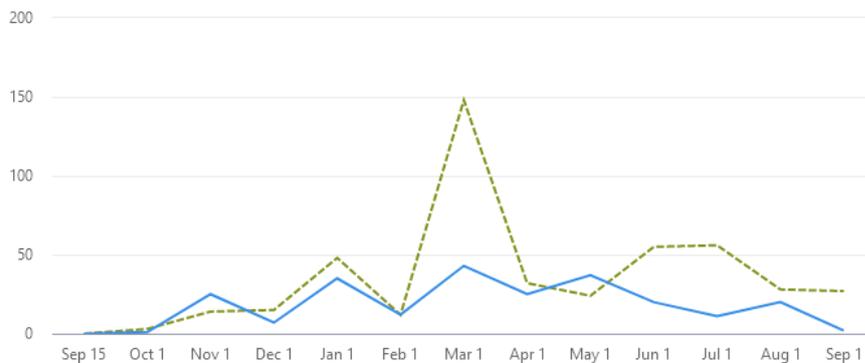
After:



Analytics:

Visitor metrics

Page views All pages All filters



- Desktop 238
- Mobile 462



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 progress. They will also constitute a key tool enabling virtual visits to the SophiA facilities and demo sites.

The introductory video is currently under development with an outsourced communications agency, which has experience with humanitarian and technological projects. It will approximately last 2 minutes and is planned to be ready for the end of October 2022. The main narrative aspect will be the impact of Sophia and the reason of its existence. The video will be highlighting the SophiA objectives. As the target audience is the general public, the video will use a popularization methodology. Furthermore, the storytelling will use elements of African culture, such as visual and musical elements of African art.

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.

“Voice-Over” will be inserted into some of the produced videos in the most widely spoken native languages of the African regions such as Swahili, Bambara, Pidgin English and other recommended local languages dedicated to the general public. The videos will also serve as educational materials.

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

An A0/A1 SophiA promotional general poster template (Figure 20) has been initially designed and will be reviewed along the project duration. Posters are displayed at events and trade fairs. The content of the poster includes the description of the project, as well as its main objectives and displays the partners' logos. Later, the contents of the poster will be updated with results.



Figure 20 SophiA poster template

A technical poster has also been developed with more schematic images to demonstrate the SophiA main technologies, as shown in Figure 21.

A rolled banner template with similar content of the poster will be also developed in order to be displayed in strategic locations. It will be available in English, French and German and downloadable from the website.



The posters and rolled up banners contain a QR code that redirects to the project website for detailed information about the project scope and updates.



Figure 21 SophiA technical poster template

3.2.2.3 Brochure

The brochure in A5 format (4 pages) has been produced to provide a quick overview of the project, main objectives, and expected results, as shown in Figure 22. It has been made available as hard copy in English, German and French for distribution when participating in trade fairs, workshops, conferences, and synergy project meetings. The QR code directs the reader to the SophiA webpage and potentially increases the number of subscribers to the newsletter. The brochure is also available for download from the website in all three languages.





SOPHIA

Sustainable Off-grid solutions for Pharmacies and Hospitals In Africa

Aims to improve quality of life of populations through better treatment & working conditions in rural and remote health facilities in Africa



● **Better Healthcare**

● **Clean Energy Technologies**

● **Clean Water Facilities**

● **Clean Cooling Solutions**

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

Sophia Objectives

The objective of the Sophia project is 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.

The Sophia systems will be manufactured using local resources and will be tested at four rural hospitals in remote African regions, aiming to create new business and job opportunities within the continent. Moreover, a special focus will be put on capacity building and skills training for students, as well as targeted support for spin-off/start-up companies to strengthen the development of a highly skilled workforce and increase the capacity for local sustainable development.

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 distilled water for medical purposes
- Hot water and steam production for hospital thermal requirements
- Cooling of surgical or intensive care units
- 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

Sophia Impacts

BETTER HEALTHCARE
Sustainably improve quality of life of populations through better treatment and working conditions in rural and remote health facilities in Africa

CLEAN ENERGY TECHNOLOGIES
Use renewable, flexible and modular plug-in energy systems for sustainable off-grid supplies, easy to integrate in existing infrastructures

CLEAN WATER FACILITIES
Provide soft drinking water free of bacteria and viruses and steam/hot water for sterilization

CLEAN COOLING SOLUTIONS
Use of environmentally friendly natural refrigerants to provide medium, low and ultra-low temperatures for cooling applications

Demonstration sites

The Sophia systems will be assembled, 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.

The project will provide a handbook/guidelines for local companies to build and replicate the Sophia systems on site.



In order to create the greatest possible sustainable and economic benefit, the exploitable results will be furthermore focused into different other markets, besides the health sector.

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
- Cooling of surgical or intensive care units
- Emergency electricity supply for surgical and intensive care units

Sophia Solar Water Container

- PV-Power systems
- Storage tank for drinking water
- Deionized water storage tank
- PlatinumCube
- Buffer tank for UF treatment
- Ultrafiltration (UF) tank
- Capacitive deionisation (CDI) modules



- Safe, clean drinking water and distilled water for medical purposes
- Hot water and steam production for hospital thermal requirements



X-Sol
Hot Water System



PVmedPort System

PV powered station for education, capacity building, vaccination and awareness campaigns

Sophia Consortium





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

Project period: 2021 - 2025
Project coordinator: Michael Kauffeld
General requests:
Elodie Bhueller - elodie.bhueller@h-ka.de
Technical questions:
Oliver Schmid - oliver.schmid@h-ka.de

SCAN TO VISIT OUR WEBSITE

www.sophia4africa.eu



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

Figure 22 Sophia brochure



3.2.2.4 Newsletter

The newsletters will be produced every six months to maintain a permanent and regular information about the project progress and achieved milestones (Figure 23). There will be a total number of 7 newsletters starting from M12. The newsletters will be available in English, French and German languages. Hard copies newsletters will be printed on demand and be distributed at events, while digital copies will be made available for download on the project website.



Figure 23 1st SophiA Newsletter template

3.2.2.5 E-Newsletters

E-Newsletters, so called “e-SophiA News”, will be produced and published periodically and exclusively online (every three months). The content will be flash information about the project news, progress, participation to conferences etc. The E-News will be managed with Mail Chimp and will automatically be sent to the website subscribers. It will also be published on the SophiA social media tools to reach a widespread number of stakeholders. A total number of 14 e-Newsletters are expected to be produced starting from M9. Figure 24 is the first e-SophiA News published beginning of the M10.





Figure 24 e-SophiA News template

3.2.2.6 Promotional items

The first promotional item is a thermal bottle designed and sponsored by SophiA partner Everflo, which was distributed at the kick-off meeting, as well as sent to other partners via mail. The partners will discuss the creation of additional promotional items.



Figure 25 The promotional item SophiA Bottle

A “SophiA Bottle on the Tour” social campaign has started on the SophiA Twitter, showing the SophiA Bottle travelling around the world spreading the SophiA message. So far, the SophiA bottle has made it to Cameroon, Caribbean, Germany, Iceland, South Africa, Switzerland, Togo, Uganda, and UK, .



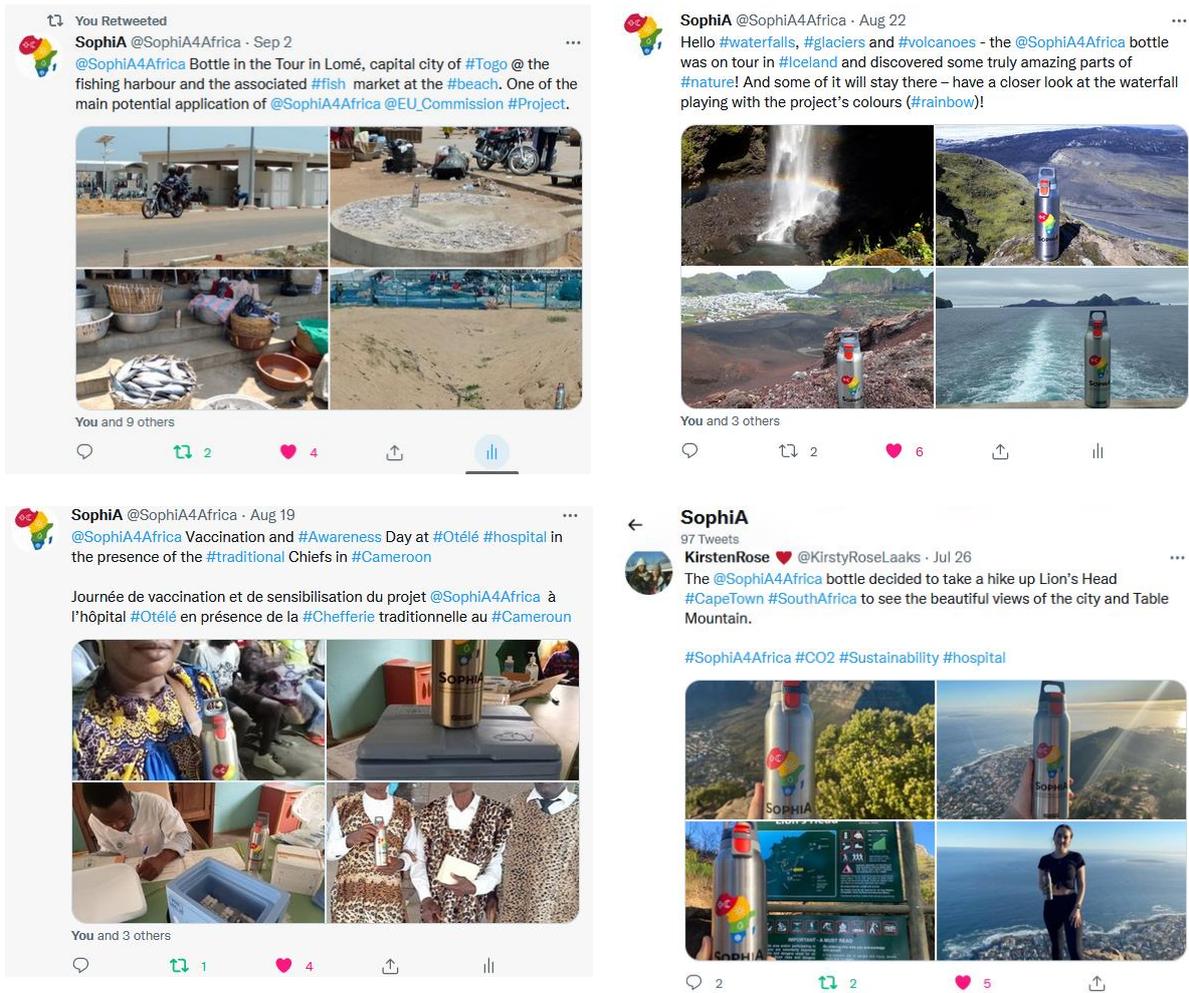


Figure 26 SophiA Bottle on the tour travelling worldwide

4.2.3 Communication timeline

Figure 27 illustrates the suggested communication timeline, including e-Newsletter, Newsletters, videos, website and brochures.



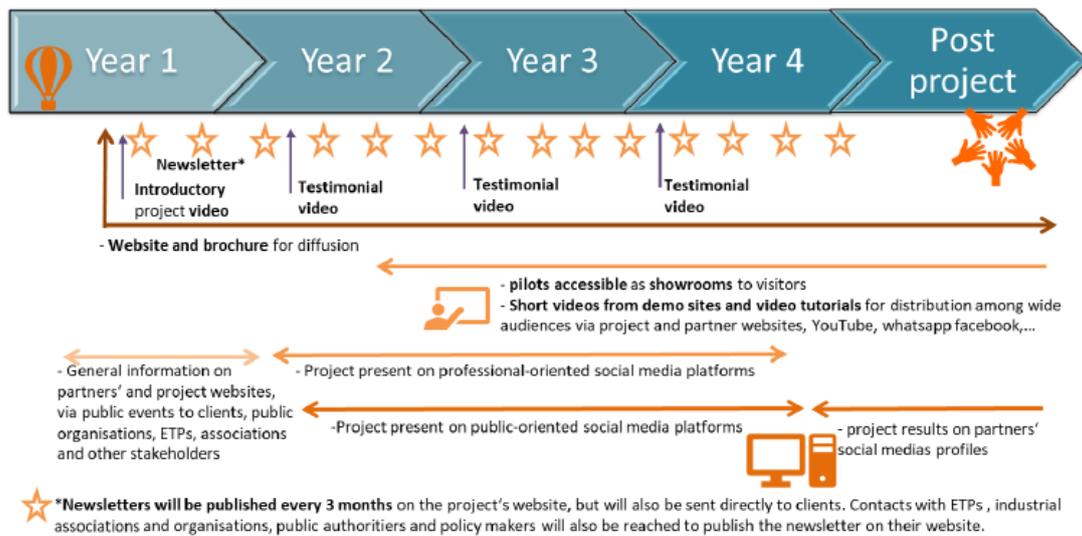


Figure 27 Suggested timeline for the communication materials

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 scientists, developers, operators and industrial communities, who shall make beneficial use of the disseminated results and data to further develop their own studies (scientists) 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, press release... 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 required to regularly report by the WP8 leader (IIR). 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 is the list of the different dissemination activities for the first year extracted from the dissemination monitoring tool.

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

Table 3 List of dissemination activities

3.3.3. Publications

The dissemination monitoring tool includes a tabulation for scientific publications, as listed in Table 4. Scientific and Technical Publications	Number
Article in Peer-Reviewed Journal	1
Publication in conference proceedings	2
Poster	1
Book / Monograph	1
Press release	2
Publication in Technical Journals/Magazines	2
Chapter in a Book	0
Thesis / Dissertation	0
Others	0

Table 4 List of scientific publications



4.3.2 Dissemination events at a national, regional and international levels

The monitoring tool also includes an extensive list (see Table 5) of 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. This list currently covers the next two years. Events will be added along the project duration.



D8.1: Communication, dissemination, and capacity building strategy plan

Par	Year	World Region	Date	Location	Events	Event type	Type of SophiA promotion	N people re:	Proof of actions
IIR	2022	Europe	October 10-11	Istanbul, Turkey	ASHRAE Istanbul https://ralcra.com/	Conference	Display & distribution COM support SophiA presentation	300	Social media Article in Newsletter
HKA	2022	Europe	September 16-17	Zürich, Switzerland	International Conference on water Treatment & Water Pollution http://www.icwpt.net/	Conference	Display & distribution COM support	300	
IIR	2022	Europe	September 29	Birmingham, UK	Cold Chain Summit	Conference	SophiA presentation Display & distribution COM support	300	Article in Newsletter Social media
IIR ,HKA	2022	Europe	October 11-13	Nuremberg, Germany	Chillventa https://www.chillventa.de/	Trade fair	SophiA workshop Display & distribution COM support	5 000	Agenda workshop/training Social media
MPHC	2022	Central Africa	October 15	Yaoundé, Cameroon	Global Handwashing Day https://globalhandwashing.org/global-handwashing-day/	Others	Display & distribution COM support SophiA presentation	1000	Social media Press release
IIR	2022		October 31- November 4	Montreal, Canada	34th Meeting of the Parties to the Montreal Protocol (MOP) https://ozone.unep.org/meetings/thirty-fourth-meeting-parties	Others	Display & distribution COM support	5 000	Article in website Social media
IIR	2022	North Africa	November 10-13	Lyon, France	SIFA – Eurexpo https://www.eurexpo.com/salon-sifa	Trade fair	SophiA workshop Display & distribution COM support	5 000	Article in Newsletter Social media
HKA	2022	Europe	Mid-November	Dresden, Germany	DKV Tagung 2022 https://dkv.org/?id=94	Conference	Display & distribution COM support SophiA presentation	2000	Social media Presentation about SophiA
MAK	2022	North Africa	November 7-18	Sharm El-Sheikh, Egypt	27th UN Climate Change Conference 2022 (COP27) https://unfccc.int/cop27	Conference	Display & distribution COM support Others	5 000	
2IE	2022	West Africa	28 November - 2 December	Lomé, Togo	Société Ouest Africaine de physique (SOAPHYS) http://www.soaphys.org/	Conference	Display & distribution COM support SophiA presentation	300	Presentation about SophiA
IIR	2022	Europe	20 - 24 November	Naples, Italy	EuroMembrane 2022 https://www.euromembrane2022.eu/	Conference	SophiA presentation Display & distribution COM support	2 000	Presentation about SophiA
IIR	2022	Europe	Nov. 30-Dec. 2	Belgrade, Serbia	53rd International HVAC&R Congress and Exhibition http://kgh-kongres.rs/index.php/en/	Conference	Display & distribution COM support SophiA presentation	2 000	Presentation about SophiA
IIR	2022	Asia	December 8-10	Ahmedabad, India	REFCOLD 2022 https://www.refcoldindia.com/about-the-event	Exhibition	Display & distribution COM support	2 000	Social media
IIR	2023	North & Central America	February 4-8	Atlanta, GA, USA	ASHRAE Winter conference https://www.ashrae.org/conferences/2023-winter-conference-atlanta	Conference	Display & distribution COM support	1000	Social media
IIR	2023	Asia	March 14-16	Mumbai, India	3rd IIR International Conference on the Application of HFO Refrigerants https://hfo2023.scimeeting.cn/en/web/index/	Conference	SophiA presentation Display & distribution COM support	1000	Article in website Social media



D8.1: Communication, dissemination, and capacity building strategy plan

IIR	2023	Asia	March 14-16	Mumbai, India	3rd IIR International Conference on the Application of HFO Refrigerants https://hfo2023.scimeeting.cn/en/web/index/	Conference	SophiA presentation	1 000	Article in website
							Display & distribution COM supp		Social media
IIR	2023	North Africa	March 17-20	Tunis, Tunisia	ACREX India 2023 https://www.acrex.in/	Exhibition	SophiA presentation	1 000	Article in website
							Display & distribution COM supp		Social media
IIR	2023	Europe	April 4-6	Shanghai, China	AFF seminar in Tunisia	Seminar	SophiA presentation	1 000	Article in website
							Display & distribution COM supp		Social media
IIR	2023	Europe	April 24-28	Dresden, Germany	17th IIR Conference on Cryogenics https://www.cryogenics-conference.eu/cryogenics2023	Conference	SophiA presentation	1 000	Social media
IIR	2023	Europe	April 27-29	Ohrid, North Macedonia	10th IIR Conference on Ammonia and CO2 Refrigeration Technologies https://www.mf.ukim.edu.mk/web_ohrid2023/ohrid-2023.html	Conference	SophiA presentation	1 000	Article in website
							Display & distribution COM supp		Social media
IIR	2023	North & Central America	May 15-18	Chicago, USA	14th IEA Heat Pump Conference (HPC 2023)	Conference	SophiA presentation	5 000	Social media
IIR	2023	Europe	August 21-26	Paris, France	26th IIR International Congress of Refrigeration (ICR 2023) https://www.icr2023.org/	Conference	Display & distribution COM supp	1 000	Social media
							SophiA workshop		Article in website
IIR	2023	Europe	September	London, UK	13th International Conference on Compressors and their Systems 2023 https://citycompressorsconference.london.ac.uk/	Conference	Display & distribution COM supp	1 000	Social media
							SophiA presentation		Article in website
HKA	2023	Europe	March 13-17	Frankfurt, Germany	ISH world's leading trade fair for HVAC + Water https://ish.messefrankfurt.com/frankfurt/en.html	Trade fair	Display & distribution COM supp	5 000	Agenda workshop/training
							SophiA workshop		Social media
HKA	2023	Europe	Mid-November	Germany	DKV Tagung 2023 https://dkv.org/?id=94	Conference	Display & distribution COM supp	5 000	Agenda workshop/training
							SophiA workshop		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	SophiA 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	SophiA presentation	2 000	Social media
							Display & distribution COM supp		Social media
IIR	2024	Oceania	June	Tokyo, Japan	8th IIR Conference on Sustainability and the Cold Chain (ICCC 2024)	Conference	Display & distribution COM supp	5 000	Social media
							SophiA workshop		Article in Newsletter
IIR	2024	Europe	September	Bratislava, Slovakia	11th IIR Conference on Compressors and Refrigerants	Conference	SophiA presentation	1 000	Social media
IIR	2024	Oceania	September	Baotou, China	10th IIR Conference on Caloric Cooling and Applications of Caloric Materials	Conference	SophiA presentation	1 000	Social media
	2024	Europe	To be confirmed	Brussels, Belgium	EU Sustainable Energy Week 2022, 2023, 2024 and 2025	Conference	Display & distribution COM supp	5 000	Social media
							SophiA workshop		Article in Newsletter
		Europe		Brussels, Belgium	BRIDG initiative meetings	Workshop	SophiA workshop	5 000	Social media
									Article in Newsletter
HKA	2024	Europe	October	Nuremberg, Germany	Chillventa 2024	Trade fair	SophiA workshop	5 000	Social media
									Agenda workshop/training

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



4.3.3 Dissemination timeline

Figure 28 illustrates the suggested communication timeline, including scientific publications, articles in technical journals/magazines and press releases.

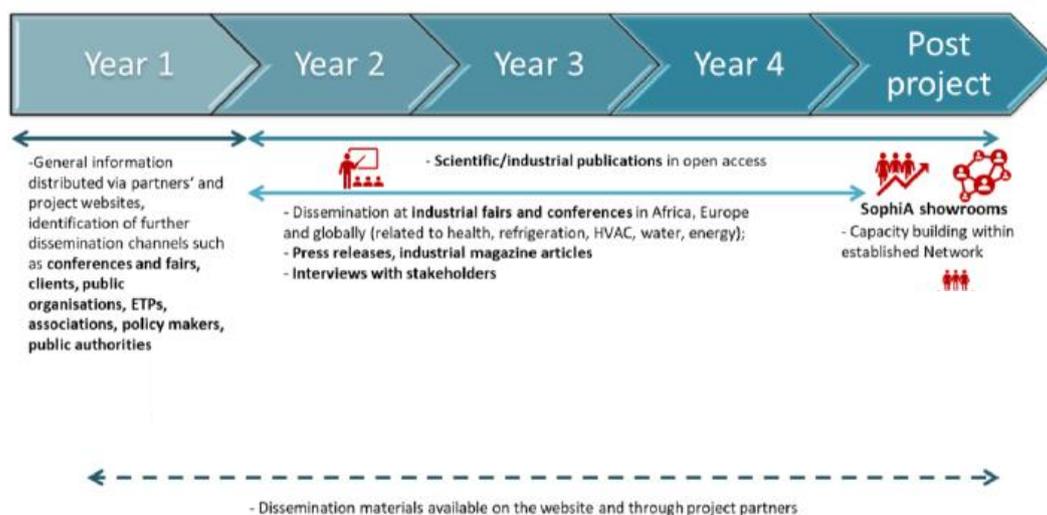


Figure 28 Suggested timeline for the dissemination materials

5. CAPACITY BUILDING AND KNOWLEDGE EXCHANGE NETWORK

5.1 Capacity Building Strategy

The building capacity strategy aims to raise interest about SophiA technologies and to ensure the technical understanding of potential end users of the different SophiA components. Moreover, a Knowledge Exchange Network has been created. This network includes participants and partners of other (sister) projects, organisations, companies, academic groups, clusters and initiatives with similar goals, activities or technologies as SophiA. Capacity building strategy

This 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 agriculture 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 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, 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 leaded by the IIR.

5.1.2 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 will start in M18 led by the partner Everflo.

5.1.3 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.

A first educational activity was developed by OST-SPF together with HKA during 25-29 July 2002, the International Summer School on Sustainability was organized at the OST Campus Rapperswil with the participation of 30 students from Germany, Switzerland and Romania. The Sustainability Summer School 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.

This activity is related to the Task 8.6: Educational and Technical training sessions, led by 2iE and supposed to start in M24.

5.1.4 Capacity building timeline

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

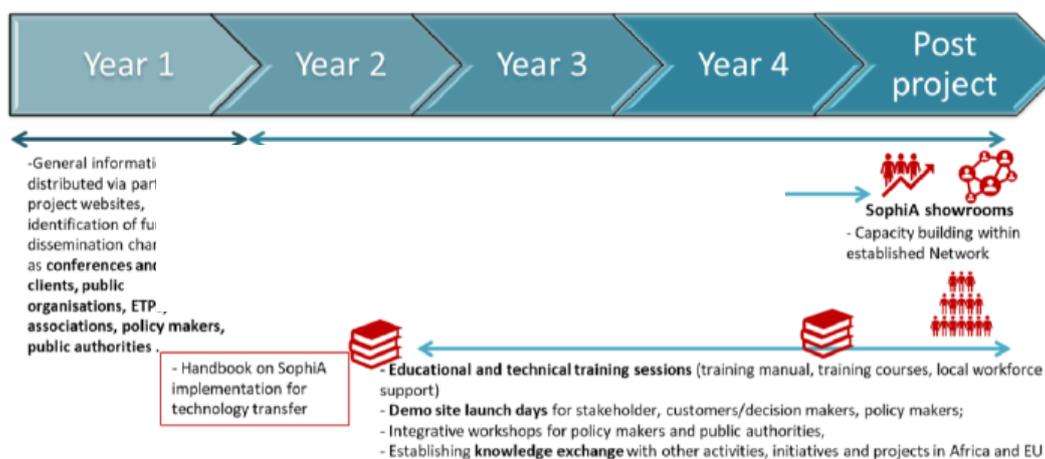


Figure 29 Suggested timeline for the capacity building materials

5.2 SophiA Knowledge Exchange Network

Starting in 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 particularly 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” 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 and SEZ participated.



D8.1: Communication, dissemination and capacity building strategy plan

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, the project's technical content differs from SophiA, nevertheless 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.

The SophiA KEN intends to conduct further bilateral calls with other related projects.

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

- LEAP-RE stakeholder forum (online), 3rd-6th October 2022
- Green Deal Arena (online) on 4th October 2022, organised by the Shared Green Deal project
- ENERGICA (online) 2nd Consortium Meeting in Nairobi, on the 8th and 9th of November 2022.

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 (D8.2) describes the review of the communication, dissemination and capacity building strategy plan (D8.1) drafted by the IIR work package leader. 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 fully developed. Some pages, such as the Demonstrator Sites, News & Events and Downloads need additional and/or regular updates on pages. An additional webpage for the “SophiA Technologies” is under development.

The SophiA social media LinkedIn and Twitter accounts are very active. Traffic on Facebook and YouTube accounts will increase with incoming activities, especially when the introductory video will be developed and uploaded.

All remaining support materials have been developed (technical poster, brochures, newsletter and e-newsletter) and will be uploaded on the SophiA website to be promoted in social media.

The SophiA consortium is fully committed to fulfil the dissemination strategy plan. Partners have so far presented, organised, participated in about 30 conference, workshops, trainings or meetings, at which they also have displayed and distributed communication support materials. So far, technical partners published two technical journal articles and three peer-reviewed academic conferences (including one academic poster).

Although the majority actions under the capacity building strategy plan have not started, the Knowledge Exchange Network task leaders have attended and participated to collaboration meetings, focusing on knowledge sharing and learning purposes.

This initial 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 (M24, M36), based on the information provided by the partners through the dissemination monitoring tool. Dissemination enhancement activities will be carried out when the results are obtained. The final Communication, Dissemination and Capacity Building Strategy Plan (M48) will summarise the D8.1 objectives' achievements.



7. ANNEXES

7.1 Annex 1

SOPHIA																
SophiA List of Dissemination Activities																
Participating	Type of Dissemination Activities (max.2 per event)	Name of Event, Publication, etc.	Place City/Co	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 made reached (if)	World Reg Reached		
Click on Cell and Use of Drop-down																
Drop-down list below																
Drop-down list below																
1	HKA	SPF-OST, MAK, ZIE, SEZ, HPMC, IIR, OIA, EVERILO, KVVCO, HS, SIS0, RS	Organization and/or Participation to Meeting	SophiA Kick-Off meeting day	Karlsruhe Germany	12/10/21	13/10/21	Hybride	HKA	Partner participation to the Kick off meeting		40		3	Europe and Africa	
1	HKA	SPF-OST, MAK, ZIE, SEZ, HPMC, IIR, OIA, EVERILO, KVVCO, HS, SIS0, RS	Promotion in Social Media	SophiA Twitter		13/10/2021	N/A	N/A	HKA	SophiA Kick-Off meeting Day 2 on Twitter		1500			Europe and Africa	
2	IIR	HKA, SPF-OST, SEZ	Press release	SophiA Prozz 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 hospital in Africa"		6000		59	Worldwide	
2	IIR	HKA, SPF-OST, SEZ	Promotion in Social Media	SophiA Prozz Release 1	Paris France	21/10/21		N/A	IIR	Discover the new EU funded project "SophiA"					Worldwide	
3	HKA	HKA	News/Articles in Partner Organisation Website	HKA website	Karlsruhe Germany	18/10/21		N/A	HKA	Forschungsprojekte zur Entwicklung nachhaltiger und energieautonomer Kühltechnologien für afrikanische Krankenhäuser				2	Europe and Africa	
4	HKA	HKA	Publication in Technical Journal/Magazine	Bedürfte Neuzerte Nachrichten (BNH)	Karlsruhe Germany	19/10/21		N/A	HKA	SophiA soll bei Impfstofflieferung helfen					Partner's Country	
5	IIR	IIR	News/Articles in Partner Organisation Website	Publication in IIR Project's webpage	Paris France	1/10/21		N/A	IIR	SophiA in the IIR Regional projects' webpage				60	Worldwide	
6	MAK	MAK	Organization and/or Participation to Workshop	MAK launch of SophiA day	Kampala, Uganda	8/12/21		Hybride	MAK	Launch of the Sustainable Off-grid Solution for Pharmacist and Hospital in Africa (SophiA) project.		500		2	Europe and Africa	
6	MAK	MAK	Promotion in Social Media	MAK launch of SophiA day	Kampala, Uganda	8/12/21		N/A	MAK	SophiA Africa official launch day by @Makerere						
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 4-week vacation in the Lake Zürich! Fallau the SophiA Battle on the Tour!				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 @Christmas2021 trip!				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 CLIMATEO workshop				20	Worldwide	

Table 6 List of SophiA dissemination activities



7.2 Annex 2



SophIA List of Scientific Publications

No	Participating	Type of Publication	D.O.I	SharePoint Link	Year of Publication/conference	Available in Open-Access?	Title	Author(s)	Conference/Workshop (if publication in conference) and place	Title of the Journal / Proceedings/Book 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.ijid.2021.03.030	osainc.com/e/rtb/eamf/Pasdmawku-raceanfangshain	2021	Year - available in Gold Open Access	SOPHIA: European funded project for vaccine storage in Africa.	M. Kauffeld, I. Calamba		International Journal of Refrigeration	Volume 120, October 2021	Pages v-vi	Elsevier	https://www.sciencedirect.com/journal/international-journal-of-refrigeration	ISSN: 0140-7007	3.629	6.5
2	HKA	Book / Monograph			2022	Year - available in Gold Open Access	Natural Refrigerants: Applications and Practical Guidelines	Eckert, Michael; Kauffeld, Michael; Siegrmund, Volker (Ed.)							ISBN 978-3-8007-8230-7, eBook: ISBN 978-3-8007-8231-4		
3	IIR	Publication in conference proceeding	https://doi.org/10.11842/ijr.12022.0019		2022	Year - available in Gold Open Access	Potential applications of CO ₂ in developing countries with high ambient temperature	Ina COLOMBO, Yann ALLOUONE, Katsuyuki Eda, NITSOUKPOE, Olivier SCHMID, Michael KAUFFELD	GL2022 IIR-Gurtav Lorentzen Conference on Natural Refrigerant/ June 13-15/ Trondheim, Norway	IIR-Gurtav Lorentzen Conference on Natural Refrigerant			IIR		ISSN: 0151-1637		
4	HKA	Publication in conference proceeding	https://doi.org/10.11842/ijr.12022.0024		2022	Year - available in Gold Open Access	cascade 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-Gurtav Lorentzen Conference on Natural Refrigerant/ June 13-15/ Trondheim, Norway	IIR-Gurtav Lorentzen Conference on Natural Refrigerant			IIR		ISSN: 0151-1638		
5																	
6																	
7																	
8																	
9																	

Table 7 List of potential peer-reviewed journals

7.3 Annex 3





INSTITUT INTERNATIONAL DU FROID
INTERNATIONAL INSTITUTE OF REFRIGERATION

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.
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 Specify the title of the journal (if journal paper) or title of the proceedings (if conference paper) in column (K).
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 Indicate the publication pages in the volume/proceedings in column (M).
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 In column (Q) indicate the impact factor, if journal paper (information might be found in the publisher website)
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Table 8 READ ME FIRST Guideline





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