



## **D.5.3.1 Healthcare as a leverage for implementing sustainable infrastructure in developing countries**

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Delivery report for the *sWASH&grow* project. Coordinated by RISE and co-financed by VINNOVA, UDI program (step 3), Sep 2020 – Aug 2022.

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## Abstract/Executive summary

4.4% of total global CO2 emissions are estimated to come from healthcare, this makes Hospitals and the Healthcare sector important actors in decreasing the global carbon footprint. Spreading Nordic knowhow and best practices is part of Nordic Center for Sustainable Healthcare’s (NCSH) vision to make an impact on a global level. sWASH&grow is the perfect platform to reach out with Sustainable Healthcare to developing countries since safe and effective healthcare is dependent on WASH and infrastructure solutions. Sustainable Hospitals/Health facilities can work as a leverage and create a demand for WASH solutions and infrastructure in developing areas. By being a central part of the community, the hospital can be the starting point to create a sustainable community or city.

On 4 May 2021, TEM – Lund University held a workshop inviting stakeholders with an interest in WASH solutions in the healthcare sector, to provide an arena for dialogue on how healthcare can become a frontrunner for implementing sustainable infrastructure in low- and middle-income countries. As an initial meeting, the aim was to initiate an interest in the topic, showcase opportunities and create discussions that could potentially lead to projects.

The event attracted 82 registrations, which was above our expectations. Participants representing 29 unique companies and 31 organizations and 5 with unidentified backgrounds.

The event resulted in two project opportunities. One in India together with MAMTA. A follow up workshop focusing on India is planned 19 October. The other track is in Tanzania together with Läkarmissionen and UNDP. There is an ongoing discussion to find financing for a project.

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## Introduction and Project Background

This report is a delivery within the project “sWASH&grow – scaling off-grid WASH innovations”. The project is coordinated by RISE with 40% co-finance from [VINNOVA](#) (the Swedish Innovation Agency).

The objective of sWASH&grow is “to develop tools that improve the opportunities for innovators and aid organizations to bring more circular, inclusive and sustainable innovations to those in need”.

The project involves 28 partners from Sweden, Bolivia, Lebanon and South Africa representing private-, public-, academic- and NGO-sectors. The goal is to improve the conditions for innovators (sellers) to be able to meet relief organizations’ (buyers) demands. Through the project, innovative solutions will be tested in real environments, upscaled and exported.

Implementation focuses on:

- Identifying success factors for off-grid solutions.
- Contextualizing methods for testing, demo and validation that respond to buyers’ requirements and meet the needs of the most vulnerable.
- Quality-assured tools for developing and scaling up innovations based on requirements, needs and price.
- Communicating results to stakeholders in the innovation system.

sWASH&grow brings together major global buyers, the innovation system's support functions and the innovation companies, together in a partnership aligned with Agenda 2030 and SDG 17. More specifically, the project contributes to SDG 6 and 9 on clean water and sanitation and will have an impact on SDGs 2, 3, 7, 12 and 13 on zero hunger, health, energy, production, and climate.

Stiftelsen TEM vid Lunds Universitet is a project member, active in WP5 and part of the UTS-team. TEM is managing Nordic Center for Sustainable Healthcare which is a network and platform with 110 member organizations. Initially a Nordic network but now with members from about 15 countries. The vision is to promote sustainability within healthcare with a Nordic perspective:

NCSH aims to:

**Raise** the status and awareness of sustainable healthcare

**Boost** innovation and investments in sustainable healthcare

**Bring** world class solutions and ideas to the Nordics

**Deliver** Nordic solutions & knowledge to the world



## Purpose and background

4.4% of total global CO2 emissions are estimated to come from healthcare (Healthcare without Harm), this makes Hospitals and the Healthcare sector an important actor in decreasing the global carbon footprint. Spreading Nordic knowhow and best practices is a part of Nordic Center for Sustainable Healthcare’s vision to make an impact on a global level. This has so far been achieved together with international partners mainly in North America and Europe. Recent years we have seen an increasing interest from low- and mid-income countries.

In these regions we see a different ecosystem of stakeholders and level of infrastructure to build upon. Safe and effective healthcare is dependent on WASH solutions and infrastructure. Through implementation of sustainable healthcare, we can create a demand for infrastructure, infrastructure that also can be beneficial for the community around the hospitals generating sustainable Cities. From the perspective of SDG 3, working with healthcare connects to all other SDGs. This way, focusing resources on sustainability within healthcare can create a platform to develop all other goals as well.



## Description of this delivery

The workshop was conducted as part of TEM’s participation in sWASH&grow. TEM’s network Nordic Center for Sustainable Helathcare as the name hints is working with Sustainability within healthcare. The aim of being part of the project was to establish a platform for collaboration on sustainable Healthcare in low- and mid-income countries. WASH and Sustainable Healthcare goes hand in hand, the network that sWASH&grow provides is the perfect platform to move things forward.

The aim of the workshop was to invite stakeholders that are working within the field of WASH solutions as well as healthcare in low- and mid-income countries, to discuss the opportunities of Sustainable healthcare and how healthcare can be a platform for export of WASH-infrastructure.

The event took place through a well proven concept that TEM (Nordic Center for Sustainable Healthcare) has conducted through many events previously. The presentations were conducted by a broad set of stakeholders to give a complete picture of the situation and get different views and understanding of the challenge. This workshop was held to initiate the topic and invite stakeholders that has an interest and are key players in this field, that could play active role in transforming the potentiality into practice.

Speakers were invited through TEM's network as well as from the sWASH&grow project member's network. The combination of speakers was set up to get different points of views and to get a broad understanding of the challenges and opportunities. The aim was to find common ground for continuous collaboration.

**Programme:**

**Sten Stenbeck, RISE**

*The project sWASH&grow – Scaling off-grid WASH innovations*

**Daniel Eriksson, NCSH**

*What is Sustainable Healthcare and how it can drive sustainable infrastructure implementation in developing countries*

**Ian Milimo & Emmanuel Nnko, UNDP**

*Creating Sustainable Health Care Infrastructure in developing countries*

**Jan Furuvald, Kapitalguiden**

*How to find public funding alternatives*

**Dr. Shantanu Sharma, MAMTA Health Institute for Mother and Child**

*Gaps and Scope of improving infrastructure in facilities for Sustainable Health Care in India*

**Vera Siesjö, SIDA**

*Supporting climate resilient and environmentally sustainable healthcare*

**Dr. Josephine Sundqvist, LM International**

*A bottom-up approach to sustainable healthcare infrastructure and community transformation – lessons learnt from Sudan, Ethiopia and Tanzania and ways forward*

**Per Olsson & Mikael Pontoppidan, LINK Arkitektur**

*Impact Architecture - holistic sustainability in healthcare projects*

**Valentin Monterio, Schneider Electric**

*Digital solutions for Sustainable & Efficient Hospitals*

**John Nyberg, Pure Bio Synergy**

*Circular Water and Disinfection Solutions for Health Care*

**Anders Gripenberg, Xinix**

*Disinfection for Health*

**Panel discussion**

*Questions for the speakers*

## Results and Outputs

The event attracted 82 registrations which was above our expectations. Participants representing 29 unique companies and 31 organizations and 5 with unidentified backgrounds.

The invitation was sent by TEMs and sWASH&grow's project members networks, through newsletters, LinkedIn, the sWASH&grow webpage. This way the outreach has been extensive, reaching people in the target group. They received the information about the activity as well as the project. Exact number of receivers is hard to estimate, but from the number and diversity of participants, we can see that we successfully reached out in several channels.

The aim of the event was to gather stakeholders that we find important in creating a platform and move things forward. From this perspective this event was a success. We had speakers from UNDP, Läkarmissionen and MAMTA who all are important actors working on the field. We also had SIDA and Kapitalguiden discussing the financing aspect. Large and small companies represented innovative solutions. RISE and Nordic Center for Sustainable Healthcare/TEM represented the project-platforms. All in all, this is a strong constellation, In the end of the event we concluded on collaboration and follow up meetings to develop a platform and concept for Sustainable Healthcare in low- and mid-Income countries.

During the follow up after the event, two potential paths has been identified. One in India in collaboration with MAMTA and the other one in Tanzania with Läkarmissionen and UNDP. These regions have different potential for export and project financing and therefor opens for different opportunities, still, results from both tracks may later be used cross the board.

India: we are now together with MAMTA planning for a webinar 19 October 2021 to initiate a similar event as 4 may but with an Indian focus, to develop a plan and invite Nordic and Indian stakeholders to participate. This will be followed up by a live event in New Delhi in February 2022.

Tanzania: Together with Läkarmissionen we have identified potential funding for a project in Tanzania. The application process will take place early fall 2021.

Constructing a platform for Sustainable Healthcare in low- and mid-income countries is not in the core of the sWASH&grow project. The financing covered the initial event to create the interest around the topic. Therefore, to develop this track further we need to find additional funding to continue. The initiation was done within sWASH&grow and a spin-of project will be represented as a result from sWASH&grow. Project partners in sWASH&grow will be involved.

## Conclusions and Impact

From NCSH/TEM's point of view, bringing sustainable healthcare into the sWASH&grow project was a bit of a gamble. The reason to participate was to get a better understanding of how the aid ecosystem works and to see how Sustainable Healthcare can be brought into it. Very early we found out that it is a perfect match and can bring new channels for export for Swedish WASH solutions.

- Healthcare is dependent on WASH-infrastructure to be able to provide safe treatments and care.
- Both WASH and healthcare are first on sight when disaster strikes, and coordination is therefore something that can benefit the local population.
- WASH and healthcare are using different export-ecosystems of stakeholders, procurement, financing etc. Therefore we can find new channels for export.
- Specialized WASH solutions for hospitals are also opening up for new export channels and finding a unique selling point differentiating from the mainstream routes.
- Sustainability, healthcare, WASH and aid are four strongholds from a Swedish export perspective, by combining them we can create a unique niche.