



# NaCLO for Africa



“About 2 billion people do not have sanitation service and about 3 billion do not have basic hand washing services with soap and water”.

(WHO data)

[www.naclo-plant.com](http://www.naclo-plant.com)

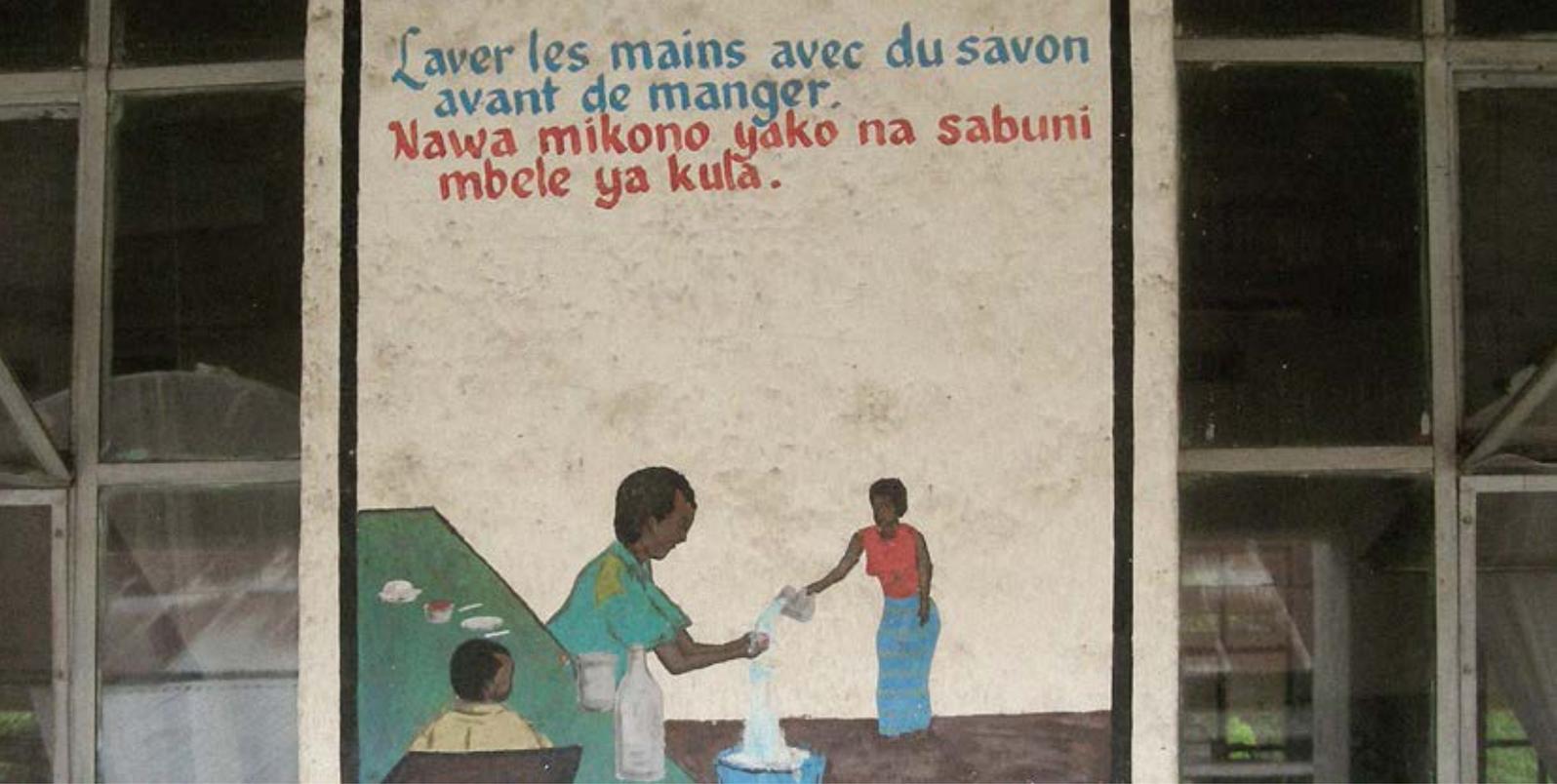


## About us

MEDIVAC is specialized in the production of medical devices for the collection of EBC (condensed human exhaled breath). The device produced, called "Turbo DECCS System", is used in many countries around the world in medical research applied to the study of diseases of the respiratory system and for the prediction of lung cancer.

MEDIVAC is one of only four companies in the world that produce devices used in this field of medical research and are mainly used in Occupational Medicine, Pneumology and Allergology.





## What is Medivac's NaClo Project

NaCLO is a key part of the 'Hygiene and Disinfection' project, which aims to encourage and support the dissemination of the culture of hygiene and the importance of disinfection in low- and middle-income countries.

It is an ambitious and wide-ranging project that contemplates health as an essential requirement for the development of countries.

Medivac's NaCLO project has hygiene as a priority: thus, in addition to initiatives aimed at improving hygiene and health, NaCLO also embraces educational, micro-entrepreneurship and international profit-non-profit cooperation initiatives.





# The advantages of NACLO 30 and Solar kit for NaCLO 30

## Electrolytic sodium hypochlorite

- disinfectant power with a broad spectrum of efficacy and durability
- flexibility and effectiveness of use through dilution even at low concentrations
- rapid destruction of micro-organisms, fungi, viruses, bacterial spores
- wide range of use (disinfection/sanitization in hospitals, first aid clinics, communities, child hygiene, home sanitization, washing and disinfection of fruit and vegetables, prevention of Ebola and Covid 19, etc)

## Production

- easy to use
- very low production costs
- facilitates skills transfer and staff training
- reduced transport costs
- environmental sustainability
- on-demand production





## How did the idea for NaClO come about?

The project is the result of long journeys in rural Africa by our friend Franco Ladavas, a former member of the Board of Directors of Industrie De Nora SpA, a world leader in the construction of electrochemical plants. Thanks also to his experience as a chemist, Ladavas realized how to tackle the serious lack of hygiene in low- and middle-income countries. A shortage made even more dramatic by largely inadequate health systems: a combination that constitutes an enormous obstacle to the overall development of those countries. Ladavas thus became aware that he could contribute to improving the sanitary situation in Africa and founded the Association "Amici di Marco ETS", in memory of his son Marco who died prematurely.

Immediately afterwards, he involved his friend Carlo Valesi and MEDIVAC Srl in the conception and construction of a small electro-chlorinator suitable for producing electrolytic sodium hypochlorite on site in a simple and low-cost way.



Ladavas and Valesi have only one goal: to equip health centers and hospitals with a system for the local and on-demand production of disinfectant. So, in 2009, they installed one of the first devices to produce electrolytic sodium hypochlorite in the hospital of Uvira (Democratic Republic of Congo), thanks to which they could also train local technicians in the management of the equipment, in the production and use of the disinfectant in its different dilutions.

Subsequently, other devices were installed in several African countries and in Bangladesh. During the years 2019-2021, MEDIVAC Srl then undertook to redesign and rationalize the production system to facilitate its transport, installation, and production start-up, also equipping it with photovoltaic panels (optional) to make it usable anywhere.

Thus, the NaCLO 30 mini-plant and the NaCLO Solar kit were born.





## Mission & Vision

The mission of the NaCLO project is to promote the culture of hygiene and to participate in the development, not only of health, of communities in low- and middle-income countries.

The vision of the project is to bring NaCLO to the attention of all profit and non-profit organizations that wish to share NaCLO's mission.

*“Our Mission is your Vision”*

# NaCLO today

The NaCLO project has taken important steps through some recent and significant collaborations.

**Senegal, 2021:** Thanks to **NaCLO 30** equipment complete with solar kit, the “**Associazione MANI (Parma)**” and “**ISCOS Emilia Romagna**” have made possible the birth, in the regions of Thies and Kaffrine, of a women’s micro-entrepreneurship project relating to the training, production and marketing of electrolytic sodium hypochlorite. The project is supported by a group of women from the Sagnakhor Federation of Pire Goureye. The product is sold and distributed on the market at a highly competitive price compared to disinfectants commonly found in Senegal.



**Guinea Bissau, 2022:** At the hospital and health facilities of the **Madrugada Campus in Bissau**, a NaCLO 30 device complete with Solar kit donated by MEDIVAC was installed. The donation is part of MEDIVAC’s CSR program, which provides for the training of local technicians in collaboration with “**Associazione per la collaborazione allo sviluppo di base della Guinea Bissau (Verona)**” and “**Cooperativa Madrugada**” for the on-site production of disinfectant to be used in the hospital facility and for the disinfection of the water collected in the campus tanks. Electrolytic sodium hypochlorite is also available in the compound’s pharmacy for external sale at a much lower price than market products.



**Parma, 2022:** the **University of Parma** and **MEDIVAC Srl** have signed a scientific collaboration agreement. MEDIVAC Srl has made available to the Department of Food and Pharmaceutical Sciences a NaCLO production system complete with Solar Kit to validate the production methodology of the system and the use of the product obtained in its various dilutions, providing technical-scientific data based on laboratory and field trials. This is also part of MEDIVAC Srl’s CSR program.





## The event

“NaCLO for Africa – Hygiene as an essential health requisite for the development in low- and middle-income countries” is the end point of the MEDIVAC’s CSR program.

It is an institutional scientific symposium to raise community and participants awareness of the problems of poor hygiene in low- and middle-income countries, and the importance of disinfection as a preventive weapon for many infectious diseases.



# Complementarity with the SDG's

“Companies are the only institution that can efficiently meet the needs of consumers on a large scale and address social, environmental and economic changes” (Michael Porter – Harvard Business School)

Sustainability and the creation of shared value are concepts deeply embedded in the DNA of MEDIVAC Srl. Although not yet certified as a Benefit Company or B Corp, in fact, the future impact of production, the social value of the company and the responsibility for the choices made in the business have been points of reference for the ownership since the establishment of MEDIVAC Srl.

Those values and commitments were translated into practice first in the MEDIVAC Srl devices and later in the realization of the NaCLO project.

The NaCLO project acts directly on 2 priority Goals: **SDG 3** ('Good health and wellbeing') and **SDG 6** ('Clean water and sanitation'), it also strongly impacts on **SDGs 4** ('Quality education'), **5** ('Gender equality'), **8** ('Decent work and economic growth'), **10** ('Reducing inequalities'), **11** ('Sustainable Cities and Communities'), **12** ('Responsible Consumption and Production'), **13** ('Climate action') and considers **SDG 17** ('Partnership for the Goals') as a Goal instrument, since it is a means to achieve all the others.

## Prioritari



## Secondari





## MEDIVAC Srl

Via Robert Kock 46/A , Località Pilastrello  
43123 Parma - Italy

ph. +39 0521 1815968  
naclo@naclo-plant.com

Visit our website for more  
information

[www.naclo-plant.com](http://www.naclo-plant.com)

