



# LiqChlor

Rethinking Water Disinfection

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# Access to Clean Water Is No Matter of Course



**2.2 bn. people  
lack safe access to clean  
drinking water**



**3.0 bn. people  
miss basic handwashing  
facilities at home**



**4.2 bn. people  
have no safe access to  
sanitation facilities**



**Access to water, sanitation, and hygiene is a human right!**



6 CLEAN WATER AND SANITATION



Ensure availability and sustainable management of water and sanitation for all



About 1.0 mio. people die of water born diseases every year, most of them children



Some countries have a funding gap of 60% to achieve water and sanitation targets of the UN



Using  $\text{Cl}_2$  as disinfectant enabled almost complete decline of these numbers but is limited to *highly developed areas*

«The filtration of drinking water plus the use of chlorine is probably the most significant public health advancement of the millennium.»

*Life Magazine*



Highly effective (<math><1 \text{ mg L}^{-1}</math>)



Against various contaminations



Enables long-term disinfection



Cheap (0.1 € for 1 mio. L water)



«Chlorine is deadly in small quantities, and once it gets into the air, it's almost impossible to control.»

*Robert W. Murray*



Highly toxic and corrosive



Complex storage and transport



Dangerous and difficult handling

# Our Solution: Trichloride-based Ionic Liquids



Safe Cl<sub>2</sub> storage



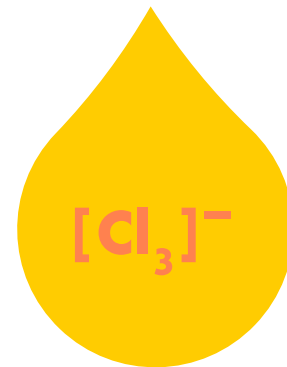
Low gas pressure



Cheap and scalable



Recyclable storage material

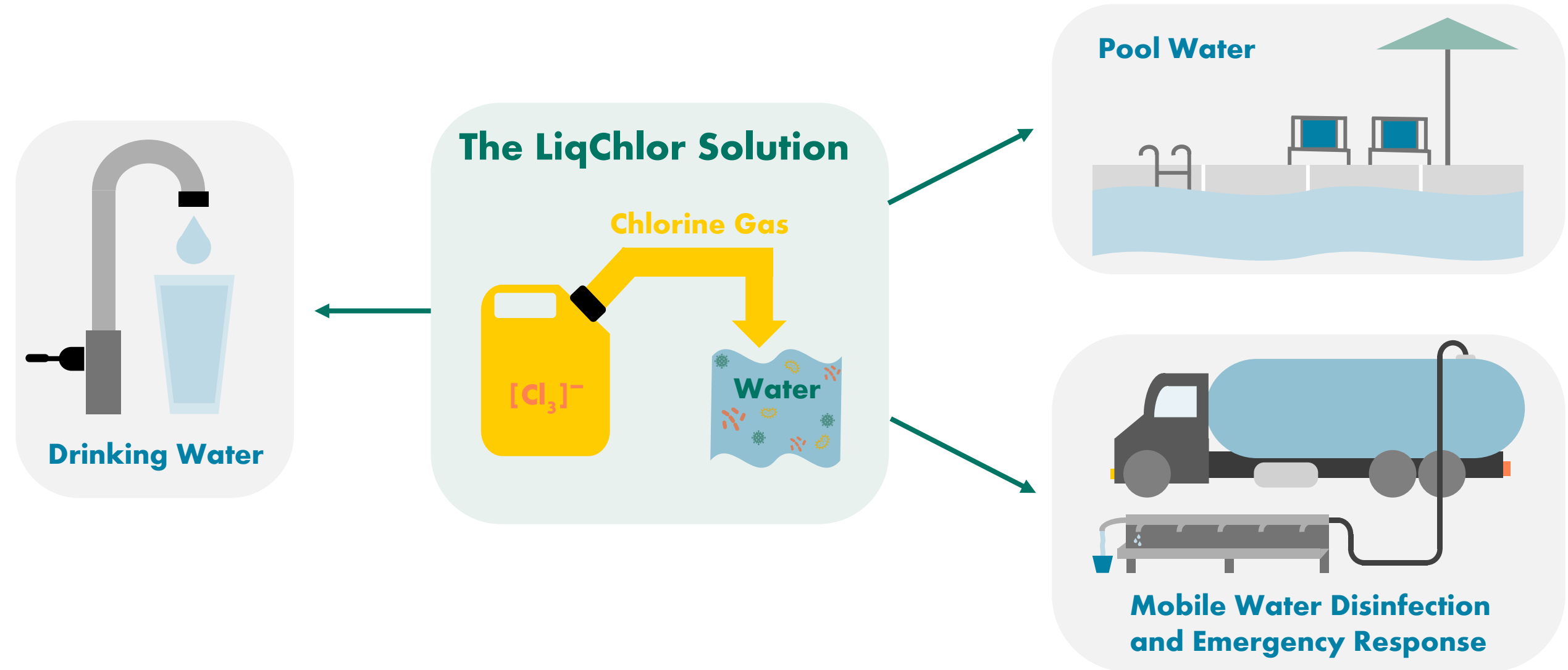


Safe water disinfection –  
mobile and independent of location



LiqChlor enables everyone to use Cl<sub>2</sub>  
to give more people access to clean  
and safe water

# Rethinking Water Disinfection





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