

ICED Evidence Library

Case Study: WASH Technology Matrix

Tags: Investment, Infrastructure, Water, Sanitation, Waste Management, Case Study



Globally, 780 million people do not have access to improved water sources and up to 2.5 billion lack access to improved sanitation (70% of whom live in rural areas). Poor access to water, sanitation and hygiene (WASH) services produces wider adverse consequences, from public health (e.g. diarrhoea, helminths, trachoma) to social services (20% of girls in developing countries do not attend school due to sanitation related factors).

Fortunately, WASH has long enjoyed consistent support from the donor community and private enterprise. The multi-disciplinary effort is widely distributed across the sustainable development goals and as a result access to improved sanitation and clean water is increasing. Despite progress, WASH and its stubborn dependence on public subsidy and therefore, the government, has been put under the spotlight in recent years, in an effort to identify the private sector driven models that can best support the scaled and improved provision of basic services across urban and rural areas.

One manner in which leading proponents are inviting private sector participation in the WASH sector is by more carefully examining the tangible technology and infrastructural assets that exist on the market that might potentially improve WASH services in developing countries in a carbon friendly manner. The importance of informed procurement decisions and known availability of key WASH technologies is key to commercialising the scaling the wider WASH sector in an environmentally sustainable manner.

But how do individual, public or private sector consumers know how carbon friendly or efficient a WASH product is? What resource exists to inform users not only about the basic cost and vendor of a technology, but also its procurement, operational and maintenance impact on the environment, via the release of carbon?

The [ICED WASH Technology Matrix](#), represents the early design and development of an actionable and participatory online, web-hosted directory that lists and recommends over 200 WASH technologies based on a number of criteria that users select, from their geographic location, budget, climate and water or sewage treatment requirements¹.

¹ Infrastructure and Cities for Economic Development (ICED) is DFID's new catalytic, flexible facility designed to accelerate DFID's infrastructure and cities initiatives across the world to contribute to poverty reduction and to resilient, inclusive, and transformative economic growth.

Unlike other research that has been done in this area, the directory seeks to influence procurement decisions at the time of purchase, listing information relating to IP, pricing per unit and CO² emissions alongside basic vendor contact information.

The WASH Technology Matrix is purposely tailored to be an applicable and easy to employ tool for a wide range of various public and private stakeholders, including:

- **Government:** The WASH Technology Matrix seeks to assist municipal authorities and public bodies to make informed decisions about the selection and procurement of water supply and sanitation technologies. Public authorities are expected to benefit uniquely from the tool in their ability to identify cost effective, and novel solutions that have been tailored to developing country urban and rural contexts.
- **Donors, Civil Society & Academia:** The WASH Technology Matrix has been tailored to help donor partners to make informed procurement decisions for appropriate technologies within their own programmes and among their own recipients.
- **Private Sector:** The WASH Technology Matrix engaged over 300 private enterprises and entrepreneurs to determine the top 200, most suitable water supply and sanitation technologies to be featured in the matrix. The WASH Technology Matrix provides businesses and enterprises the opportunity to feature their innovative work on a centralised and user-friendly platform, maximising the impact of the innovation, while carefully accounting for the IP and procurement sensitivities that surround a technology.

Outputs

The WASH Technology Matrix was published live at www.washtechnologymatrix.com in July, 2017 and is publicly available worldwide. Key outputs of the tool to date, have included:

- Field testing of the tool in hypothetical and programme level operations among donor and academic partners, including: Water Aid, Eawag, Plan International, The Carbon Trust, Population Services International, the World Bank Group, SuSanA, Practical Action Consulting, University College London and the WSUP Advisory.
- Field testing of the tool in DFID programming, via the WASH Results Programme (WSUP)—tested in five different geographies as well as at DFID HQ (Whitehall) in July, 2017.
- The publication of the WASH Technology Matrix online, so that it is available to multiple stakeholders globally.

Next steps

- The WASH Technology Matrix will remain a live website, accessible via the ICED website. Contact details will be provided to the general public, to allow for ongoing contributions and comments to the tool.
- The WASH Technology Matrix may retain use among donor partners who have been engaged in early stages of the ICED initiative. At least two donor consortiums, including Plan International and Eawag, have stated their intention to draw upon and further employ the WASH Technology Matrix in their own programming, throughout 2018.
- The WASH Technology Matrix may be used among DFID country offices and it's contractors through upcoming programme work.