

SEATTLE / USA – On the invitation of the Bill & Melinda Gates Foundation, the **Austrian design firm E00S**, together with the **Eawag aquatic research institute of ETH Zurich**, present a revolutionary new sanitation concept: the **“diversion toilet”**.

Last year, the **Bill & Melinda Gates Foundation** awarded eight universities around the world **grants** to reinvent the toilet. It should be **affordable for the poor** (less than 5 cents per day per person), **clean, safe and universally applicable**, in order to help those who have no or inadequate sanitation. According to the foundation, 2.5 billion people are affected by this condition. This problem has serious health and social consequences and is a cause of disease and death.

Researchers from around the world, including eight foundation grantees who are part of the Reinvent the Toilet Challenge, presented their concept for a new toilet from 14 to 15 August at the **“Reinvent the Toilet Fair” in Seattle (USA)**. The fair showcased innovations from around the world that are creating a new vision for the **“next generation” of sanitation** and aims to inspire collaboration around a shared mission of delivering a reinvented toilet.

“We have designed a toilet that works everywhere, from the slums of Kampala to a millionaire’s weekend home in the country,” says Harald Gründl of E00S Design.



Water, Hygiene, Future

Photo montage of an existing toilet facility complemented by the “diversion toilet” by E00S and Eawag

This collaboration between the Swiss aquatic research institute Eawag and the design firm E00S is unusual but necessary, in order **to bring advanced technology into a form suitable for everyday use.**

The result of this intensive exchange between Vienna and Zurich over the past year is the “diversion toilet”: a squat toilet that **separates** urine and feces, offers **clean water** for hand washing and cleaning the facility, **requires no sewer or water connections** and can be **locally produced** – all for 5 cents per day per person. A **service concept** is also being introduced in order to implement this system for the long term.

The “diversion toilet” represents **a real breakthrough for sanitary needs worldwide**, and with funding from the **Bill & Melinda Gates Foundation** it could soon be a reality.



Design for new technologies

Model of the “diversion toilet”
Project design: E00S and Eawag

The toilet’s internal water circulates and is sterilized using a procedure developed by Eawag. Thus for the first time it will be possible to make clean water available for personal hygiene in regions lacking their own water supply.

Feces and urine are collected separately from one another in a narrow container located underneath the toilet bowl, which is replaced every three to four days. Urine and feces are then processed in an additional step, for example, into fertilizer or biogas. Eawag is providing necessary technologies for recycling and processing the water.

The “diversion toilet” is **ultra-compact, entirely chemical-free and can be easily transported**. The processing of the urine and feces and the fact that the toilets can be set up **completely self-sufficiently** – without sewer, electricity or water connections – enables **a form of contracting**: the toilet will be operated and rented out by microenterprises.

“Whether our system can really be implemented depends on how good our business model is. No solution that relies on permanent subsidies will function over the long term,” says process engineer and Eawag project manager Tove Larsen.

In this age of expanding cities, scarce resources and related infrastructure demands, E00S and Eawag’s innovation could also have **a significant impact on the developed world**.

E00S is one of the leading agencies for product, sanitary and furniture design and has been working for years on strategies for sustainable design.

The reinvention of the toilet initiated by the Bill & Melinda Gates Foundation combines the design knowledge of E00S with the technical know-how of Eawag – and bears the seeds of a real design revolution.

For further information, interviews or images please contact us at: press@e00s.com