Applicant: Amphiro AG

The startup Amphiro AG offers energy-autarkic sensor, display, and communication modules for easy integration in mass-market faucets and fittings. With our patented and patent-pending micro-generators, faucet and fitting manufacturers can design interactive products that show temperature, volume, and energy consumption directly at the point of use – without battery, maintenance-free, and without any additional effort for the plumber. Regardless of whether the goal is to increase comfort by displaying volume or temperature on an ambient display, to build products that motivate an efficient usage of resources, or to market products that support legionella prevention in hotels and public buildings, Amphiro allows for realizing differentiating product features with a short time to market. Our product portfolio comprises individual modules for design-in as well as ready-to-brand-and-market products – all built within Europe and in strict adherence to drinking water and safety requirements.

**amphiro b1: The Smart Shower Meter for every household**

Based on its core technology, Amphiro has developed the first smart shower monitor. It leads to proven water and energy saving effects, can be mounted by the end customers themselves, and amortizes in less than a year.

amphiro b1 is an easy-to-install retrofit smart shower monitor to be mounted between shower hose and shower head. Originally built to demonstrate the quality of our energy-autarkic modules, more than 25'000 pcs have been sold since its market introduction in September 2012. In a study for the Swiss Federal Office of Energy, average savings of 440 kWh heat energy plus 8'500 liters of drinking- and wastewater per year and household have been shown from improved consumer behavior due to the provided information, allowing for an amortization-period of less than one year. With its real-time feedback at the point of use, amphiro b1 leads to average annual saving of GBP 80 plus 110 kg of CO_2 at one-time retail costs of GBP 69.

amphiro b1 is the world's first smart meter for the shower that informs you about your current water and energy consumption, provides you with real-time feedback and thus enables you to act up to your standards.

Please find our illustrative video at
www.youtube.com/watch?v=wxG4GdqJSoU
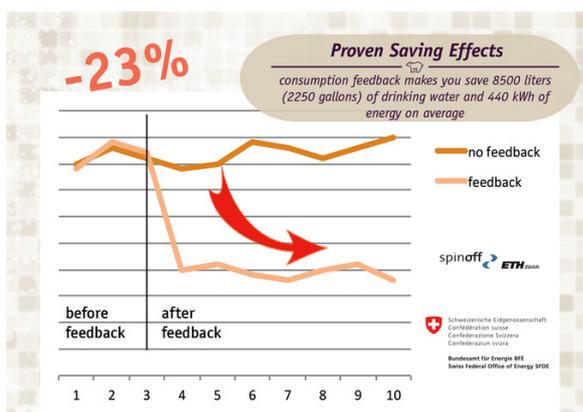
Consumption awareness is the first step towards a behavioral change and thus to energy efficiency. A study commissioned by the Swiss Federal Office of Energy showed average savings of 23% (440 kWh heat energy & 8'500 l drinking water). (N=697 households, 48'000 showers)

Source: Tasic, V., Tiefenbeck, V., Schoeb, S., Staake, T., Short-term spark or sustained impact? Investigating the long-term effect of real-time feedback, ECIS 2015, Nominated for best-work in-Progress paper.

Simplicity
installation is as easy as 1-2-3 and does not require a driller, any other tools or a plumber

You can install amphiro b1 in your shower easily in less than a minute and without any tools.

amphiro b1 is compatible with all standard hand held shower heads worldwide.

To your convenience data is displayed in your country's standard (e.g. in Gallons and Fahrenheit or Liters and Celsius).

Wireless Connectivity
Consumption data can be accessed via Bluetooth 4.0 with smartphones, tablets and computers
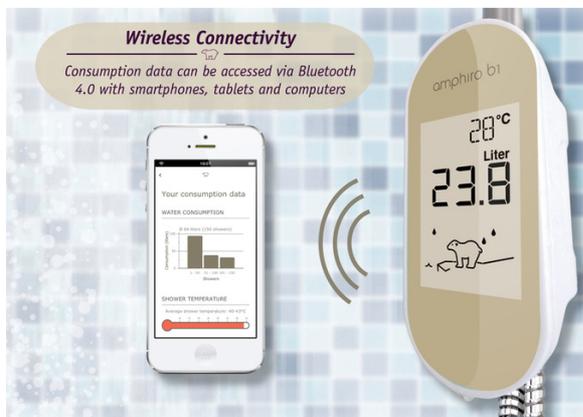
You can enable amphiro b1 to send data automatically to a smartphone app, making energy saving while showering even more convenient. Data can be accessed via smartphones, tablets and computers. The receiving device requires Bluetooth 4.0 or 4.1.

Apps are available for free in Apple's App Store and Google's Play Store.

Self-Powered
does not require any batteries as energy is harvested from the waterflow by a microturbine

Amphiro generates its energy from water flow. No batteries are needed, the devices are completely maintenance-free.

25'000 devices are in operation – without any problems from sediments in the water or calcification.

Drinking water compliance is a given.
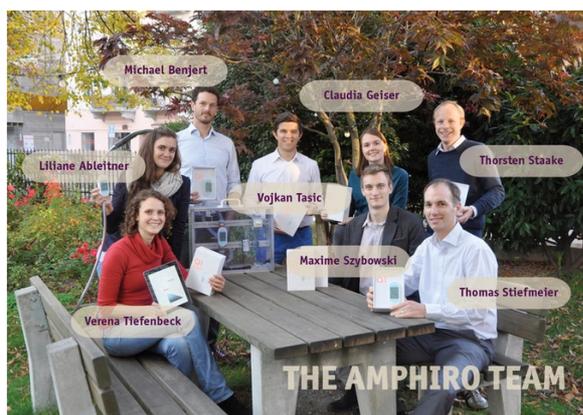
The Amphiro Team works hard on its goal of promoting energy efficiency among private households. Founded in 2009 from members of the Swiss Federal Institute of Technology (ETH Zurich), it is now a colorful mixture of various fields of interest like computer science, electrical engineering, business and marketing. Each team member performs remarkable tasks making our vision come true.

We thank you for your support!