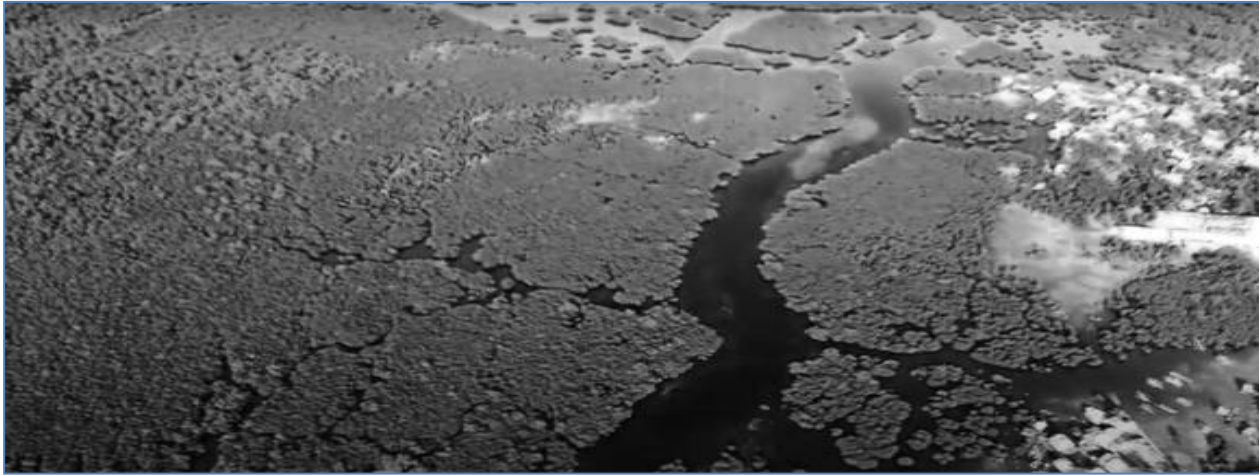
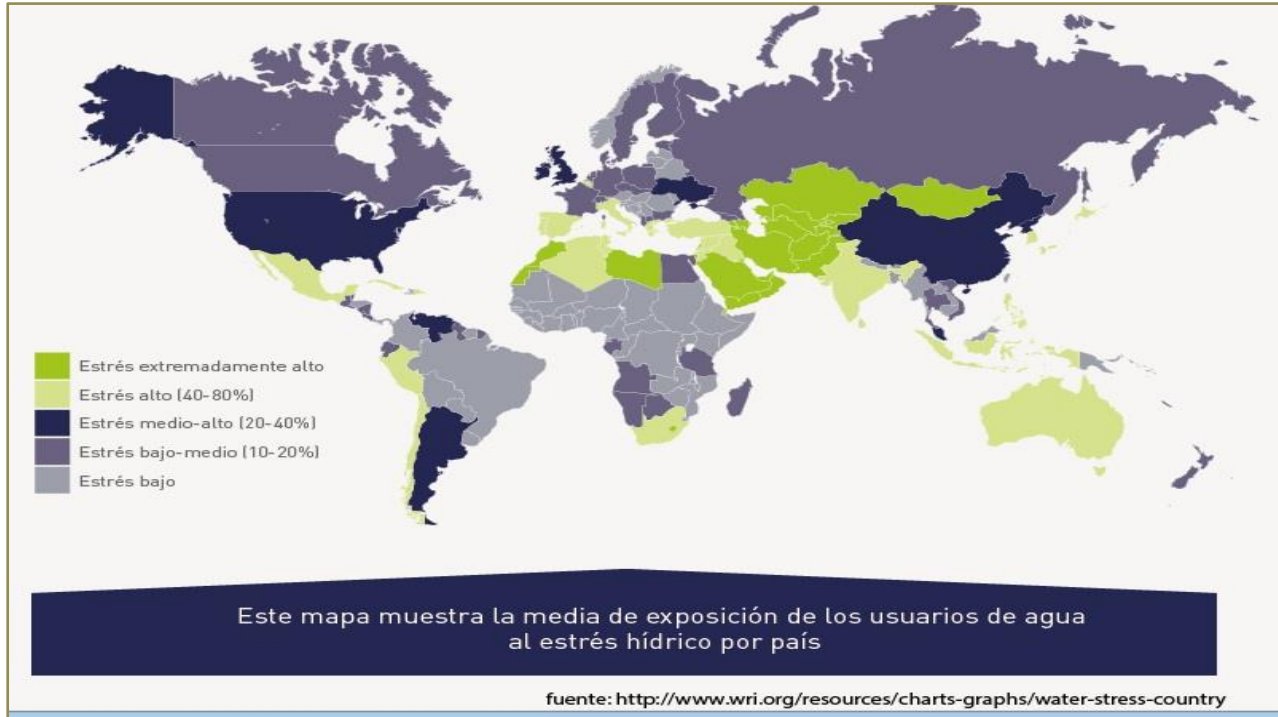


SMART WATER FLOW MONITOR



Today, natural resources are more precious than ever, and **water is the #1 global risk** according to the World Economic Forum.



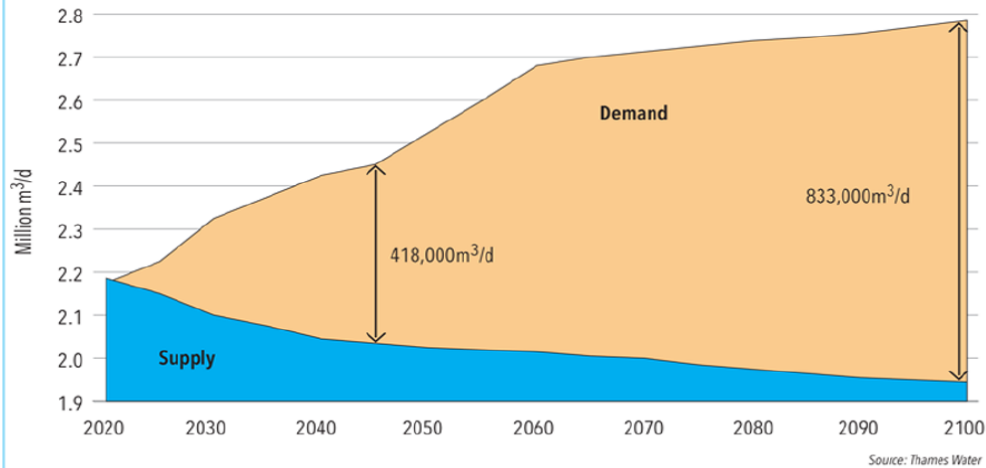
Worldwide wáter stress map

New EU directives for buildings are stricter

Water scarcity facts:

TACKLING LONDON'S LOOMING WATER DEFICIT

The orange area in the chart below shows the projected water supply-demand imbalance in London over the next 80 years. The raw numbers assume that no action is taken, although the array of mitigating solutions carry their own set of challenges.



Water availability forecast by thames Water greater London area



Water stress in Spain

Existing traditional solutions are:



Aerators ,



Flow limiters ,



eco taps ,



grey water circuit, rainwater collection

Our proposal : Smart Water Flow Monitor



An 'invisible' display shows instant & accumulated consumption to increase awareness & encourage behavioral changes in users.

We have measured savings of 5% (offices), 10% (hotels), 7% (hospitals) ...17% (households)

About half of the water saved is hot, so energy & CO2 are saved too in DHW generation

COUNT DOWN function mode

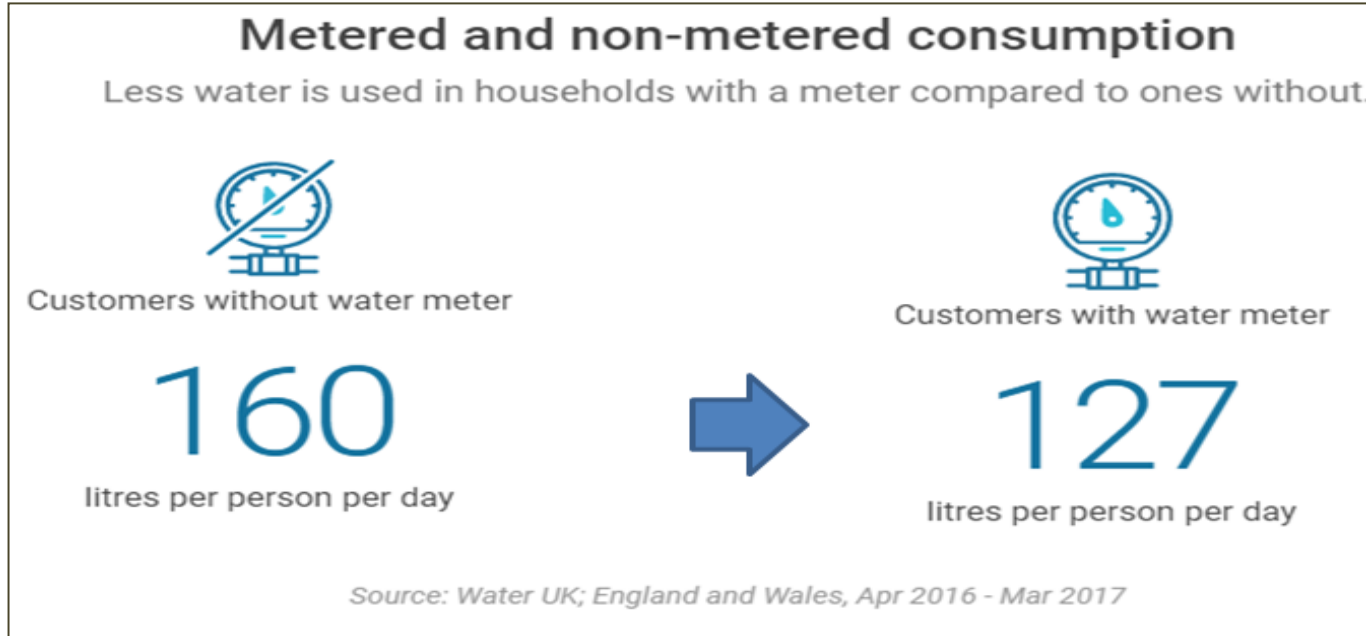
For buildings with a fix number of daily users : (schools, households, offices...)

*Users can set their
Daily consumption target
and see the “remaining amount of
water” during every use.*

**measurement is key
to achieve savings**



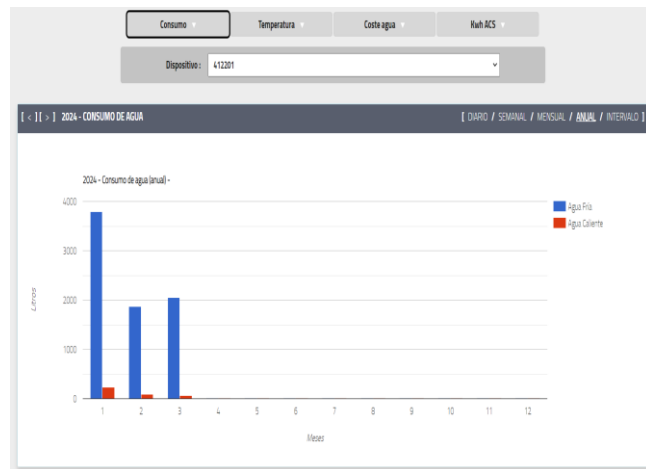
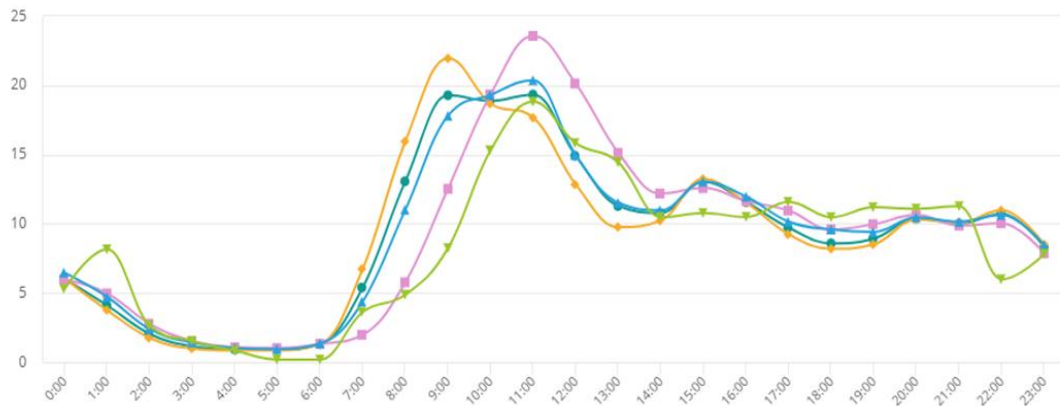
Savings based in fostering behaviour changes



Water UK :water consumption fell 20% after adding a meter in homes without it

Water Flow & temp can be sent to the cloud for stats

DEFCON⁸



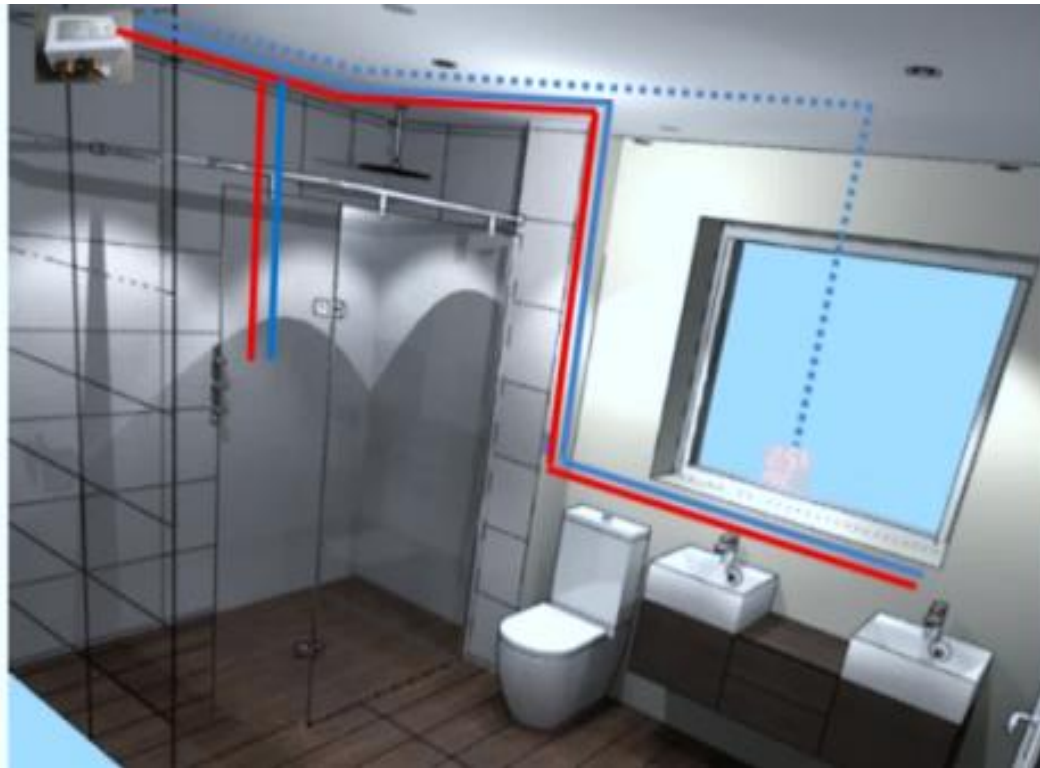
FLUJO INFORMACION

Submetering allows to know where most of the water is used



Instalación típica

DEFCON₈



No maintenance needed.

It can monitor an entire house, an entire bathroom (hospitals) or just a sink (public bathrooms).

Communication between display and flowmeters can be by cable (new buildings) or Radiofreq (renovations)

Installation time in a new building: ~20 min.

Can include a flow limiter too.

Compatible with any faucet / sanitary

***Some examples:
Hospital Viladecans***



Programation area





Units with cloud monitoring of water Flow & temperature



Retrofit version installed







Official architecture school







Fundació Sanitaria Mollet

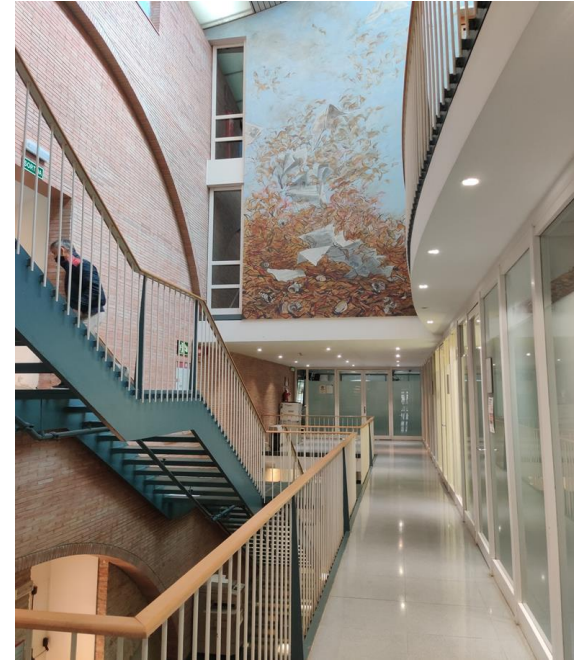


DIBA

DEFCON₈



Rellotge building Diputació Barcelona



Hotel Solymar (Valencia)



10% savings in rooms





Building with Enerphit certification



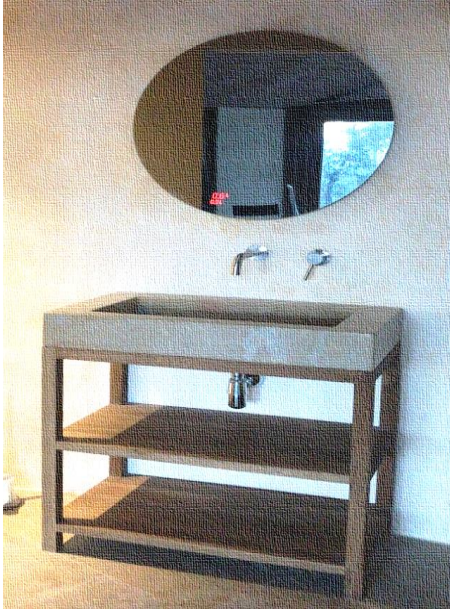
Civivox (Pamplona)



Value for future generations: priceless



Eco-lodge (Girona)



A % of water used is reused for watering ; the real water footprint is shown on the mirror



Flats (Madrid)

DEFCO⁸



Construction ongoing ...



Example: 4*Hotel (100 rooms)

Water usage 5000m³/yr.

Out of which 90% iused in romos

Water invoice 30K€/año.

Ocupation: 93%

Savings

- 500m³ (2705€)
- 14,55Mwh en ACS (1164€)
- 2.08tCO₂ (50€)

Total 3919€/ yr

ROI : 9 years in Barcelona (without grants)

5 yrs in Hamburg, Berlin, Glasgow

3 yrs in Copenhagen, Gent, Aarhus



Savings : 10% water

Feasability study



Hotel Majestic (Psg Gracia, Barcelona)



One shot Hotels



Hotel AC Som L'Hospitalet (Marriot)

Yearly impacts if 20% of Zaragoza's citizens used the Smart Water Flow Monitor :

630.000m³ water
18 Gwh en ACS
2573 t CO₂
(3.9 M€)

Smarter urban water: how Spain's Zaragoza learned to use less

Facing severe crop failure and forest fires, pioneering citizens transformed habits in a decade and reduced water use by 27%

- **How dammed Denver turned to ridiculing waste**
- **Why Melbourne needed to catch and store**



Schools



Nürnberg (Germany)



& Vilanova de Gaia (Portugal)

Acc.to a Waterwise study 3m3 of water can be saved daily in an average school

**DEFCON8 HELPS
USERS SAVE WATER
& ENERGY**

**ARCHITECTS
DESIGN PASSIVE
BUILDINGS**

**AND CITIES ACHIEVE
ITS CO2 REDUCTION
GOALS**



Awareness Fosters Savings



**MIRROR MIRROR
ON THE WALL
WHO'S THE
MOST EFFICIENT
OF THEM ALL**

