Quel est l'impact de mes efforts?

by: António Bastião, Vladimir Ilievski, Mayra Recio

WATER CONSUMPTION

The average Swiss consumes **162 liters** of water per person per day for domestic purposes such as drinking, cooking, cleaning or washing.

Does that concern you?

So what? Why bother?

Access to clean water

- 884 million people worldwide lack access to clean water
- 2.6 billion lack access to sanitation services

Local changes

- Swiss glaciers melting
- The fresh water disappears

Global changes

- Climate changes and global warming
- Global population grows
- Groundwater used faster than replenished

Awareness of water issues needs to be raised significantly!

OUR SOLUTION

Devices and Sensors

Devices with high precision for measuring the water waste.
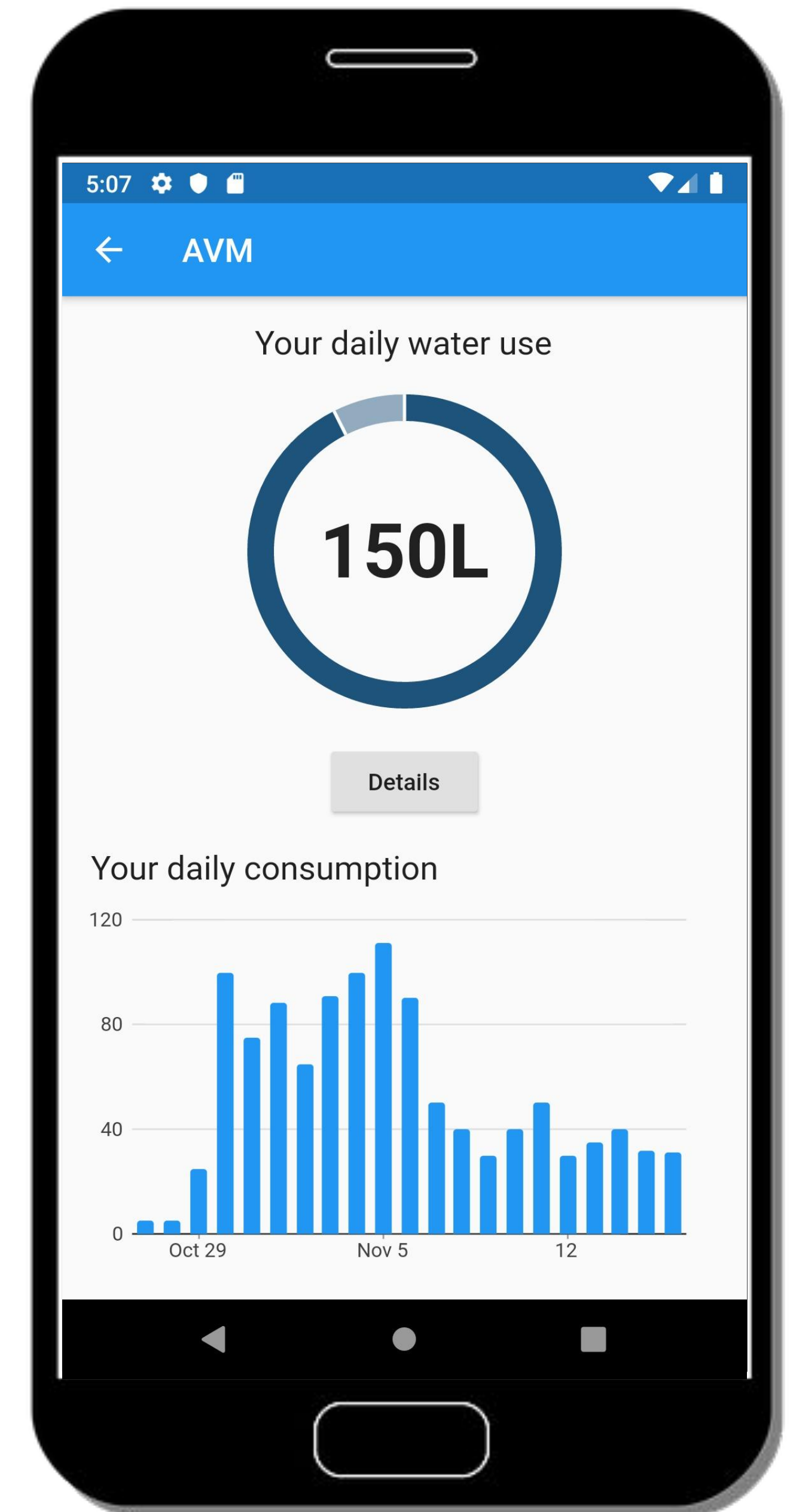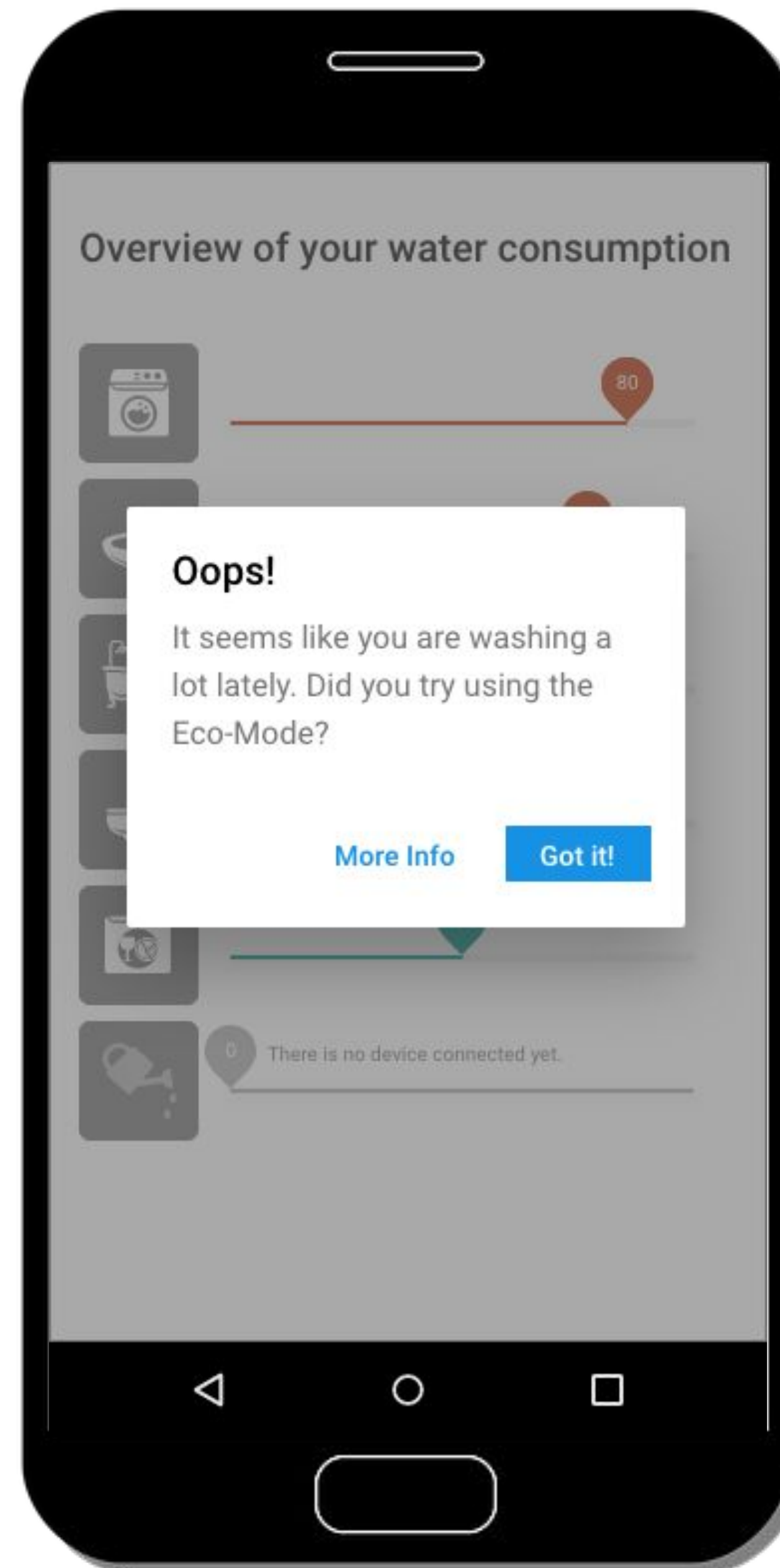
droople

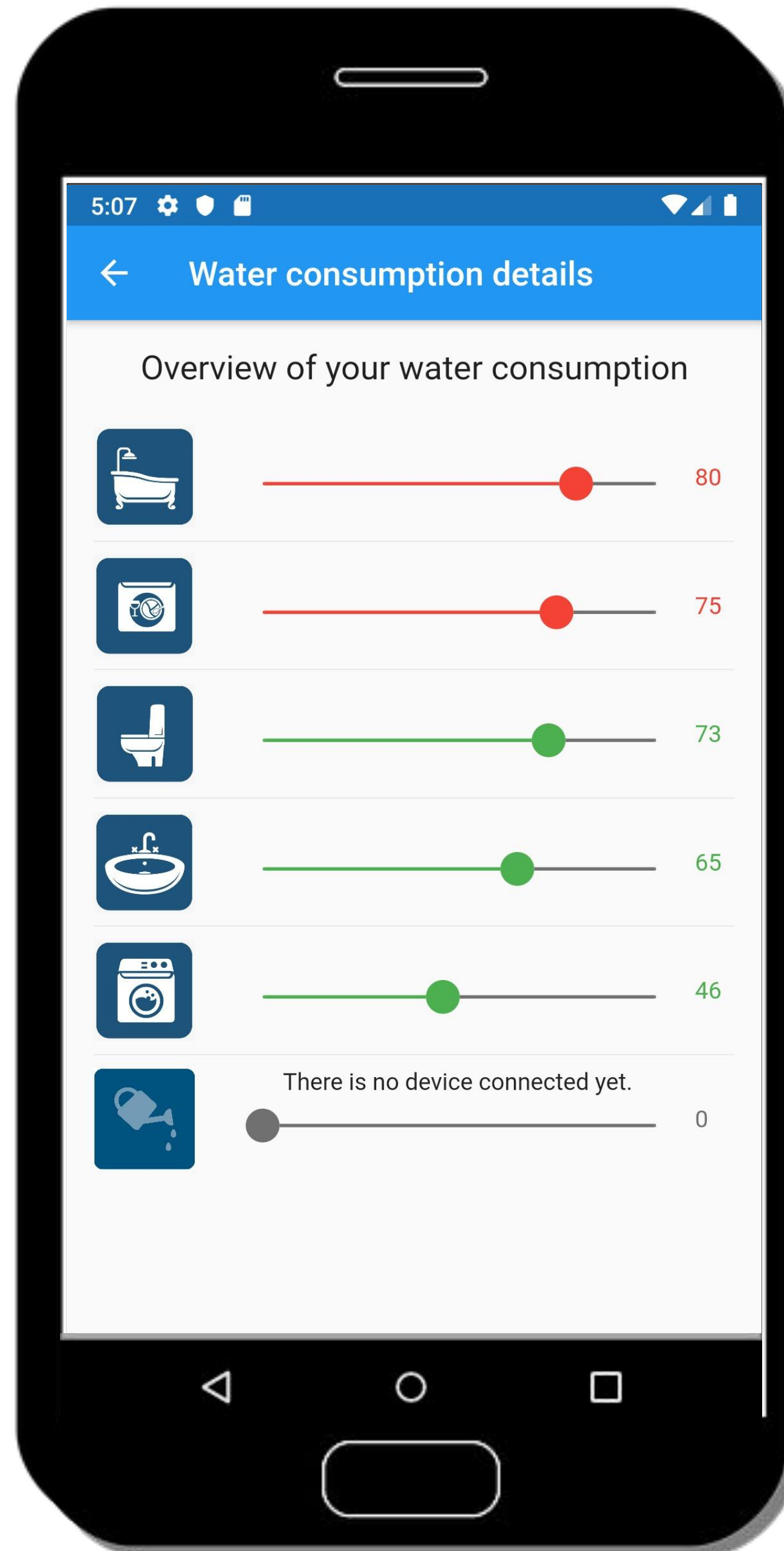## Smart homes

The households are equipped with smart sensors

Accessibility

We can easily access this information and use it

5:07

← AVM

Your daily water use

150L

Details

Your daily consumption

120

80

40

0

Oct 29   Nov 5   12

5:07

← Water consumption details

Overview of your water consumption

80

75

73

65

46

There is no device connected yet.

0

Overview of your water consumption

80

Oops!

It seems like you are washing a lot lately. Did you try using the Eco-Mode?

More Info   Got it!

There is no device connected yet.

0

Take a look at some top tips for conserving water

Small changes can make a big impact in terms of overall water consumption. Taking a few simple measures can save significant water and energy.
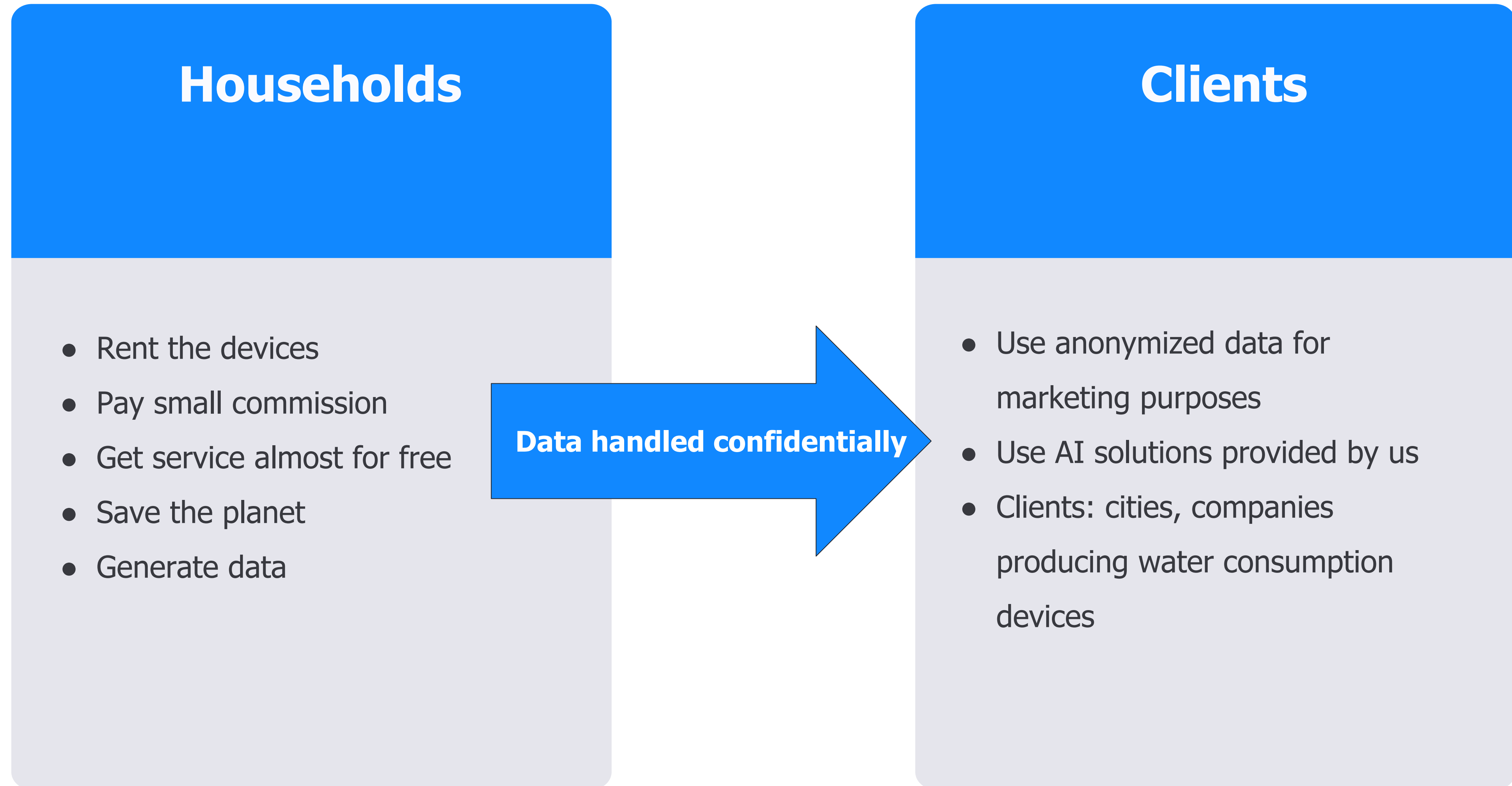
1. Re-use Towels. The towel you use to dry after a shower does not need to be laundered after each use, so hang it up and re-use it instead. Washing your household's towels when they actually need to be washed is a much better use of water than daily loads.

2. Use Less Hot Water. Saving money in the laundry room has to start with hot water usage because turning cold water to hot water is the most energy-intensive part of the laundry process. Use warm or cold water when possible, and you instantly save on water energy costs.

3. Run Full Loads. Rather than running many

Two-sided business model

Households

- Rent the devices
- Pay small commission
- Get service almost for free
- Save the planet
- Generate data

Data handled confidentially

Clients

- Use anonymized data for marketing purposes
- Use AI solutions provided by us
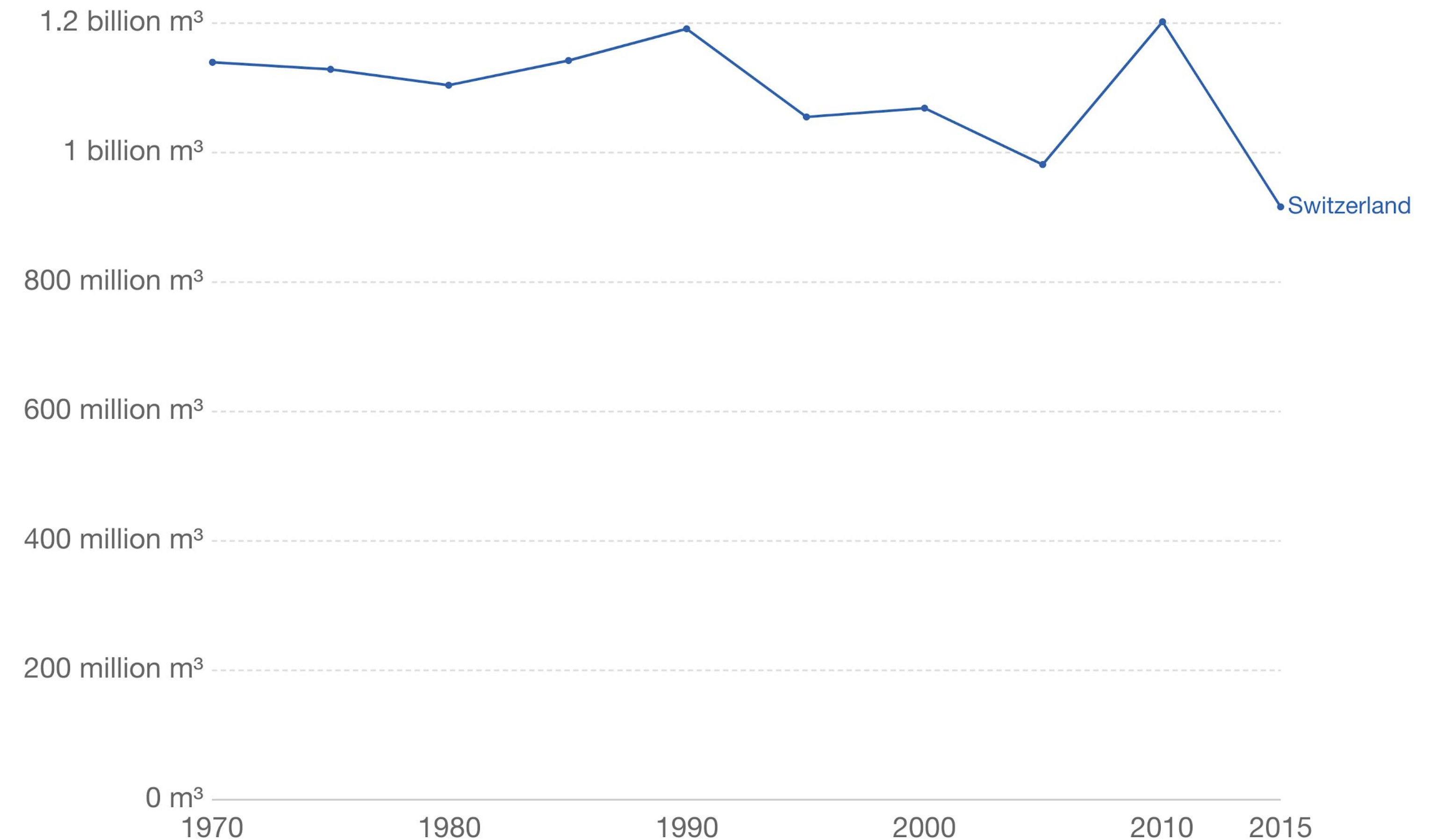- Clients: cities, companies producing water consumption devices

Good News

- 917 Million Cubic Meters in 2018: equivalent of Bielersee
- Drop of 235 Million Cubic Meters
- The raising awareness **matters!**

Municipal water withdrawal

Total water withdrawal for municipal (domestic) purposes, measured in cubic metres (m³) per year. Municipal water is the annual quantity of water withdrawn primarily for the direct use by the population.

Switzerland

1.2 billion m³
1 billion m³
800 million m³
600 million m³
400 million m³
200 million m³
0 m³

1970   1980   1990   2000   2010   2015
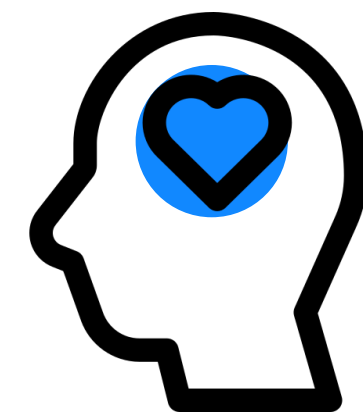
Source: UN Food and Agricultural Organization (FAO) AQUASTAT

Benefits

Raising Awareness

About the importance and value of water in the economy and society

Motivating People

To use the water efficiently and save money by making smart choices

Encouraging responsibility

Responsible use of water to support long-term availability and quality

Knowing the user

More precise information about lifestyles, water usage and prediction behavior

OUR TEAM

António Bastião

Android Developer

Vladimir Ilievski

Machine Learning Engineer

Mayra Recio

UX Designer

Thank You!

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blueark
Challenge

Enablers

Devices and Sensors

Devices with high precision for measuring the water waste.

Smart homes
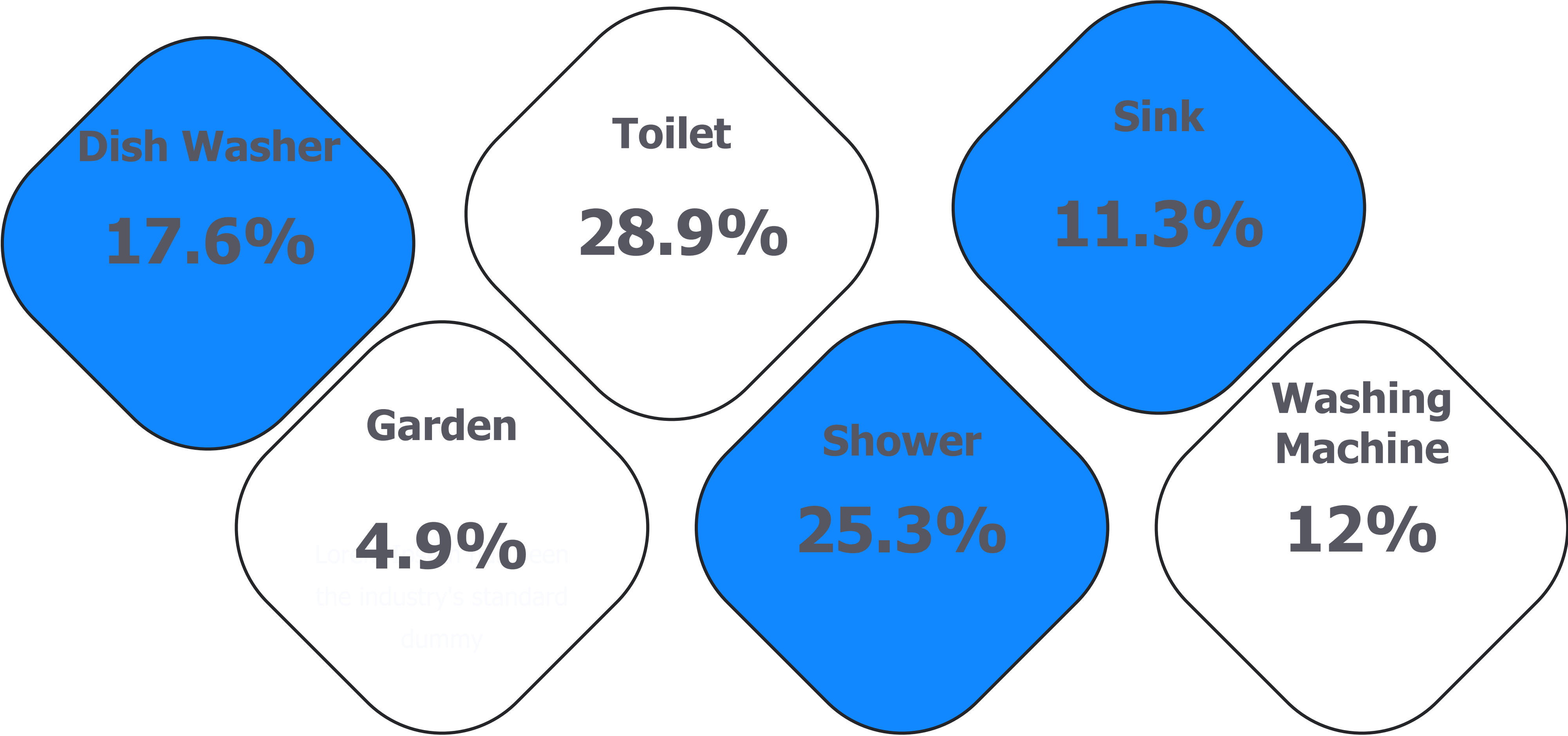
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droople

Water Waste Sources

Dish Washer
17.6%

Toilet
28.9%

Sink
11.3%

Garden
4.9%
Lon... ...een
the industry's standard
dummy

Shower
25.3%

Washing Machine
12%

Benefits

- Raising awareness about the importance and value of water in the economy and society
- Motivating technically efficient use of water
- Encouraging responsible use of water to support long-term availability and quality.

Log in for the page
pricing (device and technology)
What type of data they provide:

Agenda

- **Introduction**: Mention the challenge, Domestic water waste, water footprint
- **So what?**: Swiss consum vs. other countries, problems like climate change
- **Solution: where can we start?:** Raising awareness: droople + app
- **AVM app** : log in and take the data, display the app, show different screens
- **Conclusion:** Good news + Benefits:

Simple, user friendly solution.simple, user-friendly and fun solution that allows each citizen to control their drinking water consumption, wastewater discharges, monitor the volume of their heating water,

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Water Waste

The average Swiss consumes 162 liters of water per person per day for domestic purposes such as drinking, cooking, cleaning or washing.

If you include food, beverages, clothing, etc, the water footprint amounts to 4,200 liters per person per day.

awaren serve as an entry point for
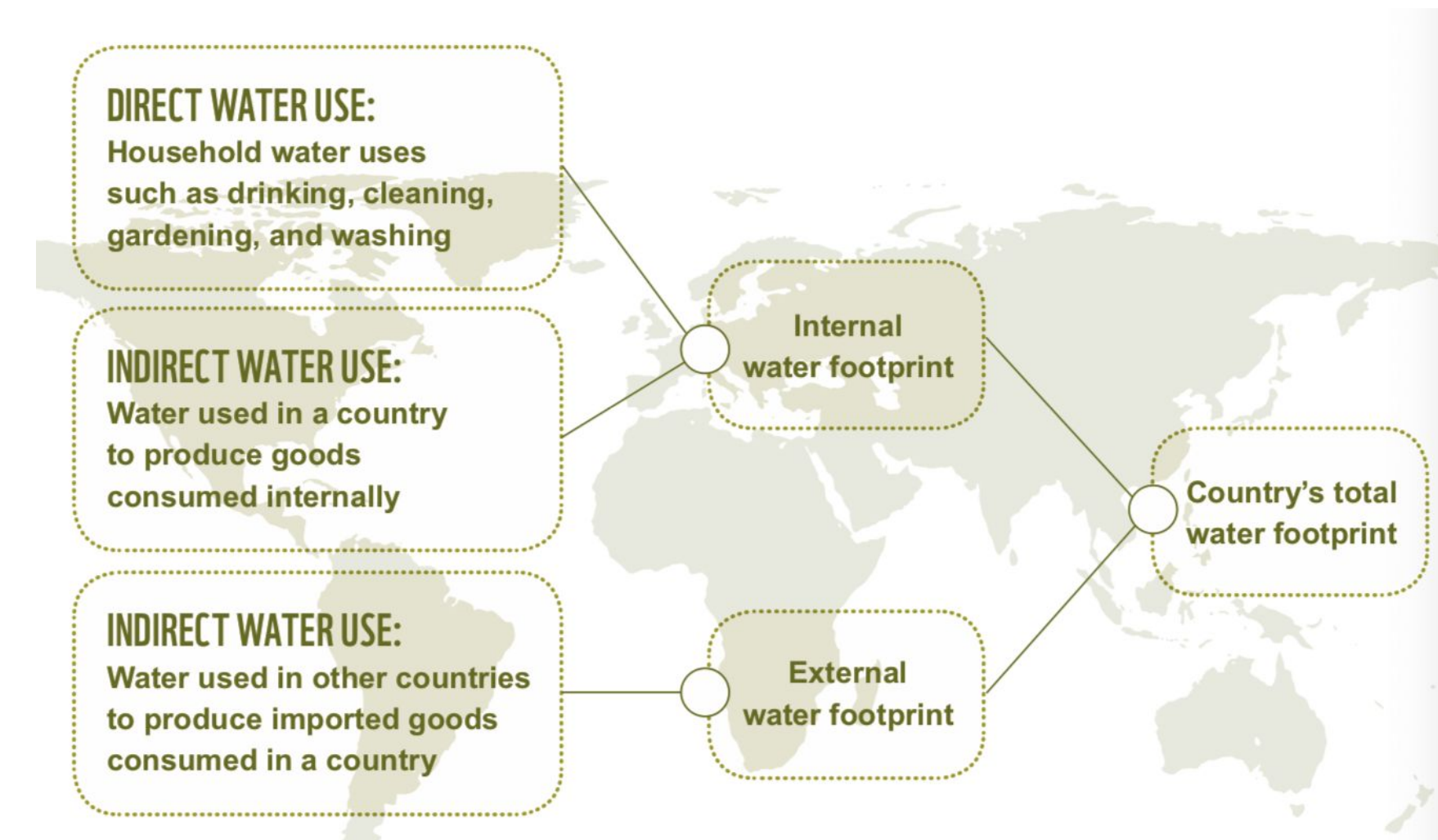decisio d to more robust responses to future
water c

28.9 % WC-Spülung
25.3 % Duschen, Baden
15.5 % Küchenspültisch
12.0 % Waschautomat
11.3 % Lavabo Bad
2.1 % Geschirrspüler
4.9 % Aussenbereich

142 Liter
Wasserverbrauch im Haushalt
pro Einwohner und Tag

920 × 1075

Water footprint

The industrialization and globalitation process has changed water issues from being mainly local affairs to becoming regional and global issues.

Water footprint as an indicator of human appropriation of freshwater resources can be measured as volume over time (mostrly m^3/yr)

What's in a number?

So what?/ Why bother?

884 million people do not have access to clean water
2.6 billion lack access to sanitation services
Global population grows
Climate changes
Groundwater is being used at a faster rate than it can be replenished
Daily requirement: 50 liters per day

→ To any Swiss citizen that amount is used daily to flush the toilet.

The domestic water is the 'visible' water

These worrying trends make managing and conserving water resources so vitally important. And, in order
to do so effectively, we must understand how water moves through the natural environment, the economies
of nations, the production practices of agriculture and industry, and the lives of people.
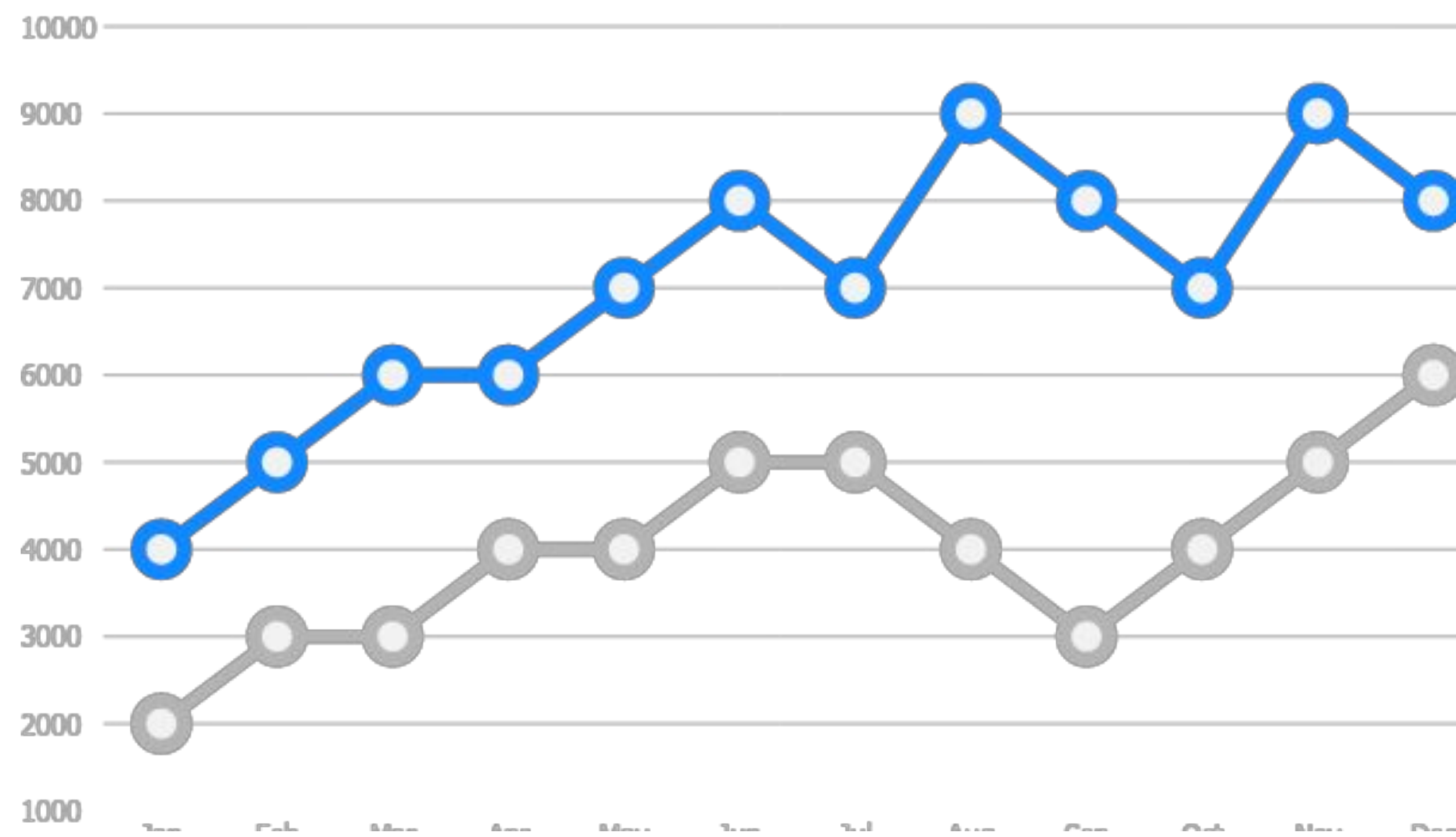
The effect of Glacier Melting

8 meters of ice melted at the Findelen glacier during the summer of 2019

CHART SLIDE

Commercialization ideas

- Two-sided business model like the social networks: users that get some service almost for free and contribute for a better planet and clients using that data to make profit
- The users do not buy the devices, we just rent to them the devices
- The users might pay some small commission on the saved amount of water
- The data is anonymized and handled in a strict and confidential manner
- We sell solutions not data
- Out clients could be: the city authorities, the washing machine producers, the dish washing machine producers, etc