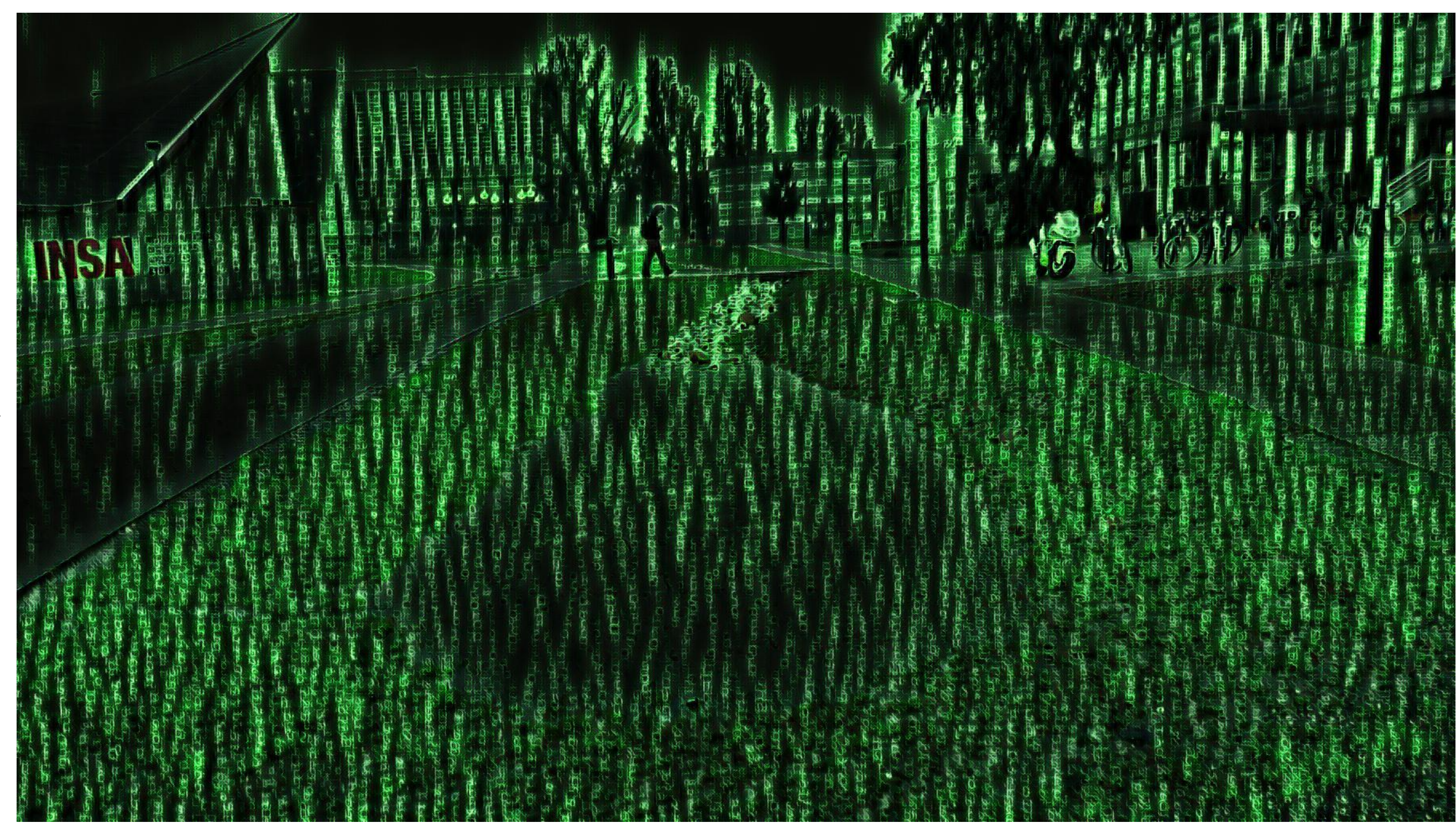
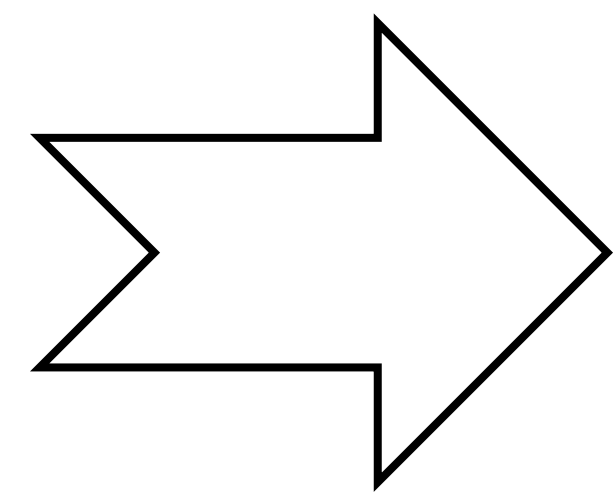
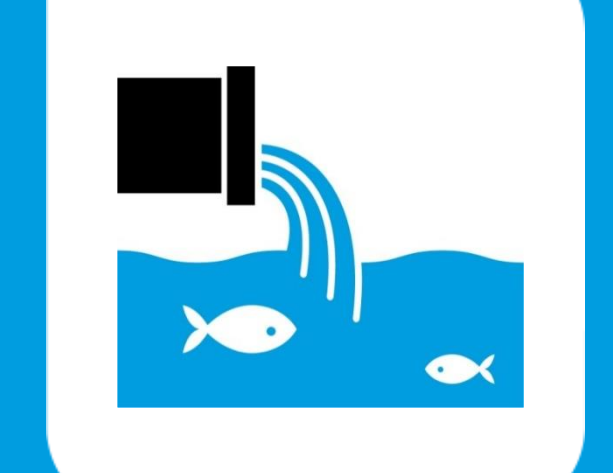
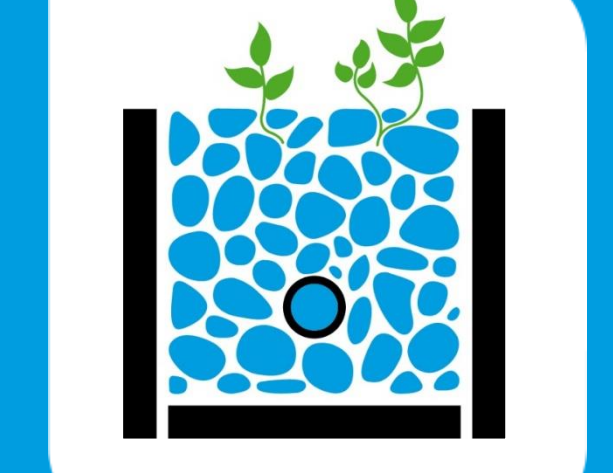


<https://mind4stormwater.org>



Toward proactive management of stormwater control measures using low-cost technology

Vers une démarche de gestion proactive des techniques alternatives basée sur la technologie low-cost

Regular monitoring prevents failures

+ Many assets across wide area

Traditional monitoring is insufficient

+ Falling costs

+ Miniaturisation

+ Easy-to-access

+ Modularity

+ Open-source

Low-cost technology

E-maintenance: real-time alerts

Collaborative maintenance: data shared

Real-time control

Knowledge on long-term behaviour



Cost=f(objective)
as always...

Challenges

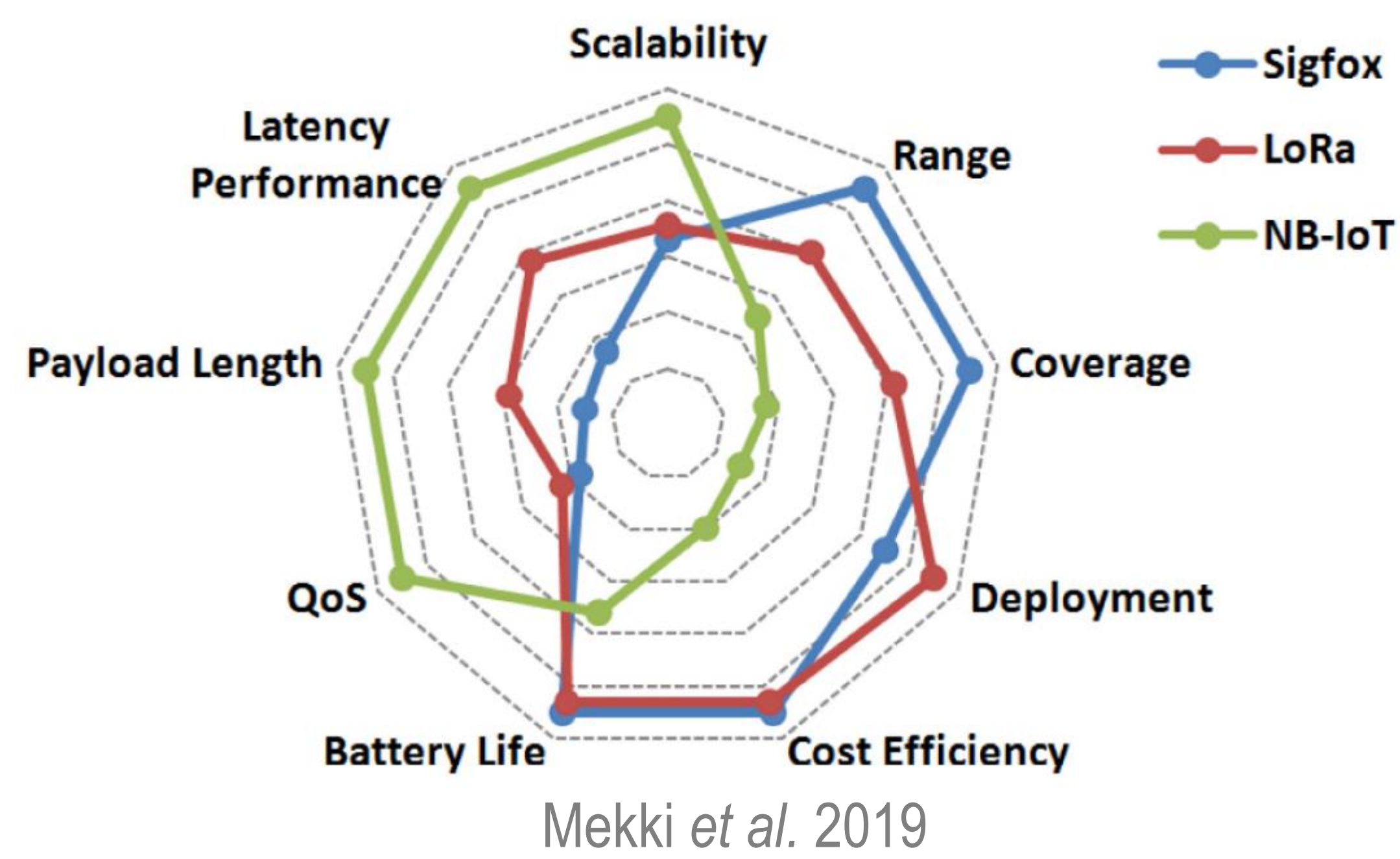
AUTONOMY



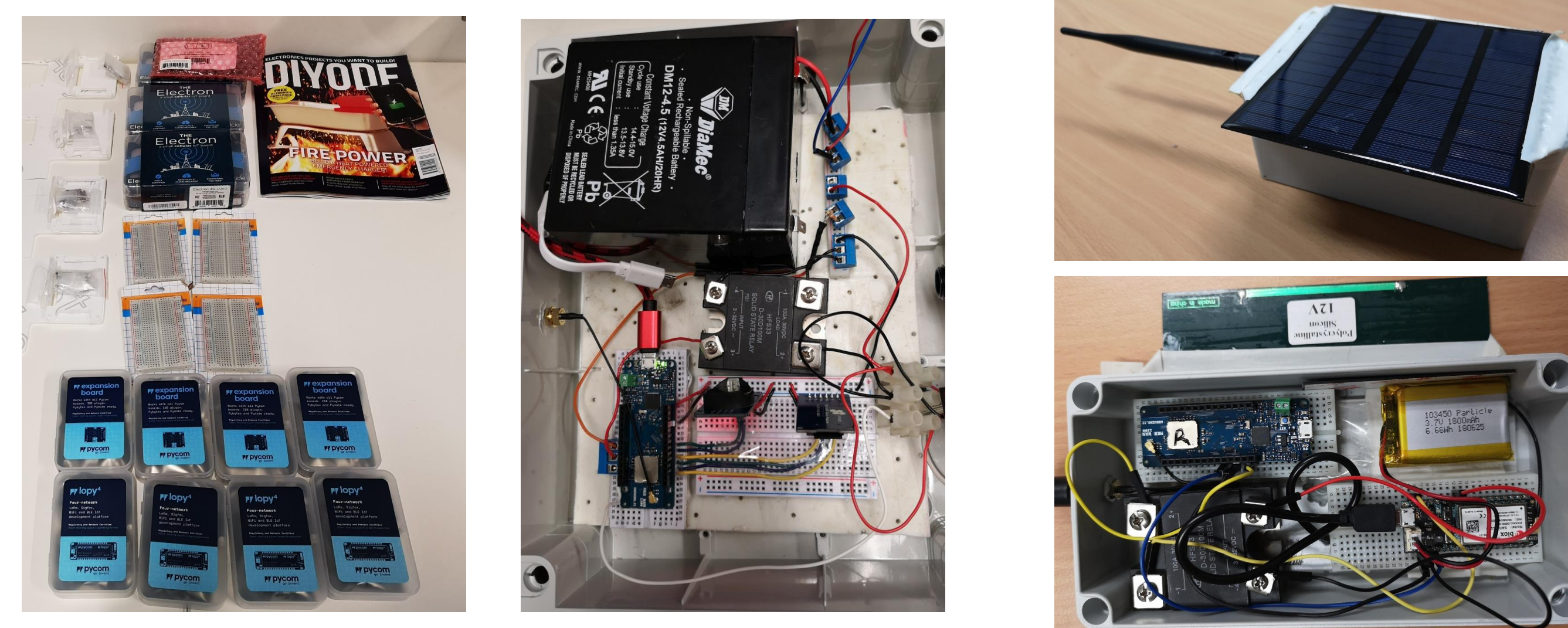
SENSORS

- Longevity and stability
- Accuracy
- Repeatability
- Reproducibility
- Resolution
- Response time
- Sensitivity to the environment

COMMUNICATION



DO IT YOURSELF



Demonstration: water level monitoring

The idea is to show that it is possible to build a system to monitor the water level for less than 150€. This kind of sensor is very commonly used in cars. The LoRa protocol is used mainly to reduce energy consumption.

Waterproof ultrasonic sensor ~ 10€

Power Converter DC 7V-36V to DC 5V ~ 10€

Battery 12V 4.5Ah ~ 20€

If you want to see the data :  or <http://tiny.cc/novaposter>

