

CREATING
A CLIMATE
FOR GROWTH

PRIVA

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PRIVA

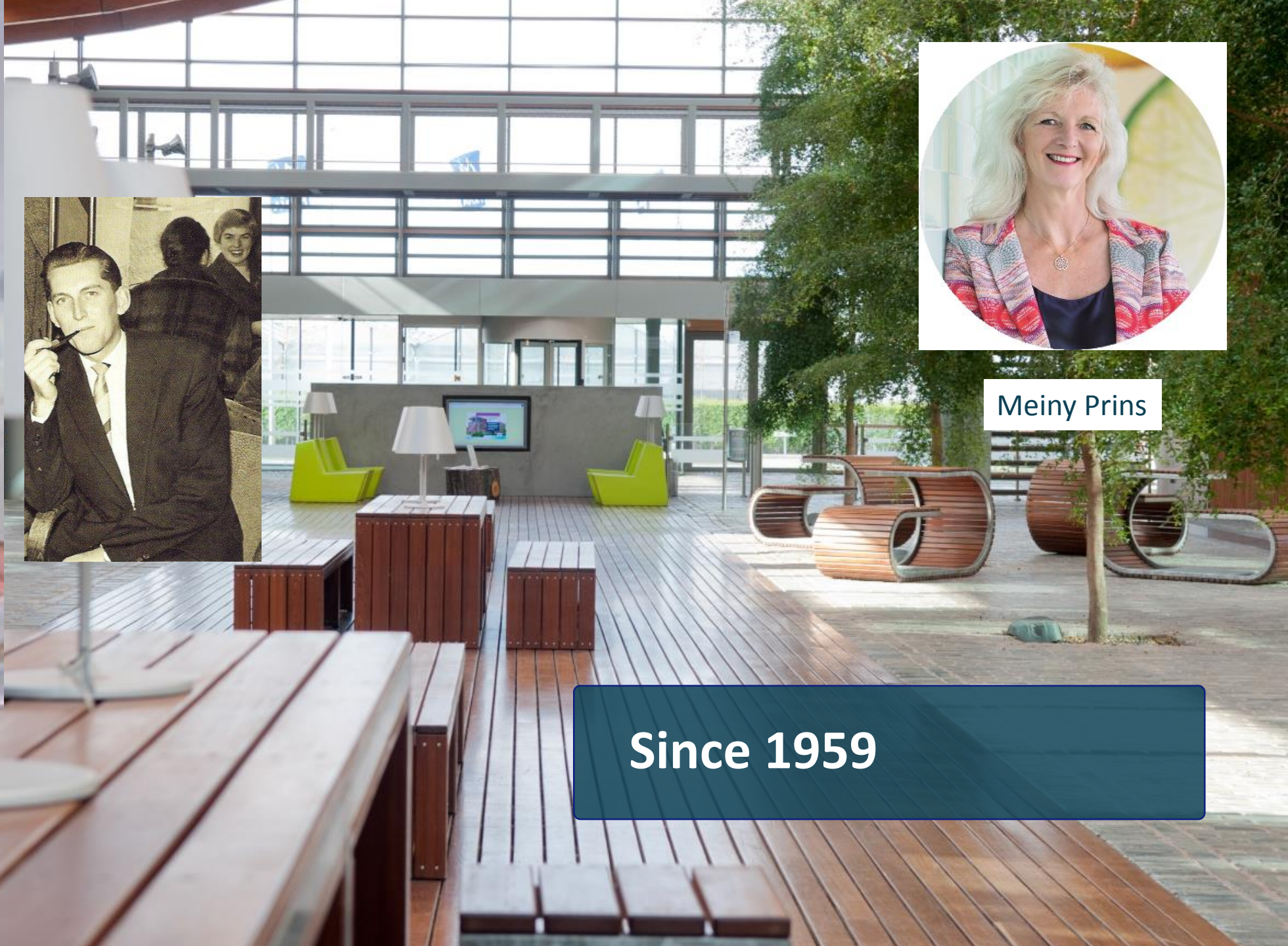
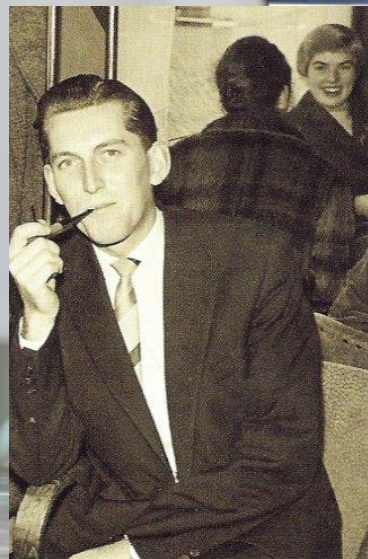
SOFT FRUIT SOLUTIONS

> PRECISION IRRIGATION

Timo Tarkiainen, Priva EMEA



Jan Prins



Meiny Prins

Since 1959

FACTS AND FIGURES



Worldwide

15 offices, > 400 distributors
Represented in > 100 countries



450 employees



Hardware

Climate and process control



Software

Control software and online services



Services

Consulting, training and support

Horticulture

Utility Buildings

Indoor Growing

PRIVA SOLUTIONS



A FEW TRENDS THAT ARE GOING ON RIGHT NOW



Demand for
better quality for
retail / export



Movement from
soil to substrate



Water is getting
scarce



Demand for
better control of
irrigation

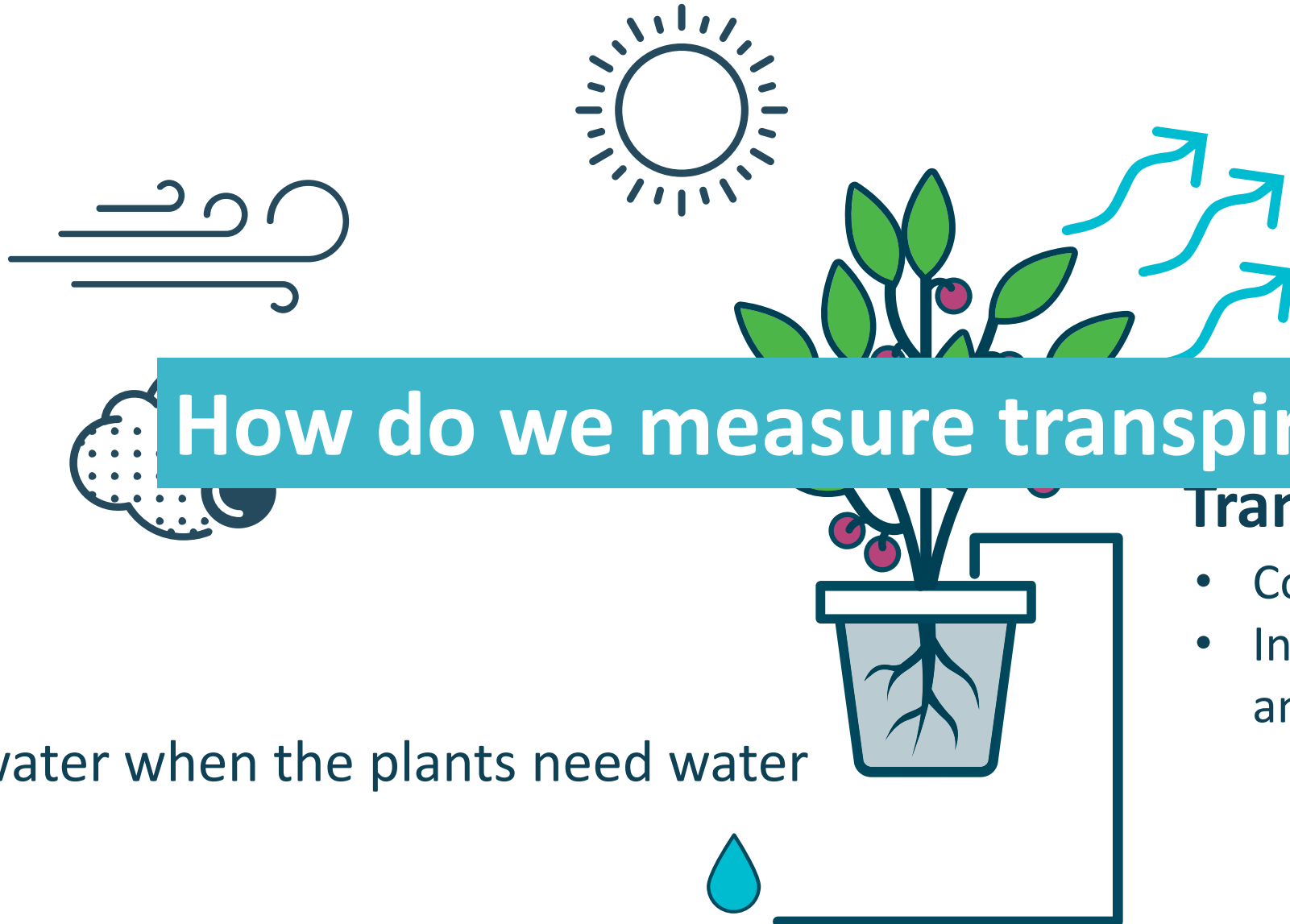
WHAT IS PRECISION IRRIGATION AND FERTIGATION?



Right amount of
water and fertilizers
at the right time

Return of investment
High production
and quality

WHEN DO PLANTS NEED WATER?



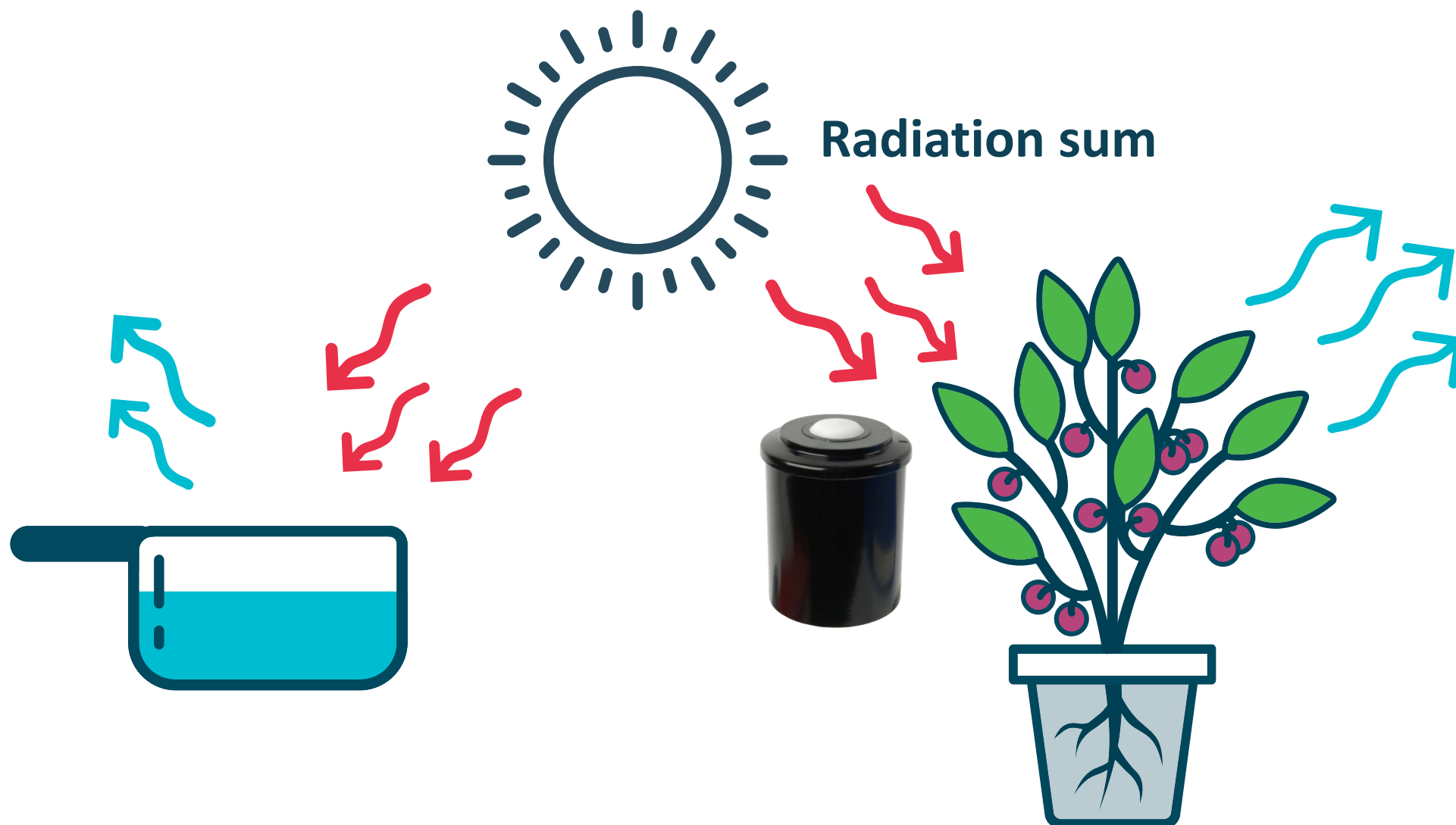
How do we measure transpiration?

Transpiration

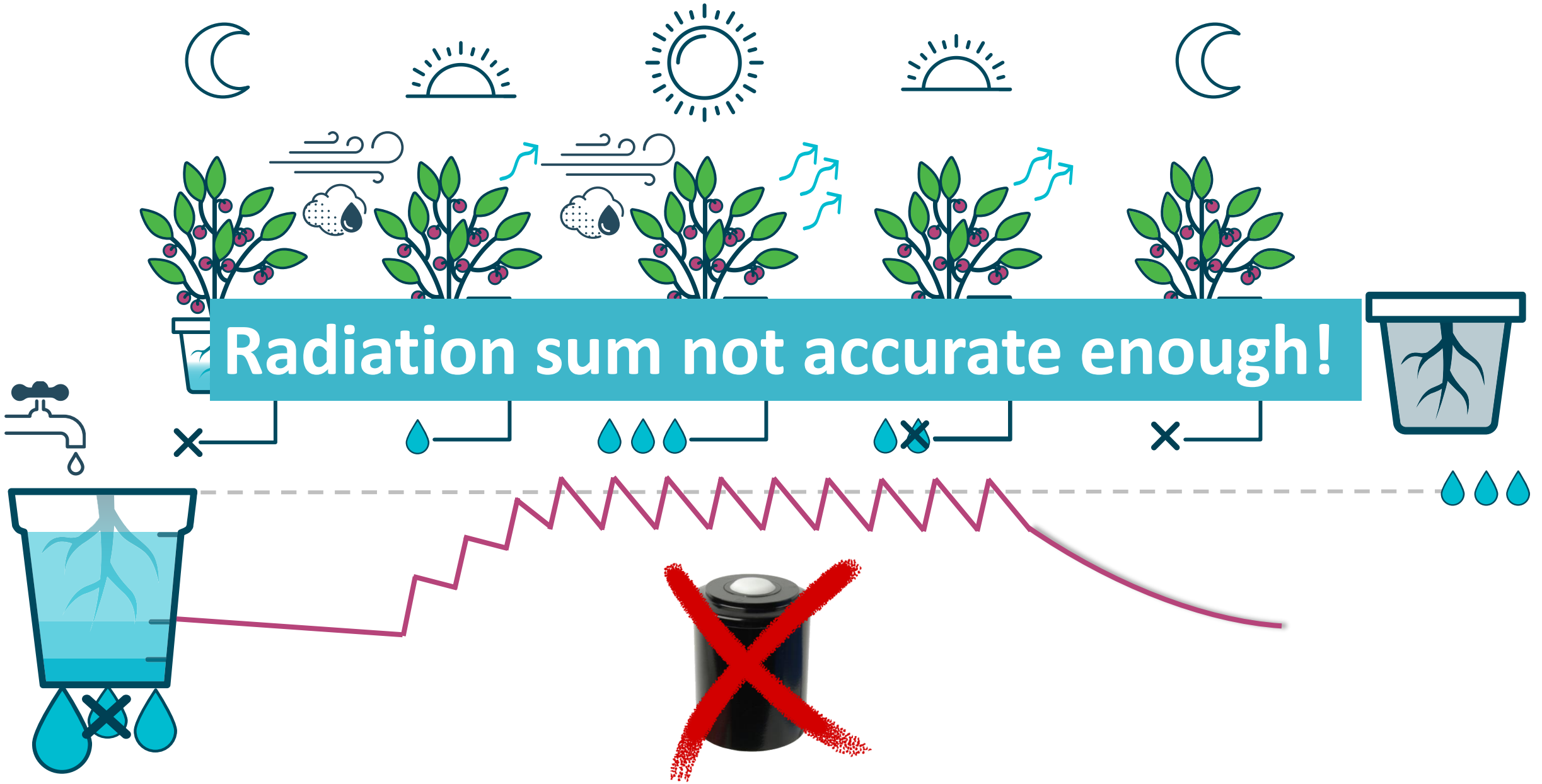
- Cooling of the plant
- Internal transport of water and nutrients

Give water when the plants need water

HOW DO WE MEASURE TRANSPIRATION?



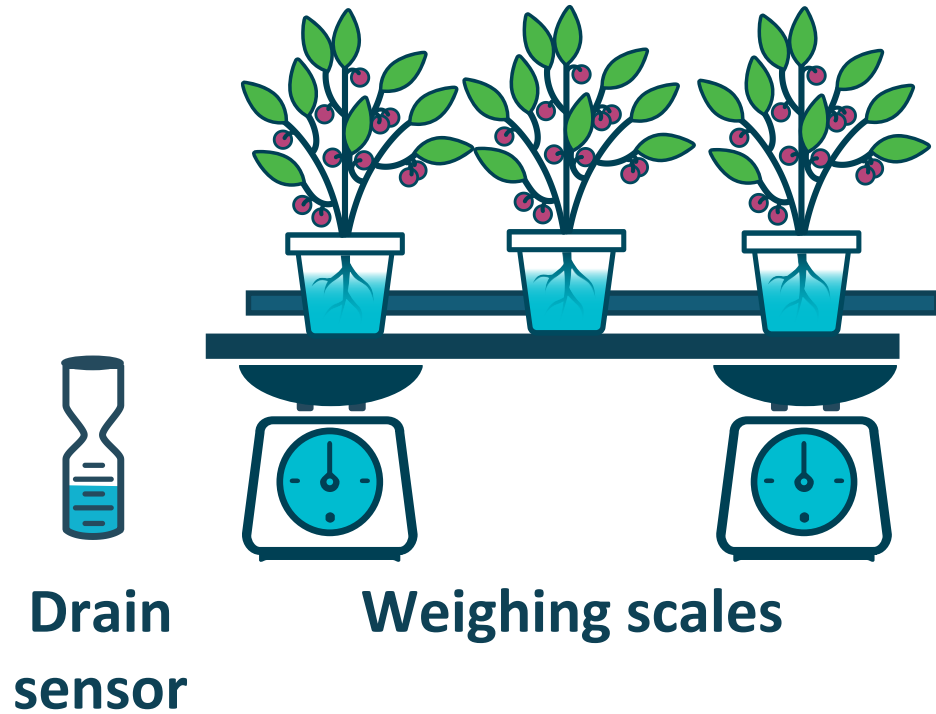
IRRIGATION BASED ON RADIATION SUM



HOW DOES PRIVA MEASURE TRANSPIRATION?



HOW DOES PRIVA MEASURE TRANSPIRATION?



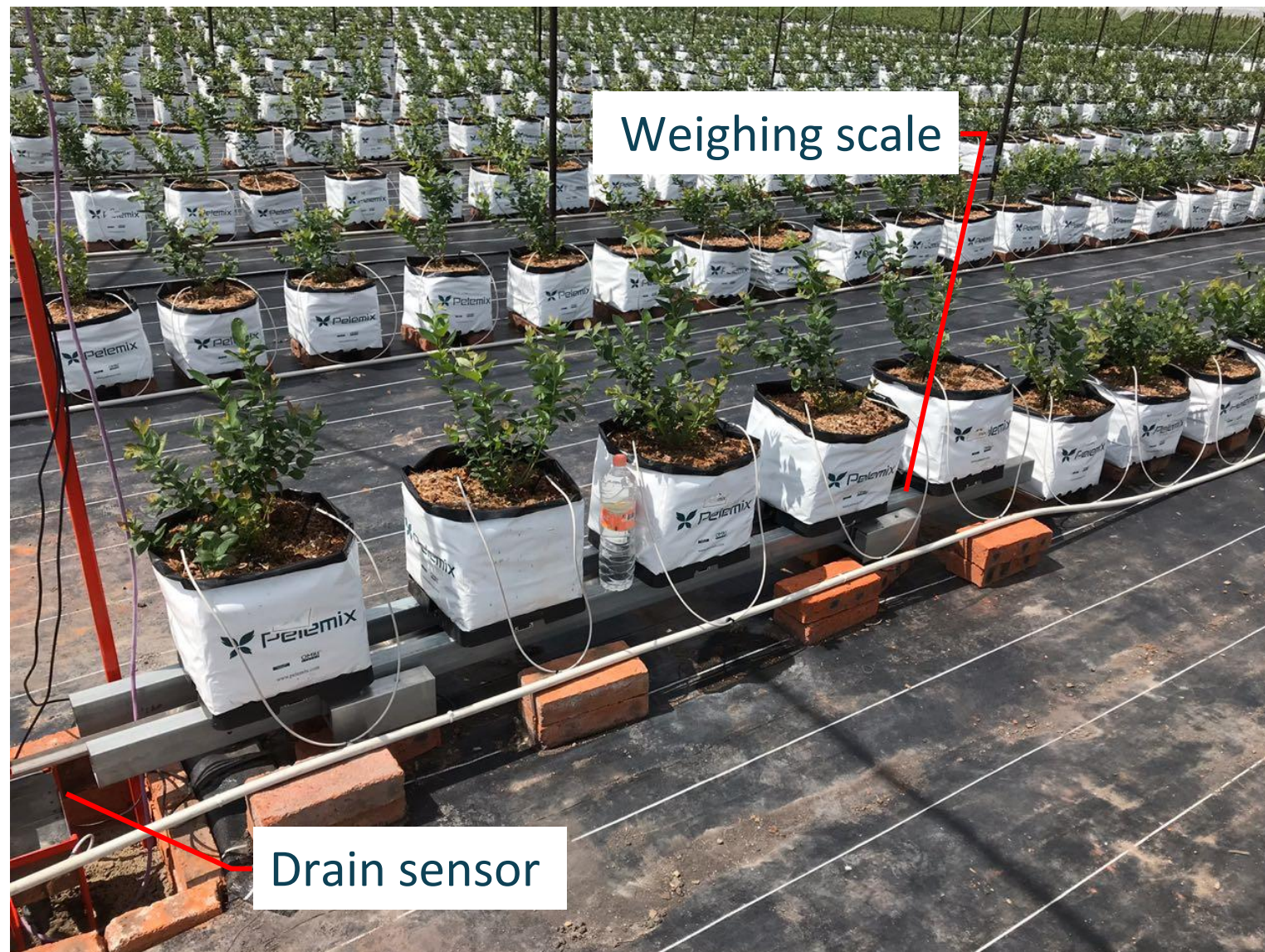
WEIGHING SCALE RASPBERRIES



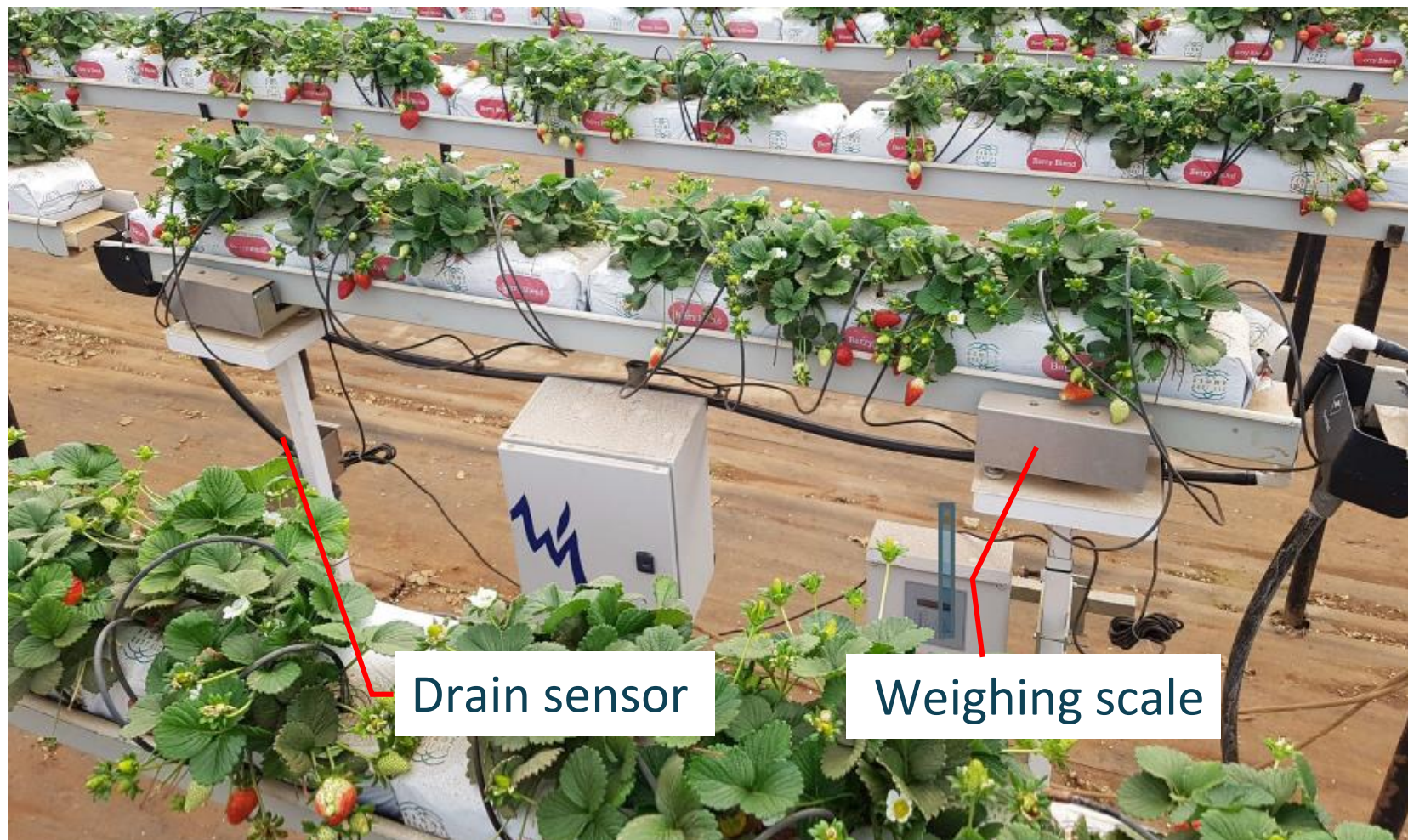
Drain sensor

Weighing scale

WEIGHING SCALE BLUEBERRIES



WEIGHING SCALE STRAWBERRIES



Drain sensor

Weighing scale

WIRELESS MEASUREMENT SOLUTIONS

Drain

Scale

Temp and RH



WE CAN ALSO MEASURE MOISTURE LEVEL WITH A MOISTURE SENSOR



MOISTURE SENSOR IN RASPBERRY POT



THE DIFFERENCES

Water dosing by time



Water dosing by radiation sum



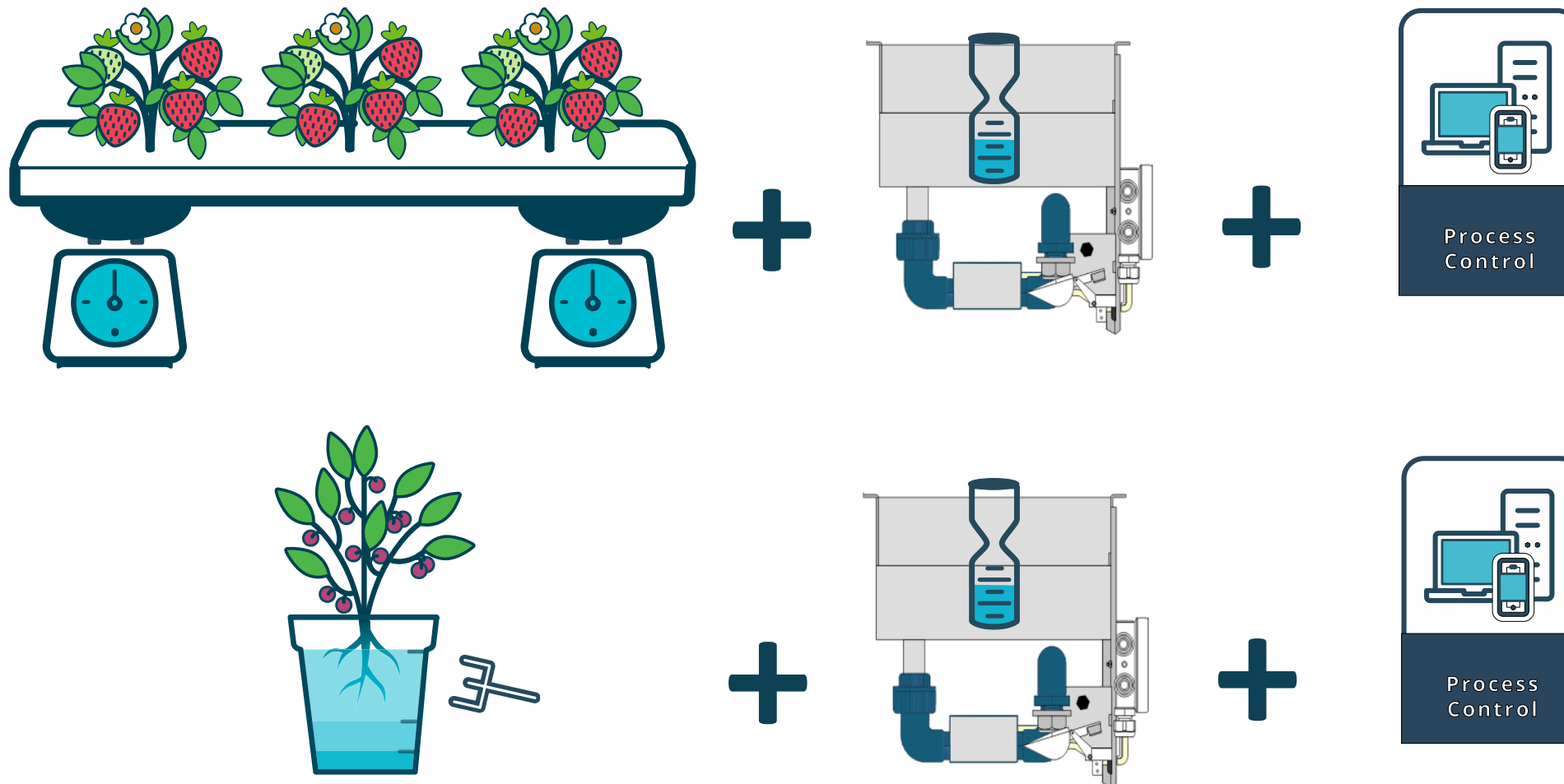
Water dosing by
Moisture Balance Module



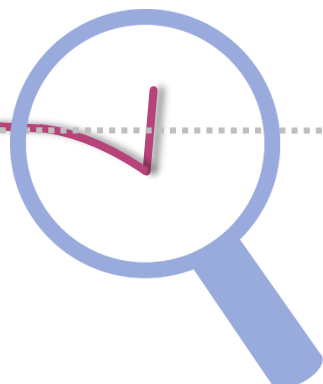
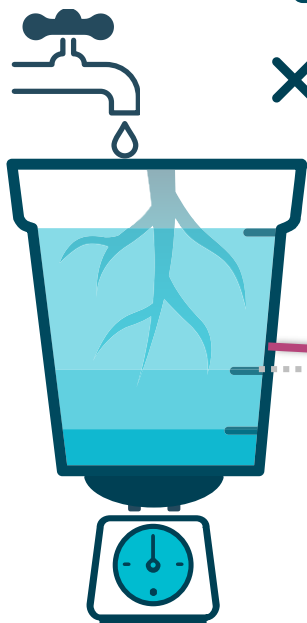
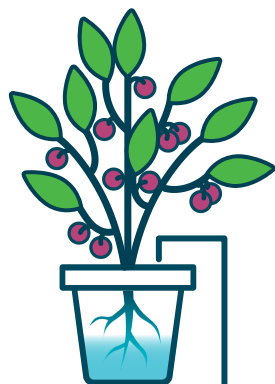


PRIVA
> MOISTURE BALANCE
MODULE

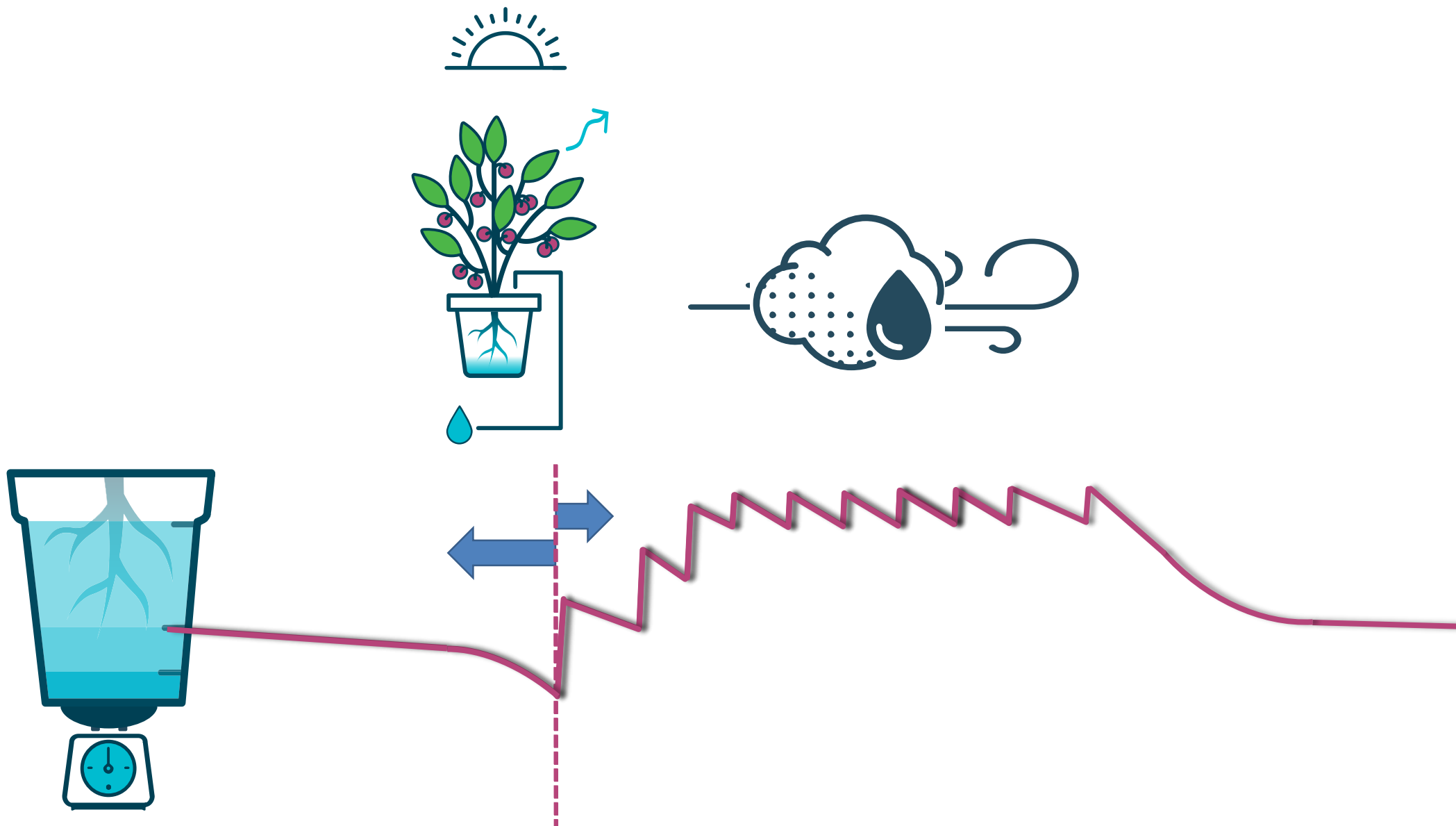
COMBINATION OF SENSORS AND SOFTWARE



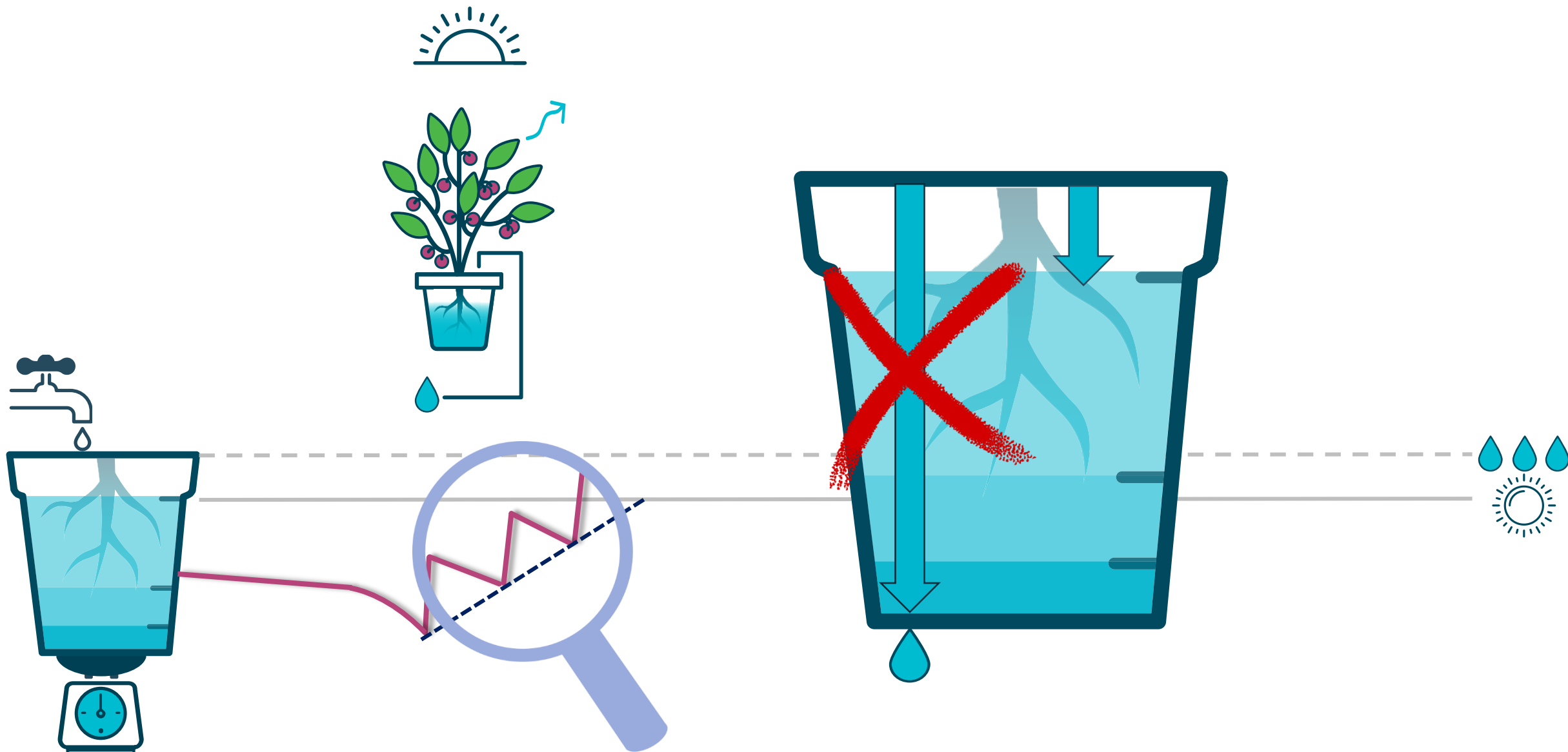
FIRST START IN THE MORNING



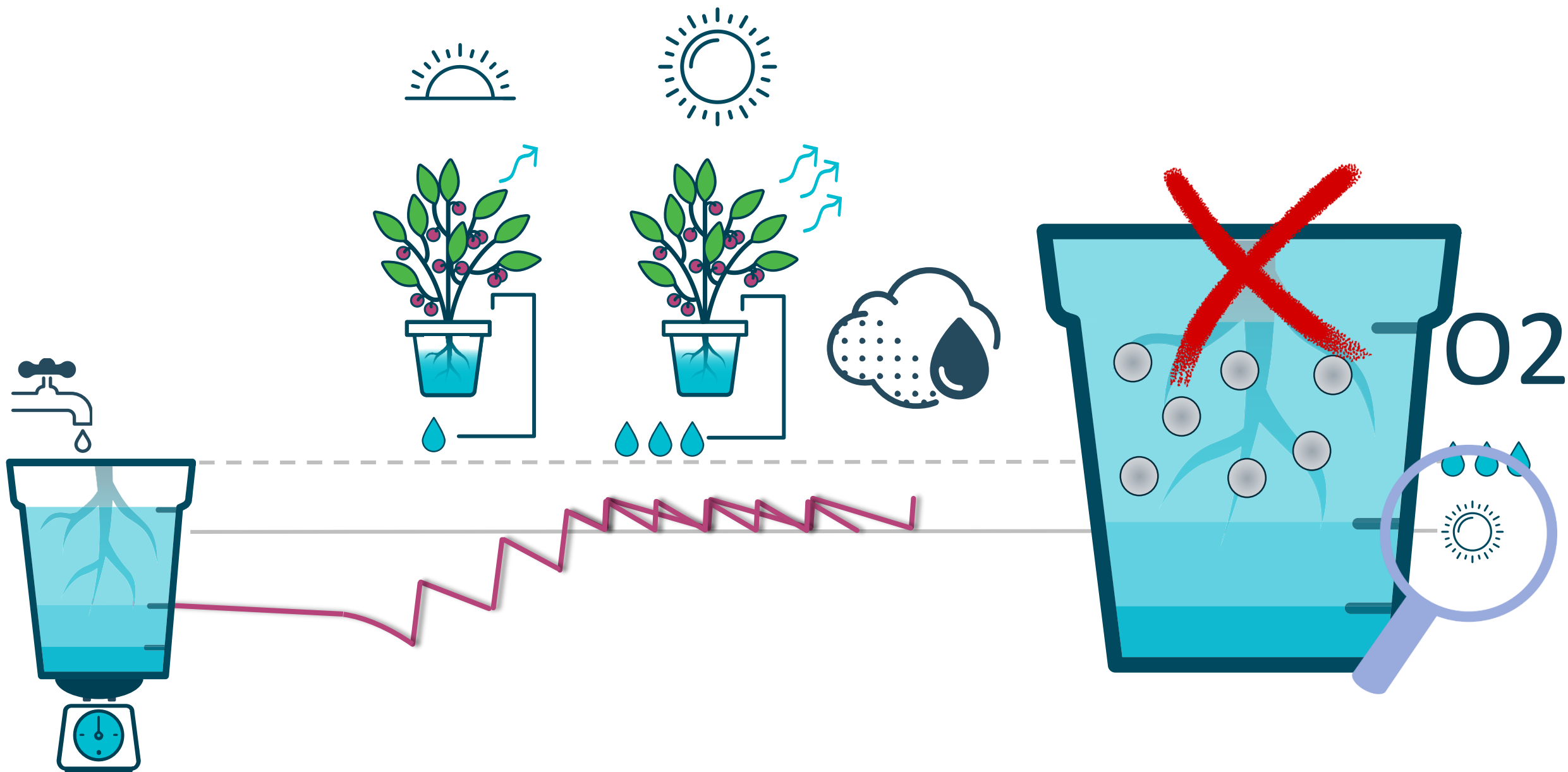
FIRST START IN THE MORNING



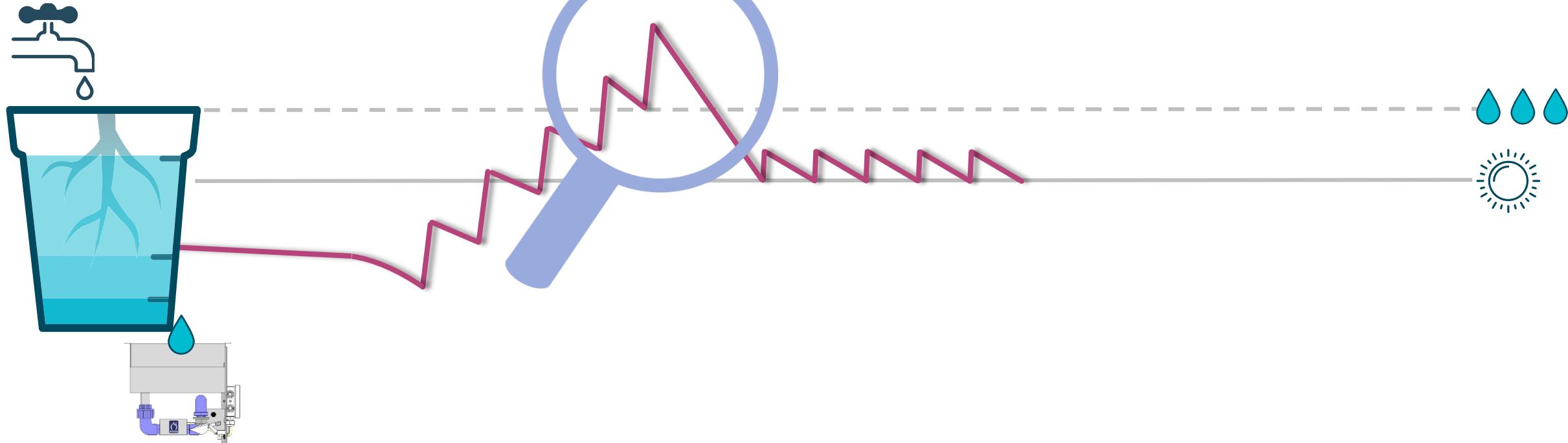
INCREASING MOISTURE LEVEL



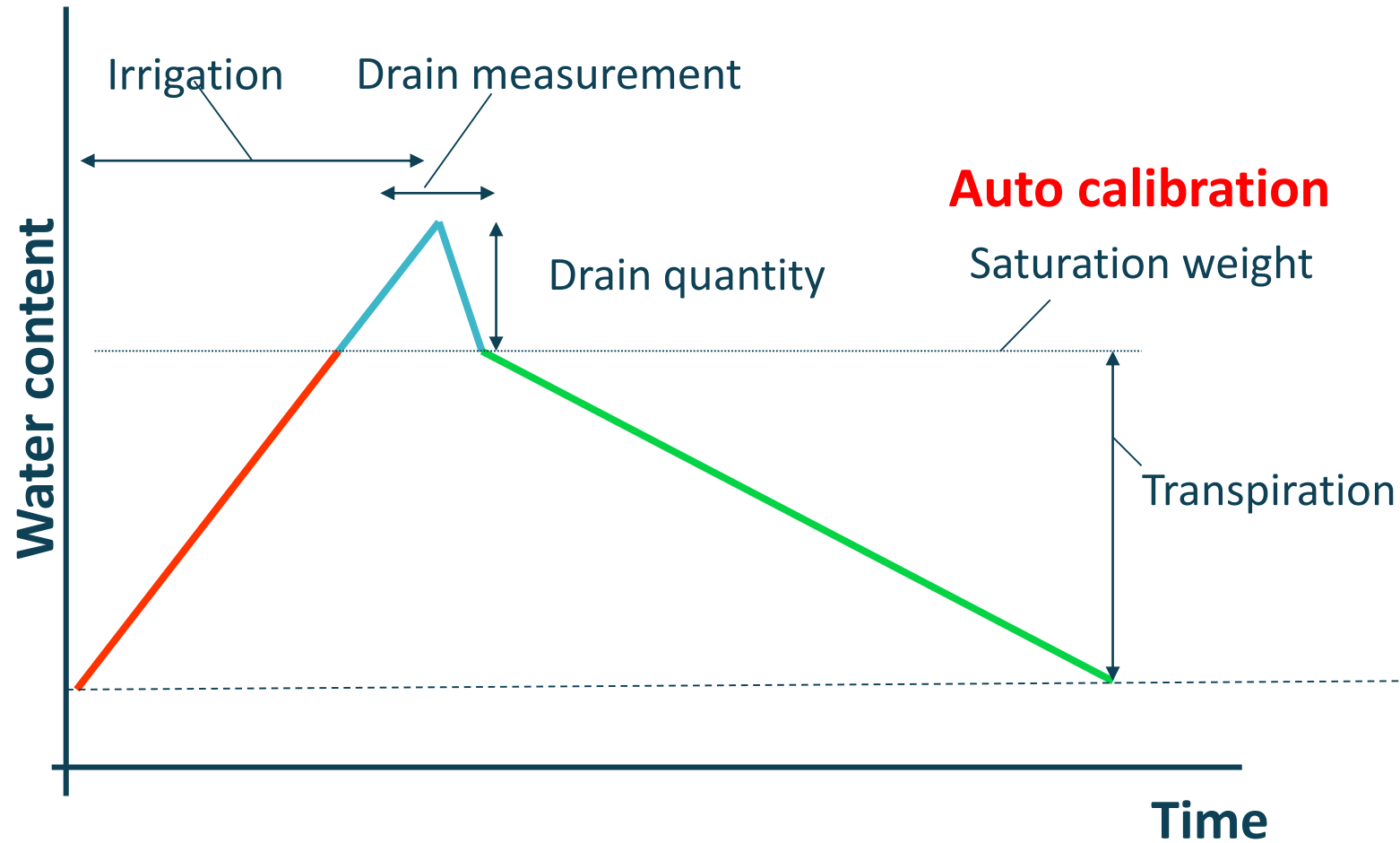
IRRIGATION BASED ON TRANSPIRATION



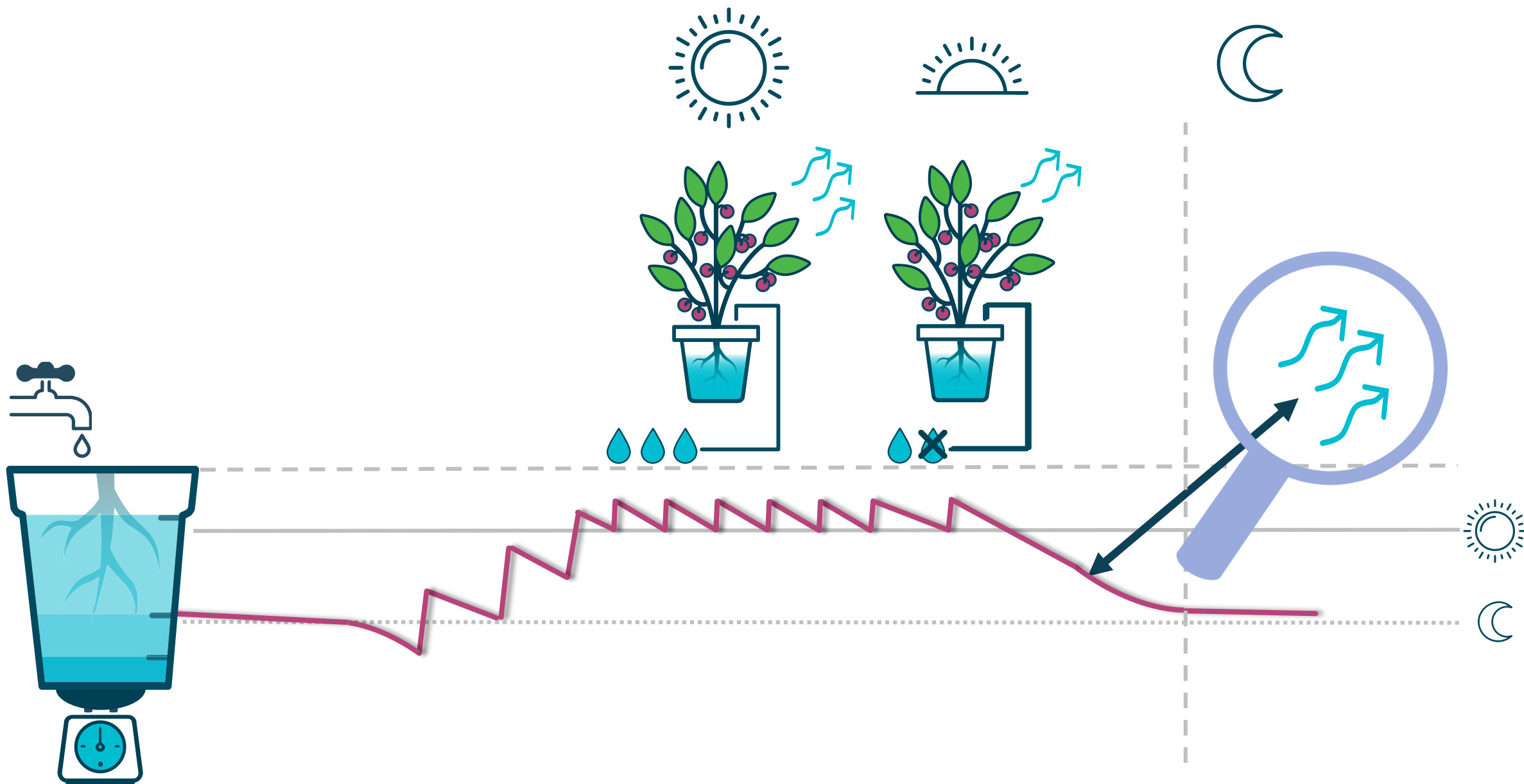
EVENNESS DRAIN



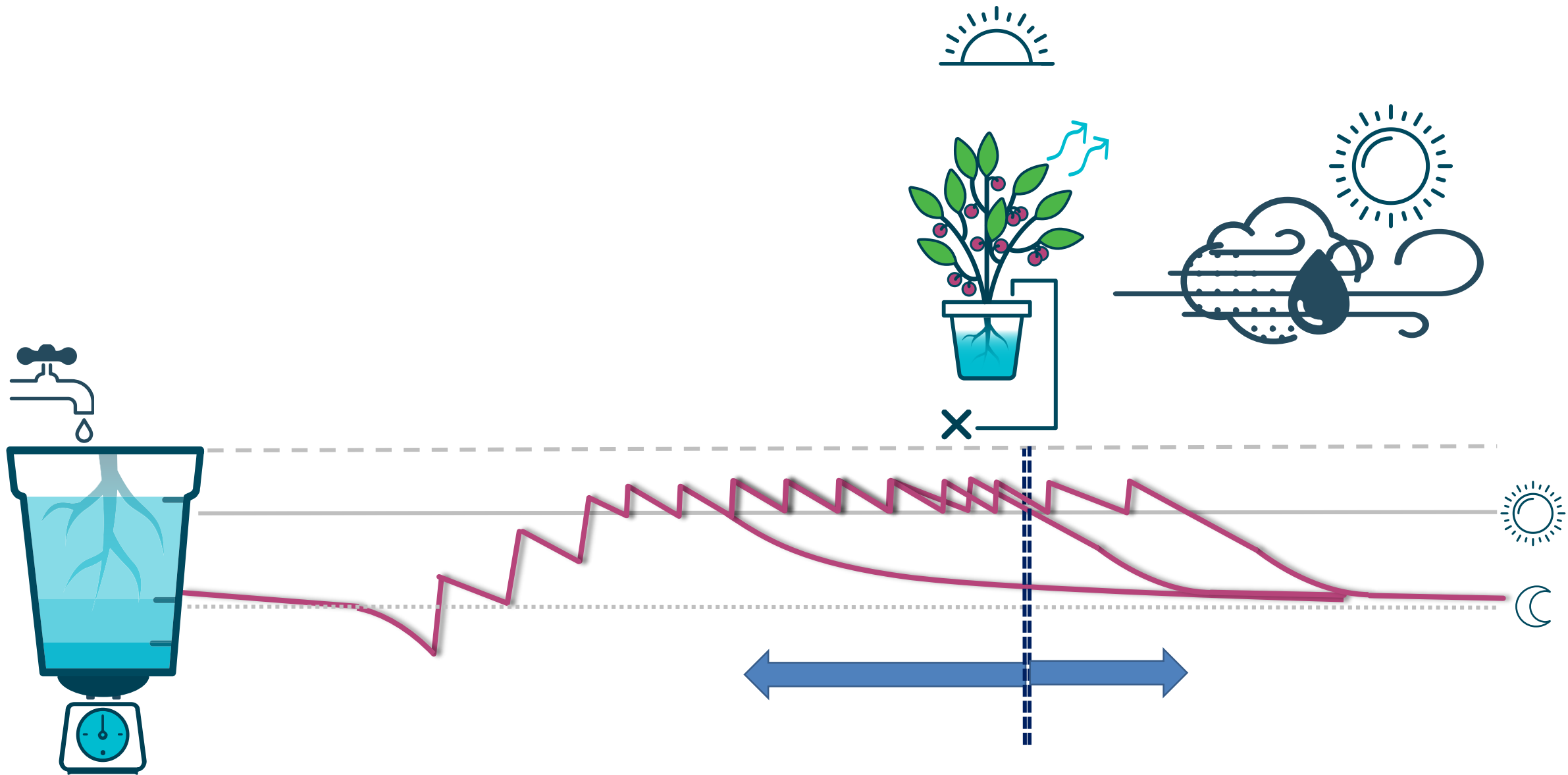
AUTO CALIBRATION OF WEIGHT



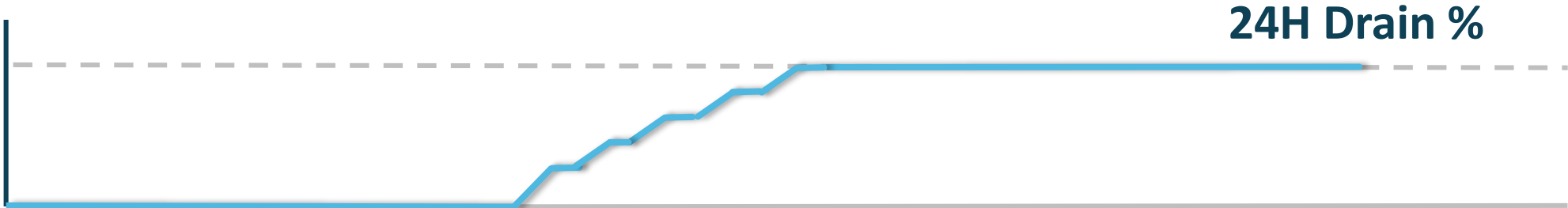
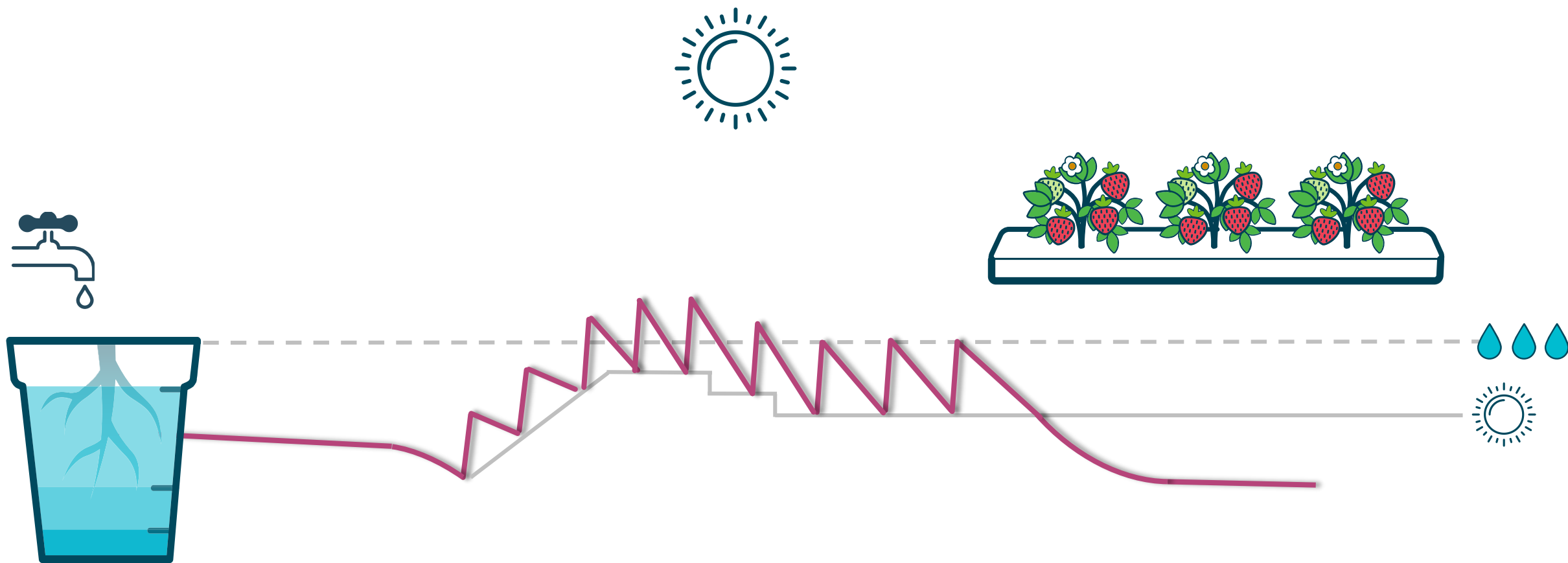
LAST IRRIGATION



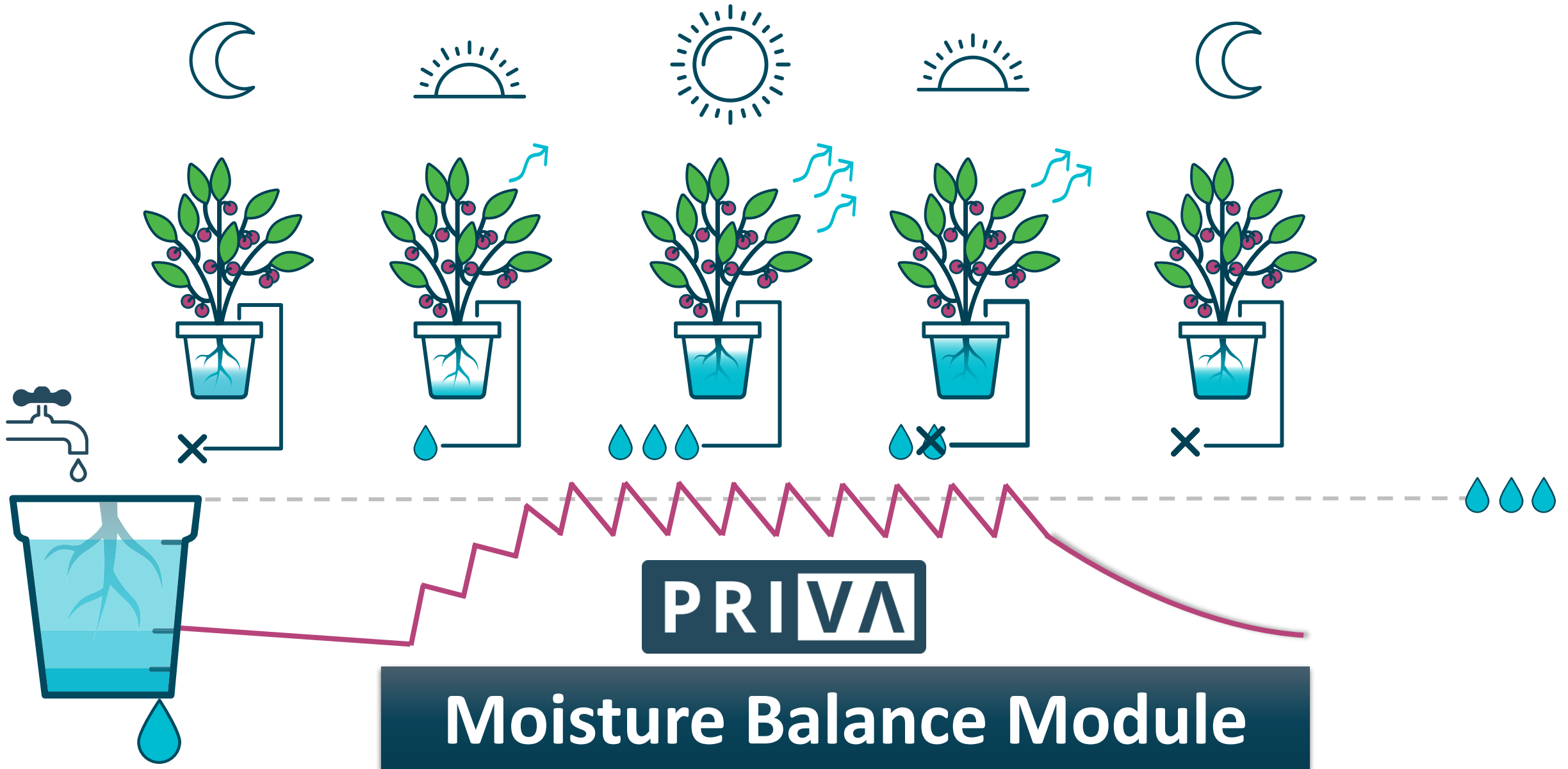
LAST IRRIGATION



24HR DRAIN%



IRRIGATION BASED ON TRANSPIRATION



PERFECT MOISTURE LEVEL



Correct timing for first irrigation in the morning

Avoid water stress and guttation

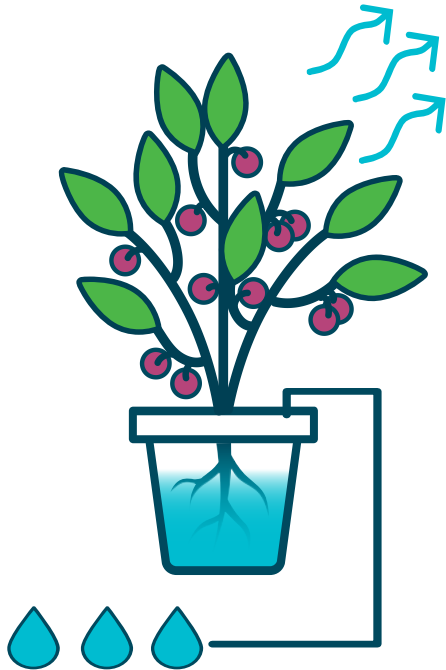
Irrigation frequency based on transpiration from plants

Optimal water and oxygen balance

Minimal amount of drainage

Correct timing for last irrigation end of the day

Achieve desired dry-out during night



Increased production through optimal water dosing
Efficient use of water and fertilizers

PRIVA CONNEXT



PRIVA COMPASS

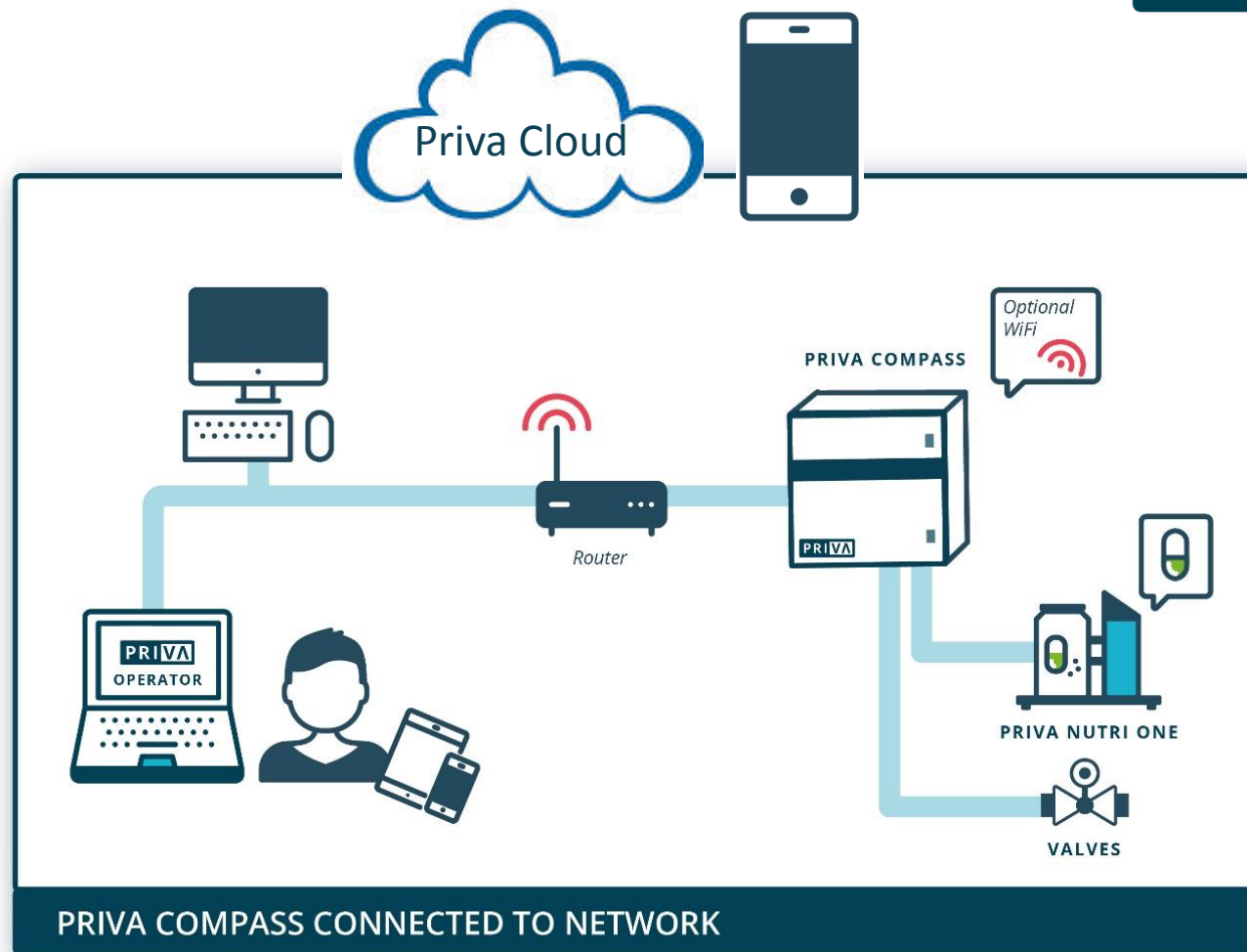
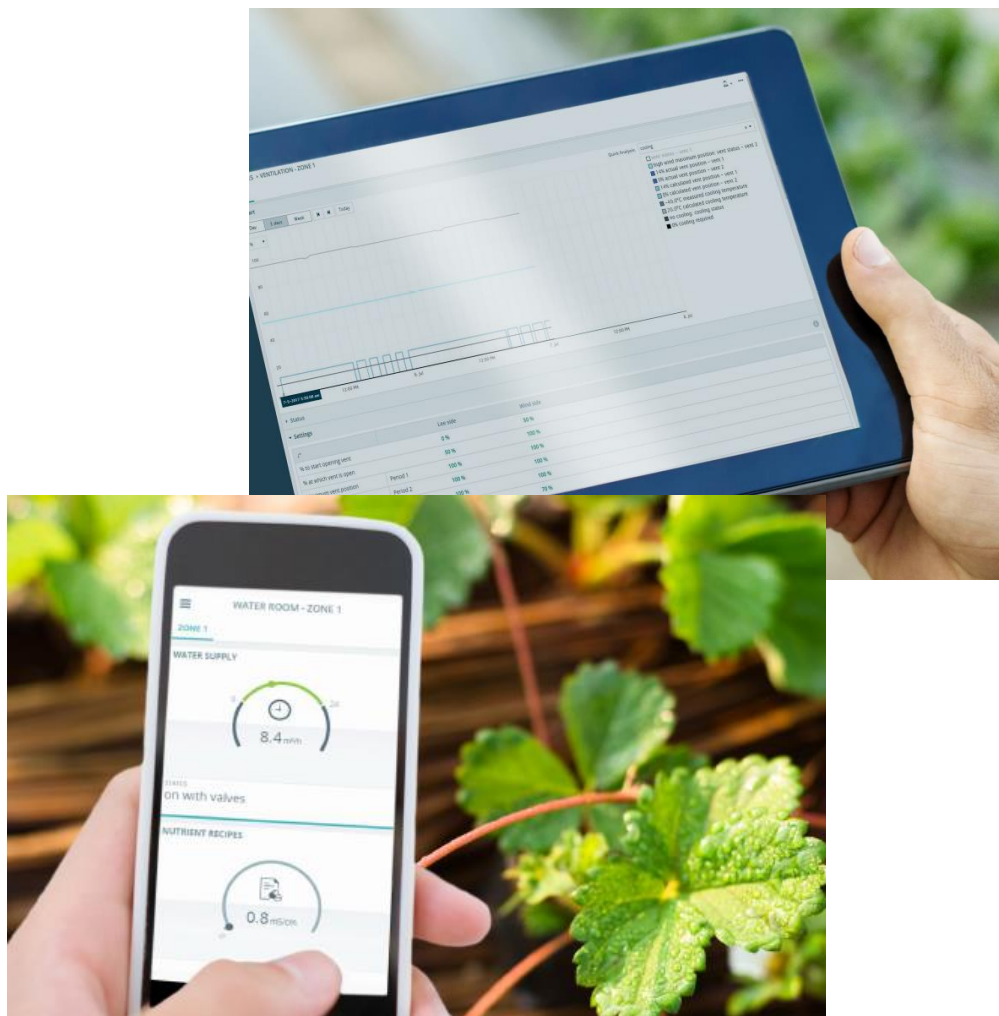


NEW



PRIVA OPERATOR – FROM ANY DEVICE ANYWHERE

CREATING
A CLIMATE
FOR GROWTH
PRIVA



THANK YOU FOR YOUR ATTENTION!

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Local partner: www.danvan.dk