



# MASLOWATEN

Market uptake of an innovative  
irrigation Solution based on  
LOW WATER-ENERgy consumption

## INNOVATIVE PHOTOVOLTAIC IRRIGATION SOLUTION BASED ON LOW WATER-ENERGY CONSUMPTION

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# DO NOT SWITCH YOUR MOBILES OFF

- WEB: [www.maslowaten.eu](http://www.maslowaten.eu)
- Twitter: @maslowaten
- Facebook: @maslowaten

## Food production system

- Irrigation versus Rainfed: 8000kg/Ha versus 2000kg/Ha
- Modernized irrigation versus Traditional irrigation: 50% - 60% water saving

## Electric cost for farmers and Irrigator communities

- FENACORE : increase of costs 627% - 1255%
- 40% - 50% of total production costs
- 2<sup>nd</sup> electrical consumer in Spain

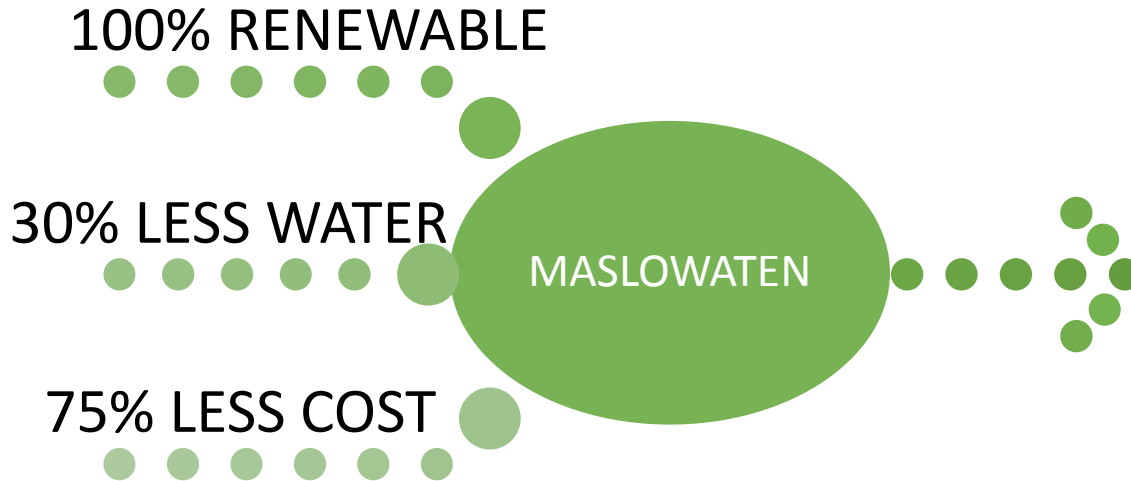
## Potential market

- Southern Europe: 14 millions Ha -16GW – 24.000M€
- Northern Africa (Grid + diesel): 1,5GW – 2.250 M€

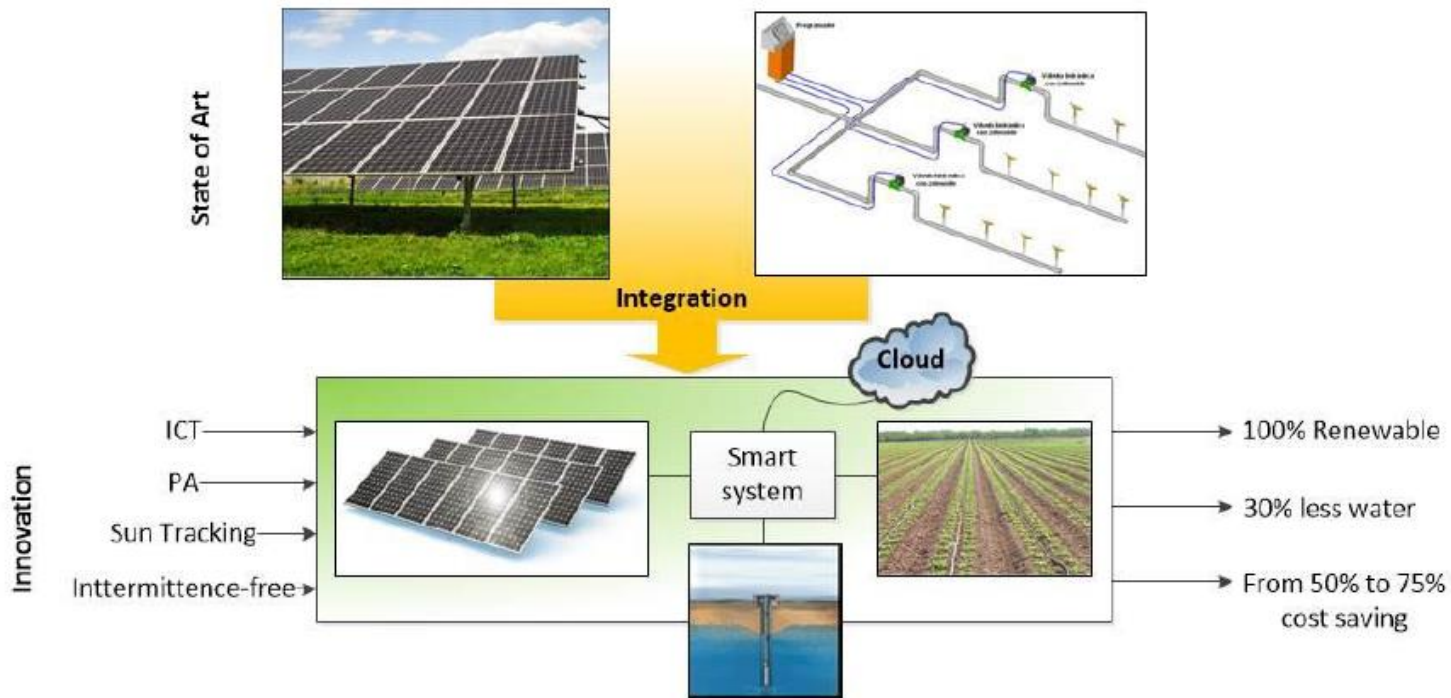
## Food and Nutrition security

PV irrigation for World Food Program – Red Sea - Egypt





# OUR SOLUTION



SEE and TOUCH



Farmers



Agro-industries

Irrigator Communities



COMMUNICATION between EQUALS

DEMONSTRATORS



In END-USER FACILITIES

## 100% PHOTOVOLTAICS



**360 kWp – Water Pool  
Irrigator Community  
Spain**



**160 kWp – Pivot  
Cooperative  
Spain**



**40 kWp – Sprinklers  
Farmer  
Italy**



## Hybrid PV – Grid/diesel



**140 kWp – PV/Diesel - Drip  
Agro-industry  
Portugal**



**120 kWp – PV/Grid - Drip  
Agro-industry  
Morocco**

## 100% PV to Water pool in Spain

### Actual data from 1<sup>st</sup> January 2017 to 31<sup>st</sup> August 2017

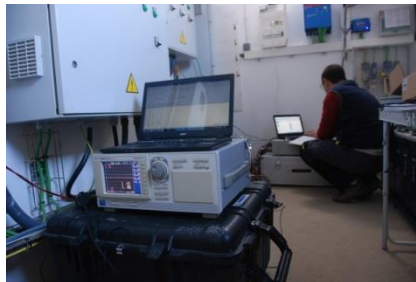
Total pumped water	399,694 m <sup>3</sup>
Total generated energy	467,751 kWh
Actual grid energy cost	10.5 c€/kWh
<b>Actual Savings in 8 months</b>	<b>49,114€</b>
<b>Expected Savings in 12 months</b>	<b>70,468€</b>
<b>Investment costs</b>	<b>432,000€</b>

SEE and TOUCH



From End-user  
to Potential -user

TECHNOLOGY  
TRANSFER



To 20 SMEs

REMOVE BARRIERS



Financing Schemes

## PV IRRIGATION AND WATER REUSE

- PV desalination and irrigation
- PV wastewater treatment and irrigation:

## Administrative barriers - Policy support

- Dangerous PV regulation
- Long legalization procedures

## Financial barriers

- High initial investment for farmers and SMEs

## Exponential growth of PV irrigation

- Technical standards for reliability and service quality

## PV irrigation for the World

- European innovation
- Worldwide need



Thanks for your attention, for more information please visit:  
**[www.maslowaten.eu](http://www.maslowaten.eu)**

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