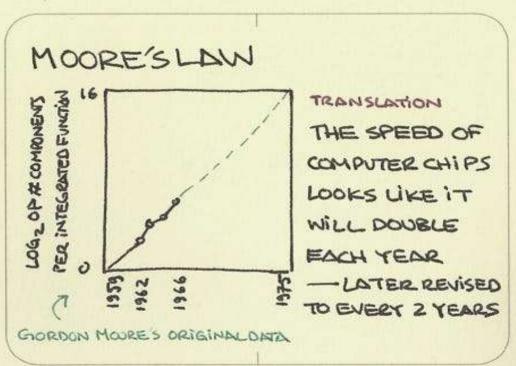






sketchplanations.com



### **Number of transistors per Silicon Chip**

1960 1

**1970** 100

1980 100.000

1990 1.000.000

2000 100.000.000

2010 1.000.000.000

2020 100.000.000.000

..... More than MOORE's Law! 3D vs 2D



#### Assessment of world water situation

## 2 billions people on earth

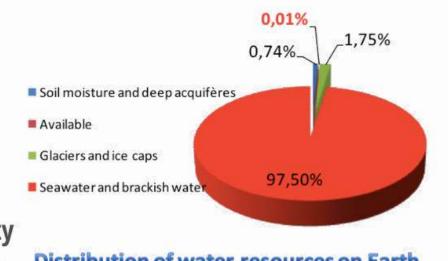
lack access to drinkable water

## 2500 children die each day

due to water consumption parasitized

## **Diseases** directly related to water quality

such as cholera, Dracunculiasis affect hundreds of thousands of people each year.



Distribution of water resources on Earth

## Miserable daily amounts of collected drinking water

has become the main source of activity for women in many countries



Marché concurrentiel : les méga usines à énergie fossile ne sont plus la seule solution !







 Watenergy = solutions for drinking water treatment & desalination

• Up to 15,000L a day fresh drinking water

 Reuse & recycling of brackish water/residue

WAT





## **CONCEPT DU TOUT-EN-UN**

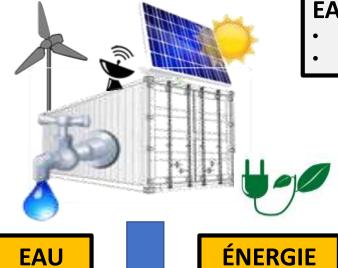


#### **ÉNERGIES**

- **SOLAIRE**
- ÉOLIEN
- **BIOMASSE**
- RECYCLAGE

#### **SUPPORTS TECHNIQUES**

- **TÉLÉMAINTENANCE**
- **LOGISTIQUE**
- **TÉLÉGESTION**



#### **EAU POTABLE**

- **EAU AGRICOLE**
- **RECYCLAGE**

#### **SÉCURITÉ**

- **SURVEILLANCE**
- ÉCLAIRAGE

#### **CONNECTIVITÉ NUMÉRIQUE**

- **GSM**
- WIFI
- **SATELLITE**
- MOOC'S
- **ÉDUCATION**

#### **PRODUITS ALIMENTAIRES**

- VÉGÉTAUX
- **FRUITS**
- **ALGUES**
- ÉLEVAGE
- **PISCICULTURE**
- **APICULTURE**

**AUTONOMIE ALIMENTAIRE** 

**EAU** 



**SERRES NUMÉRIQUES** 





## « Lou Cazaü d'Eden » EVALUATION

## **European agriculture State of Play**

- During the last 20 years, 4 million small farmers deasappeared in the UE.
- Just as the dominant agro-industry kills bees and other polinators, it dissseminates as well familiy farmers ...
- Cows no longer graze on open fields, they are raised in huge stable and are fed withgrown cereales.
- Same situation goes for millions of poultries.
- This intensive « Food Industry » doesn't feed people anymore, but cattle or produce « biocarburants » ...
- It confiscates rare water, controls and modifies the planting seeds.
- They modify the landscape, destroy the soils with pesticides and other chemicals, killing micro-organisms, bugs and birds.
- Most of the food consumed in the UE is imported.

# Lou « Cazaü d'Eden » MISSION : think Big but act Small.

- To adapt Digital Agriculture new technologies to the Family Farmers environment.
- If we don't do it NOW, small farmers will be abandoned for ever on the side of the road!
- EDUCATION is the key factor to help them surviving.
- Precisely it is what Professor Serge MIRANDA at ESTIA is developing.
- You, dear colleages and partners, as experts in Digital Agriculture must contribute. We need your technologies: sensors, IoT's, drones, robots, communications (LORA, Oneweb), Satellite imaging, etc. and even to have access to plants' music!
- We will have also the charter to help family farmers to grow higher value added plants, to transform their productions if needed, and to go to the market.
- We will help farmers installing « Agrivoltaic structures » in a compelling, seamless, but fruitful maner.
- We will also help them in providing them thousands of « evangelists » directly on their farms.
- Return to traditional agriculture is a must for small farmers by not using highly capital intensive enormous tractors and machines.
- We will promote the concept of 1000 schools with 10 students scatered all over the places, in the wotld, versus a single University with 10.000 students!

#### **SMALL IS BEAUTIFUL**



## ESKER











