



European Union Energy Day

Clean energy solutions for the buildings
of the future

Astana EXPO, 24 July 2017

#EUenergyday



Euenergyday.eu





High-level political opening

9:00-10:00

Traian Laurentiu Hristea

Ambassador

energyday.eu

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ennesys
ENVIRONMENTAL ENERGY SYSTEMS

LOOK BEYOND !



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NEW FAST GROWING CHALLENGES



The fight against climate change in cities is not simply a matter of energy :

- A range of clean energy solutions and smart buildings provide efficient answers.
- From now, the priority is: water resources and fertile soil that are the first ecosystems to be impacted
- How to guarantee peace without food security ?



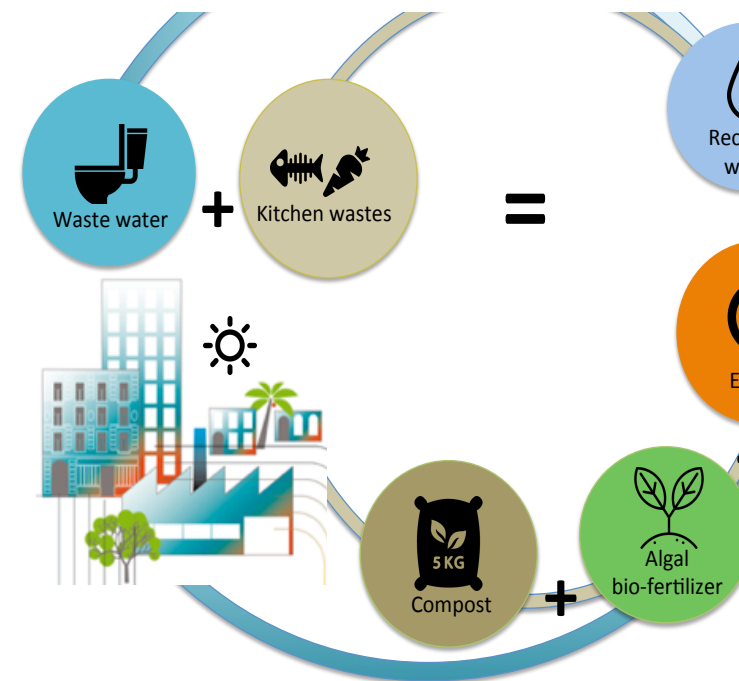
WE HAVE TO THINK GLOBAL & LOCAL BY:

- decentralizing energy management through the exploitation of local resources
- building autonomous places (water+energy)
- creating economic and social value to perpetuate the will to reduce our environmental footprint
- doing it with no ultimate residues, even not CO₂
- bringing the largest amount of people ways to reach the essential resources.

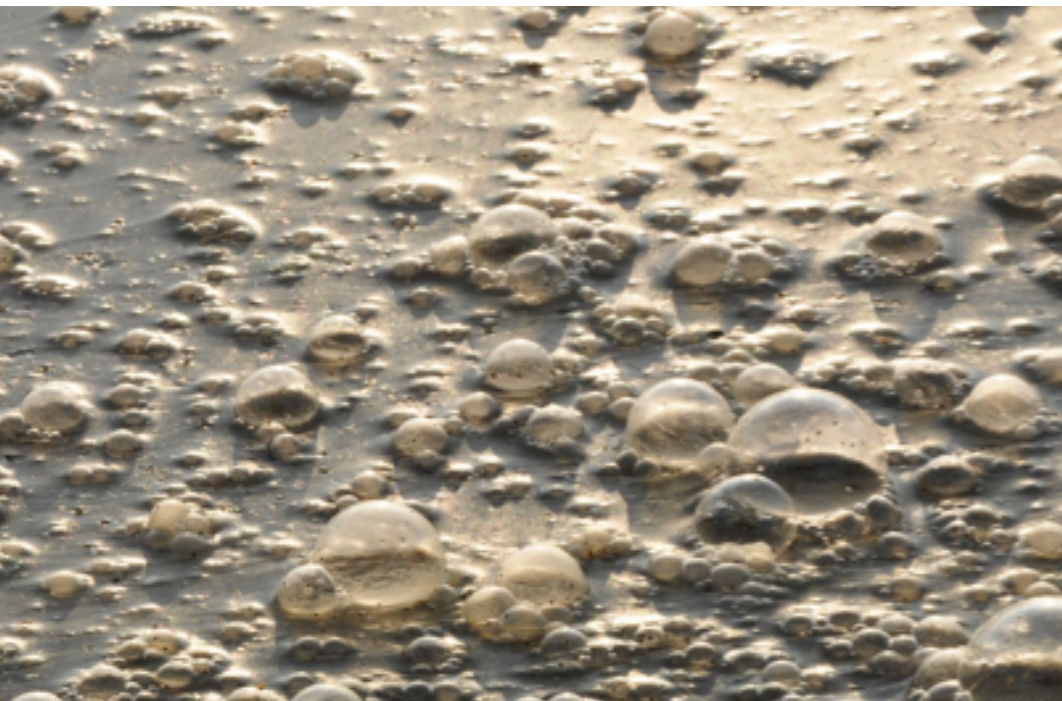
GIVING BACK TO NATURE WHAT WE TAKE FROM IT

TO MANAGE WASTE IN A CIRCULAR ECONOMY IS THE STARTING POINT.

- We have to exploit local sources of new raw material (waste) to create local new wealth.
- We use only biological agents from nature to produce new nature's resources : bacteria to produce energy and clean water and microalgae to transform residues and bring food security



**IT'S TIME TO SEIZE CLIMATE CONSTRAINTS AS A BUSINESS OPPORTUNITY
THAT WILL COME WITH SUSTAINED SUSTAINABLE GROWTH**



WASTE WATER & ORGANIC WASTE RECYCLING,
→ FREEWATERBOX[®], THE ANSWER TWO IN FOUR,
PROVIDING HIGH VALUE RESOURCES:

NEW GREEN ENERGY + CLEAN WATER + BIO-FERTILIZER + BIO-STIMULANT

HOW DOES IT WORK ?

- WASTE IS CONSIDERED AS A RAW MATERIAL
- WE RECYCLE SIMULTANEOUSLY WASTE WATER AND ORGANIC WASTE TO PRODUCE ENERGY & CLEAN WATER
- WE VALORISE ULTIMATE RESIDUES WITH MICROALGAE CULTURES FED WITH RESIDUES, LIGHT AND CO₂.
- WE TURN MICROALGAE IN GROWTH HORMONES FOR CR

A TRASH TO CASH PROCESS IMPROVING:

- Quality of life
- Economic progress
- Environmental protection
- Food & health security
- Practices for cities & food industries to go greener
- Social responsibility





OUTSTANDING RESULTS WITH VEGETABLES GROWING IN TOTAL AUTONOMY OF EXTERNAL RESOURCES

and desert or in cities, we can re-implement nature with:

re used water

local green energy

algae bio stimulant that increase the yield of crops up to 50%

IT CONCERNS EVERY PLACE



▶ Cities & eco-districts (Urban farming)

- ✓ Hotels et resorts
- ✓ Campuses
- ✓ Public catering
- ✓ Isolated villages

▶ Food processing industries & farming

- ✓ Fruits and vegetables cultures
- ✓ Dairy farms, milk and cheese production
- ✓ Factories of drinks and fruit juices
- ✓ Canning plants, ...

University campus of Laâyoune - Morocco

100 people

Developers : OCP

(Office Cherifien des Phosphates)

Recycled water : 50 m³ / day

Algal bio-stimulant : 600 L / day

Compost : 30 Kg / day

Biogas (LPG) 150 m³ / day

O₂ saving : 10 T / year





Thank you
for your attention