



The SEMiLLA Platform as a mean to create environments to develop the Circular Economy Concept

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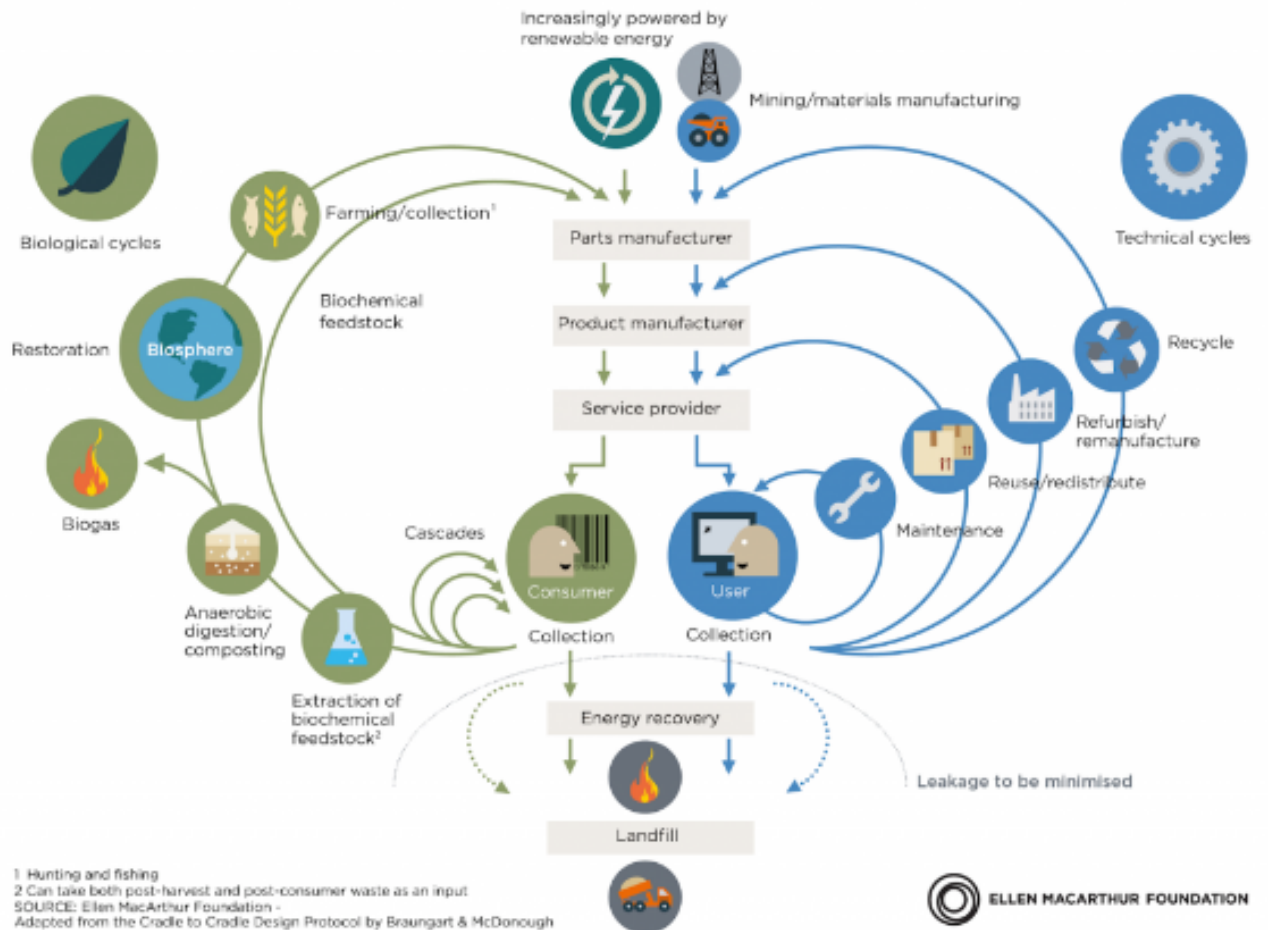
SEMiLLA IPStar



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What's Circular Economy?

CIRCULAR ECONOMY - an industrial system that is restorative by design

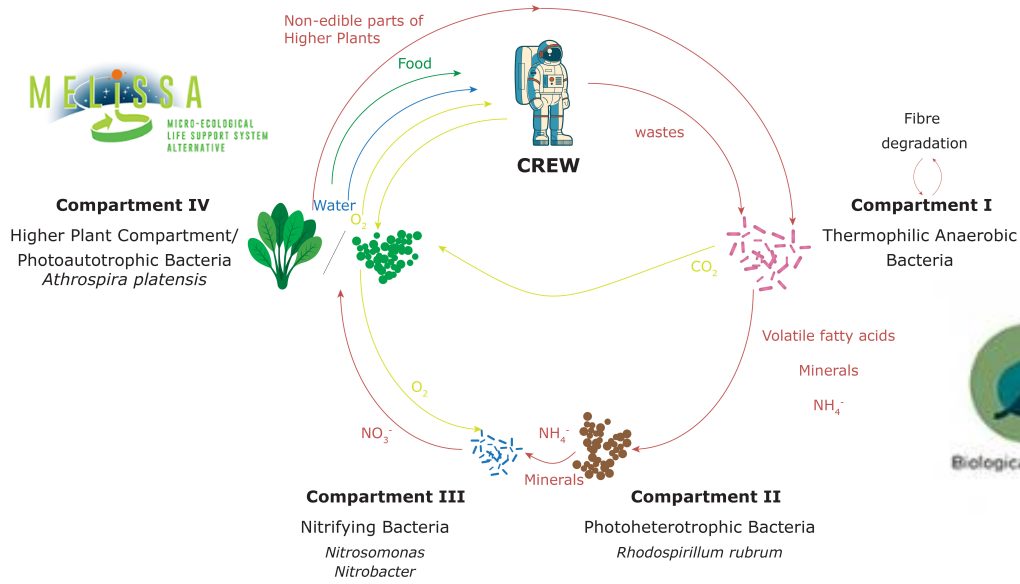


SEMILLA IPStar - VISION & MISSION



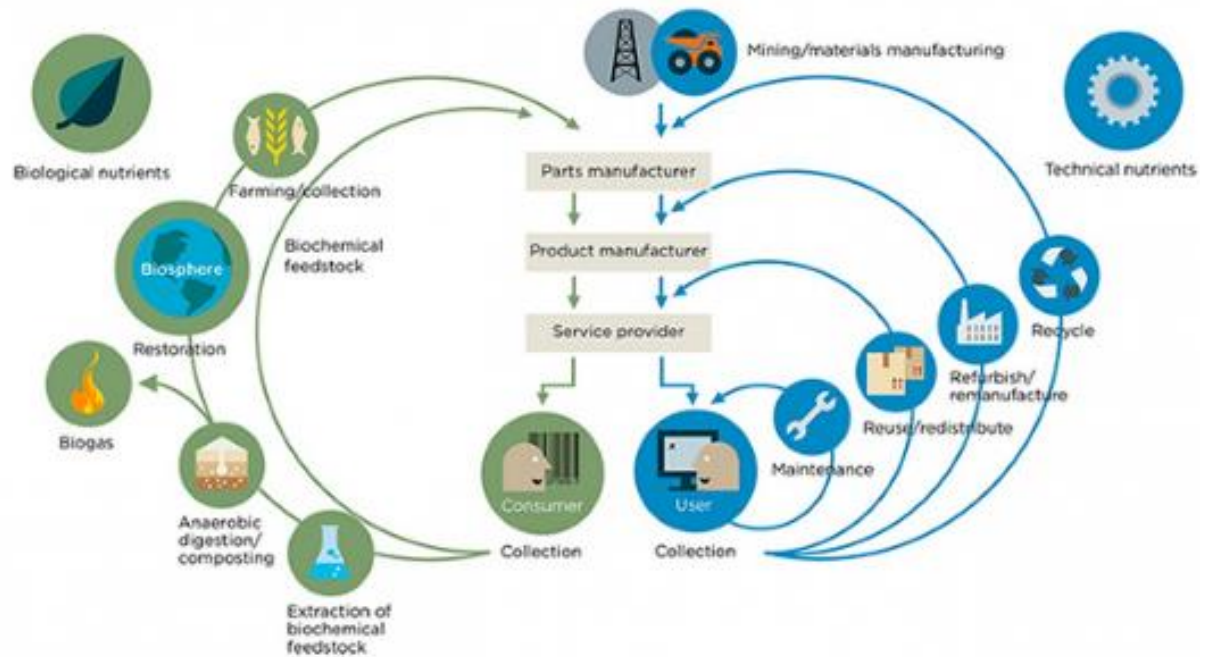
VISION: With the increasing world population and consumption patterns, the stress on Earth's resources is reaching its limits. Sustainable growth and fair availability of resources requires **restoration** instead of **exhaustion**. Regenerative circular economic systems present effective tools to meet this requirement helping to close economic loops, minimizing the need of new resources by effectively converting 'waste' streams into valuable assets that can be reintroduced into a circular system.

MISSION: Accelerate the transition to a circular society by deploying the principles of highly efficient and robust restorative life support technologies designed for long term space missions to make Earth sustainable for all.

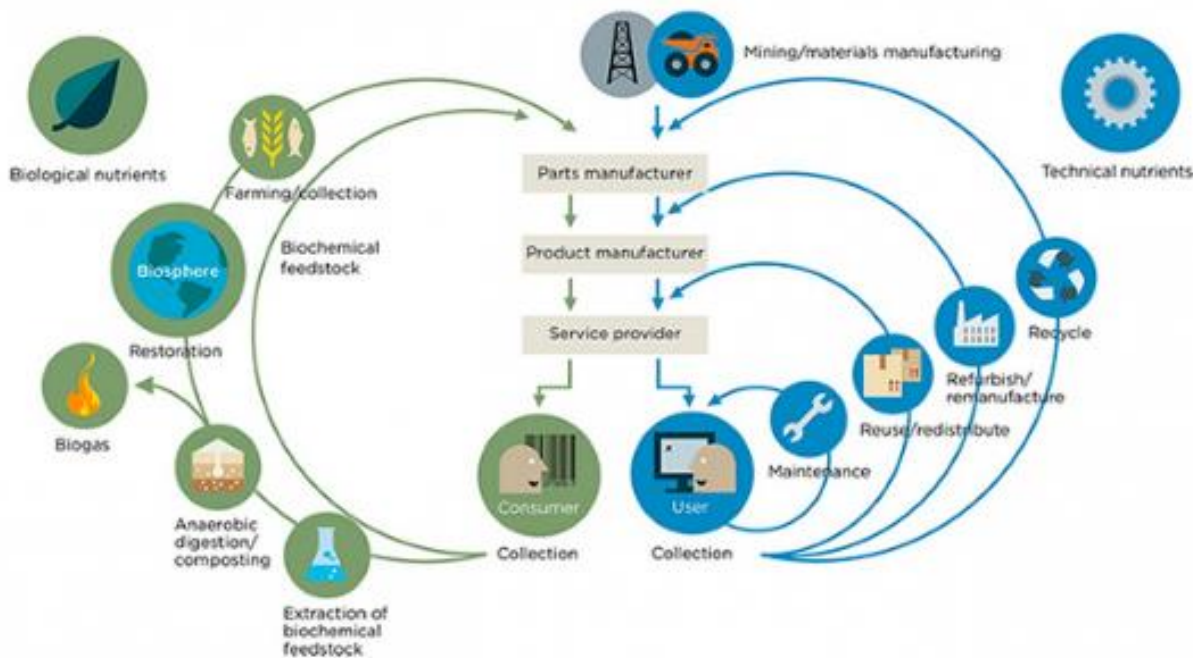


From space...

...to Earth



Difficulties implementing circularity



- A comprehensive view of the situation is key to implement circular solutions
- The best solution depends on the environment
- A high involvement of many actors is needed

SEMILLA Circular Economy Hubs - **RESEARCH**



RESEARCH



INNOVATION



TALENT



OUTREACH

WHAT?

- Develop methods to bring space tech back to earth
- use space solutions to boost circular economy

SEMILLA Circular Economy Hubs - **INNOVATION**



RESEARCH



INNOVATION



TALENT



OUTREACH

WHAT?

Develop and spread new circular business models

Help companies understand the implications of circular economy

Develop tools to implement principles of CE

SEMILLA Circular Economy Hubs - Talent



RESEARCH



INNOVATION



TALENT



OUTREACH

WHAT?

Identify the skills that the workers of the future will need in the framework of the EC

Education is fundamental, investing in it will be a great advantage.

Masters, bachelors, PhD

SEMILLA Circular Economy Hubs - **OUTREACH**



RESEARCH



INNOVATION



TALENT



OUTREACH

WHAT?

Attract attention to the CE and encourage everyone to apply it

Approach governments to issue regulation compatible with the CE

The role of government is key they must therefore know the principles of the EC to apply them in the new regulations.

SEMILLA - Circular Economy Hubs

A **SEMILLA Circular Economy Hub** is a place where SEMILLA elements (technologies, goals, products and services...) are projected to define a unique project addressing the local challenges and necessities:

- Developed together with local entities
- Involves the selection of the SEMILLA elements that are key in a specific region
- No two are alike!
- Hubs are connected all around the world to share experiences and best practices



SEMILLA Circular Hub Malaga

Partners:

- University of Malaga
- Technology Park of Andalusia
- Malaga City Council
- SEMILLA IPStar

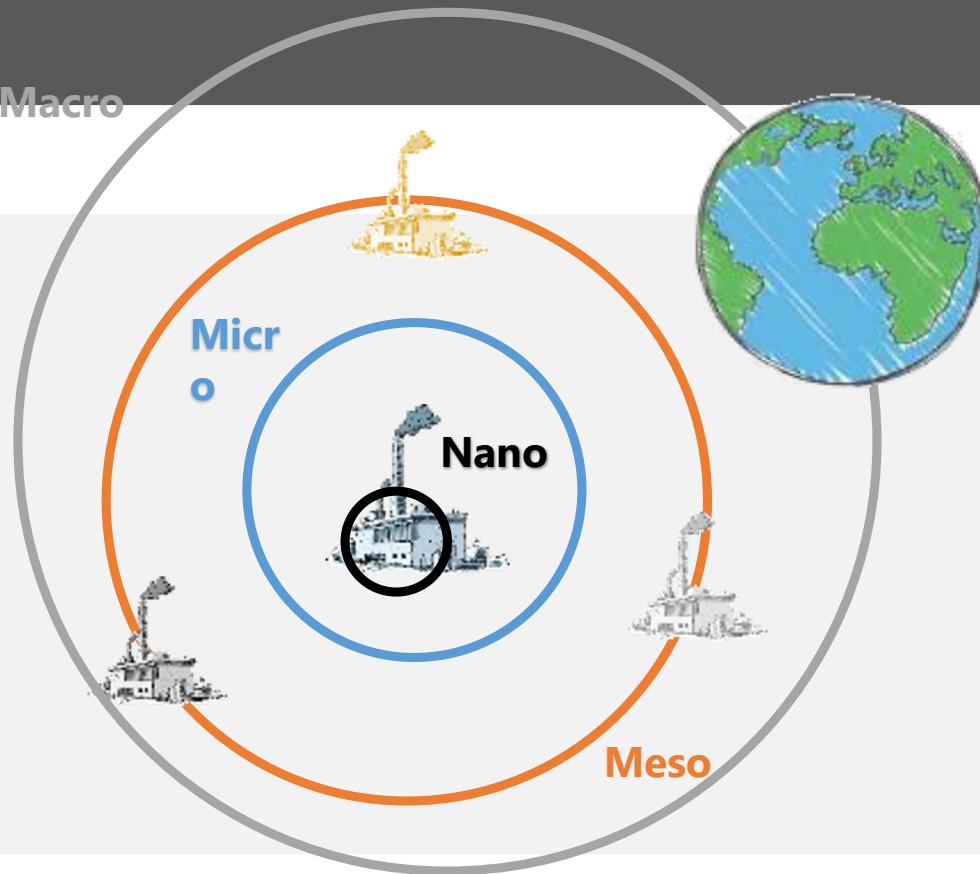
Objective:

- Develop a Circular Economy Hub in Málaga



SEMILLA Circular Hub Malaga: Master about Circular Economy

Macro



UNIVERSIDAD
DE MÁLAGA

• Content:

- 1. Circular Economy
- 2. Circular Products and Services
- 3. Circular Business Models
- 4. Industrial Symbiosis
- 5. Circular cities and regions



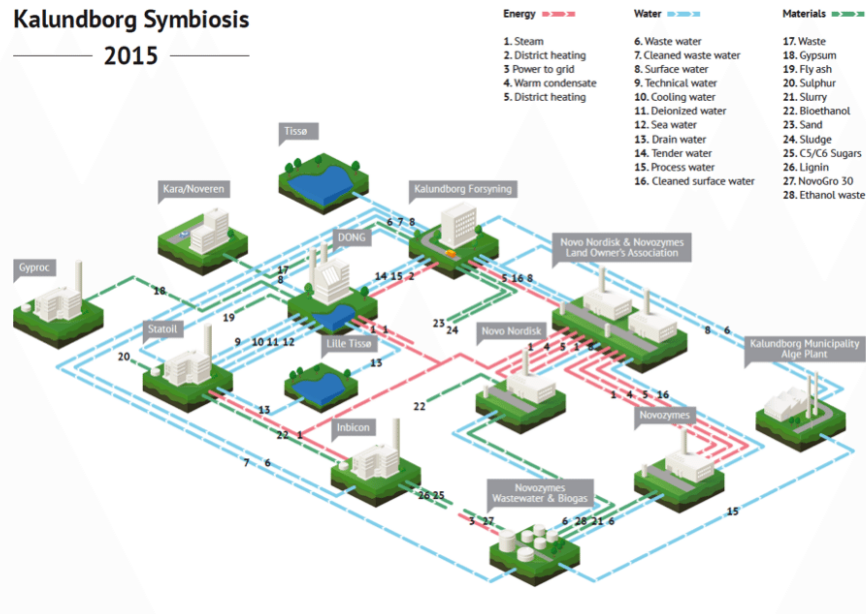
SEMILLA
Circular Systems™



Ayuntamiento
de Málaga

SEMILLA Circular Hub Malaga: Industrial Symbiosis

Kalundborg Symbiosis 2015



Water

Energy

Materials



SEMILLA Circular Hub Malaga: Malaga circular city.



Ayuntamiento de Málaga

URBAN POLICY LEVERS FOR CIRCULAR ECONOMY TRANSITIONS



Thank you

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