



POWER4BIO cross-regional visit to Andalucía

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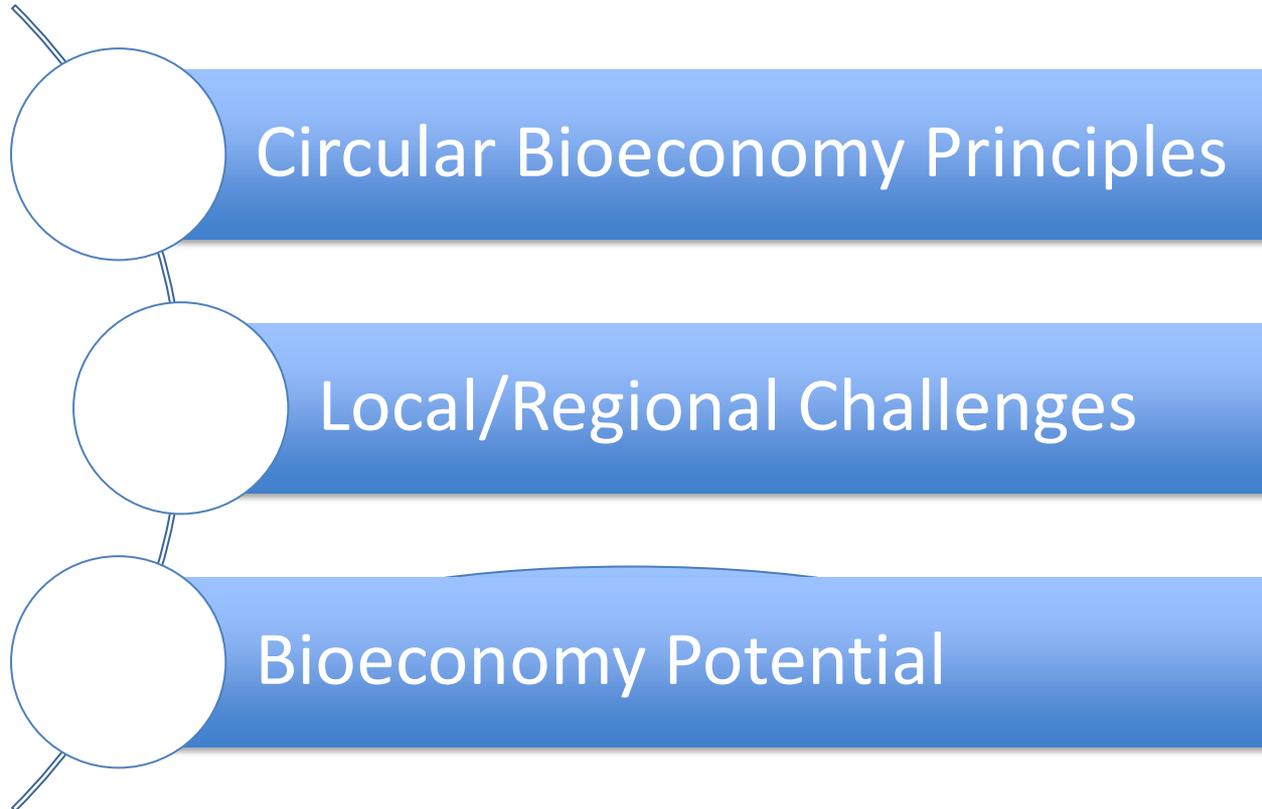
Commitment with Bioeconomy

I work full time in Bioeconomy since my stage at the DGDEVCO in 2013 where we were dealing with sustainable intensification in African countries. The Strategy of Bioeconomy for Europe was recently launched.

My background is analytical chemistry, in consequence I started working with potential nutraceutical or pharmaceutical compounds that are present in biomass and fruits and vegetables but also with sustainable agricultural practices in terms of efficient use of agro-inputs and natural resources.

I currently advise companies and administrations on shifting to a production model in accordance with circular bioeconomy principles. Another aspect of my work is the communication, education and dissemination of bioeconomy to students, farmers and value-chain actors and the general population.

Bioeconomy related with Greenddeal and how to extend bioeconomy at regional level



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Circular Bioeconomy

- ✓ Local or regional approach
- ✓ Sustainable use of natural resources
- ✓ Fostering Bioprocesses and bioproducts to replace fossil resources
- ✓ Wastes valorisation
- ✓ Jobs, new business models, new technologies, new markets

Green Deal (concerning agro)

- ✓ Local or regional sums the whole
- ✓ Sustainable use of natural resources
- ✓ Efficient production systems
- ✓ Restore biodiversity
- ✓ Reduce footprint, emissions, contamination
- ✓ Innovation in industries

My vision of bioeconomy related with Greenddeal and how to extend bioeconomy at regional level



Local or Regional Challenges

- ✓ Natural resources scarcity
mainly water
- ✓ Dependency of mineral
fertilisers
- ✓ Vulnerability of farmers to
price volatility
- ✓ Wastes management,
environmental concerns
- ✓ Vulnerability of local economies due to:
 - ✓ High dependency of a unique business
model
 - ✓ Lack of employments, loss and aeging
of inland population, migration to
coastal areas
 - ✓ Lack of investors and innovations

How to extend bioeconomy at regional level. Opportunities!!!



- ✓ Incorporation of knowledge, technology and innovations to the production system
- ✓ Fostering bioindustries: to achieve business diversification and jobs, which diminish vulnerabilities
 - ✓ Bio-inputs, to boost resilience to stress
 - ✓ Digitalisation of agri-food chain
 - ✓ Biomass valorisation
 - ✓ Compost, feed, soil restorations, energy
 - ✓ Extraction industry: Nutraceuticals, pharma, cosmetics
 - ✓ Lignin, cellulose, hemicellulose catalysis conversion C5-C6 platform bioblocks and H₂ production
- ✓ Alternative crops, biomaterials and compounds eg Hemp, Cannabis
- ✓ Shifting to a Clustered value chains, also including linking inland small producers with richer coastal cities
- ✓ Valorisation of externalities
- ✓ Investors attraction and important role of financial entities, as an example Cajamar is committed with Bioeconomy implementation, mainly in the area of South and East Spain

How to extend bioeconomy at regional level



Some considerations

- ✓ Important links with POWER4BIO:
 - ✓ Local and Regional developments
 - ✓ Very important to share expertise e.g pilot plants of catalysis for bioblocks production, extraction processes etc.
 - ✓ To support scalability of pilots
 - ✓ To involve investors and share expertise of company managers entrepreneurs demands mentoring
 - ✓ Transdisciplinary actions involving value-chain actors, administrations, researchers, consumers, communication etc
 - ✓ Indicators of performance