



**POWER4BIO**  
REGIONS FOR  
BIOECONOMY



## Bioeconomy and circular bioeconomy 16. March 2021

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# POWER4BIO – emPOWERing regional stakeholders for realising the full potential of European BIOeconomy

Coordination and Support Action  
in Horizon 2020

**Start:** October 2018

**End:** March 2021

**Duration:** 30 months

**Budget:** 2,9 M€

**Coordinator:** CIRCE (Spain)

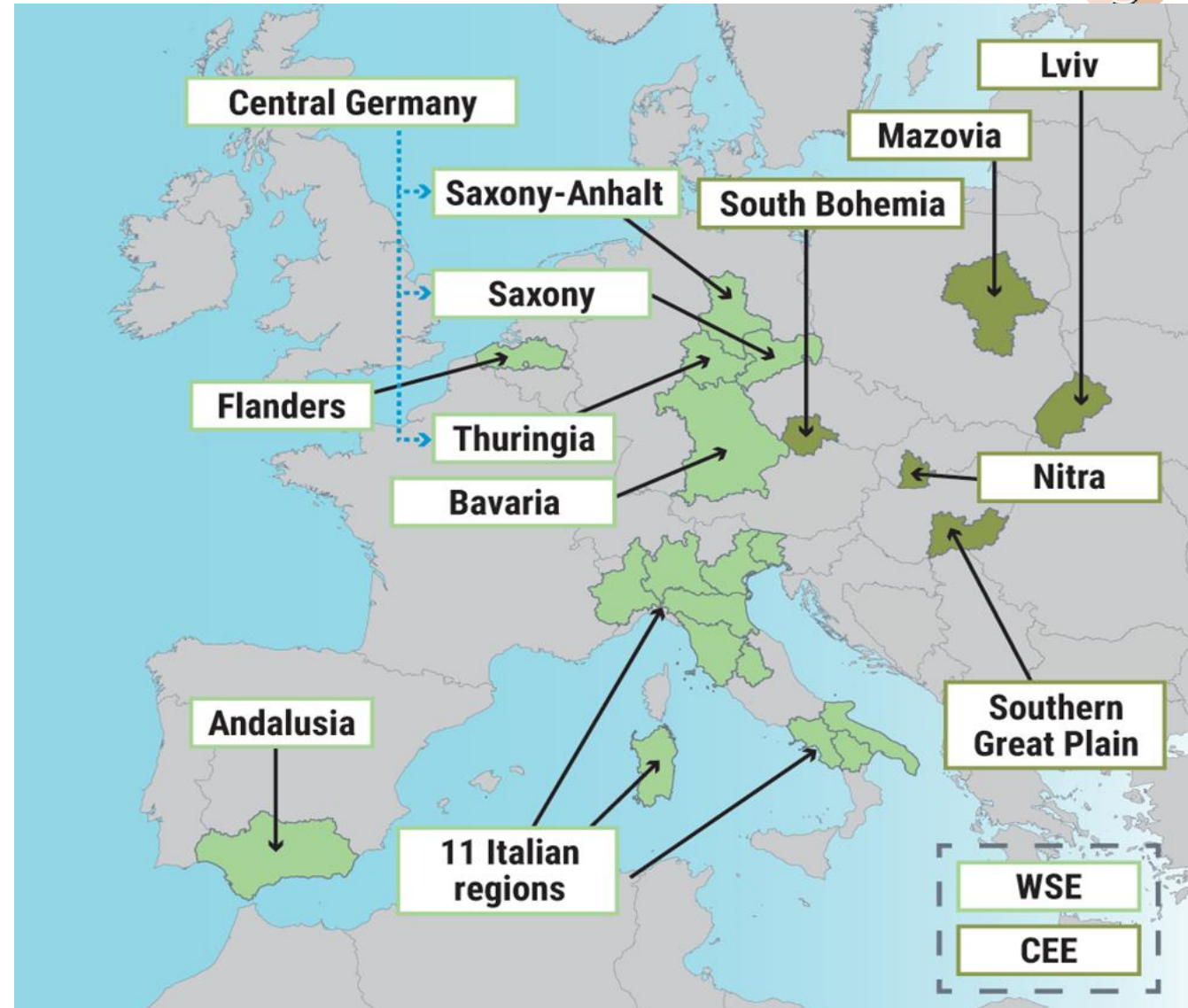
17 partners from 11 countries



# POWER4BIO concept

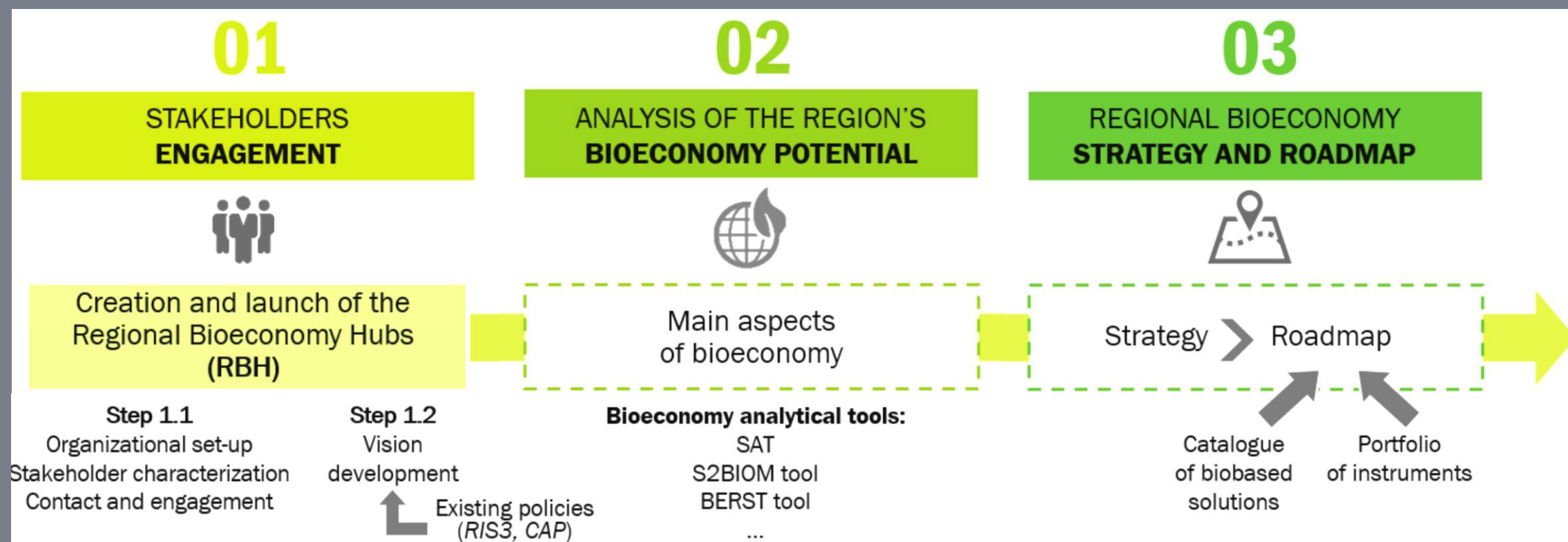
- **Empowering EU regions**, with special focus on **CEE countries**, for maximising the mobilisation and use of endogenous biomass feedstock
- **Support policy makers** and other **regional stakeholders** to take the most suitable decisions in the transition to a bioeconomy era
- **10 regions across EU and 1 regional network**, being supported by an extensive and varied number of stakeholders

- **10 participant regions**
- 5 regions from Western and Southern Europe (WSE) with medium to very high bioeconomy maturity
- 5 regions from Central and Eastern Europe (CEE) with low to medium bioeconomy maturity





# Steps of POWER4BIO methodology



# Main Outputs



Regional Bioeconomy Hubs	New bioeconomy bridges between regions	10 cross-visits and training programmes	Catalogue of mature technologies and business models	Bioregional Strategy Accelerator Toolkit
Set up infrastructure in CEE regions where key stakeholders will collaborate to develop a bioeconomy strategy	Fostering the dialogue between POWER4BIO stakeholders and enabling long-lasting cross-regional cooperation	Experience exchange by visiting each POWER4BIO region. Training and education programmes for regional stakeholders	Support regions to identify most adequate biobased solutions, suitable to be deployed at small-scale in rural areas	Instruments & support material for regions to prepare and review their bioeconomy strategy

**12 EU best practices** into 4 categories: bioenergy, biochemicals, feed & food and biomaterials

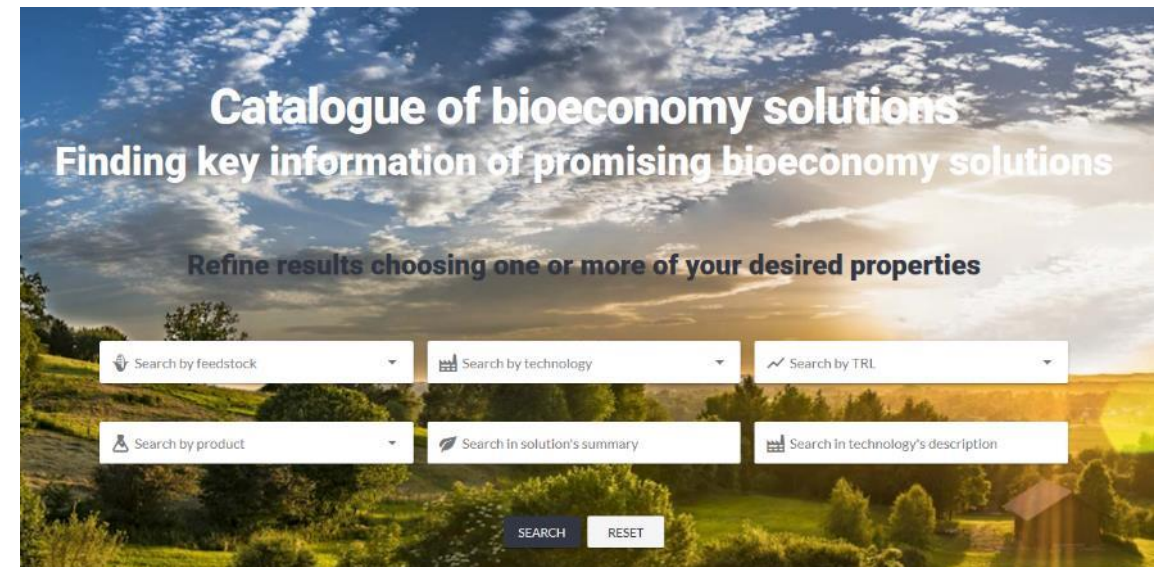
**19 Business models** practical examples of business cases

# Catalogue with bio-based solutions

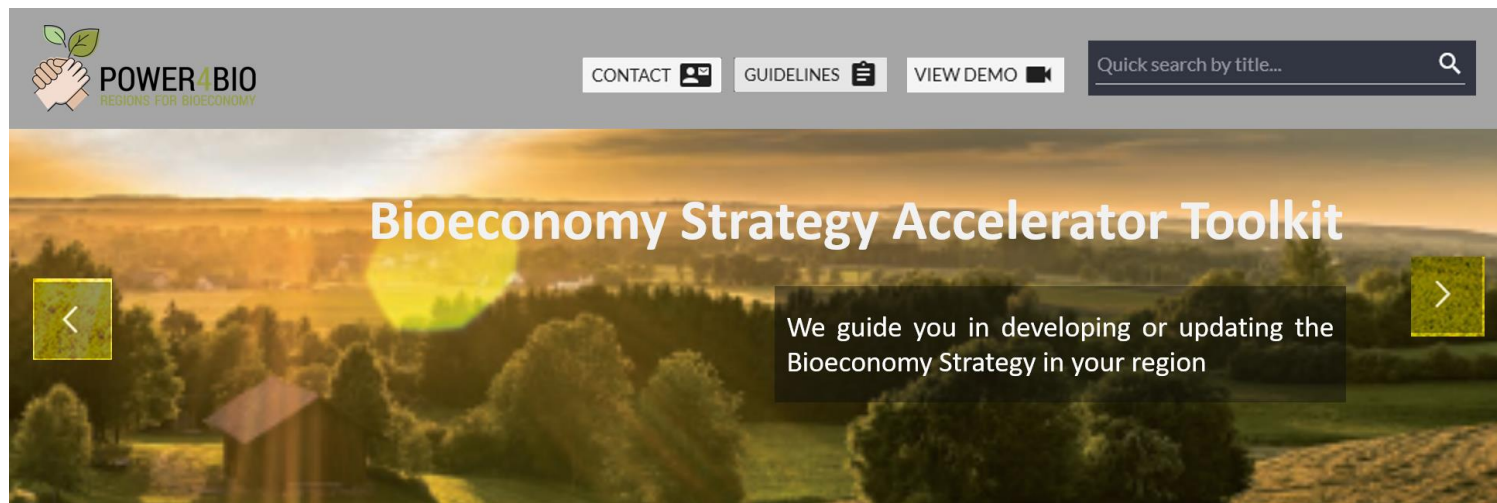


- Overview of options to **convert biomass feedstocks into bio-based products**
- Factsheets about **existing bio-based solutions** with tested potential for market uptake (high TRL)
- Implemented in a **Web-based database**
- For bioenergy production, biomaterials, biochemicals and food and feed
- The content topics of are General, Feedstock, Technology, Products, Environment and Impacts.

<https://power4bio.draxis.gr/#/>



# Bioeconomy Strategy Tool Accelerator



<http://testing.draxis.gr/>

## The BSAT- Bioeconomy Strategy Accelerator Toolkit

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## Get Started

You wish to:



Develop a new  
Bioeconomy Strategy in  
your region



Update an existing  
Bioeconomy Strategy in  
your region



# South Bohemia Region



## Potentials/ opportunities

### Existence of HUB- Expert Group

#### Traditional production:

E.g. fishery, brewery, agriculture and forestry, municipal waste

#### New more scientific oriented branches:

Biotechnology (alga.cz), biogas (Czech Biogas Association), aquaponics

#### Research potential :

- University of South Bohemia
- Czech Academy of Sciences

## Main challenges/ difficulties

**The bioeconomy as a concept is practically unknown to public in Czech Republic**

- **Cultural** obstacles - people prefer traditional use of resources
- **Economic obstacles:**
  - Financial problems – low regional support
  - Functional biomass market doesn't exist
- **Legal obstacles:**
  - Legal obstacles - in case of waste management
  - Bioeconomy strategy does not exist at national and regional level**

# Bioeconomy Actors and Activities

- **Regional expert group of the POWER4BIO project (RBH)**  
group of nearly 50 stakeholders from South Bohemia Region with different background (academia, industry, policy makers, civil society and general public).
- **South Bohemian Association for Bioeconomy r.a,**  
June 2020 expert group of POWER4BIO project changed into more formal body
- September 2020 Association expressed the interest in the functioning as **the Regional Innovation Platform/ Krajská inovační platforma (KIP)** *abbreviation in Czech*

# Future Visions



## Bioeconomy hand in hand with Circular economy

- **Food wastes and Communal bio waste processing:**
  - Source for biogas stations
  - Source for industry- used food oil (Hydal project)
- **Biogas gained from sewage sludge** – used for public transport
- **Biogas station changed to:**
  - bioethanol production
  - small refineries
- **Aquaponics**

## IN GENERAL

- **Bottom up regional activity must be aligned with top down support - EU and national level**



# Thank you for your attention!

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