

Advice and nature-based solutions to create value with biodiversity regeneration and pollution reduction

Presentation BeeOdiversity

2021

Main sectors of activity and needs addressed

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Agribii	CINACC 2N	d Water
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Sustainable Agriculture

Product quality and labels

Resources protection

Monitoring biodiversity and agricultural pollution

Raising awareness among stakeholders

Industrial, transport, logistics

Priorities and reduction of pollutants

A positive biodiversity footprint

Mitigating the risks of opposition

Permits and regulations

Biodiversity and industrial pollution indicators

Real estate and smart cities

Better quality and attractiveness of the site/ building

Licenses, labels and financing (non-financial KPIs)

Positive territorial impact and indicators

Link with the local community

Development and differentiated management of a site

Committed companies and investors

Consistent biodiversity and CSR strategy

Differentiation and awareness

Employee well-being and attractiveness

Impact indicators

Private-planet partnership for mutual benefit

BeeOdiversity creates value through biodiversity regeneration



WHY

We are convinced that regenerating biodiversity and reducing pollution is both vital and valuable to visionary companies/public entities, humanity, the economy and ecology. For a sustainable future!

HOW

To achieve your objectives and design impactful projects, we draw on:

- The genius of Mother Nature
- Technological innovation
- The involvement of all the players in a project.

WHAT

We design and implement innovative strategies and solutions to regenerate biodiversity and reduce pollution with the aim of creating value.

Our method:

- Quantitative and qualitative biodiversity and pollution impact indicators
- Advice and modelling
- Actions



COMPANY INFO

- 15 FTE: Bioengineers, IT developers, Business modelling and development, Beekeepers
- Active in 7 countries in EU and USA
- Awards: Solar Impulse, Ashoka, Chivas-Venture, Belgian Smart Award, Environment & Energy Award, etc.
- + 70 clients: Companies in various sectors (water, industrials, real estate, agribusiness, CSR brands, etc) and public institutions (municipalities, cities, regions)



Your needs and expected benefits



Your activities and result

The quality and resources of your products are improved / preserved

Differentiation of your activities and increased visibility

Limitation of risks and costs

Your sites and exploitations

Regulatory constraints and obtaining permits/certifications (Bcorp, ISO, BREEAM...).

Attractiveness and positive footprint

Your stakeholders

Well-being, efficiency and attractiveness for your employees

Strengthened link with local actors







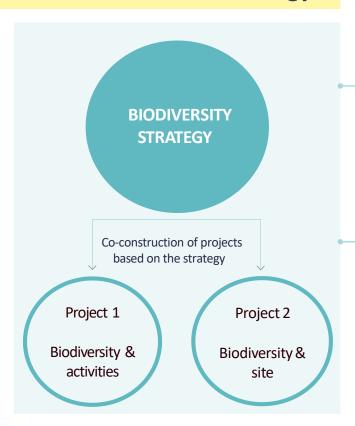






Our services: a global strategy for your activities

From strategy...



Preliminary assessment

We examine the impact and constraints of your value chain with regard to biodiversity.

Recommendations

We co-create a targeted strategy and steering tools for the preservation/regeneration of biodiversity and the reduction of pollution emitted by your activities or those of your stakeholders.

Implementation plan

We propose innovative solutions and projects adapted to your specificities with an implementation plan.

Next step

Free workshop (+/- 3h) to clarify the need and activities

Our services: and/or solutions for your sites

To operationalization

Next step

Meeting to clarify the needs and make an offer

Assess and measure

- Activities: we assess the activities on site (specificities, needs, constraints)
- Site: we carry-out an ecological and pollution survey of the site
- √Inventory of fauna, flora and natural environments
- ✓ BeeOmonitoring (inventory of pollution, pesticides and biodiversity on 700ha through bees)
- ✓ *BeeOmapping* (inventory of risks and priorization of sites at low cost)
- √ Regulatory constraints
- Stakeholders: we assess the impact on / from local stakeholders

Model and advise

- Projects at the service of your **activities** and **CSR**
- Restore biodiversity on your sites
- √ Development concept for creating ecosystem value and services
- ✓ *Development plan* (feasibility analysis, choice of species, plans, specifications)
- √ Management plan (maintenance and development charter, reasoned practices, choice of species)
- Limit industrial and agricultural pollution
- √ Toxicity, origin, impact analysis
- ✓ Identification of alternatives or solutions
- Concept and methodology to involve and train stakeholders

Act and implement

- Realisation and maintenance of onsite biodiversity developments and indoor developments to reconnect humans with nature
- Training and animation of local actors (farmers, site managers, etc.)
- Communication, awareness raising and placement and management of bee colonies, insect hotels, etc.
- Quantitative and qualitative impact measurement through BeeOmonitoring
- Other specific solutions

Suggested approach: From prioritisation to targeted action

Multi-site analysis

site prioritisation

BeeOmapping Flash

Pre-defined indicators:

- Soil occupation
- Natura 2000
- ZNIEFF
- Hydrography

sites: unlimited

Ranking by degree of ecological interest

BeeOmapping Customised

Customised indicators

- Mapping data
- Building typologyPriorities activities
- (e.g. permits, etc)

sites: unlimited

Customised - Visual of er gloral ranking process

Rules of sustainable management

General advice for all sites

Site analysis

#prioritisation of sites & local actions #indicators TO and impact

Site audit Ecologist

Advantages:

- Flora and fauna
- Non-foraged flowers
- Indicators

Limitations:

- Limited to the site
- Non-continuous
- Non-standardised
- Visual analysis: margin of error and unidentified floral species

BeeOmonitoring Bees/Tech

Advantages:

- Biodiversity & pollution
- 700ha: site + surroundings. Analysis of the impact of the site / activity on the territory
- Continuous + optimal floral identification
 Innovation & integration
- local community
- Standardized and in the lab: comparison between sites is possible and no errors possible
 - T0 and impact indicators

Limitations:

 Flora: but it is the basis of the ecosystem

Advice

#biodiversity #pollution

Actions

#on-site #stakeholders

Specific Advice

Landscaping

- Biodiversity & building quality, site attractiveness, food production, well-being, environmental impact
- Plans and specifications
 Management green spaces
- Principles of good management with regard to annual budgets, objectives and stakeholders
 Performance indicators

Depollution

- Origin of pollutants
- Prioritisation
- Solutions

Stakeholders

- Stakeholder analysis
- Involvement, collaboration, awareness-raising

Support to act

Realization

- Landscaping
- Maintenance
- Facilitation of stakeholders (workshops, conferences, etc)

Project management

- Choice of contractors
- Coordination and monitoring of the work

Impact metrics

- Audit
- BeeOmonitoring

Bees & nesting

- Leasing
- Management of colonies
- Insect hotels etc



Advantages: very limited cost and easy to implement on many sites

Al Software: multi-site assessment (score, risks, solutions) (from 2021)

Advantages: analysis + advice; limited cost; many applications; multi-site in one click

Example of solution - BeeOmonitoring









Rushlight

Nature-based solution to **monitor the environment** through the analysis of pollen collected by bees which act as natural drones.

This is the only tool to collect qualitative and quantitative data on :

- number, type of plant species present and their impact on the ecosystem
- type, concentration, origin and impact of industrial and agricultural pollutants present

On large surfaces, at controlled cost

NO TECHNOLOGY CAN PROVIDE SIMILAR DATA

These measures then make it possible to (i) assess the impact of a site/activity, (ii) act in a targeted manner to enhance biodiversity and/or lower pollution and (iii) evaluate the impact of the measures taken, supported by scientifically quantified indicators.

It is also a great tool to:

- engage and strengthen relationships with the territory and stakeholders (local authorities, associations, local inhabitants, schools, the world of culture, etc.).
- engage employees and get them involved in a project with a positive impact.

Deliverables: data, benchmarking, advice, communication tools, reports, presentations, label, etc







POLLUTION

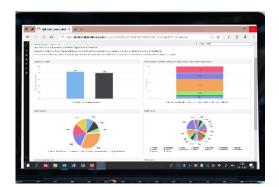
Heavy metals, PAH, Dioxins, Furans, PCBs, PFAS, etc



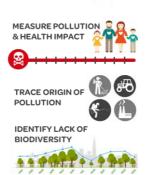
BIODIVERSITY

Plant species & birds,

insects, ecosystem



Video via this link



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Example of solution – Well-being development

Biodiversity developments developed by BeeOdiversity in collaboration with experts in neurology to reduce stress, the risk of burnout and improve the ability of employees to concentrate and recover. It is also used in EPHAD to reduce the effects of neurodegenerative diseases in particular. This effect is scientifically validated.

The **benefits for the occupants** of the site include the following:



Stress and burn-out reduction



Concentration, efficiency and wellbeing improvement



Team cohesion

The development also benefits the local ecosystem.

Method:

- Stakes of the company and an inventory by the experts in neurology
- ✓ Conception of the development and design with regard to its stakes
- √ Choice of of well-being indicators
- Installation of the development and its components
- Monitoring of well-being indicators by experts in neurology





Our uniqueness

Scientific expertise

The BeeOdiversity team is composed of scientific experts in biodiversity regeneration. It also has partnerships with universities and is a member of committees. You will find the expertise you are looking for.











Entrepreneurial

experience

Your needs and constraints as a company will be understood and taken into account because BeeOdiversity is also based on a 100% entrepreneurial model. We speak the same language.

Benefit from the agility, passion and innovative spirit of an ambitious enterprise.

Single partner

You can count on a single partner capable of advising, implementing and coordinating every step of the project.

Achieving your international ambitions can be made easier thanks to our presence in different countries and our global network.

Social impact

The search for positive societal impact and systemic change is part of BeeOdiversity's DNA, which is Ashoka Fellow. Your projects and organization will be entirely associated to this societal impact.

- > 50.000ha monitored and impacted per year
- > 100 projets per year
- Europe and USA
- Thousands of stakeholders made aware each year

Ashoka Fellow, Solar Impulse (2020), Réseau Entreprendre, Smart Belgium Award (2018), Chivas Venture Award (2017), Belgian Energy and Environment Award (2017), Systemic Economy Award (2016), Brussels Entrepreneurship Laureate (2015), Social Innovation Accelerators Network Award – EU (2014)

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Example of references

















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