



Network
Nature

Nature-based solutions Business information package



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Welcome to the exciting world of nature-based solutions!

Whether you are just starting out in this field or are a professional already, or simply want to learn more, this document has useful information for everyone.

The package starts with introducing the concepts of nature-based solutions and enterprises. We then present examples of nature-based enterprises as inspiration. The business opportunities offered by nature-based solutions are set out next. Going into specifics, business model canvases are introduced which have been adapted especially for nature-based solutions.

We close the document with recommendations and tips on where to start – including exploring policy and legislation, networking and funding opportunities. In each chapter sources are linked and tips are given. All of them provide additional interesting materials where you can learn more about the different points being made. Just click on the highlighted text, and it will take you directly to the respective source.

If you are a **business** and would like an introduction to the concepts, the first chapter is probably the most valuable to you, as well as the success stories of nature-based enterprises. If you need more evidence, for yourself or others, the chapter on business opportunities is for you. If you want to define a business model for a nature-based solution that you want to deploy you can use one of the business model canvases described. And for concrete steps to start or even to scale-up your project, look at the final chapter.

For **higher education of business professionals**, this information can also be used for a course on nature-based solutions and enterprises. The chapter on the concepts of nature-based solutions and enterprises and the business opportunities which nature-based solutions can present can serve as an introduction to the course. The examples of nature-based enterprises can then be used as case studies.

Further links are provided with more information regarding these companies and further reading material. To solidify this knowledge, group work can be done with the business model canvases. Look at the nature-based solutions catalogues that are linked, choose one and fill out a canvas for it. If each group uses a different canvas, there can be a discussion afterwards comparing the models and the experiences with them.

What are nature-based solutions and nature-based enterprises?

The European Commission defines nature-based solutions (NBS) as:

“Solutions that are inspired and supported by nature, which are cost-effective, simultaneously provide environmental, social and economic benefits and help build resilience. Such solutions bring more, and more diverse, nature and natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient and systemic interventions.”

Another important definition is the one adopted by the Fifth Session of the United Nations Environment Assembly (UNEA-5):

“nature-based solutions are actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits”

NBS offer benefits to nature as well as people, and the conservation and promotion of biodiversity is crucial to

the concept. To use plants and animals to create solutions has been the way humanity started out. So creating and implementing NBS is, in a way, going back to our own roots. Some NBS are indeed a revival of traditional methods, whereas many others are brand-new ideas on how to borrow from and use nature.

All definitions mention challenges that NBS can solve and benefits they can bring. [NBS have the potential to help with](#)

- **environmental** problems,
- **social and cultural** challenges and
- **economic** challenges.

One important reason to use NBS are **environmental** problems, such as those related to climate and water, but always keeping in mind that biodiversity improvement is intrinsic to the concept. To prevent flood damage, areas of land are kept clear of buildings and a design implemented with vegetation helps in maintaining stormwater. To prevent landslides, trees and shrubs are planted along mountains. In addition, NBS can help to solve **social and cultural** challenges, for example in the fields of public health, food security and

even social cohesion. An example are green spaces in densely populated areas with community gardens where neighbours can meet and engage with each other. For **economic** challenges such as a lack of employment opportunities, renaturation of attractive landscapes can draw visitors and create employment. These are very basic examples, but their effects can be enormous.

[NBS can also contribute a lot to a nature-positive economy.](#)

This is important, as the ecosystems which are the basis for our societies and economies are destroyed and degraded. To change this, we need to switch from the business as usual to an economy which values nature. This is smart both because it sees the contribution nature makes to the economy and paves the way for an economy that values and promotes this contribution. For example, in the field of tourism, if nature is degraded, tourists will stop coming and income will be lost. A nature-positive economy will ensure that tourism will be done in a way to protect nature and therefore keep a destination attractive for tourists.

Historically, the public sector has led the financing and implementation of NBS. It is still a very important player, but the private sector is also becoming increasingly relevant. Enterprises which contribute to the development and delivery of NBS and for whom nature is at the core of their business were termed [nature-based enterprises \(NBE\) by Kooijman, McQuaid, Rhodes, Collier and Pilla.](#)

NBE can be for-profit or non-profit and are often small or micro enterprises, with less than 50 employees. While some NBE have been active for over 20 years, many have started in recent years and are relatively new. [NBE are for example](#) active in NBS for green buildings; NBS for water management and treatment; sustainable tourism and health and wellbeing.

TIP: For further information on NBE and their barriers and enablers, we recommend an [article about factors influencing the success of nature-based enterprises.](#)

NBS can be an alternative to so-called “grey” solutions – grey because they often rely on materials such as concrete. NBS can also be used together with grey solutions, to create a mix. An important aspect of making NBS last is to ensure their upkeep and management, and indeed there are many NBEs emerging to provide maintenance services for NBS. NBS often need care after they have been first implemented, unlike for example concrete solutions which can be left alone for the first (few) years. However,

in the long-run NBS can be more cost-effective than “grey” solutions. One of the reasons is that if maintained they do not deteriorate and can last much longer.

One innovative way to support their maintenance is to [combine NBS with smart technology.](#) Entrepreneurship in the field of NBS and smart technology has become increasingly important in recent years as concerns about climate change and environmental sustainability have grown. For example, an NBE may develop a smart irrigation system that uses sensors to optimise water usage in urban gardens.

In the project [TreeMania](#), a sensor is placed in the soil of a plant or tree. This sensor then monitors different important parameters such as moisture, temperature and oxygen content of the soil. Text or email messages are then sent when a plant or tree needs care. This makes the management much more efficient, because it is enough to look after those plants and trees where the sensors indicate there is a need. The care can come from professionals or citizens. If citizens are involved, this also raises awareness about NBS. Overall, entrepreneurship in the field of nature-based solutions and smart technology offers exciting opportunities to create innovative and sustainable solutions that can help address pressing environmental challenges while also creating profitable businesses

TIP: There are several catalogues of NBS which you can look at to see the potential of NBS and get inspiration. The GrowGreen project has produced such a catalogue with a focus on [European cities.](#) Urban Nature Atlas has an [interactive map](#) which shows more than 1000 examples of nature-based solutions in European cities and beyond. If you want to learn more, go to the [NBS databases](#) part of this document.



Source: <https://www.nadinagalle.com/blog/talking-trees-part-3-how-can-we-listen-to-trees>

Examples of successful nature-based enterprises

As inspiration, we present two success stories of existing nature-based enterprises as examples below. NBE contribute to the development and delivery of NBS and have nature at the core of their business. Both companies develop and produce NBS.

Helix Pflanzen focusses on specific plants and hedges, and also provides plant systems to green buildings, especially in urban areas. Nature is therefore at the core of their business, and with their NBS they contribute to better air quality, climate and a higher biodiversity in cities, they strive for a fair production of their products and have created jobs.

Sonian Wood Coop buys trees felled in the Sonian forest just outside Brussels where a careful selection of trees is felled and replaced by new ones to adapt the forest to climate change, to increase biodiversity and to produce timber. The company buys the trees at auction and processes the wood. They produce tables and flooring and sell them directly to customers, and sell the processed wood to local carpenters and carpentry companies. Previously, the wood was mostly exported as raw material to Asia. This NBS helps to reduce emissions and strengthens local value chains, creates locally added value and jobs and a sense of identity with local products.

Success story – Helix Pflanzen GmbH und Helix Pflanzensysteme GmbH

What is the core business of Helix Pflanzen GmbH und Helix Pflanzensysteme GmbH?

[Helix Pflanzen GmbH](#) and its sister company [Helix Pflanzensysteme GmbH](#)

[GmbH](#) are trading companies which also have additional agricultural nursery companies. These nursery companies produce almost all of the plants which are traded. Helix Pflanzen focuses on specific plants that they sell directly to customers, including ground cover plants and English lavender. They also offer ready-to-use hedges which can be bought in the desired length. Helix Pflanzensysteme plans innovative plant ecosystems and technologies, delivers them and

also cares for the stewardship of these systems. This stewardship is what makes the difference, as only plants which are healthy can contribute to ecosystem services. Plant systems are offered which are ready-to-use solutions for urban areas, focusing on greening buildings and landscapes. By using insect-friendly plants, biodiversity is supported in urban areas. As there is increasing building activity in cities and less and less green spaces, the company specialises

in vertical greening to use all available space. They have developed entire plant systems which include, in addition to the plants, sensors, software and digital tools so that they can be sustained using only rainwater. By using insect-friendly plants, biodiversity is supported in urban areas. In addition to these products, the companies also offer monitoring and care of NBS as a service.



Source: Helix Pflanzensysteme GmbH



Source: Helix Pflanzensysteme GmbH

Why and when was this NBE founded and how is it organised?

Helix Pflanzen GmbH was founded in 2000 and Helix Pflanzensysteme GmbH in 2006. The origins of the companies go back even further, to 1932 when the trading company Müller was first founded. In the year 2000 the former trading company Müller was combined with the nursery “Lichtendorfer Baumschulen” and became Helix Pflanzen. The Müller family still owns the company today, with about 30 permanent employees and in the agricultural nursery companies another 40 permanent employees and about 15 seasonal workers. They have the legal status limited liability companies.

What are the factors that contributed to their success?

One of their success factors is new innovative solutions. They developed these solutions also by being partners in European research and innovation projects. Their ability to then turn these into products they could sell to customers was also important. As part of the [Turas project](#), they built a green living room in the city of Ludwigsburg. This is an outdoor installation with walls that are made entirely of soil and plants. On that basis Helix developed a [portable version of this green living room](#), which has been employed all over Europe. They were also part of the [Connecting Nature](#) project.

What was the main challenge they had to overcome?

One main challenge was to develop vertical greening solutions that only need rainwater so they can be sustainable. To achieve this, digital tools, sensors and software needed to be developed and linked together to maintain the plant systems.

It can sometimes also be a challenge to convince investors to use rainwater, as most of them initially don't consider this option. A further important challenge is the lack of knowledge about the importance of the stewardship of plant systems. In the conventional approach, what counts are only the number of plants being planted during the delivery. But for these plants to contribute to ecosystem services, it is necessary for them to be healthy. Therefore the continued stewardship after delivery is essential.



Source: Helix Pflanzensysteme GmbH

How do Helix Pflanzen GmbH und Helix Pflanzensysteme GmbH address the three mentioned problems and challenges that NBS can help to solve?

NBE contribute to the development and delivery of NBS and have nature at the core of their business.



Environmental problems

- In cities there is less and less space available for greenery, leading to increased heat and decreased air quality and biodiversity, and to counteract this Helix focuses on using vertical space for greening and thus contributes to greener cities
- The plant systems improve living conditions in cities by improving air quality, providing cooling effects and reducing CO²
- The plant systems are also designed to increase biodiversity by choosing plants so insects live and/or find food there



Social and cultural challenges

- Helix strives to bring nature into cities for everyone to enjoy. For this they provide green rooms, either portable or permanent, for inhabitants to enjoy nature and see the benefits it brings
- Products are [produced fairly](#) and sustainably



Economic challenges

- The company has existed for decades and has grown to create even more jobs in the region

TIP: If you want to know more about the green living room, you can watch a short, informative [video on YouTube](#).



Source: Helix Pflanzensysteme GmbH

Success story – Sonian Wood Coop

What is the core business of Sonian Wood Coop?

[Sonian Wood Coop](#) is named after the Sonian Forest, a unique peri-urban ecosystem of approximately 5000 hectares just outside of Brussels, because this forest is where the company gets its wood from. In the Sonian Forest, trees are cut down if they are damaged, are in danger of falling down or to make space for planting other trees. These raw logs are then sold in large quantities, most often at auctions. Sonian Wood Coop buys these trees and processes them for further use. It has two main customer groups: On one hand, local carpenters and carpentry companies buy the wood ready to use and only in the quantities they need at the time. They have the additional value of advertising their products as local. On the other hand, the founders focus on making products and selling them to customers directly. These products include tables, flooring and customised designs.



Source: Sonian Wood Coop

Why and when was this NBE founded and how is it organised?

Through an analysis of the flow of commodities in and out of Belgium/ Brussels, the founders noticed that the wood felled in the Sonian forest [was mostly sent to Asia \(mostly China\) as raw material](#). At the same time, the companies working with wood in Belgium/Brussels bought wood from other countries, like Scandinavia, Canada or even Asia. The founders saw an opportunity to support the use of local wood and to strengthen local value chains. They therefore founded Sonian Wood Coop in 2019. The company has six employees as of April 2023. The company has the legal status of a cooperative company under Belgian law. To be a social and democratic enterprise, the company has put up certain rules. In the general assembly, all members of the cooperative have equal voting rights. The payout of earnings and the differences in share price are strictly limited. They furthermore restrict the differences in wages within the company and the board of directors act as colleagues.



Source: Sonian Wood Coop

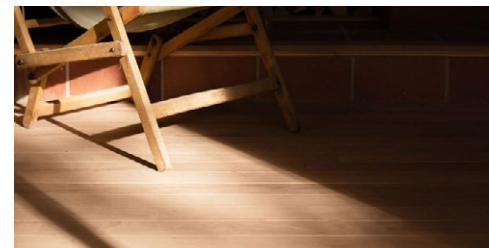
What are the factors that contributed to its success?

The founders used the fact that there was an already existing market for high value hardwood in Brussels from carpenters and carpentry companies. They also made sure to tell the story of the local wood to connect to potential customers. For these customers they offer customised products such as tables and in that way offer them a unique experience. So far they have shifted hundreds of tonnes of wood back into the local market.

This emotional connection of citizens to their local forest also helped the company to set up a successful crowdfunding campaign to get started. It also showed that there was interest in what the founders wanted to achieve. Later the company got capital investment in the form of private equity.

What was the main challenge they had to overcome?

As the market considered the export and import of wood to be working, policy makers did not see a way to interrupt this value chain. Sonian Wood Coop had to find a way to get to the wood directly and figure out how best to buy it. They also had to find local partners to process the wood, like lumber-jacks and sawmills.



Source: Sonian Wood Coop

How does Sonian Wood Coop address the three mentioned problems and challenges that NBS can help to solve?



Environmental problems

- Create more biodiversity in the Sonian forest: Even though only beech wood is used by the company, this still contributes to biodiversity as for the beech trees which are cut down, other species are planted to increase the biodiversity and the adaptation to climate change impacts.
- Reduce emissions: by using local wood directly instead of exporting it overseas and importing wood from other countries



Social and cultural challenges

- Use local wood and be proud of it, create a sense of identity with the local products
- The company itself as a social and democratic enterprise



Economic challenges

- Strengthen local value chains, and reduce dependence on global value chains
- Create more local value added producing from wood locally instead of exporting wood as raw material

TIP: If you want to learn more, you can watch a [video](#) about the Sonian forest and Sonian Wood Coop (in Flemish with English subtitles).

Nature-based solutions as a business opportunity

Demand and benefits of NBS

Governments, academia, the business community, citizens, and other actors are increasingly recognizing and embracing NBS, thus building momentum for these types of solutions.

Demand for NBS is generated by:

- *Public sector, especially local and regional governments, as policymakers embrace their benefits, particularly in their environmental and social dimensions*
- *Private sector, as firms (particularly bigger ones) increasingly see a chance to lower their costs, add value to commercial/private property and increase their compliance with the three sustainability aspects Environment, Social and Governance (ESG)*
- *Civil Society, as non-governmental organisations (NGOs) see an opportunity to address local problems*

This increasing demand is supported by a policy environment which is pushing to make more funding available for NBS. Examples are:

- *[EU Biodiversity Strategy for 2030](#) which sets the goal of “establishing a larger EU-wide network of protected areas on land and at sea”, “launching an EU nature restoration plan” and “unlocking funding for biodiversity and setting a new governance framework”*

TIP: As part of this strategy, the European Union has called on cities with over 20.000 inhabitants to develop Urban Greening Plans (UGPs). Watch the launch event of the UGPs [here!](#)

- *The World Economic Forum states in its [New Nature Economy Report II - The Future of Nature and Business](#) that there is a clear business case for investing in NBS with a potential return on investment estimated at USD \$10.1 trillion and 395 million jobs by 2030*

TIP: Check out the [Summary brief for business](#) of the New Nature Economy Report II which gives concrete examples of present and future business opportunities that can be exploited by NBE offering NBS.

- *[UN State of Finance for Nature](#) report which calls for investments in NBS to triple by 2030 and to increase four-fold by 2050 from the current level. Also, [The State of Finance for Nature in the G20’ report](#) reveals that current G20 investments in NBS are insufficient and calls for G20 countries to scale-up annual spending on NBS to USD 285 billion by 2050 to tackle the interrelated nature, climate, and land degradation crises.*

TIP: have a look at the [Key Findings](#) of the UN State of Finance for Nature report and learn more about the current and future streams of funding flowing into NBS.



Source: Jorgen Hendriksen / unsplash



Source: Evangeline Shaw / unsplash



Source: Jonathan Ansel Moy De Vitry / unsplash

Though increasing demand and increasing funding for NBS, most NBE are in their early stages in terms of developing a sustainable model for value creation, value delivery and value capture by means of NBS-products, -services and/or -processes.

TIP: Learn more about how demand of NBS is developing, have a look at:

- The [“Market Analysis Report \(2020\)”](#) produced within the Horizon 2020 project [CleverCities](#).
- The Independent Expert Report [“The vital role of nature-based solutions in a nature positive economy \(2022\)”](#) which gathers contributions from many Horizon 2020 and LIFE funded projects.

Last but not least, by delivering NBS to end-users NBE are generating a second layer of benefits, as society and ecosystems profit from their contributions to climate change mitigation/adaptation, biodiversity, public health, the economy and social cohesion.

Value Chain and Market Sectors

For NBE to be successful, understanding the value chain in which they are active is essential. As in many other sectors, successfully delivering NBS requires an interconnected web of key actors whose role can sometimes even overlap. Indeed, sometimes the boundaries between demand and supply are a bit blurry as end-users such as communities and businesses may also be suppliers of services (volunteers supplying maintenance or monitoring services) and suppliers of financing (through crowd-funding or corporate sponsorship). This is also very important when setting up your NBS business model and you can find more information on this in the chapter on [Business models for nature-based solutions](#).

TIP: Engage with your potential users to better grasp your demand! NBS suppliers can profit from involving end-users in a co-production process already from the early planning stages to better define and meet end-user’s needs.

The value chains active in the various market sectors where NBS find concrete application are either directly or indirectly “making use of nature” as part of their value proposition (offer). Some of the [most established market sectors for NBS](#) are: green buildings, water management, landscape architecture, urban and environmental planning, sustainable forestry and agriculture.

TIP: Examples of a direct use of nature are for instance “living green roofs”. In the same line of thought, “designing or monitoring of a green roof” is an indirect use of nature.



Source: GRÜNSTATTGRAU Forschungs- und Innovations GmbH

In addition to the traditionally most established market sectors for NBS, a bottom-up approach to classify them has been undertaken within the [Connecting Nature Enterprise Platform](#) by entrepreneurs leading NBE in different markets and sectors. The result is the following market sector classification which identified 10 different sectors:

- *Ecosystem creation, restoration and management:*
- *Marine ecosystem restoration*
- *NBS for green buildings*
- *NBS for public and urban spaces*
- *NBS for water management and treatment*
- *Sustainable forestry and biomaterials*
- *Sustainable agriculture & food production*
- *Sustainable Tourism*
- *NBS for Health & Wellbeing*
- *Community Engagement for NBS*
- *Smart technology, monitoring and assessment of NBS*



Source: Svetlana Shemetiuk / Pexels

Business models for nature-based solutions

Why do you need a business model?

Over the past years a lot of collaboration between researchers, policy makers and entrepreneurs resulted in an improved knowledge base for one of the most important aspects of bringing innovative NBS into the market: building a solid business model that lays the basis for sustainable NBE.

TIP: learn more about how the European Commission's [research policy for nature based solutions supports NBE in their mission of deploying and mainstreaming NBS in Europe and beyond](#).

The benefit of elaborating a strong business model is twofold. On the one hand, you gain a systematic and sound understanding of “what you are offering”, “to whom you are offering it”, as well as other key aspects (revenues, costs, key partners, etc). On the other hand, it will equip you with a powerful communication tool that will bring you one step closer to get the support you need to implement your NBS project (getting financial support, attracting talent, engaging in alliances/cooperation partnerships, etc).

A cornerstone of any business model is a deep understanding of what the value proposition of a venture really is. Within a certain market sector there are always different types of possible value propositions. These are, in turn, linked to a particular way in which value is delivered and captured by the NBE.

TIP: If you want to learn more about the basics of business modelling, the book [Business Model Generation](#) by Osterwalder and Pigneur is a good place to start.

The expression “value proposition” should be understood from the point of view of the customer/user benefiting from the NBS you are offering. In some business models it could be the public sector or the private sector, but other stakeholders might as well be your users (for instance: citizens). With that in mind, the value proposition of an NBE should answer the following questions:

- “What core value does your NBE deliver to your users/customers?”
- “What is the environmental, social & cultural, economic need/challenge that your NBE aims to solve?”
- “Why would the user/customer that you have in mind want to have this problem solved?”

Once you have a value proposition in mind, your NBE still needs to tackle the following questions:

- “How are you going to produce such value (value creation)”
- “How do you plan to deliver such value to your customer/user segment (value delivery)”
- “How are you planning to earn revenues in exchange for the value that you are delivering (value capture)”

Indeed, being able to properly answer such questions will help you structure a storyline that puts together those elements in a way that is both compelling and easy to understand for those who can give you their support to make your idea a reality!

To elaborate such a storyline is difficult for many NBE, as mainstream tools are not always easy to apply/adapt to the NBS sector. Luckily, considerable advancement has been achieved in this field, as over the years several research and innovation projects funded by the European Commission have produced supporting materials to do this. One of the central tools that has been adapted and, thus, is ready to use by NBE is the well-known Business Model Canvas (BMC).

TIP: the project [CLEVER Cities](#) produced a document that briefly breaks down the main concepts and rationale behind the Business Model Canvas in an urban context (see “[3.2.1 Understand the Business Model Canvas for NBS](#)”).

Tools available

If the concept of NBS puts the focus on increasing the visibility of nature’s benefits for society and biodiversity, then a business model for NBE should be instrumental to better explain the idea behind your NBS project to those who will give you their support to make your idea a reality.

Adaptations of the traditional Business Model Canvas help NBE to improve their understanding of the value proposition of the NBS that they offer, how they will be delivered and how that value will be captured.

TIP: Check out the [catalogue of eight business models](#) prepared by the NBS project [Naturvation!](#) The catalogue presents different Value Propositions (risk reduction, urban offsetting, green densification, local stewardship, green health, etc) in a short and straightforward way. The focus is on briefly explaining the value proposition itself, how the value is being delivered and how the value is being captured by the NBE. The added value of these business models is not only how they are presented but also that they all rely on real pilots carried out in different cities between 2016 and 2021. You can also check out the four Business Models studied within project UNaLaB in the report [Business Models & Financing Strategies](#).

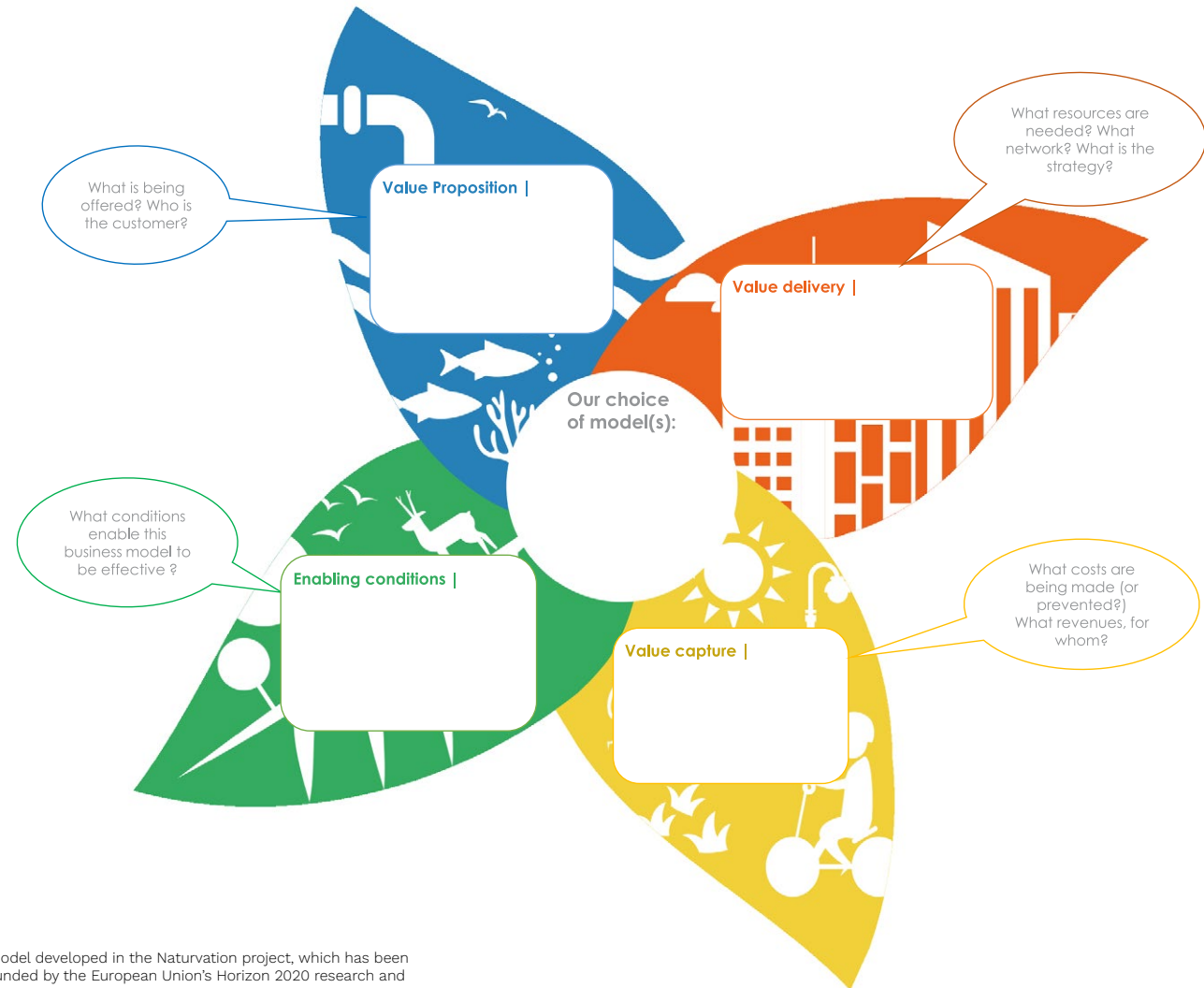
Business Model Puzzle

Solve the puzzle in just three steps!
That could be the slogan of this tool which has been developed by the [project Naturvation](#) and offers a great starting point especially for NBE in their early phases.

One of the main challenges of a successful implementation of urban NBS is the coordination between different actors (the so-called, “puzzle”). Indeed, NBS often involve public agencies, local residents, NGOs, etc and it can be difficult to align and engage all these stakeholders towards a common vision. The [Business Model](#)

[Puzzle](#) aims at helping you better coordinate between such actors.

First, you are encouraged to choose a type of NBS. Second, you need to identify “who values what?”. Third, you are ready to mix & match your own NBS business model.



Moreover, it can (and should) be used iteratively over time. In early stages of your business, it will help you design your model from scratch while, at later stages, it will help you to critically assess it and improve it.

Let's have a look at the tools available to support NBE:



NBS Business Model Canvas

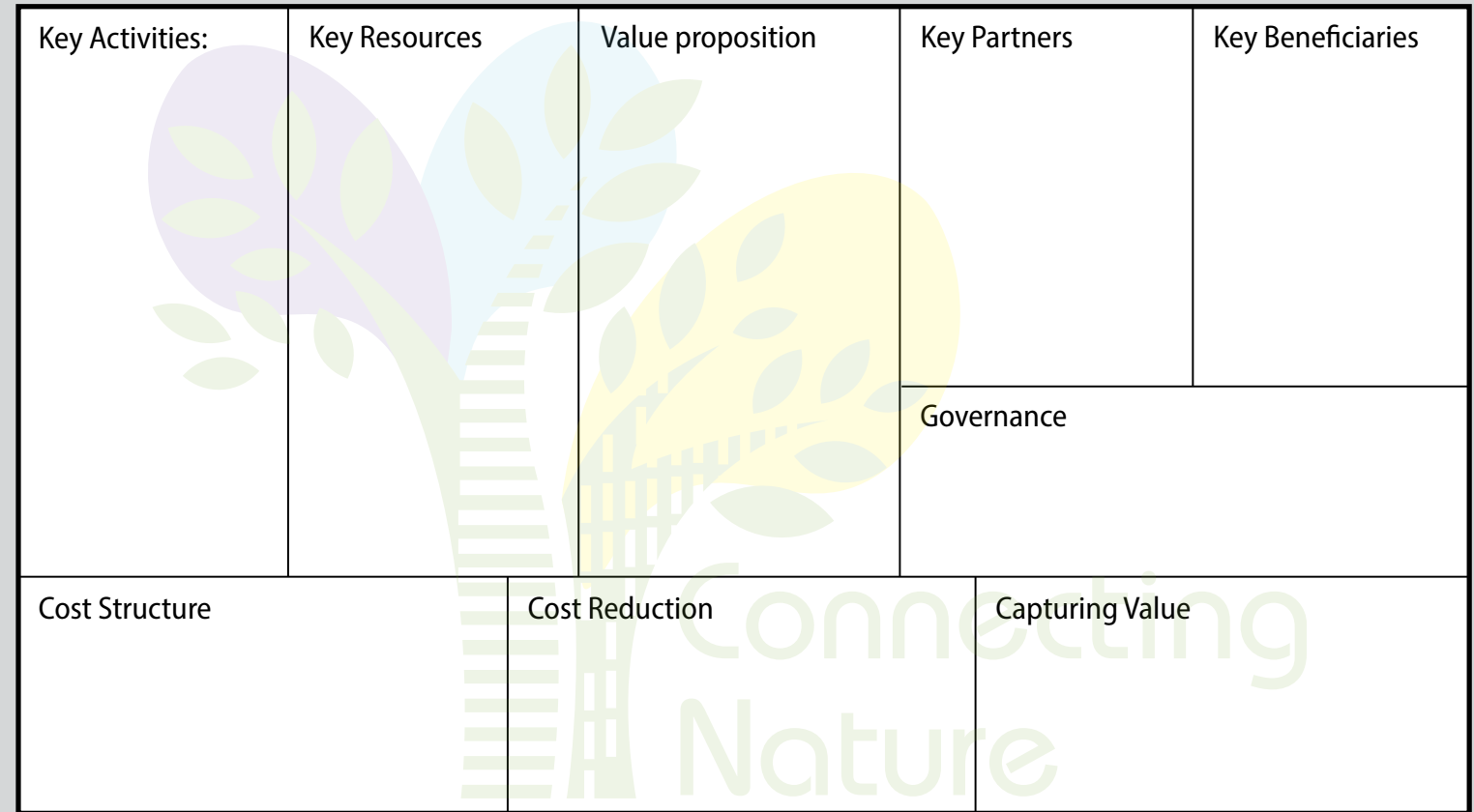
The NBS Business Model Canvas has been designed by the [Connecting Nature](#) project to support the first steps of the implementation plans of urban NBS.

The tool is an adaptation of the well-known [Business Model Canvas](#) from Osterwalder and Pigneur, to better capture the wider value proposition of NBS. The tool is likely to be very practical for NBE which already have a value proposition and are looking forward to gaining a deeper understanding of the whole business model.

This [tool](#) aims to help address six major innovation challenges related to the financing and business modelling of NBS, by focusing on:

- *business model planning for long term sustainability (instead of upfront capital investment);*
- *analysing economic but also environmental and social benefits, thus, expanding the conventional understanding of “value proposition”, “who your stakeholders are” and fostering “alternative ways of capturing value”;*
- *building a common vision and broader understanding of NBS potential for all stakeholders (including reducing silo thinking in the public sector).*
- *capacity building as it can be used with the support of a comprehensive [guidebook](#) with multiple case-studies.*

Nature-Based Solutions (NBS) Business Model Canvas



The NBS Business Model Canvas & Guidebook by [Siobhan McQuaid, Trinity College Dublin & Horizon Nua](#) is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#). It is based on a work from Alex Osterwalder's Business Model Canvas designed by Business Model Foundry AG. View the original Business Model Canvas on: <http://strategyzer.com>.



Funded by the Horizon 2020 Framework Programme of the European Union Grant Agreement No 730222

- *exploring the possible trade-offs between economic and other considerations while assessing different value propositions.*
- *identifying key stakeholders to be involved and considering how they can be engaged through different governance models.*

Business Model Canvas Matrix for NBS

Under the [project CLEVER Cities](#) a Business Model Canvas Matrix has been put together to simplify the cocreation of business models from the perspective of groups of organisations acting together in urban settings to implement NBS.

Each building block of the model has a set of guiding questions that shall help you brainstorm and fill them in. By systematically assessing each question, your business model will be ready to offer solid arguments to address the importance of NBS and its market uptake.

- **Beneficiaries:** are the groups of people, organisations or stakeholders, to whom you are aiming to reach and create value by proposing a dedicated value proposition.
- **Value Proposition:** consists of a selected bundle of products and/or services that caters to the requirements of a specific beneficiary.
- **Revenue streams:** is how an organisation captures value.
- **Key resources:** are the most important assets required to offer and deliver the previously described elements.

Business Model Canvas Matrix for NBS. Focus on Creation, Delivery and Capturing Value				
6)Key Partners Who are the Key Partners? Who are the Key suppliers? Which Key Resources are acquired from partners? Which Key Activities do partners perform	5)Key Activities What Key Activities do the Value Propositions require? What are the Distribution Channels? Beneficiary Relationships?	2)Value Propositions What value is delivered to the beneficiaries? Which one of the beneficiary's problems are helped to be solved? What bundles of products and services are offered to each beneficiary? Which beneficiary needs are we satisfying?	7)Governance Who is involved in our governance process and public participation related to NBS? How do we engage stakeholders in the co-design, co-implementation and co-monitoring processes of NBS?	1)Beneficiaries For whom is the value created? Who are the most important beneficiaries?
Value Delivery		Value Creation		
8)Cost Structure What are the most important costs inherent in the business model?		3)Revenue Streams/ Financial Model For what value and benefits are our beneficiaries really willing to pay and which are the revenue streams? Which is the Financial Model?		
Value Capture				



Model developed in the CLEVER Cities project, which has received funding from the European Union's Horizon 2020 innovation action programme under grant agreement no. 776604.

Model Adapted from Connecting Nature project (<https://connectingnature.eu/financing-and-business-models>) and with guidance from Osterwalder, Alexander; Pigneur, Yves; Clark, Tim (2010). Business Model Generation: A Handbook For Visionaries, Game Changers, and Challengers

- **Key activities:** are the most important activities an organisation needs to perform well in order to implement its NBS business model.
- **Key partners:** describes the network of suppliers and partners that make the business model work.
- **Governance:** this building block focuses on the interaction between all the key partners in delivering the value proposition and performing the key activities.
- **Cost structure:** describes the costs incurred to operate a business model.

What next? Where to start?

Now how to get started? Here we present different resources that are specially conceived to help NBE and companies interested in NBS to grow and expand. The resources presented in this section are from EU funded initiatives. As such, they predominantly focus on the European context. NBE are advised, to consider similar or complementary resources at both the national and local level.

This section has no particular reading order. If you are at a rather early stage of your project (ideation) then you might want to read the *NBS databases*, or the *Policy and Legislation* first. If, on the contrary, you have a well-developed project idea and you are looking for financial support for your project, then you might want to jump to the *Funding* part. And if you are looking for inspiration, like-minded companies or cooperation partners, the *Networking* part is for you.

NBS databases

If you or your NBE are unsure regarding which NBS fits the challenge that you want to address better, then visit the [NBS Toolkit](#) developed by the [project OPERANDUM](#).

Finding the right NBS for the problem or challenge that you want to address has never been easier. The tool allows for an intuitive search experience by combining both hazard and geographical search criteria. As a result you will get detailed recommendations covering aspects such as:

- *expected costs,*
- *funding opportunities,*
- *case studies,*
- *benefits and disbenefits, etc.*

The tool even has a feature that allows for easy comparison between two or more NBS.

Another tool with an extensive database of NBS was launched by the [project Naturvation](#) and showcases more than 1000 examples of NBS taken from interventions made in over a hundred cities from Europe and beyond. The tool is called the [Urban Nature Atlas](#).

Narrowing down your search results is easy with this tool as it has many filter options for your search. Some of its most salient features are:

- *detailed impacts and monitoring profiles,*
- *insights into governance and financing aspects,*
- *references to other sources to learn more about the NBS that you searched for.*

Policy and Legislation

The [OPERANDUM project](#) developed a very helpful tool for those NBE who want to understand what permits they need in order to start implementing

their project. The tool is called [GeoIKP](#) which stands for *Geospatial Information Knowledge Platform* and gives you access to more than 2000 policy documents from different European countries.

By combining two or more filters you can find the policies that are relevant to your NBE much faster. For instance, you can search by country, hazard, policy keyword, etc.

Once you have found the policy documents that are relevant for your NBE, the tool:

- *allows you to directly open the document/s,*
- *displays a selection of similar policies that might be of interest too,*
- *showcases NBS case studies that are linked to your search results.*

With this information at hand, you are ready to start working on finding out what your *permitting path* is, namely: the path that goes from planning an NBS, through the assessment of all relevant policies and legislation, to filing an official permission to implement the envisaged NBS.

TIP: the [GeoIKP](#) tool speeds up your search for relevant policy documents that you need to know in order to properly plan and implement your NBS project, the so-called “permitting path”. However, permitting paths vary greatly depending on the country, the type of NBS and other aspects. Therefore, the tool can only give you an overview of what you have to consider, but it cannot provide a step-by-step guide.

Networking

One of the fastest growing networking communities in the field of NBS is the [Connecting Nature Enterprise Platform](#). The platform has been active since 2020 and it reaches entrepreneurs from 90

countries worldwide with the aim to connect them across the often complex value chains related to the activities of NBE. This is a great opportunity to get in touch with innovation leaders active in different market sectors.

The platform helps you stay up to date with news and emerging trends and encourages you to have your say in shaping the growth and direction of the nature-positive economy.

[EdiCitNet Marketplace](#) is another resource that you can make use of. It is a digital platform that facilitates both connection and collaboration between initiatives, entrepreneurs, public institutions and NGOs across the world.

If your focus is on sustainable urban food production, distribution and use (be it neighbourhood gardens, use of locally grown urban food in restaurants, urban beekeeping, high-tech indoor farming, etc) then this is the perfect networking platform for your NBE!

The [project OPERANDUM](#) launched [GeoIKP](#), already mentioned above as a source for relevant policy documents and legislation. In addition, the platform supports NBE by offering a business networking environment that will help you find partners, clients, funding and even technical data and legislation. Similar to other platforms, you can apply filters to speed up your search.

The thematic focus is on NBS addressing hydro-meteorological hazards under current and future climate conditions. So if your NBE addresses hazards such as coastal erosion, landslides, flooding, etc in both urban and non-urban contexts then this is probably the right address to get active.

If rewilding is at the core of your project then you should have a look at the [European Rewilding Network \(ERN\)](#). The network aims to bring the numerous initiatives that already exist throughout

Europe closer together and to empower each member of the network with the practices, methodologies, information and tools (i.e. volunteers database, experience sharing virtual platform, etc) they need to be successful in their efforts.

The ERN belongs to [Rewilding Europe](#), an organisation based in the Netherlands which is on a mission to “...demonstrate the benefits of wilder nature through the rewilding of diverse European landscapes, and to inspire and enable others to engage in rewilding by providing tools and practical expertise”.

More general in scope but enabling a worldwide reach, the Enterprise Europe Network (EEN) has been helping businesses since 2008 to innovate and grow on an international scale. It is an initiative of the European Commission and is known for being the world’s largest support network for SMEs with international ambitions.

The member organisations of the EEN are experts in providing business support to SMEs. They possess unique knowledge of the local business environment and have the necessary contacts to exploit business opportunities worldwide.

The Enterprise Europe Network can also offer a targeted approach aimed specifically at your business sector. Its groups of experts cover all key economic sectors, from healthcare, agri-food and intelligent energy to fashion and textile. In addition, the Network helps companies increase their resilience and support SMEs in their transition to more sustainable and digital business models.

Certainly of interest for any NBE, is the [Partnership Opportunities Database](#) (POD) where you are able to publish Business and Technology oriented Requests and Offers.

TIP: Find the [local EEN contact point](#) that is closest to your NBE and get in touch to begin your internationalisation journey and to start using the [Partnership Opportunities Database](#).

Funding

In this document, we focus on European funding. If your NBE is looking for funding to start or continue your project, then we recommend to have a look at the following funding sources:

Grants

Within the EU, the research and innovation policy currently in force sets the goal of bringing the EU to a leadership position in the field of “innovating with nature”. The ultimate goal of this policy is the achievement of sustainable and resilient societies.

NBE can for example benefit from the framework programme for research and innovation called [Horizon Europe](#). Particularly interesting for NBE could be the [Horizon Europe Missions](#) with focus on “adaptation to climate change”, “water restoration” and “healthy soils” as well as Cluster 6 of the programme, called [Food, Bioeconomy, Natural Resources, Agriculture and Environment](#). This cluster gathers environment related calls for international research collaboration proposals and if your project is successful, you will receive a grant to implement your idea.

In addition to funding, if your project proposal is selected, your NBE will gain international visibility and access to an international consortium of project partners.

Similar to Horizon Europe but more focused on climate change mitigation and adaptation research, the [LIFE programme](#) has a total budget of €5.43

billion for the period 2021-2027. This programme is the dedicated funding instrument to support the transition to a low-carbon and climate-resilient economy. Calls for proposals are published on a regular basis in the [funding & tenders opportunities portal](#) of the European Commission. This applies both to the LIFE programme as to the Horizon Europe programme.

The so-called National Contact Points (NCP) are the experts who can guide you and provide you with practical information on all aspects that are relevant for your application.

TIP: Find out which is your nearest [Horizon Europe NCP](#) and [LIFE NCP](#).

A third option for your NBE to apply for a grant are the [European Cooperation in Science and Technology \(COST\) actions](#). Under the framework of this programme researchers, innovators and other professionals from SMEs, universities, NGOs, as well as other public and private institutions receive funding to develop interdisciplinary research networks to collaborate.

As the goal of the programme is to support such networks, the funding made available will cover the expenses of networking activities (organisation of events, short-term scientific missions, training schools, communication activities, and virtual networking tools) but not the research itself.

COST Actions are a great option for those pursuing new ideas through collaborative efforts. It is also very well suited to build communities around emerging scientific, technological and societal topics. Also, they are bottom-up, meaning that they can be on any topic chosen by proposers.

TIP: Get in touch with the nearest [COST NCP](#) to learn more about the programme and the possibilities it has to offer for you.

Finally, the [European Structural and Investment Funds](#) bundles five different funds managed by the EU member states in coordination with the European Commission. One of them, the [European Regional Development Fund](#), might also be a source of financing for your project as it covers environment research related calls.

Public bodies, universities, associations, NGOs and voluntary organisations but also some private sector organisations (especially small businesses) can profit from this fund. One way of getting started is by searching for keywords that are relevant for your project in the [European operational programmes](#) of your region.

Take into account that since EU member states manage the fund, you will have to follow the application procedures of the relevant managing authority and your project application must meet the selection criteria and investment priorities of your regional programme.

TIP: Contact your [managing authority](#) and learn more about the possibilities that this fund has for your NBS initiative.

Loans, guarantees and equity

The [European Investment Bank](#) (EIB) is the lending arm of the European Union (EU) and, thus, it supports projects that promote the priorities and objectives of the EU following a responsible approach to investment in every investment decision (Environmental and Social policy and standards).

For instance, the EIB provides loans to other financial institutions, who act as intermediaries for smaller projects and companies active in the biodiversity and NBS sectors in Europe.

TIP: learn more about the [priority areas](#) (climate & environmental sustainability, sustainable cities & regions, etc) and [initiatives](#) (circular economy, preserving our oceans, etc). If you have questions you can always ask the [EIB offices](#).

Supporting micro- (0-9 employees), small- (10-49 employees) and medium-sized (50-249 employees) enterprises is a priority of the EIB Group. Through its intermediaries, the [EIB Group provided in 2022](#) more than €16.35 billion in financing for these customer groups.



The EIB Group offers its financial support through a network of commercial and promotional banks as well as other financial institutions which have offices and teams located close to the SMEs and have a detailed local understanding of their needs. You can find the intermediaries that are relevant for you in a [dedicated website](#) developed by the EIB. The actual customers that are eligible to work with the intermediaries depend on the criteria agreed by the EIB Group with each specific intermediary.

The [Green Checker Tool](#) was originally developed to support financial intermediaries (i.e. bank relationship managers, branch officers, etc) in originating, appraising and reporting on the green investments financed through EIB's intermediated debt products. The tool is available publicly, thus, you can also use it to get a preliminary idea if your NBE could be eligible for funding or not.

TIP: check out the report [SMEs Overview 2022](#) and learn more about how the EIB Group has supported micro-, small- and medium-enterprises which can generate an impact in selected policy areas relevant for the European Commission.

Crowdfunding

The project [REGREEN](#) launched the [Nature Solutions Platform](#) which gives NBEs the possibility to gain insights on crowdfunding and to pursue a crowdfunding strategy to get the funds that your NBE needs to foster its plans.

The platform acts as a bridge connecting NBE that are looking for funding with citizens who make their investment decisions by choosing the project that inspired them the most.



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How can you help?

Join the NetworkNature community! Becoming a member of NetworkNature will enable access to special features of the website:

- Share and promote your events, case studies and resources
- NetworkNature biannual newsletter
- Find out more about the work of the H2020 and Horizon Europe NBS projects

Access the NetworkNature website: networknature.eu

How can you help raise awareness about nature?

- Sharing this fact sheet
- Mapping where your work connects

- [Networknature.eu](https://networknature.eu)
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