NATURE-BASED SOLUTIONS IN GREENFIELD SITES: KILDEDAL BY, BALLERUP

NATURE-BASED SOLUTIONS NETWORK (NBS-NET)

Nature-based Solutions Network Group | BLOXHUB

29/01/2026

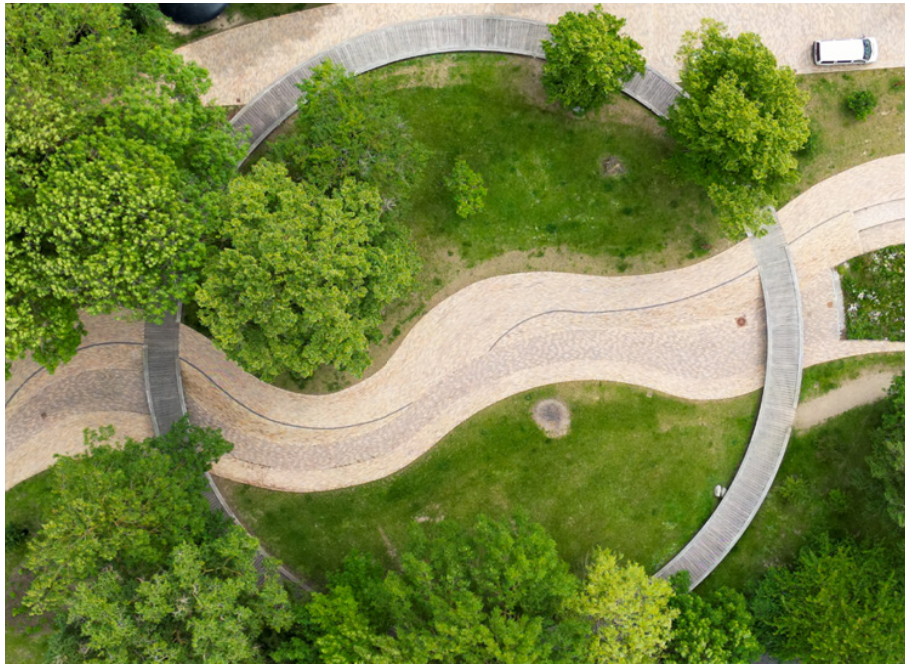
BLOXHUB, Bryghuspladsen 8, 1473 København

WHY NATURE-BASED SOLUTIONS?

Nature-based solutions (NBS) work with natural systems to address societal challenges while supporting the health of ecosystems. By restoring and protecting landscapes such as wetlands, forests, and urban green spaces, they can reduce climate risks and improve water management, while also supporting biodiversity and creating healthier environments for people and wildlife alike. As pressures from climate change and urbanisation grow, these approaches help build resilience in both communities and nature. Investing in nature-based solutions therefore strengthens the shared foundations on which both human societies and the natural world depend.

Cities in the Nordic region will face growing pressures as climate change intensifies, but they are also well positioned to respond in ways that are both locally effective and globally relevant. Climate projections for the region point to more frequent heavy rainfall and a growing risk of urban flooding, as well as rising sea levels in coastal areas and warmer summers that can intensify heat in dense neighbourhoods. These changes place stress on drainage systems, urban waterways, surrounding landscapes, and critical infrastructure, while also affecting public health and everyday quality of life.

Nature-based solutions can help cities respond to these challenges across both urban areas and the urban-rural interface. Within cities, measures such as green roofs and permeable landscapes can help reduce heat, manage stormwater, and improve air quality. In peri-urban areas and surrounding catchments, restoring wetlands, reconnecting floodplains, and strengthening green corridors can help store and slow water, filter pollutants, support biodiversity, and create recreational landscapes that are accessible to local communities. By integrating these approaches across city regions, Nordic cities can reduce climate risks and strengthen ecosystems, improving the liveability and resilience of both urban and surrounding communities – while also demonstrating practical models that cities around the world can adapt to their own contexts.



Karens Minde Akse, Sydhavn (photo credit: Københavns Kommune, Kristian Langæble)

THE NBS NETWORK

The Nature-based Solutions Network (NBS-Net) is a network group for professionals in the built environment, to allow them to connect, learn from each other, and gain the tools to apply nature-based solutions to their projects. NBS-Net is built around the IUCN definition of nature-based solutions. Its aim is to serve a broad community of Danish professionals and researchers, including architects, urban planners, environmental scientists, landscape designers, and property managers.

NBS-Net is anchored at BLOXHUB and organised by George Langridge Gould and Peter Andreas Norn.

George is the founder of **The Next Ecology**, an environmental consultancy that provides strategic and in-depth advice, with a focus on biodiversity, to companies and organisations that are operating within the built environment.

Peter is the founder and CEO of **Jordnær Rådgivning**, a management consultancy company that helps public and private customers translate business, nature and climate ambitions into concrete value creating solutions.

WORKSHOP SERIES OVERVIEW

During spring 2026 NBS-Net is running a series of workshops in order to help practitioners of urban and regional interventions understand how to implement nature-based solutions in their work.

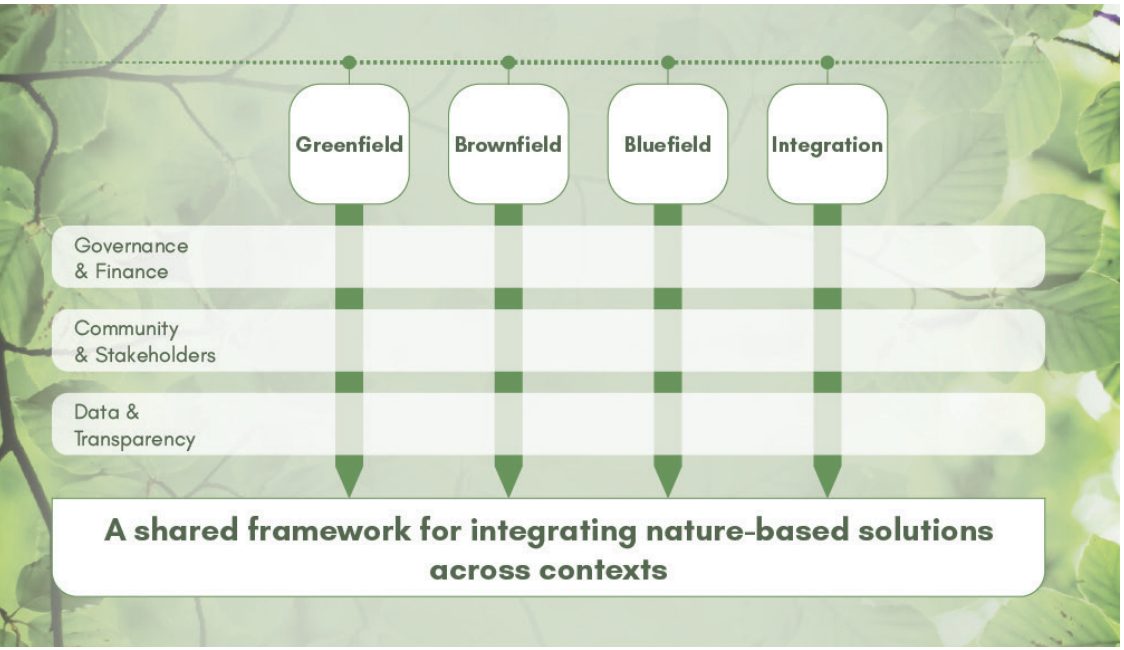
Our workshops will explore:

- **Greenfield sites:** Urban development in natural settings presents particular issues, as it requires the replacement of natural space with a built environment. How do we ensure that we minimise the loss, and integrate nature into the new area?
- **Brownfield sites:** Redeveloping formerly occupied sites is efficient and sustainable, but often neglects to make space for nature. What role does nature play in brownfield developments, and can it be added where it didn't exist before?
- **Bluefield sites:** Denmark has a deep relationship to water, and many cities develop urban spaces alongside – or on – water. But marine ecosystems are also interwoven with our built environment, and need to be integrated into our cities. How do we keep marine nature safe, and how can marine environments solve our problems on land?

Within these workshops, we hone in on cross-cutting themes, that shape the ways we put nature-based solutions into practice:

- **Governance & finance:** For nature-based solutions to be implemented effectively, they need to fit into our current systems and processes. Who pays for NBS? And who makes the decisions?
- **Data & transparency:** NBS needs to be based on clear scientific knowledge, and needs to be accessible to everyone. Ensuring that data is collected, analysed, and available, will make it possible for NBS to integrate seamlessly into urban development.
- **Communities & stakeholders:** Who is urban development for? Who is the community? Understanding the users and interested parties, and what each one of them needs and offers, can allow practitioners to include nature in the process in decisive and impactful ways.

Diagram of workshop series: 2026 Winter-Spring Plan



NATURE FIRST IN KILDEDAL BY

BY **SIV RAUN ANDERSEN** DEPUTY CEO, KILDEDAL BY

Kildedal By is a pioneering urban project focused on sustainable living through nature-based solutions. Spanning 46 hectares of urban development and an equal area dedicated to nature, the project aims to create a vibrant, liveable city that harmonises urban development with nature. Kildedal By is developed by Kildedal P/S, owned by Ballerup Municipality and PensionDanmark.

Kildedal By site-map: nature areas

THE CITY OF KILDEDAL BY

Located around an existing train station, the city will feature diverse housing options, businesses, shops, cultural facilities, public institutions, parks, and nature.

With a focus on sustainability, the development will provide:

- 5,000 jobs primarily in the life sciences sector.
- 2,000 homes, mainly townhouses and apartments.
- 240,000 m^2 of buildings on former agricultural and industrial land.
- A mix of urban and natural environments supporting sustainable, healthy living.

INNOVATIVE NATURE-BASED SOLUTIONS

Kildedal's commitment to sustainability includes:

1. **Sustainable Development Goals:** The project aims for DGNB Gold certification and emphasises low-emission construction, biodiversity, and community art.
2. **Green Infrastructure:** Rainwater management systems, parks, and nature areas support ecological

balance and urban biodiversity.

3. **Community Engagement:** Kildedal P/S involves citizens through community-building activities and shared facilities.
4. **Enhancement of Nature Quality:** Coherent nature and improved nature quality are developed as an early part of the project in an area equal to the city through interdisciplinary collaboration.

COLLABORATION FOR NATURE

Kildedal By collaborates with the Danish Society for Nature Conservation. What began with skepticism has evolved into a trusting partnership focused on planning, environmental impact evaluations, and improving nature quality.

The strategy is defined in the Nature Quality Program, developed with the Danish Society for Nature Conservation, other green organisations, the Municipality of Ballerup, Novafos, and Kildedal P/S. Key initiatives include:

Workers and volunteers building Kildedal By from the ground up (photo credit: Siv Raun Andersen, Kildedal By)

- Improving nature quality in an area equal to the city;
- Large-scale blue-green solutions for rainwater management;
- Monitoring nature quality and biodiversity every three years;
- Supporting more coherent nature around the city;
- More protected nature, habitats, and access to nature;
- 3.5 hectares of regenerative food landscape and wildlife habitats;
- Nature trails and recreational spaces;
- Several initiatives have already been implemented.

EARLY PLACEMAKING

Kildedal By prioritises nature and community building before construction. Over the next decade the city will develop, while initiatives with artists, citizens, and nature experts are already underway - a process we call **early placemaking**. Mapping of archaeology, cultural heritage, and local flora and fauna ensures site-specific planning, including the Nature Quality Program, urban structure, and art.

Activities include using local clay, working with invasive plants, exploring nature sounds and bats, and projects such as artist Karin Lorentzen's campfire site inspired

by nature, early settlements, and photosynthesis. Artists and nature experts are valued alongside engineers and architects, creating an inclusive approach to urban development.

CONCLUSION

Future urban development requires a nature-first perspective. This holistic view can succeed through interdisciplinary collaboration between experts, municipal authorities, artists, green organisations, and citizens.

- We enhance nature quality and ensure access to nature.
- We work for a more cohesive and protected nature.
- We invite citizens, experts, and artists to experience and co-create nature as part of community building.
- We monitor nature and communicate the results.

This approach requires close, trusting cooperation across disciplines. The results in dialogue, nature conservation, sustainable agriculture, biodiversity, and art, show that integrating nature into city planning is essential for creating vibrant and sustainable communities – benefiting both nature and future citizens.

KEY TAKEAWAYS

1. Nature-based solutions are increasingly in demand in urban development projects in Denmark.
2. In the case of Kildedal By, getting to this point has required an adaptive planning approach. This approach has allowed the urban development partnership behind Kildedal By to experiment, learn, and develop new ways of working with a wide range of stakeholders.
3. Data and transparency – alongside meaningful community involvement – are essential to building trust and improving outcomes. In practice, this means making data on environmental performance openly available, and creating clear, ongoing opportunities for local stakeholders to shape decisions, rather than treating engagement as a one-off exercise.

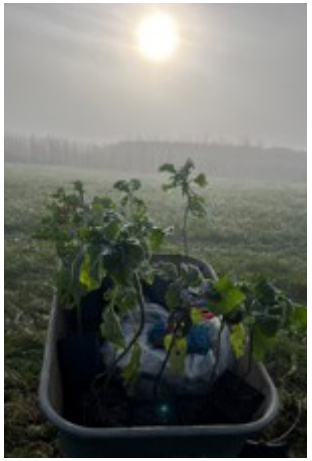
Enghaveparken, Vesterbro (photo credit: Jens Lindhe)

GOVERNANCE & FINANCE

Effective governance and financing are essential for turning nature-based solutions from ideas into lasting action. Governance provides the policies and institutions at the national and municipal levels, as well as the structures needed to coordinate stakeholders and clarify responsibilities at the project level. Sustainable financing ensures that projects can be developed, maintained, and expanded over time. Together, governance and finance create the enabling conditions that allow nature-based solutions to deliver long-term benefits for both ecosystems and society.

KEY INSIGHTS

Certification schemes such as DGNB help guide developers and investors toward more sustainable approaches by providing recognized standards and benchmarks. However, even with such frameworks in place, the value of nature-based solutions still needs to be clearly demonstrated in key financial and investment decisions. Investors and developers must be able to understand how nature-based approaches contribute to both environmental and economic outcomes.



Kildedal By, Copenhagen (photo credit: Kildedal By)

Nature-based solutions can also increase the attractiveness and long-term value of an area. High-quality natural environments in urban settings can make neighbourhoods more desirable places to live and work. This may lead to tenants staying longer, which in turn reduces vacancy rates, idle rent, and transaction costs for property owners. At the same time, stable communities can emerge, strengthening social cohesion and reinforcing the overall value of the area.

UNANSWERED QUESTIONS

Despite increasing interest in nature-based solutions, important questions remain regarding their economic viability. One key question is how nature-based solutions compare financially to more conventional approaches to urban development. In some cases, they may involve higher upfront costs related to planning, implementation, or maintenance. However, these costs may be balanced or outweighed by long-term benefits, such as improved environmental quality, increased property values, reduced climate risks, and improved health and well-being for residents.

Another question concerns regulatory alignment across different governance levels. Nature-based projects often extend across municipal, regional, or even national boundaries, particularly in areas such as watershed management, biodiversity corridors, or large-scale landscape restoration. There is a need to better coordinate regional nature initiatives to ensure that projects are aligned and contribute to broader ecological and policy objectives. A lack of coordina-

Bishan Ang Mo Kio Park, Singapore (photo credit: Henning Larsen, Shiang Han Lim)

tion risks fragmenting efforts and undermining their full potential.

ACTIONABLE ADVICE

Looking ahead, further work is needed to strengthen the economic and governance frameworks that support nature-based solutions. This includes developing better methods for valuing ecosystem services and translating environmental benefits into economic terms that investors and decision-makers can understand. Demonstrating how nature contributes to improved physical and mental health, climate resilience, and long-term urban attractiveness can help strengthen the investment case.

Governance structures also need to support stronger collaboration between different actors, including governments, developers, investors, scientists, and local communities.

Finally, aligning regional nature initiatives and governance frameworks will be essential for scaling up nature-based solutions. Clear policies, coordinated planning, and supportive financial mechanisms can help ensure that nature-based approaches are implemented consistently and contribute to broader environmental and societal goals.

Karens Minde Akse, Sydhavn (photo credit: Københavns Kommune, Kristian Langæble)

DATA & TRANSPARENCY

Reliable data and transparency are essential for nature-based solutions to be credible, effective, and trusted. Good data enables progress tracking, impact assessment, and informed decision-making throughout a project's lifecycle. Clear reporting of data collection and sharing further strengthens accountability among stakeholders.

KEY INSIGHTS

Technological innovation is a major driver of progress in nature-based solutions. New tools such as digital

monitoring platforms, remote sensing, and mapping technologies enable the collection of high-resolution environmental data. At the same time, technological data must be complemented by human observation and local knowledge. Methods such as field monitoring, community engagement, and citizen science help capture aspects of ecosystems that technology alone may miss.

Kildedal By, Copenhagen
(photo credit: Kildedal By)

Understanding nature requires looking across time. Data should not only describe present conditions but also reflect what ecosystems looked like in the past and what they might become in the future. This longer-term perspective helps evaluate ecosystem recovery, understand trends, and support more resilient planning.

While digital tools generate valuable datasets, low-tech data collection methods – such as local observations, interviews, and community knowledge – play a crucial role. These approaches contribute narratives that make data meaningful and accessible. Storytelling can translate complex environmental data into insights that resonate with communities, decision-makers, and the wider public.

Environmental data should not remain static reports

or isolated numbers. Instead, it should function as "living data" that is continuously updated, shared, and interpreted. Dynamic datasets help track ecosystem change and inform adaptive management.

UNANSWERED QUESTIONS

One of the key challenges is determining who is responsible for environmental changes observed through monitoring. For example, if biodiversity indicators such as bird populations change over time, it is not always clear which actors should take responsibility or respond. Clarifying ownership and accountability frameworks is essential for credible monitoring systems.

A potential solution lies in stronger data infrastructure and governance. National databases and cross-border data platforms could help standardise how environmental data is collected, stored, and shared. Such systems would improve comparability across projects and regions while supporting collaboration between institutions.

ACTIONABLE ADVICE

Future work should move beyond purely ecological metrics toward a broader ecosystem services perspective. Measuring how communities benefit from living in healthy natural environments – through well-being, climate resilience, and social value – can strengthen the case for nature-based solutions.

Data collection must start with a clear purpose: identifying what matters and why it should be measured. Establishing shared frameworks and ensuring collaboration among stakeholders at the right stages of a project will help ensure that data is both meaningful and actionable.

Transparency also depends on effective communication. Narratives, media engagement, and social media can help translate complex environmental data into stories that reach broader audiences. Documenting the full process – from data collection to outcomes – and engaging communities throughout the project lifecycle can further strengthen trust and accountability.

Encouraging curiosity and participation among local communities can enrich data collection efforts. Citizen science initiatives and participatory monitoring allow residents to contribute directly to environmental knowledge, making data more inclusive and grounded in lived experience.

Kildedal By, Copenhagen (photo credit: Kildedal By)

COMMUNITIES & STAKEHOLDERS

Communities and stakeholders play a central role in the success of nature-based solutions. While communities consist of the people who live in an area, stakeholders often extend beyond residents and can include neighbours, visitors, municipalities, authorities, land and facility managers, experts, and environmental organizations. Engaging this broad range of actors helps ensure that projects reflect diverse perspectives and needs.

KEY INSIGHTS

Creating dialogue between actors is essential. When stakeholders share knowledge and experiences, a form of collective or "swarm" intelligence can emerge, enabling more informed and balanced decision-making. Through dialogue and participation, expectations can be managed and a sense of shared ownership can develop around the project.

Community engagement also needs to recognize different types of cycles. Natural ecosystems evolve over time, human communities change across generations, and projects themselves move through different phases – from planning to implementation and long-term management. Lessons learned during one project cycle should be captured and transferred to future initiatives to support continuous improvement.

Enghaveparken, Copenhagen (photo credit: public domain)

Creating opportunities for people to meet and interact is an important part of building strong communities around nature-based solutions. Physical meeting spaces and social activities can encourage communication and collaboration. These spaces should not only be places where problems are discussed, but also places where ideas, activities, and shared experiences can emerge.

Another important perspective is recognising nature itself as a stakeholder. Rather than seeing nature solely as a resource to be used, projects can aim to create a more balanced relationship between people and the natural environment. In practice, this may involve giving nature a "voice" in planning processes – for example through ecological mapping, scientific expertise, or local advocates who speak for specific species or habitats.

UNANSWERED QUESTIONS

A key question concerns how long-term ownership of nature-based projects can be maintained. When projects are initially developed, a core group of participants often feel a strong sense of ownership. However, as communities evolve and new generations move into an area, maintaining engagement and stewardship can become more challenging.

Another open question is how best to define and activate the concept of community. Living in the same

area does not automatically lead to communication or collaboration. Projects must therefore consider how to encourage meaningful interaction between residents and stakeholders and how to design spaces and activities that bring people together.

There is also a broader question about how nature should be represented in decision-making processes. If nature is considered a stakeholder, new approaches may be needed to ensure that ecological perspectives are adequately included in planning and governance.

ACTIONABLE ADVICE

Successful community engagement requires early and continuous dialogue among stakeholders. Establishing clear meeting spaces – both physical and social – can help facilitate communication and collaboration. These spaces should encourage active participation and shared experiences rather than focusing solely on formal discussions.

Projects should also invest in processes that build shared ownership over time. Co-creation approaches, participatory workshops, and community activities can strengthen the connection between people and place. At the same time, mechanisms should be developed to transfer knowledge and engagement to future generations to ensure long-term stewardship.

Finally, integrating nature's perspective into community engagement can strengthen awareness and appreciation of local ecosystems. This can be supported through ecological mapping, educational activities, local ambassadors for species or habitats, and cultural or creative events that highlight the relationship between people and nature.

ACKNOWLEDGEMENTS

Thank you to **BLOXHUB** for hosting and supporting the Nature-based Solutions Network.

Thanks also to **Siv Raun Andersen** and **Kildedal By** for introducing us to your process and outcomes, and sharing your insights with our network members.