

Framework for Equitable Nature- based Education



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Acknowledgements

Framework for Equitable Nature-based Education

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Executive Summary

The *Framework for Equitable Nature-based Education* presents a transformative model for integrating Nature-based Solutions (NbS) into education systems, with a strong emphasis on equity, inclusion, and sustainability.

Developed by the STEM Passport for Inclusion team at Maynooth University, this framework builds on the success of the STEM Passport as a model which can be applied to address systemic barriers in education—particularly for socioeconomically disadvantaged and underrepresented groups.

Rooted in the principles of the Sustainable Development Goals (SDGs) and the Just Transition model, the framework aims to ensure that all learners, regardless of background, are equipped with the skills, knowledge, and confidence to participate in and benefit from the green economy and future NbS careers.

The document outlines a phased, scalable approach that includes:

- Piloting programs with targeted communities,
- Evaluating and iterating based on feedback,
- Expanding reach through policy engagement and institutional collaboration.

This framework highlights the importance of a pathways approach emphasising interdisciplinary learning, practical experience, mentoring, and digital platforms to support lifelong learning and career readiness in NbS fields. By embedding equity at every stage—from curriculum design to policy advocacy—the framework ensures that education becomes a powerful tool for social and climate justice, and sustainable development.

Introduction

The acceleration of climate change and rapid technological advancements of the 21st century demand a more adaptive education system that leverages cutting edge technologies to enhance skill acquisition while addressing the pressing needs of global communities and the environment they depend upon.

In 2023, the World Economic Forum noted that there has been a 40% increase in the need for green skills since 2015 (Duke, 2023). To date, green talent and upskilled professionals that are equipped to engage in these emerging fields has failed to keep pace with demand.

“Nature-based Solutions leverage nature and the power of healthy ecosystems to protect people, optimise infrastructure and safeguard a stable and biodiverse future.” IUCN (2025)

In addressing global climate change, roles leveraging NbS currently employ over 60 million individuals, with projects that add an additional 32 million new jobs could be created within NbS by 2030 (Nature-based Solutions can generate up to 32 million new jobs by 2030, but investments in skills needed). NbS incorporates social, environmental and economic considerations when planning for and implementing nature driven solutions to support people and planet. While human well-being is often a consideration, especially in the development and implementation of urban NbS or green-grey infrastructure termed Nature-based Infrastructure (NbI), **intentional efforts must be made to ensure a just transition** to a NbS prepared and skilled workforce.



Photo source: designed using canva.com

Duke, S. (2023) The future of jobs is green: How climate change is changing labour markets. World Economic Forum. Available at: <https://www.weforum.org/stories/2023/04/future-of-jobs-is-green-2023-climate-change-labour-markets/> (Accessed: 19 June 2025).

International Union for Conservation of Nature (IUCN). (2025) Nature-based Solutions. Available at: <https://iucn.org/our-work/nature-based-solutions> (Accessed: 19 June 2025).

Introduction

To address the challenges of reskilling our current workforce and planning to meet the education needs of our future workforce, an adaptive framework has been developed that engages local communities, higher education and industry to meet the needs of disadvantaged or lesser resourced groups in their region. This model, developed and applied to address inequal access to STEM education (the STEM Passport for Inclusion), targets disadvantaged groups first.

To facilitate a just transition, **the STEM Passport for Inclusion model works to meet the educational needs of those with the greatest barriers to access**, targeting the Sustainable Development principle to Leave No One Behind. Further, initial applications of the model target Sustainable Development Goals (SDGs) for No Poverty, Quality Education, Gender Equality, Decent Work and Economic Growth, Reduced Inequalities and Partnerships for the Goals.

The equitable education framework underpinning the STEM Passport for Inclusion model is adaptive to the disadvantaged groups in their local region. By applying the equitable education framework to NbS, there is potential to target additional SDGs that focus on climate, health and sustainability.



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Leave No One Behind



Leave No One Behind (LNOB) is a fundamental principle within the SDGs, underpinned by concepts of equity and non-discrimination (United Nations Sustainable Development Group, n.d.). Within NbS, LNOB is essential in designing sustainable solutions which support vulnerable communities, fostering resilience and protecting biodiversity for the benefits of humans and the more than human sphere.

Within NbS Education, LNOB requires a lens of focus that ensures education empowers marginalised groups with necessary skills and knowledge to engage in sustainable practices. Efforts to ensure inclusive education can promote culturally relevant solutions and community driven conservation efforts.

What is Nature-based Solutions?

Nature-based solutions are an interdisciplinary approach to providing solutions to societal and sustainability challenges by engaging experts in engineering, technology, environmental sciences, governance, finance and social/behavioural sciences. NbS leverages the power of healthy ecosystems to protect people, optimize infrastructure, and safeguard a stable and biodiverse future (UNEP, n.d.).

NbS includes urban green infrastructure, natural flood management via sponge cities, wetlands and mangroves, as well as reforestation projects.



United Nations Sustainable Development Group (n.d.) Leave No One Behind. Available at: <https://unsdg.un.org/2030-agenda/universal-values/leave-no-one-behind>

United Nations Environment Programme (UNEP). (n.d.) Overview of Nature-based Solutions. Available at: <https://www.unep.org/topics/nature-action/nature-based-solutions/overview-nature-based-solutions>

Photo source: designed using canva.com
<https://www.architonic.com/es/pr/ko-bogen-ii/20154834/>
<https://www.worldfuturecouncil.org/sponge-cities-what-is-it-all-about/>

Who is this for?

Academia/Third Level Education

Third level institutions can use this framework to integrate NbS into their curricula across a broad range of departments or through a collaborative, interdisciplinary approach. By applying the CEFM to ensure access to accredited micro-credentials, third level institutes adapt and become more resilient to the evolving educational landscape, fostering an interdisciplinary, equity-focused and life-long learning approach. They benefit from opportunities to collaborate with secondary schools to develop a pipeline of students from their local communities, enhance partnerships with industry, contribute to research and evaluation, and support policy advocacy. By engaging in the co-designing curricula that is adaptive to industry and student needs, they help build a pipeline of skilled, diverse learners prepared for sustainability-focused careers.

Secondary Education

Secondary schools benefit from engaging with this framework by introducing students—especially those from underrepresented backgrounds—to green careers and NbS, underpinned by STEM and critical topics within core curricula, through hands-on, interdisciplinary learning. By early engagement with industry and industry role models, the model supports students and schools with student retention and boosting career aspirations and access to higher education. Individually, STEMP has seen positive impacts for student belief and confidence resulting from participation. More broadly, opportunities to ensure greater understanding of career pathways and education resources beyond secondary school become more widely available to students, teachers and administrative staff, such as guidance counsellors. Enhanced student engagement alongside partnerships with third level and industry can support greater community cohesion in local and regional areas. Secondary schools facilitate programme success through communicating programme benefit to students/guardians and tracking student progress to ensure inclusive and impactful learning outcomes.

Who is this for?

Industry

Industry partners benefit framework engagement by investing in the next generation of works, ensuring access to a diverse, skilled talent pool prepared for emerging green careers. By co-designing course content and participating programme pathways such as mentorship, internships/work experience opportunities, and site visits, industry partners ensure that education and exposure aligns with real-world workforce needs. This engagement enhances corporate social responsibility and helps build sustainable, inclusive career pathways, while also contributing to programme evaluation and long-term impact. Industry partners can facilitate sustainable programme implementation by supporting programme funding or via offering space and technological resources for programme implementation at scale.

Non-governmental Organisations

Non-Governmental Organisations (NGOs) have potential to play a vital role in advancing environmental justice and education equity by building relationship with the local communities in need. They can facilitate community engagement and by in, providing an avenue to help scale successful pilot programmes. This framework offers NGOs a structured way to contribute to sustainable development goals within their community while empowering underserved communities through education and advocacy.

Local/Regional Government

Local and regional governments (LRGs) can use the framework to upskill their communities for green jobs, support increased community cohesion and economic prosperity while aligning education with sustainability and Just Transition goals. They benefit from supporting economic development and climate resilience while leveraging local infrastructure, such as libraries or community centres, for programme delivery when possible. Governments can facilitate policy integration and support the translation of impact into policy at local, regional and national levels. Further, LRGs may provide funding and logistical support, and act as connectors between schools, industry, and community stakeholders.

Gender, Inclusion and Diversity Framework for NbS

Previous frameworks have been developed to better understand the embedded nature of Gender, Inclusion and Diversity within effective Nature-based Solutions that meet the SDGs objective to LNOB. This framework, **the Gender, Inclusion and Diversity (GID) framework for NbS** was developed within the GoGreenRoutes project (Delbaere, et al. 2024). The framework is referred to as, “a climate justice perspective is applied while addressing how the nexus of gender equality, age, LGBTQ+ rights, social; cultural and ethnic background, inclusion of people with disabilities and, displaced populations and immigrants impacts the use of public spaces and interactions and considers the possible consequences for participating in participatory processes towards NbS development and Implementation.”

This framework makes the argument that considerations must be explicitly made to ensure the equitable nature of NbS, rather than operating on the assumption that equity and GID considerations are implicit in the design and implementation of NbS.

Similarly, equity in education and the inclusion of NbS in education is not inherently equitable and, without an equitable framework for engagement, could widen the divide between those with the skills to meet the needs of the future labour market and those that do not, particularly those with lesser resources and those that could be more adversely impacted by climate change or climate change related catastrophes. By centring equity within this approach to broadening access to NbS education, we ensure **a person centred education approach that meets the needs of its local community and ensures access sustainable careers for those that are most likely to be impact by climate change in their communities. This can support more connected and sustainable local economies in addition to mitigating the negative impacts of climate change for locals.**

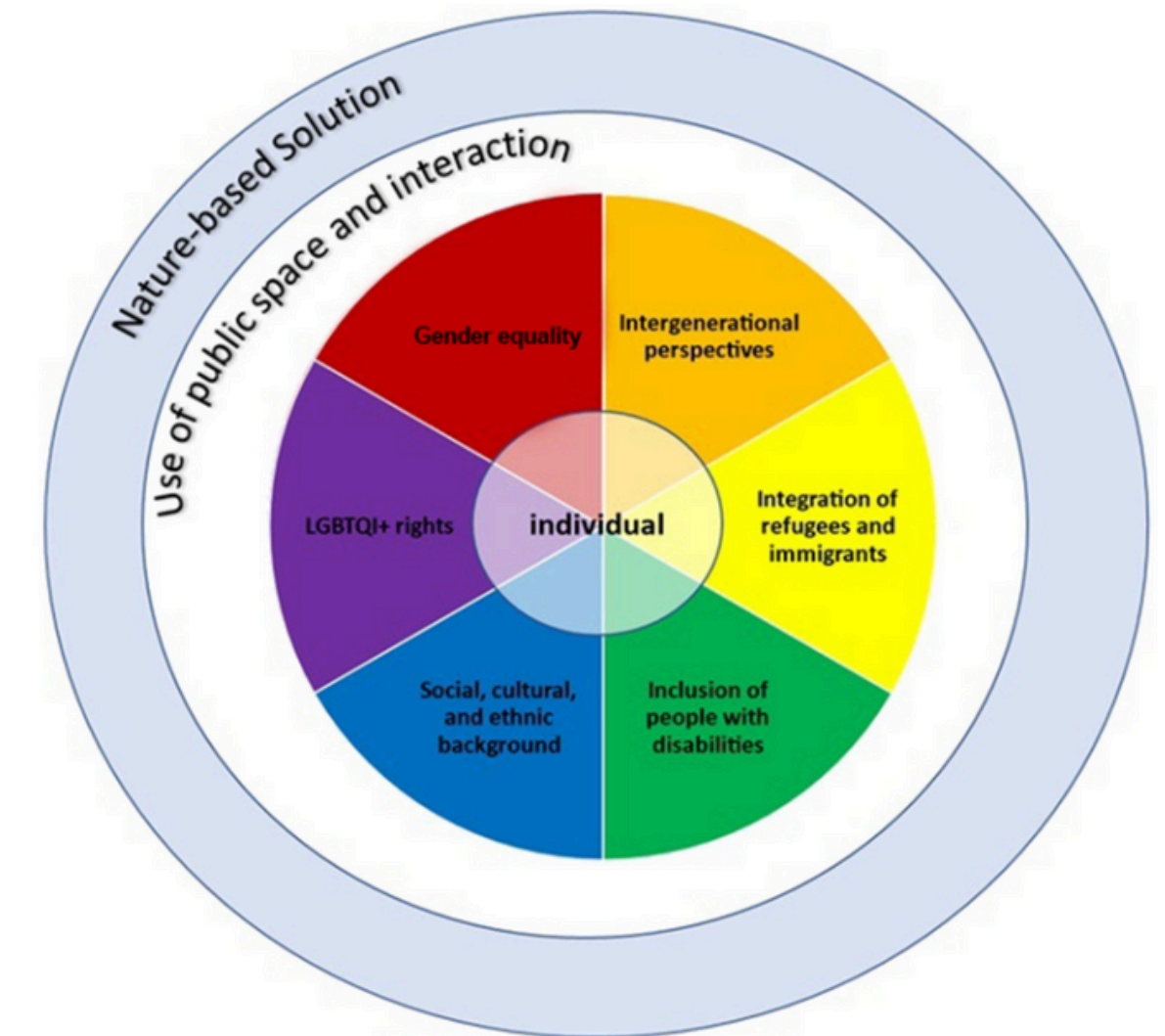


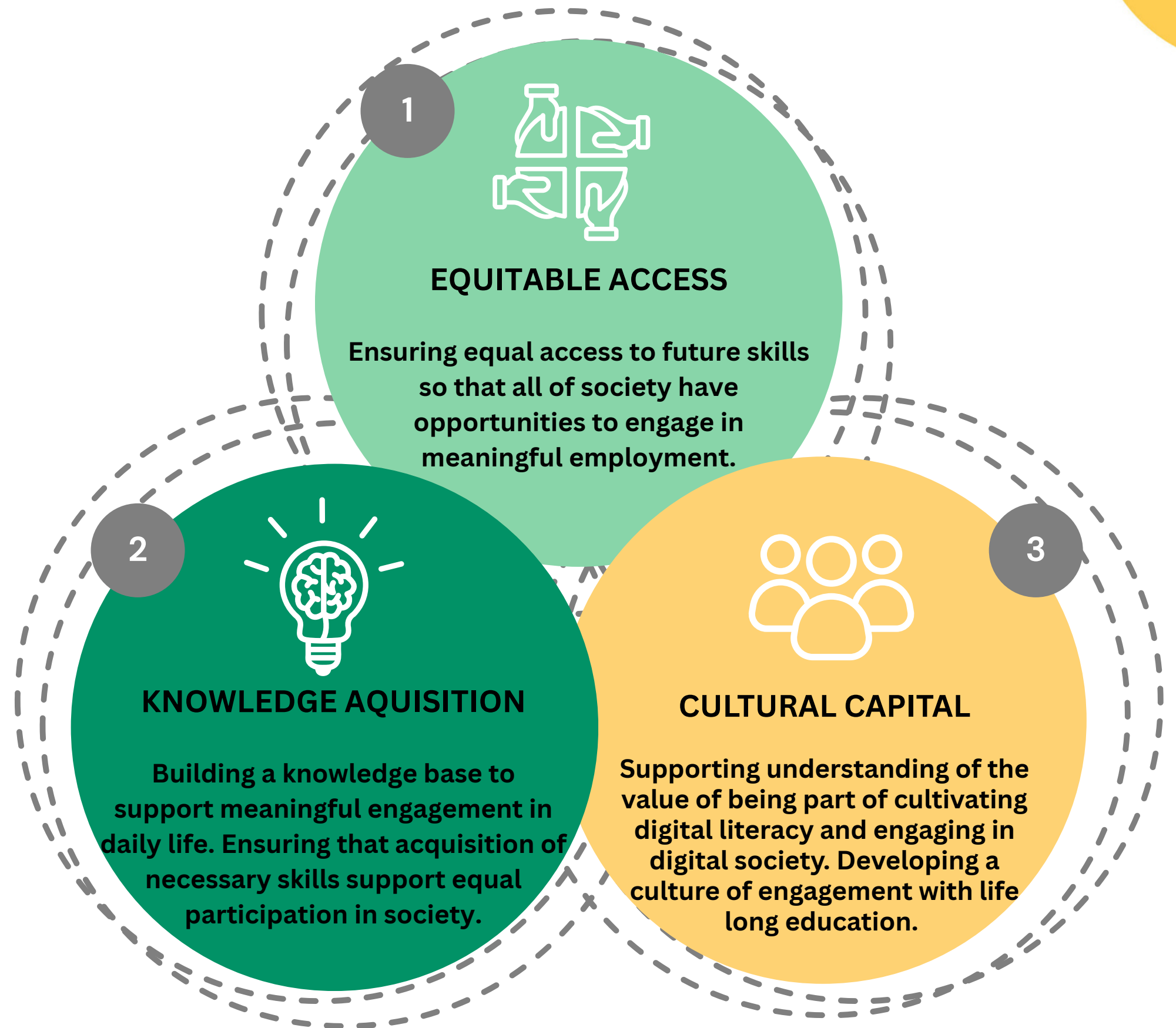
Figure 1: Gender, Inclusion and Diversity Framework for inclusive Nature-based Solutions in cities

Vision for Equitable Education



The *Framework for Equitable NbS Education* aims to change the future by ensuring that all students, irrespective of class or condition, leave school fully prepared to engage in the workforce of the future.
(See Figure 2)

Figure 2: A Vision for Equitable Education



Addressing Educational Inequalities

1

Socioeconomic Disparities:

Just as the STEM Passport for Inclusion addresses the socioeconomic barriers that prevent disadvantaged students from pursuing STEM careers, a similar approach is needed for NbS education. Socioeconomically disadvantaged students often lack access to quality education and resources, which limits their understanding and engagement with NbS. By providing targeted support, mentoring, and resources, we can ensure that these students have equal opportunities to learn about and contribute to nature-based solutions.

2

Gender Inequities:

The STEM Passport model focuses on increasing female participation in STEM fields, recognizing the significant gender gap. Similarly, NbS education must address gender disparities. Women and girls often face unique barriers in accessing environmental education and careers. By implementing mentoring programs, providing role models, and creating inclusive learning environments, we can empower young women to pursue careers in NbS while becoming leaders and innovators in environmental sustainability.

Building Essential Skills and Knowledge

1

Interdisciplinary Learning:

Nature-based solutions require a multidisciplinary approach, integrating knowledge from ecology, engineering, social sciences, and more. The STEM Passport model's emphasis on building a strong foundation in STEM skills can be adapted to NbS education by incorporating interdisciplinary learning. Students can be taught to apply scientific principles to real-world environmental challenges, fostering a holistic understanding of how different fields intersect to create sustainable solutions.

2

Practical Experience:

Hands-on learning is a cornerstone of the STEM Passport model, with activities such as coding, AI, and industry tours. Similarly, NbS education should include practical experiences like field trips to natural habitats, participation in conservation projects, and internships with environmental organizations. These experiences help students connect theoretical knowledge with practical applications, enhancing their understanding and commitment to NbS.

Enhancing Social and Cultural Capital

1

Mentoring and Networking:

The STEM Passport model's mentoring programs help students build social capital by connecting them with professionals in STEM fields. NbS education can benefit from similar mentoring initiatives, where students are paired with environmental scientists, conservationists, and policymakers. These relationships provide valuable insights, guidance, and inspiration, helping students envision themselves in NbS careers.

2

Community Engagement:

Nature-based solutions often involve community-based approaches to environmental management. NbS education should emphasize community engagement, encouraging students to work with local communities on conservation projects. This approach not only builds cultural capital but also fosters a sense of responsibility and connection to the environment.

Creating Pathways to Higher Education and Careers

1

Accredited Programs:

The STEMP model includes accredited micro-credentials that provide alternative pathways to higher education. NbS education can adopt this strategy by offering accredited courses and certifications in environmental science, ecology, and sustainable development. These credentials can help students transition to higher education and careers in NbS, ensuring they are well-prepared and recognized for their skills.

2

Career Guidance:

Providing clear pathways to careers is essential for both STEM and NbS education. The STEM Passport model's focus on career guidance can be adapted to NbS by offering workshops, career fairs, and counseling sessions focused on environmental careers. Students can learn about various career options, required qualifications, and potential employers, helping them make informed decisions about their future.

Tracking Progress and Impact

1

Digital Platforms:

The STEM Passport model includes a digital platform to track students' progress and connect them with opportunities. NbS education can benefit from a similar platform that centralizes information about courses, internships, and job opportunities in the environmental sector. This platform can also track students' achievements and provide data for ongoing research and improvement of NbS education programs.

2

Research and Evaluation:

Continuous evaluation is crucial for the success of educational programs. The STEM Passport model's mixed-methodological approach to assessing impact can be applied to NbS education. By collecting quantitative and qualitative data on students' experiences, attitudes, and outcomes, educators can identify strengths and areas for improvement, ensuring the program's effectiveness and sustainability.

Applying the Just Transition Model to NbS Education

A Just Transition, broadly defined, leverages the SDG principle of LNOB and further considers that efforts do not push others behind in the transition to low-carbon and environmentally sustainable economies and societies. A just transition model can enable more ambitious climate action and provide an impetus to attaining the SDGs. Through inclusive dialogue, this approach intends to reflect the needs, priorities and realities of local societies and their historical responsibilities for climate change and environmental degradation (United Nations Committee for Development Policy, 2023). NbS Education can greatly benefit from the principles and practices of the Just Transition model, considered below.

1

Inclusivity and Fairness:

Access to Education: Ensure that NbS education is accessible to all students, regardless of socioeconomic background. This can be achieved by providing scholarships, grants, and free educational resources.

Diverse Representation: Promote gender and racial diversity in NbS education programs, as well as allowing for additional adaptation to other protected or under-resourced groups in a local region. Encourage participation from underrepresented groups through targeted outreach and support.

2

Community and Worker Engagement:

Local Involvement: Engage local communities in NbS projects and education. This can include community-based learning projects, where students work on real-world NbS initiatives in their local areas. This also can support more sustainable community development by enhancing a sense of connection to the local region, offering a stronger pipeline of applicants into the local university and local businesses.

Stakeholder Collaboration: Foster partnerships between schools, local governments, NGOs, and businesses to support NbS education and projects. This collaboration can provide students with practical experience and networking opportunities.

3

Interdisciplinary Approach:

Interdisciplinary Curriculum: Develop an interdisciplinary curriculum that integrates ecology, social sciences, engineering, policy studies and other relevant NbS disciplines. This approach helps students understand the complex, interconnected nature of NbS and the diverse array of opportunities to engage in fruitful and decent careers across NbS disciplines. Furthermore, a strong basis in social sciences can provide necessary perspective regarding the continued dismantling of inequities and fostering sustainable behaviour at the individual and community level.

United Nations Committee for Development Policy (2023) Excerpt from the Report on the Twenty-Fifth Session. United Nations Department of Economic and Social Affairs. Available at: <https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/CDP-excerpt-2023-1.pdf>

Applying the Just Transition Model to NbS Education

By applying the Just Transition model to NbS education, we can create an inclusive, fair, and effective educational framework that prepares students to contribute to a sustainable and biodiverse future. This approach ensures that all students, regardless of background, have the opportunity to engage with and benefit from nature-based solutions and related career opportunities.

4

Policy and Structural Change

Educational Policies: Advocate for the inclusion of NbS education in national and local education policies. Ensure that NbS principles are embedded in the curriculum at all levels of education, including formal, informal and continuing education.

Accreditation and Certification: Develop accredited NbS courses and certifications that provide students with recognized qualifications. This can provide a pathway to help them transition to higher education and careers across NbS sectors.

5

Practical Experience and Career Pathways

Hands-on Learning: Incorporate fieldwork, internships, and project-based learning into NbS education programs. This practical experience is crucial for understanding and implementing NbS.

Career Guidance: Provide career counseling and guidance to help students navigate the various career paths in NbS. Highlight the diverse opportunities available in conservation, environmental policy, sustainable agriculture, and more.

6

Monitoring and Evaluation

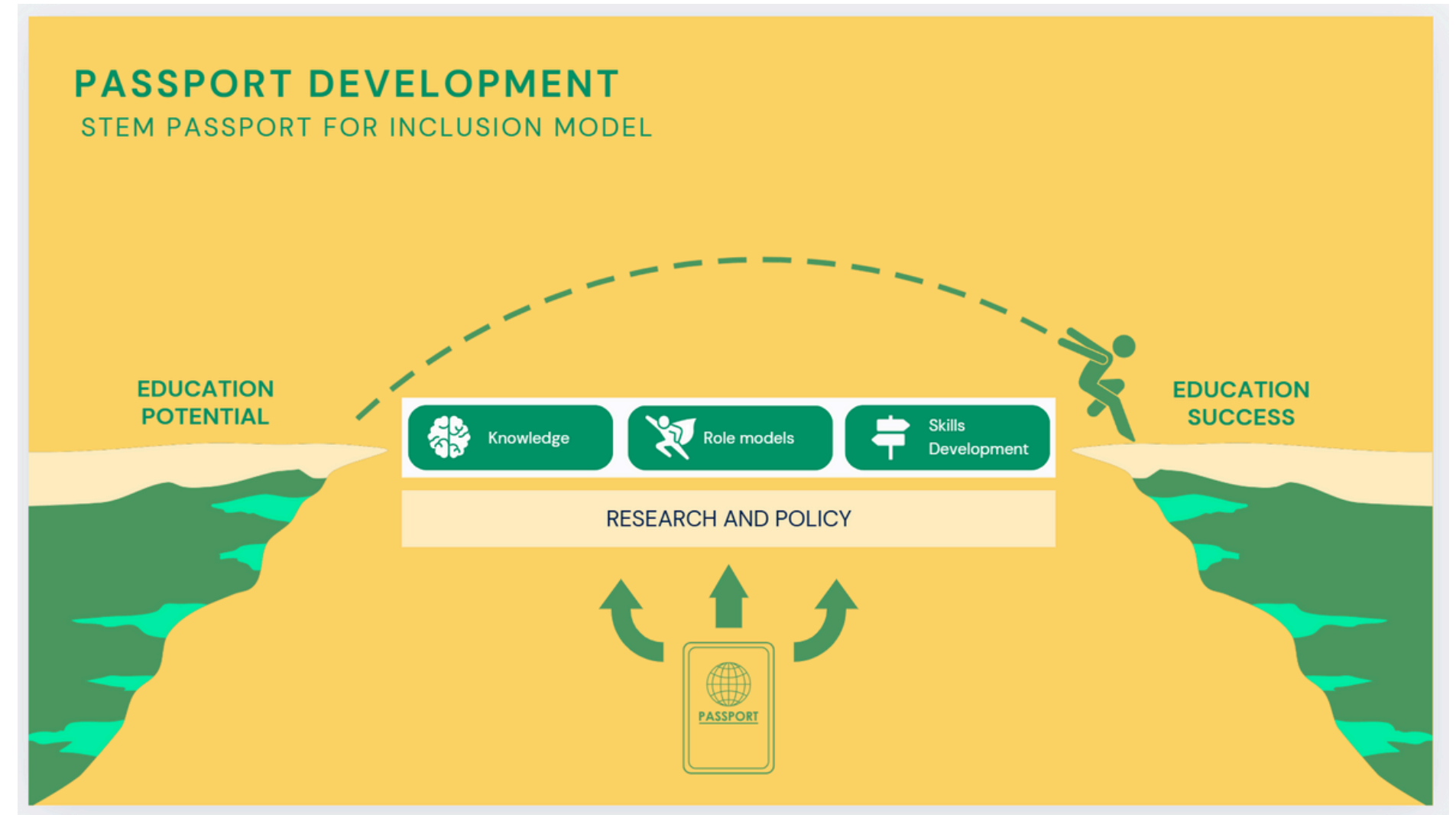
Tracking Progress: Use digital platforms to track students' progress and achievements in NbS education. Collect data on student outcomes to continuously improve the program.

Impact Assessment: Regularly assess the impact of NbS education programs on students and communities. Use this data to refine and adapt the curriculum and teaching methods.

Background

The STEM Passport for Inclusion (STEMP) programme has designed, implemented and validated the Passport for Inclusion model which has demonstrated significant success in addressing gender and socioeconomic disparities in STEM education. Following the initial pilot, STEMP has engaged over 5,000 secondary school students in STEM education. Impact assessment has identified 76% of STEMP students are considering a career in STEM because of the programme, with 79% considering studying STEM following their engagement (as seen in Figure 3).

The Passport for Inclusion model's principles and strategies can be effectively applied to other types of education, particularly in the context of NbS due to often explicit linkages to efforts of equality and equity via the lens of the SDGs.



Background Continued

This education model supports under-resourced students and communities in moving from education potential to education success via a pathways approach (Figure 4). The model leverages three distinct pathways (Figure 6) to support appropriate knowledge acquisition, engagement with role models working in relevant fields across industry and formalising a process that supports those with lesser resources in staying within the education system to achieve long standing education goals, via attainment of critically necessary skills to engage effectively in the field of work and via credentialling that supports their movement from potential to meaningful career progression. The transformative impact of the programme can be seen in Figure 5, highlighting student engagement with STEM following programme completion.

Educational Impact of Student Engagement with STEM Passport

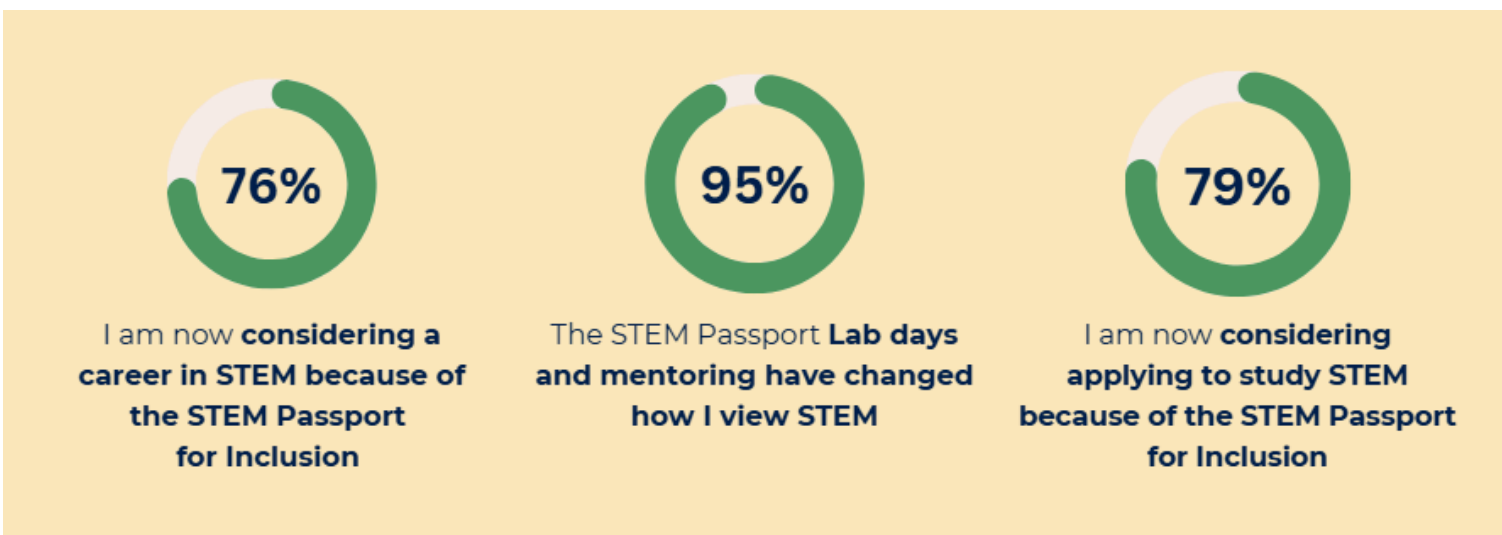


Figure 4: Pathways Approach to Equitable Education



Photo source: STEM Passport for Inclusion

Pathways Approach

In alignment with the model's vision to ensure every student, regardless of class or condition, leaves school prepared to fully engage in all educational and career opportunities, the model was developed as a solution leveraging a systems approach to change which ensures that students leave school with necessary skills via engagement with higher education institutions, mentoring, and industry exposure.

To achieve this, a three pronged system solution was developed. This solution involves formalising pathways for secondary school students in under-resourced communities to achieve a university level qualification while in secondary school, opportunities to meet with industry mentors to provide role models and to skill acquisition via hands on experience in applied settings and/or via engagement with their local community.

Pathways Approach Continued

Building effective pathways starts with the formalisation of effective stakeholder relationships. Research on building effective education partnerships has identified a 4 C's approach that is also easily identifiable within this framework design. The 4 C's are *Capabilities, Connections, Cognition and Confidence*.

- **Capabilities:** Developing participants' skills and knowledge through structured learning and engagement. This includes student knowledge, but also train the trainer formats and leadership upskilling for actively engaged members of industry.
- **Connections:** Strengthening networks across formal education, third level education, industry and local communities to develop a scalable pipeline into NbS careers that meets the need of the future job market.
- **Cognition:** Shaping beliefs and values that align with collaborative, skills based and student-centered learning approach.
- **Confidence:** Building self-efficacy among stakeholders, empowering them to take active roles in educational improvement.

The study emphasizes that these four dimensions are essential for sustainable and impactful educational partnerships, particularly in underrepresented or underserved communities.

The process by which STAMP is able to support their student's learning includes offering a university level qualification (via the Common Microcredentials Framework) through the completion of dedicated STEM Education Days and associated coursework. This innovative and transformative approach equips students with applied STEM skills, enhancing capacity and providing a relevant qualification while the students are still in secondary school. This innovative and skills-focused approach leaves students with a credential which can enhance access to third level education or the broader job market.

CMF offers a transformative avenue for more adaptive education systems that meet the needs of the current labour market. Leveraging this approach within STAMP has support stakeholder engagement with industry by allowing industry collaboration on course content and delivery, with capacity to adapt or expand content to meet future programme needs.



Figure 5: Detailed Pathways Approach to Equitable Education

Knowledge and Skills Development



Pathways Approach Continued

Role Model Engagement

The integration of role models through the Mentoring for Equality programme within the STEM Passport for Inclusion (STEMP) initiative creates vital pathways for students from under-resourced communities to connect with professionals in industry. While these communities are rich in role models, young people may not often see individuals in industry roles who reflect their backgrounds or experiences. This lack of representation can contribute to a perception that such career paths are inaccessible.

By facilitating meaningful relationships between students and industry mentors, the programme enhances students' cultural capital and broadens their understanding of the opportunities available to them. For mentors, the programme offers a structured and impactful engagement through a 5-hour Mentoring for Equality, Diversity and Inclusion training, which covers best practices for working with under-resourced communities. For those seeking deeper involvement, a dedicated micro-credential provides extended learning and leadership development.

This model not only benefits individual participants but also offers a scalable, evidence-informed approach that can be replicated across educational and industry settings to promote equity, inclusion, and long-term systemic change.

“Mentoring these energetic, perceptive students was incredibly rewarding, being able to show them that a STEM career is exciting, fulfilling and something they can achieve locally. Through the STEMP program, I've learned how much representation matters - seeing someone like yourself (similar background, similar interests) succeed can spark a world of possibilities.”

-STEM Passport Mentor

Industry and Social Responsibility

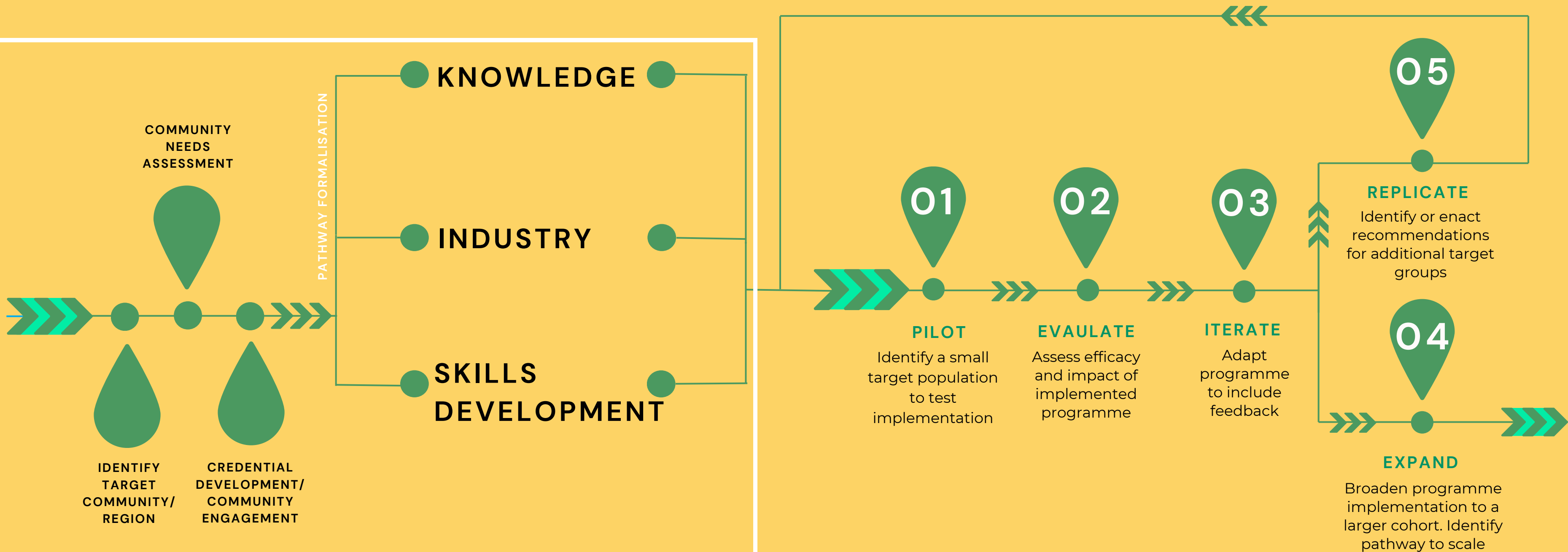
Industry support for STEMP and inclusive education through mentoring recruitment plays a pivotal role in fostering inclusive leadership and cultivating equitable workplace cultures. By providing visible role models, this initiative not only advances workplace equity but also reinforces an organisation's broader commitment to social responsibility. Supporting diverse women in developing mentoring skills—while also creating space for men to engage meaningfully as allies—builds mentoring capacity and opens pathways to leadership and career progression. This approach is more than good practice; it is a strategic investment in a more innovative, equitable, and sustainable future workforce—one that the next generation of workers and leaders can confidently and enthusiastically aspire to join.

Steps to action

Equality, Diversity & Inclusion Framework

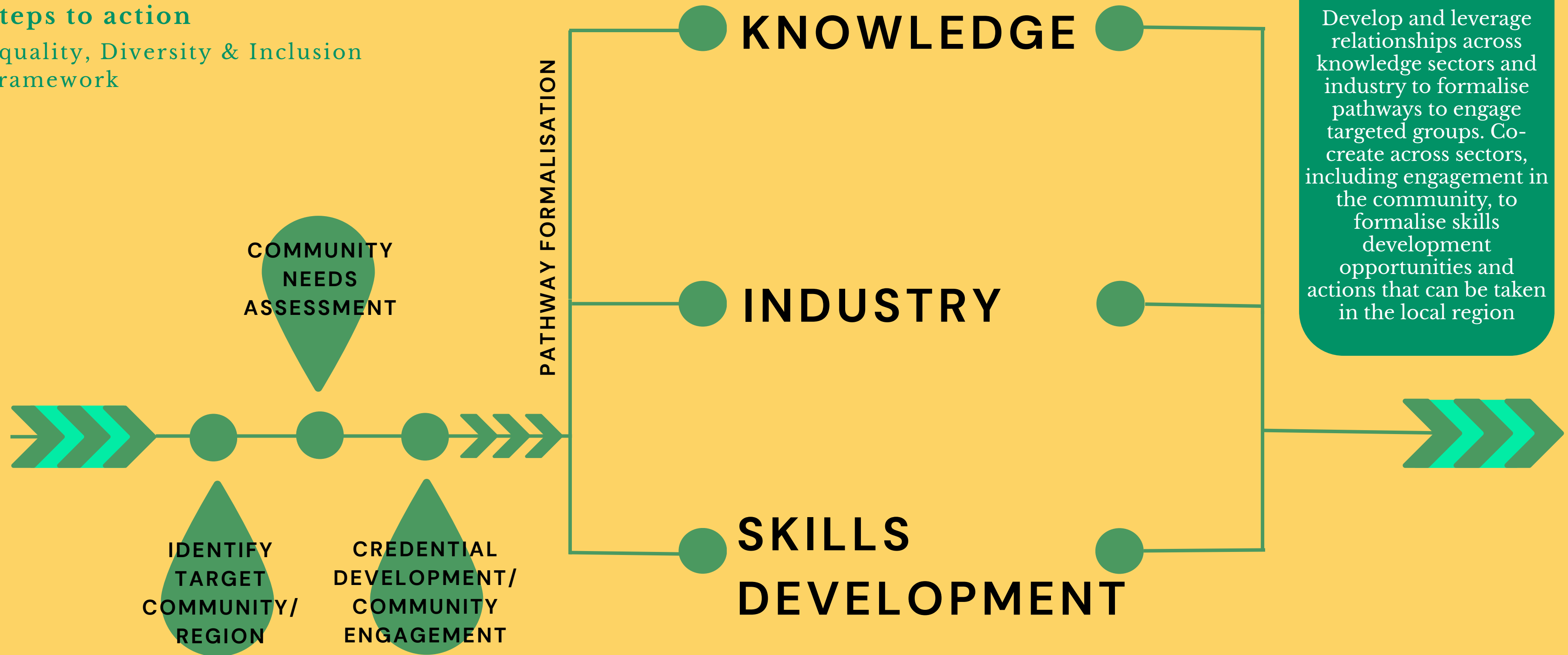
Programme Development Resources for Funding and Finance

Pre-existing tools and guidebooks can be leveraged effectively to identify funding and financing pathways to support programme design and piloting, with guidance as to how to transition into long term sustainable programme integration within the educational landscape, often via engagement with policy and garnering support within industry to support ongoing initiatives and the expansion to additional populations. These tools and guidebooks include resources such as Connecting Nature's Nature-based Enterprises Guidebook and the Finance and Business Models Guidebook, found in Additional Resources on Page 26.



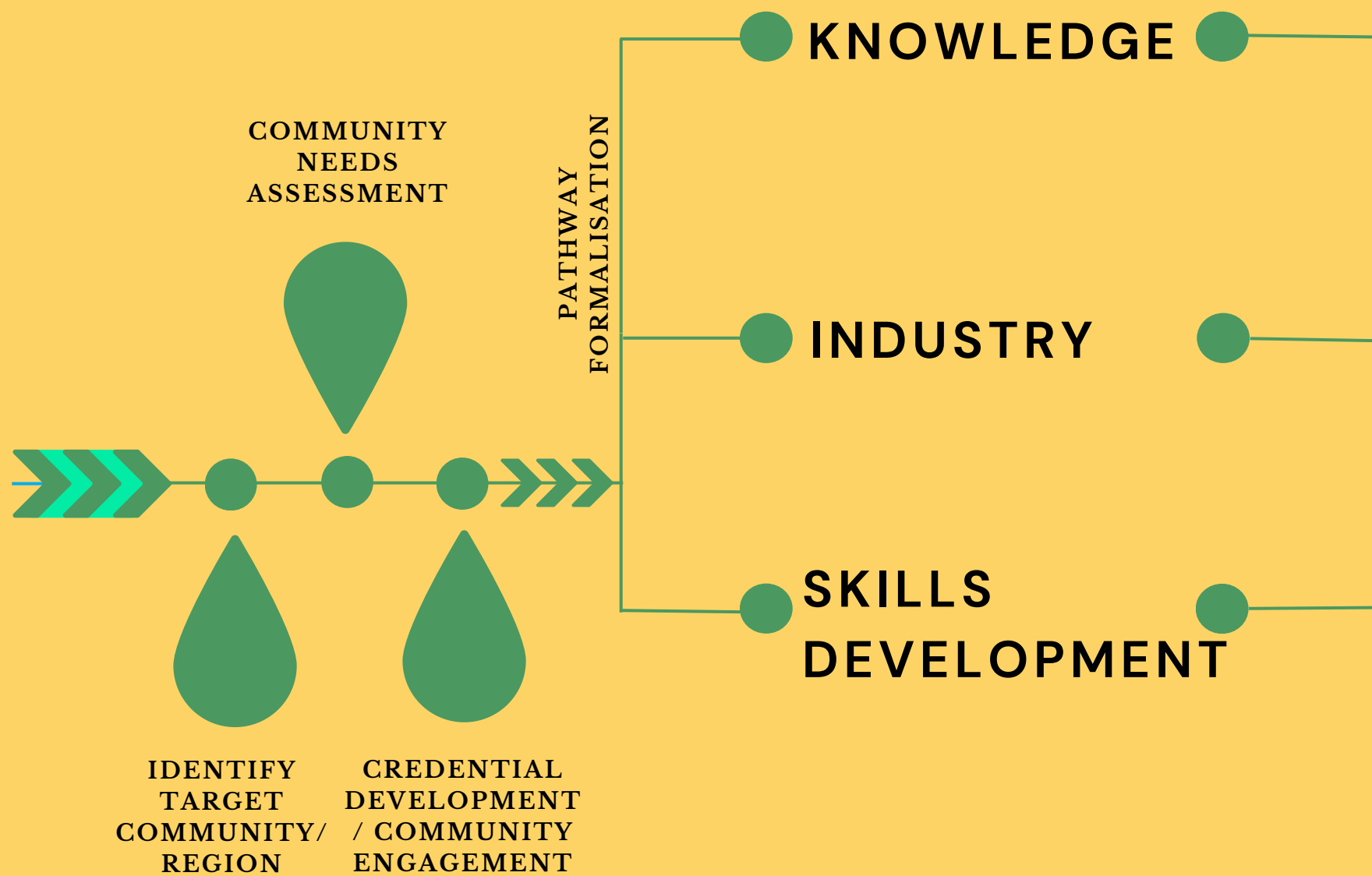
Steps to action

Equality, Diversity & Inclusion Framework



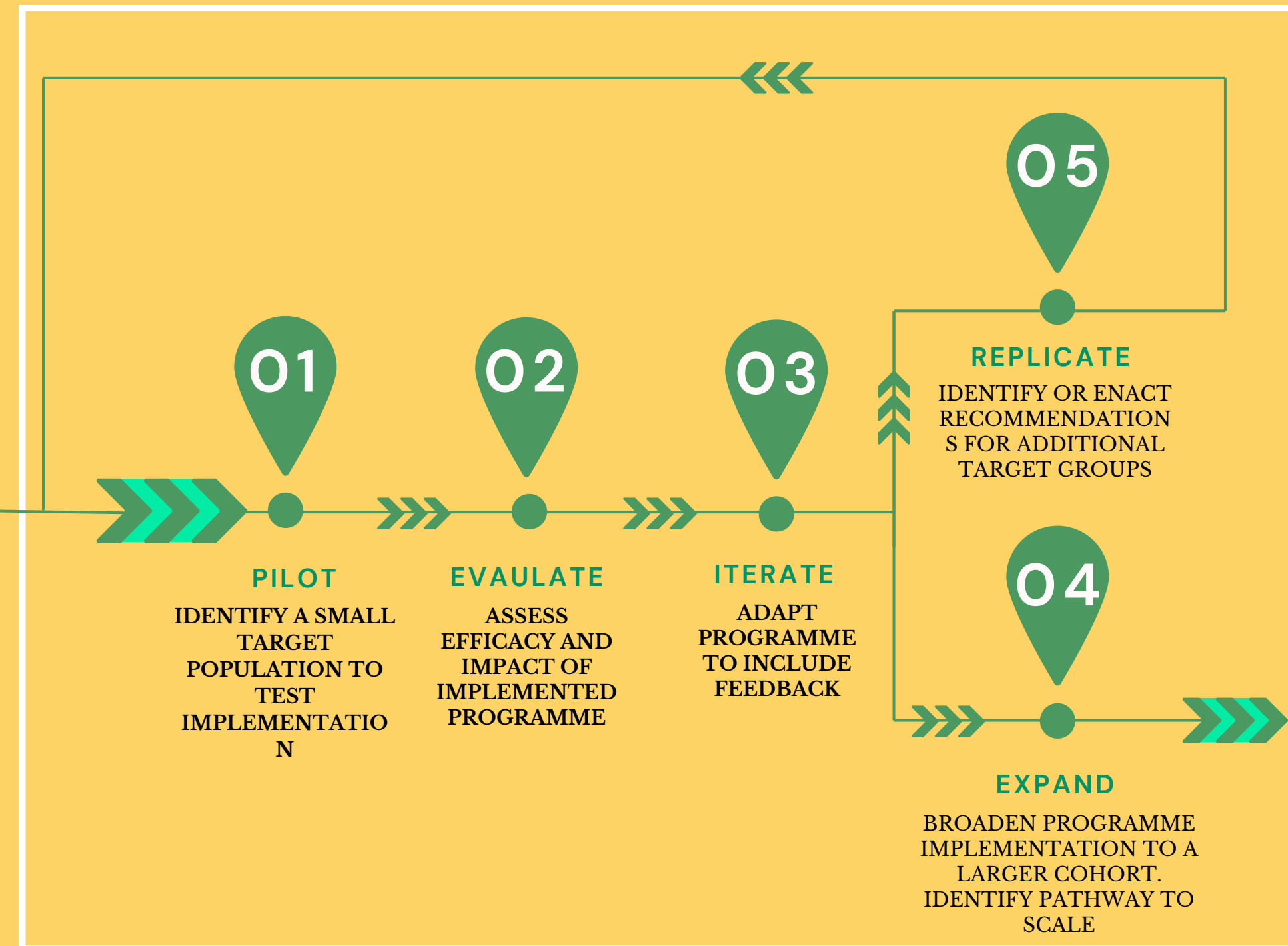
Steps to action

Equality, Diversity & Inclusion Framework



Programme Execution

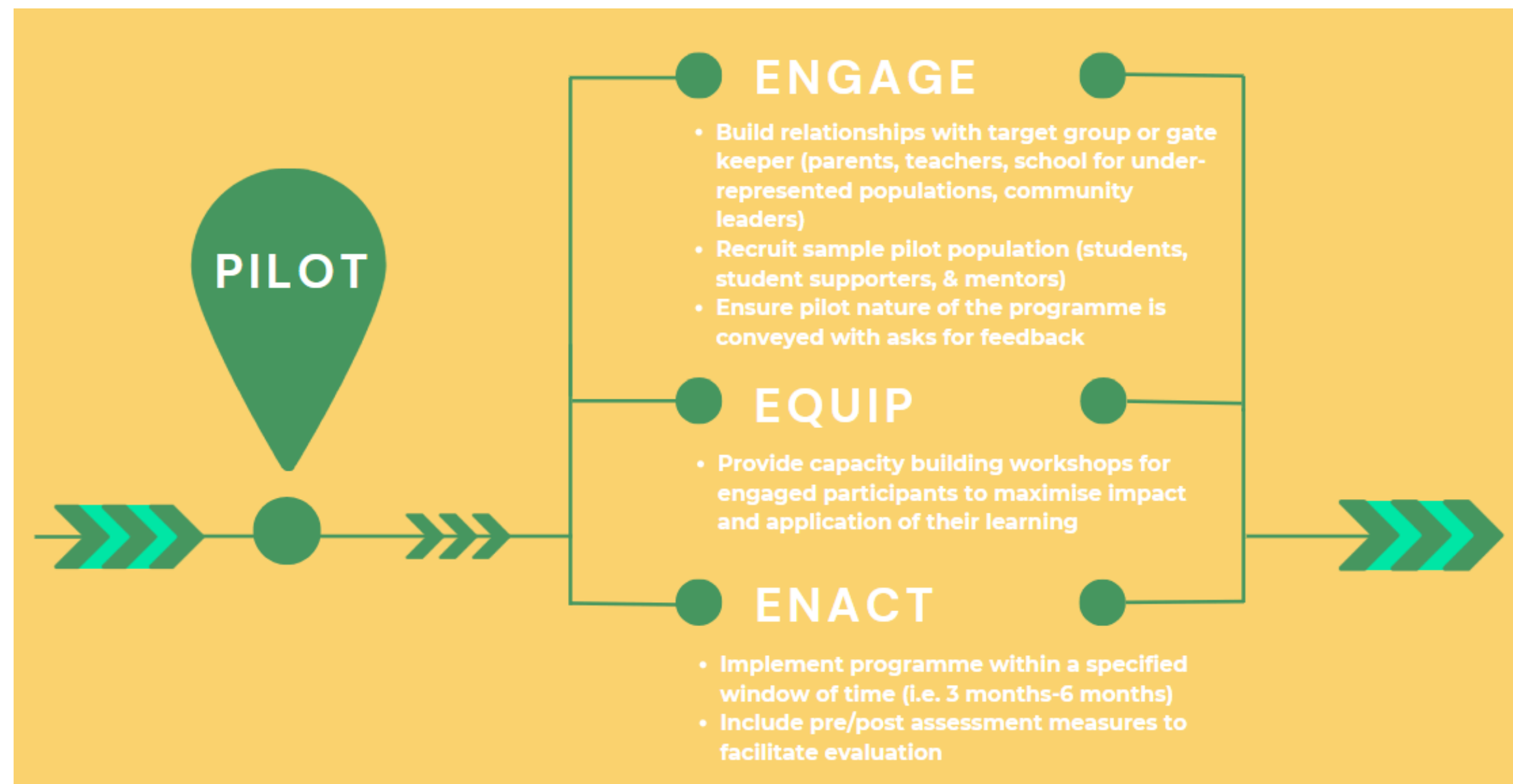
Once pathways have been developed, pilot groups within the target community/region should be engaged to trial implementation of the programme. This allows an opportunity to build trust amongst key leaders in industry and amongst target communities, fostering opportunities to critically evaluate the programme to ensure it meets the needs of targeted groups and has potential for replication and expansion.



Piloting for Optimal Impact

The steps to action include a phased approach to implementing educational programs, emphasizing the importance of piloting to engage stakeholders, strengthen relationships, and build capacity. Building strong relationships with key stakeholders—such as industry partners, teachers, community leaders and policy makers—is foundational because it ensures that diverse perspectives are integrated into decision-making, fostering trust and enhancing the relevance and acceptance of the educational initiative from formal education, through third level and into skilled career positions.

Engaging pilot groups effectively involves clear communication about the program's experimental nature and active iteration via evaluation and seeking feedback. This not only improves program design but also empowers participants by valuing their input. Further, this approach focuses on upskilling all participants, across all stakeholders, to build capacity, through targeted workshops and training. This equips participants with the skills and confidence needed to apply their learning effectively, leading to more sustainable and impactful outcomes that can be enacted and expanded upon.



Expanding Programme Reach



The final phase of the framework focuses on programme expansion, seeking sustainable pathways to scale and support ongoing programme implementation through the pillars of policy and practice. It emphasizes broadening the programme's reach to new or underserved communities, fostering inter-institutional collaboration, and embedding successful practices across educational settings. Additionally, it highlights the importance of translating programme outcomes into measurable impact through policy briefs, engagement with political leaders at various levels and inclusion of programme design in social and education policy at local, state, national and EU levels to support long-term adoption and systemic change.

For example, within the STEM Passport for Inclusion, the programme originally focused on secondary school age girls in under-resourced communities. The programme has successfully expanded to work with early school leavers and lone parents.

Case Study - Expanding to New Communities Led by Local and Regional Governments

The STEM Passport for Inclusion prides itself in practicing an equity focused approach, reaching communities that are the most underserved. In 2023, we were approached by Longford County Council to work with students in the region. Longford is one of the most underserved communities in terms of education opportunities and is facing significant challenges with the transition to a low-carbon future, particularly with the decline of peat-fuelled power generation. This has created an urgent need to up-skill the local workforce for new industries.



Photo source: STEM Passport for Inclusion



Avenue to engagement

A mentor who engaged with STEM Passport for Inclusion since its pilot phase connected to the council in their local region to drive engagement efforts and local programme implementation

Leading Stakeholder

Longford County Council

Outcome

70 students from 4 mixed school in Longford completed the programme. This was our first delivery to boys and it proved extremely impactful: students, teacher and mentors describing the impact on student beliefs and aspirations.

Local Access Benefits

Providing students from disadvantaged areas with local access in our rural communities offers benefits by expanding education opportunities, fostering skill development, academic success, and greater community support.

Sustainability Efforts

By utilising Longford County Council's Hub Broadband Connection point, the county was also able to reduce costs and promote sustainability by minimising environmental impact.

“The positive feedback from teachers and students shows that this programme has truly shifted perceptions of STEM, with many more students now considering STEM careers”

-Broadband Digital Officer for Longford County Council

Local and Regional Governments as Key Facilitators of Equitable NbS Education

Embed NbS in Local Education Policy

- Advocate for the inclusion of NbS education in local curriculum guidelines.
- Align with Just Transition and Sustainable Development Goals (SDGs) in local education strategies.
- Develop policy briefs to support integration at regional and national levels.

Provide Funding and Logistical Support

- Allocate local grants or seed funding for schools and NGOs to implement initial pilots of the framework.
 - Support local actors with funding to support sustainable growth over targeted timelines. This funding support can be provided in tandem with other available NbS funding models and local business support schemes
- Offer transport, space, and digital access to reduce participation barriers.
- Leverage EU and national funding streams

Facilitate Stakeholder Collaboration

- Act as a connector between:
 - Schools and universities prioritising support for under-resourced schools or communities that have been identified in a local community needs assessment
 - Industry partners (especially green and environmental sectors)
 - Encourage Corporate Social Responsibility in the local region, highlighting investment in education and local green infrastructure
 - NGOs and relevant community groups
- Host roundtables and/or working groups to co-develop curriculum, mentorship, and career pathways.

Support Communication & Dissemination

- Celebrate and share successes by highlighting local case studies and impact
- Use local media, events, and social platforms to raise awareness of the need for NbS education and impacts in the local region to garner community understanding and support

Guiding Questions on Developing Pathways and Partnerships for Equitable Education

Who are the underrepresented or underserved groups in our region, and what barriers do they face in accessing education and green career pathways?

What local, regional, or national policies support or hinder equitable access to NbS education?

Which stakeholders (e.g., schools, universities, local/regional industry, NGOs, community leaders) are essential to co-design and implement this framework in your local context? Who are the key connectors that could support effective collaboration and partnership formation? How do you gain access to those stakeholders if relationships are not pre-existing?

How can we build trust and sustained engagement with communities, especially those historically excluded from sustainability focused education or those most marginalised by climate change?

Conclusion

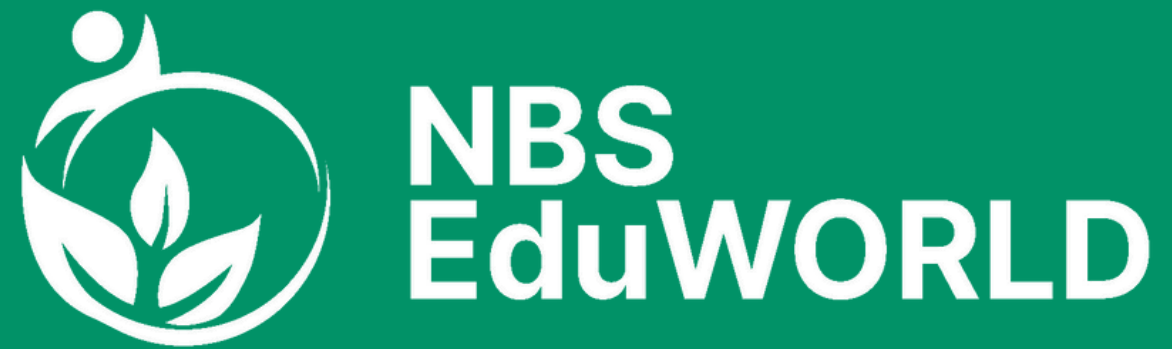
The *Framework for Equitable Nature-Based Education* offers an innovative and inclusive vision, leveraging a systems approach to more equitable education in NbS, to preparing learners to thrive in a rapidly evolving, sustainability-focused world. By integrating the principles of equity, community engagement, and interdisciplinary skills-based learning in collaboration with industry, it ensures that we LNOB in the transition to a green economy and more sustainable future for all. This approach is adaptable to local contexts and allows for programme leaders to engage with and respond to the needs of the under resourced groups in their community. Grounded in the proven success of the STAMP, this model provides a scalable, adaptable pathway to equip underrepresented learners with the skills, confidence, and connections needed to pursue meaningful careers in NbS.

Additional Resources

Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A. and Laude, D., 2022. Stakeholder engagement: Past, present, and future. *Business & Society*, 61(5), pp.1136-1196.

McQuaid, S., Kooijman, E. and Fletcher, I. (n.d.) *Nature-Based Enterprises: A Guidebook for Supporting the Start-up and Growth of Nature-Based Enterprises*. Connecting Nature. Available at: <https://connectingnature.eu/sites/default/files/images/inline/Enterprise.pdf>

McQuaid, S. and Fletcher, I. (n.d.) *Financing and Business Models Guidebook*. Connecting Nature. Available at: <https://connectingnature.eu/sites/default/files/images/inline/Finance.pdf>



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