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Deliverable 13: Report on outcomes of funding mechanisms and processes for large scale implementation of the Connecting Nature Framework in Fast follower cities



Image from the Organisational Resources Workshop in Malaga

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Users Executive Summary

Since 2017, Connecting Nature has had a major impact in raising knowledge and awareness in partner cities about alternative financing and business models for large scale implementation of nature-based solutions. Building on the work done between 2017 and 2019 with the frontrunner cities of Genk, Glasgow and Poznan, the seven fast follower cities have used the learnings and made steady progress since 2019 to effect place strategies, programmes, plans, co-operation agreements and frameworks to develop long term co-financing and co-governance of nature-based solutions. Early results coming from the fast follower cities are promising such as the public private collaboration emerging in Nicosia, the cooperation of multiple departments in A Coruna City Council and the development of new collaborative modes of stewardship in Sarajevo and A Coruna. However significant challenges remain, such as rigid political and bureaucratic structures which in turn have led to a slower uptake and transition to new methods of determining innovative financing and co-governance models in particular as evidenced in Ioannina and Burgas.

This report builds on Deliverable 10 produced in 2020 “Submission of financing applications/development of financial partnerships/establishment of financing platforms to facilitate accelerated nature-based solution delivery” in the front runner cities of Genk, Glasgow and Poznan authored by Trinity College Dublin. The findings of that deliverable have to some extent been mirrored in the fast follower cities, yet significant innovations have occurred in terms of governance, particularly in relation to stewardship of NbS, the importance of pilot projects to build trust and new innovations in public-private sector financing in Nicosia related to the ‘Adopt a Park’ scheme. The key findings are summarised below:

- Public awareness/understanding of nature-based solutions and their effectiveness in tackling climate change and providing social, economic and environmental benefits is considerably lower in southern and eastern European countries than it is in the northern European front runner cities. The term nature-based solutions is unfamiliar and does not translate well into local language. It was a challenge to introduce the term into local vernacular.
- In Mediterranean and eastern countries, there has been a traditional reliance on local governments to tackle climate issues, be responsible for municipal infrastructure and provision and maintenance of services and solutions. Citizens don't see it as their responsibility. The expectation that such matters are a municipal responsibility remains a barrier to community involvement in the delivery of projects in some cities.
- Cities recognize the need to shift their perspectives, think more creatively, and to push themselves into new ways of working, particularly with respect to the mapping/identification of stakeholders and fostering ways for more meaningful co-production and engagement.
- The public sector remains the most important source of financing for large-scale implementation of nature-based solutions in the fast follower cities. There is a preference by the cities to use EU and national funding programmes as this is where their internal expertise lies.
- There is evidence of growing innovation among the fast-follower cities in finding ways to co-fund and co-govern, in particular of the stewardship phase of NbS. The stewardship phase is where many municipalities struggle to find ongoing funding for municipal budgets. As NbS become more present in cities, these co-funding and co-governance approaches should be mainstreamed and grown from small scale interventions to larger scale projects.
- As is evidenced from both Sarajevo and Malaga, the communities in which the NbS are to be implemented are marginalised, may have a distrust of public authorities and the concept of co-creation is nascent, the pilot model is an important mechanism to build trust and demonstrate “proof of concept” in a way that is non-threatening and is of a scale



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- sufficient to show how nature in public spaces can provide multiple community benefits.
- Further integration and cooperation between municipal departments is needed in the planning and delivery of NbS. Successful delivery of NbS requires the cooperation of several different departments ranging from environment, enterprise, and finance/economics to health, education and transport. NbS are not the sole responsibility of one department who can struggle to be effectively heard when decisions need to be taken. Certainly steps have been taken in some of the fast follower cities to liaise with multiple departments like in A Coruna and having external agencies that can negotiate or cooperate with city municipalities (SERDA, ANEL, ProMalaga) has reaped benefits too.
 - The establishment of a common language for working cross-departmentally and with various stakeholders is a significant step in addressing the challenge of (a) communication and awareness related to the concept of NBS (and also NBE), and (b) meaningful co-production and engagement. By allowing for a sense of shared understanding across various stakeholders with respect to the aims, objectives of NBS, an agreed upon terms of reference creates the potential to better frame how stakeholders work together to achieve desired objectives and goals.

2.0 Executive Summary

2.1 Objectives of report

The objectives of this report are firstly, to summarise the progress and results of the fast follower cities (A Coruna (ES), Burgas (BR), Ioannina (GR), Malaga (ES), Nicosia (CY), Pavlos Melas (GR) and Sarajevo (BiH)) of the Connecting Nature project in securing funding for NbS implementation and secondly, to summarise the contribution of Open Innovation Teams in implementing NbS as part of the Connecting Nature Framework process on the large scale implementation of nature-based solutions. Building on the concepts developed and tested with front runner cities, each fast follower city has implemented the Business Model Canvas for Nature-based Solutions and established Open Innovation Teams to implement the NbS in each city.

2.2 Summary of main results

The main results from the fast follower cities can be summarised as follows:

- Six cities (A Coruna, Ioannina, Malaga, Nicosia, Pavlos Melas and Sarajevo) have successfully secured funding in excess of €46.82m for the Connecting Nature NbS exemplar in their city (A Coruna, Malaga and Sarajevo - networks of smaller interventions €278k, Ioannina, Pavlos Melas and Nicosia have secured €46.8m for large scale projects)
- The remaining city of Burgas has secured commitment to funding of their NbS exemplar through its inclusion in the city's development Strategy 2021 - 2027.
- The public sector remains an important source of financing for large-scale deployment of nature-based solutions at city, regional, national and European level.
- The lack of knowledge, culture and experience of collaboration between public sector organisations and non-public sector organisations is a major roadblock to hybrid or blended financing of nature-based solutions in fast-follower cities.
- Nature-based solutions remain a relatively new and complex concept for many cities so public financing to demonstrate proof of concept remains important.
- High level political and public administration support is a key success factor in ensuring long-term sustainable financing for nature-based solutions.
- Responsibility for nature-based solutions is best placed in city council departments with a clearly defined horizontal remit, ideally reporting directly to the Mayor or head of public administration.
- There is more openness in fast-follower cities to explore options for co-financing of the



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 stewardship phase of NbS than other phases.

2.3 Short conclusion

The public sector remains the most important source of financing for large-scale implementation of nature-based solutions in the fast follower cities. Levels of innovation are low and the over reliance on public funds for all phases of implementation and stewardship continues. The development of long-term sustainable business models based on co-governance and co-financing should be prioritised.

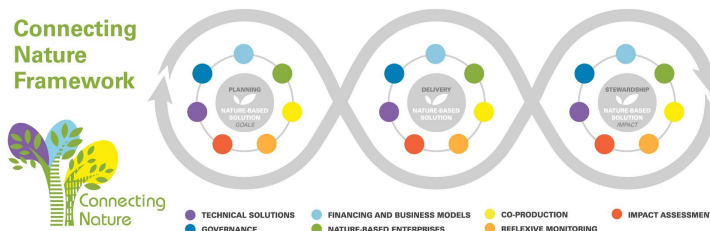
External finance as a source of funding NbS is not widely used and there is a preference for EU and national funding programmes as this is where internal expertise lies in city municipalities.

Further integration and cooperation between municipal departments is needed in the planning and delivery of NbS. Successful delivery of NbS requires the cooperation of several different departments ranging from environment, enterprise, and finance/economics to health, education and transport. NbS cannot be positioned as the sole responsibility of one department who can struggle to be effectively heard when decisions need to be taken. Steps have been taken in some of the fast follower cities to liaise with multiple departments like in A Coruna. Working with external agencies that can negotiate or cooperate with city municipalities (SERDA, ANEL, ProMalaga) has benefits too. However departments with multifunctional remit who have a direct line to the Mayor or top decision makers are best placed to manage NbS.

3.0 Introduction

3.1 Scope of this report

The Connecting Nature Framework was created as a process tool to help cities and other organisations navigate the path towards implementation of Nature based Solutions on a large scale: The Framework identifies three distinct phases of development for a nature-based solution: planning, delivery and stewardship. Throughout each phase there are seven separate elements that cities and other entities need to consider when shaping their individual nature-based solution: technical solutions, governance, impact assessment, finance, entrepreneurship, co-production and reflexive monitoring. Cities can choose to start with any element of the Framework process and consider the others in the order that suits their context. What emerges from the Framework process is a comprehensive 360° overview of each stage of development of the nature-based solution.



Tasks 4.2 and 4.3 on securing funding, organisational support and resources for the implementation of the NbS exemplar can be linked directly to the Connecting Nature Framework elements on Financing and Business Models and Governance and Co Production.

City Societal Challenges and NBS Exemplar

Table 1 below provides a short description of the societal challenge being addressed in each city and



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how the NBS exemplar addresses these challenges. A short description of the methodology employed in terms of financing and organisational resources is then provided.

Table 1: Description of nature-based solution exemplars to be funded and implemented in each of the fast-follower cities (Source: Fast follower city draft framework reports 2021)

A Coruña

Societal challenge addressed: A Coruña is an extremely compact city: surrounded by the ocean and is densely populated which has resulted in a scarcity of open green areas, poor biodiversity and a high rate of soil sealing in the city centre, which in turn leads to heat stress and surface water flowing episodes. Nowadays, the city population is declining as citizens move to the less densely populated metropolitan area. This contributes to an excessive dependence on private transport, creating important traffic problems and lowering the air quality. The use of NBS solutions, as opposed to grey infrastructures, can help the city mitigate climate change effects, improve air quality, reduce surface water flowing and boost biodiversity, while at the same time offering new opportunities for leisure activities, outdoor recreation or food growing.

A Coruna NbS exemplar is to create a network of urban gardens connecting different initiatives across the city. The network will be expanded to include new community gardens, enlarge existing gardens and to pilot a model to create a network of school gardens in the city. The NBS exemplar is expected to contribute to: increased biodiversity and ecology; a sustainable public space offering healthy recreational opportunities for people; increase social cohesion and community engagement, boost resilience against climate change and promote sustainable consumption.

Burgas:

Societal challenge addressed: The Park of St Trinity is located in the heart of the city, beside densely populated residential areas (30,000 inhabitants) living in high rise apartments with no green spaces, next to the city bus station, sports centre and the city hospital. Largely neglected since the 1950's, and with access made more difficult by 2 main city roads contributing to reductions in air quality.

Burgas NBS exemplar: restore the park with improved pedestrian access in a way that protects biodiversity and provides social, economic and environmental opportunities and provides a vital green lung into this densely populated part of the city.

Ioannina

Societal challenge addressed: To reconnect city citizens with the locally known "Living Room of Ioannina", the largest green urban space in the city that provided social and cultural activities and access to nature for city residents prior to its abandonment and decay.

Ioannina NbS exemplar is the restoration of Pirsinela Park, It is the largest area of existing greenspace (almost 250.000 m²) with a forest and several decaying built infrastructures. Ioannina Municipality intends to make the park more accessible, revive its cultural and social uses, while doing so in an environmentally friendly and sustainable manner, preserving local biodiversity and developing on-site economic activity with local tourism and sustainable production activities.

Malaga

Societal challenge addressed: Lagunillas is one of the oldest neighbourhoods in Malaga close to the historic city centre with an ageing population. It has largely avoided any regeneration but this has resulted in many vacant and derelict sites - almost 20% of the buildings. The elderly population is resistant to change fearing gentrification. There is very little green space in the neighbourhood, no shade and recreational space for families living there.

Malaga NbS exemplar is to regenerate this area of the city of Malaga - introduce NbS such as pocket parks, green spaces and green corridors in a way that provide that provide social,

environmental and economic benefits to the region. Given the resistance to change the first stage is the creation of an urban garden in the area to act as a stimulus for the local community to see the possibilities which should lead to the creation of a network of pocket parks and green corridors connecting the pocket parks with the larger green areas around the University and the city center area. This garden should provide social benefits like a certain level of physical activity, will help elderly people fight loneliness and will act as a meeting point for local associations. If the pilot works it will help the further development of pocket parks or the application of other NbS solutions that could slow down gentrification, one of the biggest societal challenges in a neighbourhood where a large part of the population is either retired or has a low income.

Nicosia Societal challenge addressed: The urban quality in the city of Nicosia is deeply marked by the division of the island of Cyprus and faces at least two related challenges: (i) the performance of its mobility system, which is heavily biased towards the use of individual cars, and (ii) the lack of adequate and environmentally rich public spaces in the proximity of the densely built urban core.

Nicosia NbS exemplar is to create, on a district level, an urban network of linked Open and Green spaces with the National Forest Park of Athalassa as the core and linking this with up to 8 large green spaces managed by the Municipalities of the city. The parks and green spaces will eventually be connected by an integrated bicycle and pedestrian network. The identification of a large number of small unused open spaces throughout the city has led to the creation of an 'Adopt a Park' Initiative targeted at encouraging large corporations to engage with nature-based enterprises to design, implement and manage small scale pocket parks. This multi-stage exemplar will contribute towards improved health and wellbeing, encourage more use of alternative forms of transport in turn leading to improved air quality and quality of life for city residents.

Pavlos Melas Societal challenge addressed: Pavlos Melas is a suburb of Thessaloniki, Greece's second city. Quite built up, with a poor infrastructure (roads, footpaths in disrepair), socio economic challenges in terms of employment opportunities, ageing population and lack of accessible green space

Pavlos Melas NbS exemplar is the transition of a former military camp in the city center into a Metropolitan Park. Largely abandoned since 2006, nowadays it represents an 'Urban Gap' contributing to the deprivation of the area. The area corresponds to 332.104 m² and comprises 63 buildings of 24.000 m². To reverse the situation, the Municipality is embarking on the restoration of the park across a number of phases. Phase 1 will concentrate on the restoration of the Parks green spaces with Phase 2 restoration, the sustainable reuse of the many buildings. The restoration of the green spaces will provide a much needed social and cultural outlet for the citizens leading to improved social cohesion, health and wellbeing.

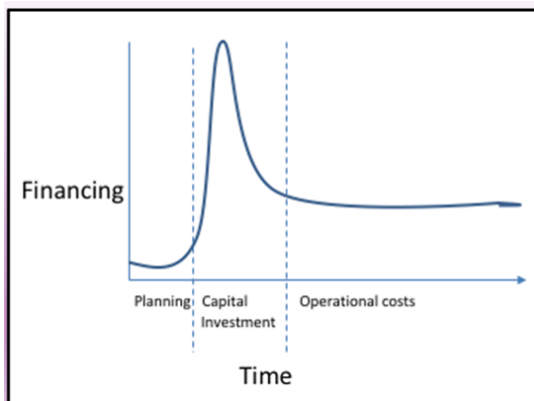
Sarajevo Societal challenge addressed: The lack of green areas in the city of Sarajevo can be directly attributed to the destruction of the city during the war (1992-1995) which obliterated green areas and forests that have never been restored. This coupled with poor air pollution (contributory factors being central heating systems and traffic volumes,), a rebuilding programme which prioritized housing and business without respecting urban planning has created further challenges such as lack of wind, high levels of smog and fog in winter period with high level of pollution. The COVID -19 pandemic reinforced the importance of public spaces with multiple purposes for all city inhabitants regardless of age and need to have multifunctional public green spaces for various activities (picnics, physical activity, play etc).

Sarajevo NbS exemplar is the creation of an urban garden and sensory park with multifunctional purposes, open to all citizens, and adjusted to special target groups. The need for multifunctional spaces became apparent during the COVID pandemic The exemplar is sited within the Secondary Vocational Education and Training School where there are other user groups nearby: elementary

school with children with disabilities, centre for healthy ageing, municipality, shops, kindergarten, elementary school etc. This surrounding is important for the purpose of the exemplar and main activities (urban gardening day, intergenerational exchange etc). It is hoped that locating the garden in the educational establishment should help create a model that can be replicated throughout the city.

3.2 Methodology

Financing of NbS



Connecting Nature research identified three major phases of financing nature-based solutions. These phases may reoccur multiple times over the lifetime of a nature-based solution. The three phases are:

1. Financing the planning of nature-based solutions.
2. Financing capital investment in nature-based solutions:
3. Financing ongoing operational costs

The Connecting Nature Guidebook on Financing and Business Models recommends 4 steps in securing finance for all 3 phases of nature-based solutions:

- Step 1: Securing a solid support base for nature-based solutions
- Step 2: Planning sustainable business models and financing for nature-based solutions
- Step 3: Secure Funding
- Step 4: Measuring impact and return-on-investment

Step 1 where each city aligned nature-based solutions with city visions, strategies, planning policies and programmes in order to secure political support took place in a series of workshops run by Osmos in late 2018 using the Connecting Nature Governance Guidebook as the reference tool.

Business Model Canvas Workshops

Following on from these initial visits by Osmos, Horizon Nua in turn visited each fast follower city to kick start Steps 2 and 3 above on the path to secure sustainable financing and business models for NbS. Research has shown that too often there is a focus on financing the capital investment costs of nature-based solutions and not enough consideration goes into planning long-term sustainable business models to secure a return on investment. Connecting Nature, has customised the well-known business model canvas tool specifically to help plan the business models for nature-based solutions. These resources were co-developed and tested by Trinity College Dublin with the frontrunner cities in 2018 and 2019 and were used as the workshop resource in each of the fast follower cities (see [BMC Guidebook](#))



The fast follower city workshops were delivered between June 2019 and February 2020 involving core Connecting Nature team members responsible for driving the NbS exemplar project and in some instances other stakeholders - such as members of the Green Environment Team in Burgas, NbS Cluster

members in Malaga (community development organisation Rizoma, NBE and Connecting Nature partner BioAzul, and NGO IUCN), and city of Sarajevo officials along with the SERDA team members in Sarajevo.

Before each workshop, a site visit to NbS exemplar took place where the vision for the NbS and societal challenges were discussed and assessed

Following the site visit, the group returned to work on the Business Model Canvas for the NbS exemplar looking at each of the following areas and considering each element of the canvas from an economic, environmental and social perspective. Following the exercise, each team had a solid framework from which to identify the actions required to develop the business model for the individual exemplar.



Reflexive Monitoring Calls

Having completed the workshops with each city, Horizon Nua and TCD have run a series of follow up reflexive monitoring sessions to track progress in relation to identifying financing and governance structures for their exemplar and agreeing key actions at each stage of the process. In these sessions road blocks are identified and actions to circumvent or deal with these are agreed. The framework sections on finance and entrepreneurship are reviewed to be updated after the call. Calls are recorded and the notes are shared with the city. These calls also cover the progress on the development of the city's nature-based entrepreneurship strategy (Task 6.3). These sessions are quite informal and run independently of the more formal reflexive monitoring sessions that the cities participate in with DRIFT and TCD (Task 4.5) Each city has had 5 - 7 calls between October 2019 and September 2021.

Peer to Peer Learning

As part of the peer to peer learning that has been developed within the project, fast follower cities have grasped the opportunity to learn from the front runner cities and from each other on innovative financing routes that cities have identified to fund their exemplars. A series of smaller group calls have been facilitated by TCD and Horizon Nua whereby the experience of cities is shared. Examples include a session in August 2021 on corporate sponsorship of NBS where front city Poznan and fast follower city Nicosia have shared their experiences and plans to engage the private sector in the funding of the NbS with A Coruna.

The outputs of the Business Model Canvas workshop and reflexive monitoring calls that followed with each city are reflected in the tables below. The completed Business Model Canvas formed the basis for cities to frame their finance and business models section of their Framework reports. As each call progressed over the intervening 2 years each city's progress was tracked on securing funding for capital development and stewardship costs. New models and proposals for governance were shared as well as challenges and roadblocks that occurred along the way (e.g COVID delays and impact on city budgets; delays in tendering etc) Interventions and workarounds to securing alternative funding where possible were identified and often times suggestions shared on other cities solutions that could be replicated or modified were tabled. Each city updated their action plan regularly following these calls

4.Funding Mechanisms

4.1 Summary table on status of financing

City	A Coruna - An Urban Garden Network	Burgas - Restoration of St Trinity Park	Ioannina - Restoration of Persinela Park
Capital financing required for NBS exemplar	Establishment of a New Urban Garden €300k Pilot project for schools gardens €60k	Estimate of €2m included in city development plan	10M €
Capital financing applications submitted/secured	Participatory Budgets €50k EIDUSCoruña €250k (ERDF 80%) Secured: €250k	Exemplar included in the Plan for Integrated Development of Burgas Municipality (2021–2027). Result: Prioritised for funding €1-2m will be applied for once calls open in 2022/23	€10M secured from National Recovery Fund part of the Next Generation EU project Small budget from city €50,000 approx. (minor restoration work) Secured: €10.005m
Unsuccessful capital financing	Regional funds call for an employment workshop to improve the existing gardens (2020)	Project proposal to Bloomberg 2021 Global Mayors Challenge €1m	None
Sources of capital investment 1. City budget (public) 2. Regional / national/ EU /other public sources 3. Private/third sector 4. Financial Institutions	1. €160k including 50K participatory budget 2. €200k (ERDF) 3. / 4. / Total €360k	Funding Plan 1.City Budget ~2% promotion/publicity 2.EU Plan for Integrated Development of Burgas Municipality~80-85% 3.Church donations~TBC 4. Low interest loans~10-15%. Mix of EU funds, private banks, and EIB or EBRD	1. 50k 2. 10M € 3. / 4. / Total €10.005m

City	A Coruna - An Urban Garden Network	Burgas - Restoration of St Trinity Park	Ioannina - Restoration of Persinela Park
<p>New financing partnerships:</p> <ul style="list-style-type: none"> • Capital • Stewardship 	<p>Capital: Collaboration between Environment, Employment and Education departments</p> <p>Stewardship: education dept. to take responsibility for stewardship of school gardens.</p>	<p>Capital: ERDF matched with low interest loans</p> <p>Efforts underway to attract the private sector (Church) located in the grounds of the park to support the park's renovation as a direct beneficiary of the restoration works.</p> <p>Stewardship: Public private cooperation on stewardship and management of the park by developing NBE initiatives in the park. Discussions and planning ongoing</p>	<p>Capital: no new partnerships- reliance on public funds</p> <p>Stewardship: Public Sector alternative models to be explored - income from leasing out buildings; Cultural events and activities - will rent out theatre</p>
<p>Key innovations</p>	<p>- New model of collaboration between different departments (breaking silos)</p> <p>- New gardeners association to take some responsibilities for stewardship phase of the community gardens</p> <p>Public private funding partnerships are being explored for school gardens programme - very early stages to be developed in 2022</p>	<p>New collaborative model for the stewardship phase.</p> <p>There may yet be scope for private sector involvement in the capital phase as businesses are located in the park -co-financing of capital costs being explored</p>	<p>Public private cooperation in terms of generating income in stewardship phase</p>

City	Malaga Step 1 - La Yuca Garden, Lagunillas	Malaga Step 2- Lagunillas development of pocket parks and neighbourhood green corridors	Pavlos Melas - Restoration of Former Military Camp
Capital financing required for NBS exemplar	€17,500 (pilot)	<p>Capital financing to be determined pending resolution of legal issues around ownership and availability of derelict plots</p> <p>Economic regeneration plan for Lagunillas under preparation €327,286</p>	€ 64.8m - this is the total budget and funds will be applied for and secured across a number of years and phases
Capital financing applications submitted/secured	<p>Grant received in the framework of the call for International Urban Cooperation</p> <p>Secured: €17,500</p>	To be determined	<p>€19.9m Regional Operational Programme Central Macedonia (2018 secured)</p> <p>€ 2.5m Operational Programme "Competitiveness, Entrepreneurship and Innovation" (EPAnEK) - (2019 secured)</p> <p>€1.5m Public Investment Program (2020 secured)</p> <p>€4.4m Antonis Tritsis Development Programme for Local Government-Partnership (2021 secured)</p> <p>Total: € 28.3m submitted € 28.3m secured to date</p>

Unsuccessful capital financing	Not applicable	Not applicable	UIA-INCLUSIVE Parks (2019) €1.48m
Sources of capital investment 1.City budget (public) 2.Regional / national/ EU /other public sources 3.Private/third sector 4.Financial Institutions	1. City Hall €17,500 Total: €17,500	Regeneration Plan combination of 1 and 2. Capital funding it is expected to come from a combination of sources including city and regional government funds, and EU sources Later funding may come from PPP arrangements	1. € 2.2m - municipality 2. € 28.3m 3. / 4. / Total: € 26.1m
City	Malaga Step 1 - La Yuca Garden Lagunillas	Malaga Step 2- Lagunillas development of pocket parks and neighbourhood green corridors	Pavlos Melas - Restoration of Former Military Camp
New financing partnerships: <ul style="list-style-type: none"> • Capital • Stewardship 	Capital: 100% public. No new innovation Stewardship:transition from public management to private stewardship. La Yuca is to be managed by 2 community associations, ASPA and Fantasía Association in Lagunillas.	Capital: To be determined Stewardship: The Yuca exemplar is expected to stimulate interest among the community to develop more urban gardens. It is planned that community groups will lead on the stewardship of the new gardens. The NbS Cluster to be located in Lagunillas will also have an active role in liaising with the local community and supporting stewardship of the new urban green areas	Capital: Public sector, EU funds, Municipal Own contribution New structure collaboration between municipality and association of municipalities - structure for financial management of project + technical support Stewardship: Municipal financing of ongoing stewardship costs
Key innovations	Development of a new model of governance, co-production and co-creation.Public funding and private stewardship.	Bottom up approach to co-production of these new gardens; Transition from a public private model of governance and stewardship	New structural collaboration between municipality and association of municipalities to create a cooperative structure for financial management of

			project + technical support. Pavlos Melas Park is the first of this type of interagency cooperation which extends to co-governance during the implementation phase but no ongoing commitment yet secured for stewardship phase
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City	Nicosia (Green Network)	Nicosia (Pocket Parks)	Sarajevo
Capital financing required for NBS exemplar	€17 M approx	€10-15k per park (200 parks) 50 parks to be targeted in Round 1	Initial phase: 25.000€ (pilot)
Capital financing applications submitted/secured	Urban Park of Pallourokampos : €4.000.000 Saint George Linear Park: €500.000 Lourka Forest Park: €1.500.000 Linear Park of Yialias: €2.250.000 Kakkarista Park: €250.000 €8.5m funding secured for 5 of the 8 parks The funds for the remaining 3 parks are included in the Municipal Budgets but are still awaiting approval (Jan 22 update)	Issuing a call for local businesses for Corporate Social Responsibility (CSR) investment to fund the capital developments. Each municipality has initiated its own call for proposals (end 21) and the first park has been adopted in the Strovolos Municipality by FML Ship Management Ltd	5.000 € City of Sarajevo - secured 2.500 € SERDA (engagement of the architect for the design of the exemplar) - secured 3.000€ (project budget)- secured 17.000€ (Czech Embassy) submitted 8.000€ (Czech Embassy) submitted 16.000€ (Slovak Embassy) submitted 2.000€ UNDP (through re-imagine my street project) €€€€ Municipality of Novo Sarajevo– submission being prepared Total €53,500 submitted €10,500 secured
Unsuccessful capital financing	Not applicable	Not applicable	Not applicable

City	Nicosia Green Network	Nicosia (Pocket Parks)	Sarajevo
<p>Sources of capital investment</p> <ol style="list-style-type: none"> 1.City budget (public) 2.Regional / national/ EU /other public sources 3.Private/third sector 4.Financial Institutions 	<p>ERDF co-financing and the Governmental contribution. However the exact percentage of each co-financing side has not yet been decided.</p> <p>Awaiting the relevant decision from the Council of Ministers. (Jan 2022)</p>	<p>3 & 4 are the target</p>	<ol style="list-style-type: none"> 1. City of Sarajevo, SERDA 2. CN budget, UNDP
<p>New financing partnerships:</p> <ul style="list-style-type: none"> ● Capital ● Stewardship 	<p>Capital: A new Public/private collaboration between a private school,Strovolos Municipality and the Ministry of Health for the redevelopment of Ayios Dimitris Park - one of the 8 parks in the network. COVID delaying progress</p> <p>Stewardship: Talks still underway re ongoing PPP co- operations with regards to Ayios Dimitris Park</p>	<p>Capital: Privately led financing</p> <p>Stewardship: Private firms and municipalities will collaboratively oversee the maintenance of the pocket parks.</p>	<p>Capital: Partnership of multiple actors,</p> <p>Stewardship: Exemplar maintenance and management by Municipality/School</p>
<p>Key innovations</p>	<p>PPP collaboration is a first for funding and stewardship of public parks in Nicosia and could lead to a new model of cooperation in the future</p>	<p>Using CSR to mobilise and fund NBS</p>	<p>Co-production process between public, NGO and private sector (embassies) in terms of identifying financing</p>

4.2 Innovations in financing and governance in the fast follower cities

Table 3 above summarises the progress made in each city in securing financing for their NbS exemplars. What is evident from the ongoing calls with each city over the last 18-24 months is that cities had to tackle several challenges when it came to identifying and securing funding for their exemplar. A table summarising the main challenges and enablers towards securing financing are presented below followed by a summary of key innovations identified in each city linked to securing capital financing, the stewardship of the NbS and new innovations in governance. The summary also provides more context in terms of addressing the challenges faced and identifying enablers that have facilitated the NbS exemplar delivery.

Challenge	Impact	Cities affected
COVID-19	<ul style="list-style-type: none"> Public budgets cut Remote working and consequent delays in decision making Restricted access to public / private spaces delaying works 	<ul style="list-style-type: none"> Malaga - all municipal budgets cut, no funding available for any “non-essential” works A Coruna - no public funds for school gardens project Malaga, Nicosia, Pavlos Melas, Ioannina: leading to general delays in project development and funding decisions A Coruna (no access to schools to develop or maintain school and community gardens)
Hierarchical structure of local government	<ul style="list-style-type: none"> Identification of plot ownership (private ownership and municipal ownership) and consequent legal issues NbS delivery required cooperation and alignment of priorities between several city municipalities adding complexity and delays Mistrust between public and private sectors affecting PPP collaborations Short electoral cycles Lack of coordination between Departments 	<ul style="list-style-type: none"> Malaga - led to delays in releasing plots in Lagunillas Sarajevo - multiple layers of local government Nicosia - 8 separate municipalities Ioannina- this appears to be historical and change is slow in coming Ioannina - Plans and priorities for development change regularly depending who is in power and with one eye always on the next election A Coruna, Ioannina, Malaga - leads to delays, lack of understanding and alignment of priorities
Community resistance to change	<ul style="list-style-type: none"> Fear of gentrification among neighbourhood communities (in particular the elderly) Expectation that the Municipality is responsible for the delivery and upkeep of public spaces and citizens don't see themselves as having a role in this process 	<ul style="list-style-type: none"> Malaga Burgas

Enablers	Impact	Cities affected
High level political support	Leads to green-lighting of certain projects	Ioannina - explicit Mayoral support for Persinila Park exemplar
Pilot projects	Builds up trust in communities and shows proof of concept and possibilities for replication	Malaga - pilot will be critical to build trust among the ageing population in the community Sarajevo - the pilot will be critical in terms of building community collaboration incorporating intergenerational activities and actions for people with disabilities. Again, proof of concept is vital for expanding this NbS model across the city and attracting private funding.
COVID-19	A renewed emphasis on supporting nature-based and green projects in the private sector - CSR green strategies	A Coruna, Nicosia, Malaga all working towards developing public-private partnerships and using private financing to deliver NbS

Innovation potential in funding and stewardship in each fast follower city

A Coruna:

Community gardens: The capital funding of NbS in particular the new urban garden in Adolfo Suarez Park, has been funded with a combination of ERDF and using participatory budgets as voted for by citizens of A Coruna. The city has identified that NbS-related projects are usually among the most voted initiatives every year.

Stewardship costs: The new community garden association "De Leria na Leira" which manages 3 of the urban gardens has introduced a membership fee (€12 annually). Some of the revenue raised has been used to update the common tools in the three urban gardens. Although small, this is a new revenue stream going directly to maintaining the gardens that previously relied on municipal funds.

School gardens: €60k funding for the pilot project of 5 school gardens was secured from Municipal budgets and remains the only source of funding to date. The Department of Education is keen to see the educational elements adopted into the curriculum and is open to co-funding this initiative to sustain the existing gardens and expand the network. However, COVID-19 has impacted heavily on their budgets and right now there is no funding available for new projects. The Connecting Nature team is devising a plan to approach the *private sector to fund / co-fund both the school garden capital and stewardship phases in an on-going collaboration*. There is a history of funding once off capital costs for school projects but a more long term CSR strategy approach is being developed by the A Coruna Connecting Nature team .

This initiative has the express political support of Environment Councillor Ester Fontan who has led preliminary meetings with private companies such as Repsol (energy company) and La Voz de Galicia (main newspaper in the region) during the recent Environment week in the city.

A Coruna City Council has been engaged in peer to peer learning and knowledge exchange with Poznan and Nicosia around the development of a CSR strategy to support community projects.

Innovation Potential: High 🚦 - *new avenues for stewardship funding in particular are being*

explored using community and private sector funds

Governance


The urban gardens have been traditionally managed by the City Council. Recognising that urban gardens promote community building and contribute to the generation of more active citizens with increased ownership feelings towards public spaces, the city council has organized capacity-building workshops on group facilitation with the intention of forming self-managed groups among the plot holders and gardeners. These workshops have resulted in the formation of a new association "De Leria na Leira" to take on the management and running of the urban gardens. A transition of responsibilities will gradually transfer from the city council to the new association. This is being phased in with the support of a staff resource in the city council. A regulatory change has enabled the association to raise funds independently from both private and public sectors.

Innovation Potential: High 

Burgas: Saint Trinity Park is included in the Plan for Development of Burgas Municipality 2014-2021, which ensures that it is among the priority sites of the city and will be funded in the coming years. The sites included in the plan will be financed by the European Regional Development Fund (ERDF) through the Regional Development Program 2021-2027, Priority 1 Integrated Urban Development, **bank loans** and own funds of the municipality. This is the traditional approach that the local administration applies (use of a combination of financing resources- European funds, low interest loans and own financing) in the implementation of its investment program.

In 2014, a dedicated financial instrument was introduced to support beneficiaries in the implementation of their city development projects financed by Operational Regional Development Programme 2014-2021. The main beneficiaries of this instrument are Bulgaria's municipalities. The purpose of the instrument is to support co-financing of ERDF funds with low interest loans. Burgas was eligible for financing through Sustainable Cities Fund, Urban Development Fund - South (<https://www.citiesfund.bg/en/>). The budget of the fund is formed by a mix of OPRD 2014-2021, EIB and private banks.

This type of financing will remain for the new financing period (2021-2027) as the tendency is for the grants to get lower and the % of loans to increase, as a way to encourage the implementation of financially sustainable projects.

Innovation Potential: Medium  - *Although Burgas continues to rely on traditional paths of financing for their NbS projects, they are the only city in Connecting Nature to use low interest bank loans alongside ERDF funds to implement investment projects.*

Private Sector Financing: Burgas is exploring a number of private sector financing options to co-fund the restoration of St Teresa's Park. Located right in the centre of the park is the Church of St Teresa. The church and its congregation will benefit greatly from the overall restoration of the park and the enhanced facilities. Burgas Municipality believes that there is good reason to invite the Church to provide some private funds towards the restoration works - particularly for the works immediately around the Church site which is currently dominated by overgrown woodland and trees needing restorative interventions. The walkways in particular could be restored using nature-based interventions. Other sources of private financing that will if successful contribute

towards the longer term upkeep and stewardship if the park include plans to develop a co-working hub similar although on a smaller scale to a co-working space in the US called [Second Home](#). Among the features are an outdoor campus - alfresco working areas with WiFi, and garden offices where the air is continuously recycled. Preliminary discussions have commenced with potential partners on the funding of this element of the overall design of the park. Rental income will go towards stewardship costs in the future.

Stewardship:

Finally, Burgas Municipality has drawn up plans that certain areas of the park will host nature-based enterprises - landscape gardeners, green roof and wall solutions; smart tech and urban agriculture being examples of potential businesses. Each nature-based enterprise will be responsible for the maintenance and management of the site where they are located thereby reducing maintenance costs for the Municipality while providing direct business opportunities for enterprises located in the park to visitors and passers by. While these plans while still at a nascent stage they represent a significant departure for Burgas municipality in that they will be a first for public private financing of NbS in the city.

Innovation Potential: Medium 🚦

Ioannina: The NbS restoration of Persinilla Park is to be funded entirely from the public purse. €10 m has been secured through the National Recovery Fund. The hierarchical structure of local government coupled with a short electoral cycle makes public private partnerships a risky undertaking for the private investor where they could be left exposed if incoming Mayor's priorities differ from the previous incumbent. There is little evidence of public private collaborations when it comes to capital development projects in Ioannian and even in Greece. In this instance in Ioannina, the current Mayor has pledged his support for the restoration of Persinilla Park and has been instrumental in approving the funding secured for its restoration.

Innovation Potential: Low 🚦

Stewardship: As referenced above, public private collaboration is virtually non-existent and private investors are loath to get involved in capital development projects. However, when it comes to the ongoing stewardship of the nature-based solution and the facilities that will be delivered in the park, the city is more hopeful that private investment will be forthcoming. The park infrastructure will be developed so that restaurant / cafe, sports facilities, social and cultural and eco tourism amenities etc will be offered in the park. This provides an opportunity for private enterprises to take a stake in the park and establish businesses. The Municipality is planning that rental income/ license fees etc that will accrue from these arrangements will be ring fenced for park upkeep.

Innovation Potential: Medium 🚦

Malaga: Public finances in Malaga were badly hit by the COVID-19 pandemic. City budgets were frozen and in many cases diverted into employment subsidies, health care etc as the city struggled to deal with the pandemic and the economy which relies so heavily on tourism shut down.

Recovery will take time and it has been exceptionally difficult for Connecting Nature partner ProMalaga to make headway into securing a capital investment budget for the redevelopment of the Lagunillas neighbourhood. This coupled with difficulties in the city council over identification of title and ownership of the derelict and vacant plots in the neighbourhood and a reluctance for change among the elderly community who fear gentrification has forced a rethink of the strategic approach to developing the network of urban gardens and green corridors in Lagunillas.

It is hoped that the development of the Yuca urban garden as a pilot project, combined with an economic regeneration plan for the region will stimulate interest and prove a catalyst in convincing the community of the benefits of replicating urban gardens and pocket parks throughout the neighbourhood to provide shade, recreational and community amenities.

In terms of funding secured by November 2021

€17,500 has been secured from the City for the Yuca Pilot garden .

Wider capital development proposals are on hold pending the resolution of title of the plots and how many will become available.

Innovation Potential : Low 🚦

Malaga: NbS Cluster

Interestingly the creation of an NbS cluster in Malaga in 2018 represents several opportunities to build awareness of and deliver on NbS in the Malaga region thus supporting the city's strategic goal of generating green jobs and looking to create viable employment alternatives to tourism. The cluster is supported by Promalaga (City's economic development agency), IUCN Meda Region, the University of Malaga and BioAzul (NBE and Connecting Nature partner) Prioritising this strategy now as the city recovers from COVID-19 and seeks to build back better creates opportunities to develop Malaga as a leading centre in growing a new nature-based economy delivering nature-based solutions at neighbourhood, city and regional level. The NbS Cluster mission is to support the growth of NBE's, promote and support the implementation and stewardships of NbS by NBE's and to build trust among communities that the expertise in designing, delivering and managing NbS is available locally and can be done in collaboration with local communities.

Innovation Potential: High 🚦 *in terms of governance and the city's economic strategy*

Nicosia's Green Network has secured €8.5m of the €17m in capital funding for 5 of the 8 parks in this NbS exemplar. The remaining parks have been included in the Local Strategic Sustainable Development Plan for which funding has yet to be secured. The most accessible source of funding for urban projects in the Municipalities of Greater Nicosia is and will be EU funding. According to Charis Sotiriou, who is responsible for EU funding at the financial administration of the Central Government, priorities for EU funding in Cyprus will continue to include Environment and Climate-Change Adaptation.

However in the case of Ayios Dimitrios Park an opportunity has been identified that the neighbouring English (private) school and the neighbouring Makarios Children's hospital would cooperate on the redevelopment of the park. This proposal has been suggested by the English school who put forward a plan for redevelopment. Discussions are ongoing being facilitated by ANEL (Connecting Nature partner) and this would mark a first in terms of public private partnership and also with funds from the Health Department contributing towards the park which is used a lot by patients and their families.

Innovation Potential: Medium 🚦

ANEL has together with city municipalities created a highly innovative strategy to develop and fund the 200+ pocket parks that have been earmarked for the many vacant and derelict sites in the city centre. Home to many large multinationals and corporations, ANEL has developed a strategy to target the CSR programmes of these companies to fund the development and maintenance of pocket parks near their offices. The redeveloped pocket parks will be co-designed with local communities and be open to communities and employees alike. The call for the pocket park programme opened in November /Dec 2021. Each Municipality will manage it's own call but all operate to the same guidelines.

Each park is expected to cost in the region of €10-15K and a partnership commitment to maintain the pocket park beyond the initial 1- 2 years is expected for the stewardship phase between the community, corporate business and city. The first Adopt a Park contract was signed at the end of 2021 between the Strovolos Municipality and [FML Ship Management Ltd.](#)

The park's adoption ceremony took place in the presence of the Ambassador of India Madhumita Hazarika Bhagat and a representative of the Minister of Foreign Affairs. The event was honored by the presence of Dr. Michalis Ieridis of CYMEPA, the principal and students of the Falcon School that is right next to the park and representatives of the residents of the neighborhood.

Innovation Potential: High 🚦

Pavlos Melas: The redevelopment of the former Military Camp in Pavlos Melas to a public park with multiple amenities on site is a multiphase project costing in excess of €64.8m. Phase One can be considered the NbS element - the redevelopment and restoration of the Park's green spaces for which a budget of €19.9 million was secured through the Regional Operational Programme Central Macedonia in 2018. Following completion of the development plan, the tender was issued in 2021. COVID halted much work in 2020 it was awarded in the latter half of 2021 and work is expected to commence in 2022.

Pavlos Municipality has continued to secure public funding for the redevelopment of the many buildings on the site for conversion into sports facilities, education, enterprise and cultural amenities.

Innovation Potential: Low 🚦 *due to reliance on public funds a source of capital financing*

Pavlos Melas: Governance

Given the scale of this project, the fact that it will serve not just the citizens of the Municipality of Pavlos Melas but the entire city of Thessaloniki, cooperation between the Municipality and the Municipalities Association in the area has been strengthened to the point of establishment of a new structural model involving all the Municipalities to manage the financing of the park through the different capital funding phases. This new model will lead on the financing and technical support for the park's redevelopment which is the largest infrastructural redesign of a former military campus in Greece.

No agreement has yet been reached on the stewardship phase of the project.

Innovation Potential: Medium 🚦 *due to new collaboration between public bodies on the capital funding*

Sarajevo: Sarajevo faces a number of challenges, not least the complexity of local government structures and a general lack of awareness of NbS. The pandemic highlighted the need for more multifunctional outdoor spaces and in response to this the City of Sarajevo and SERDA have codesigned a NbS exemplar that delivers at multiple levels for the community it serves in terms of integration and replication possibilities.

The team have applied for funding to develop the NbS exemplar from a number of sources and have secured funding from both the city and EU funds to date. Applications are with Embassies and UNDP programmes which are common enough sources of funding in Bosnia and Herzegovina.

While funding from the schools directly are not expected for the capital costs, they will contribute towards the stewardship costs of the exemplar together with the Municipality and this represents a new form of collaboration between the different actors in the city.

Innovation Potential: Medium 🚦

5. Organisational Resourcing

5.1 Overview of Innovation Cluster Workshops

Successful implementation of nature-based solutions requires a contextualised approach. In order to create an organisational nucleus for developing the Connecting Nature framework within the specific context of each city, Task 4.3 involved setting up a local Open Innovation Team in each of the FFCs that would advance the project(s) at the local level¹. For this task, Osmos led a series of workshops with the aim of creating the Open Innovation Team in each city (see Appendix A for an overall workshop structure/programme). The workshops brought together the key people/organisations involved in nature-based solutions in the city in order to facilitate a common understanding in relation to the nature and scope of the envisaged project(s).

For a detailed overview of the workshops themselves, refer to Appendix B which presents a list of reports (links)). The workshops served to both clarify the specific exemplars each city would focus on for their framework reports, as well as provide them with more hands-on experience with specific elements of the framework.

In the next Section, the report will present an overview from the cities, describing the activities and outputs from the Innovation team Workshops. Taking a similar approach to Deliverable 14, the next section seeks to provide a space for the cities themselves to reflect on and share their perspectives with regards to the Innovation Team Workshops. Among others, the cities highlight the following as key outputs of the workshop: contribution to creation of a multi-stakeholder open innovation team; contribution of multiple stakeholders to co-production of exemplar; and engagement of stakeholders

¹ The innovation workshops were part of a series of visits, beginning with Osmos visiting each of the FFCs, (as part of Task 4.1) in order to: (a) to identify the current status of NBS delivery (i.e. in relation to planning, implementation and asset management); and, to begin to identify areas with the greatest capacity (and possible expertise) and those where capacity is lacking (i.e. potential needs and gaps). During their visits, Osmos completed interviews with key experts (representing stakeholders across the penta-helix – society; administration; business; knowledge; and capital) and conducted workshops comprising a project environment canvas and chart of emotion. Following up on these visits, Task 4.2 involved Horizon Nua facilitated BMC workshops with each city as a way to focus in the selected exemplar by looking specifically at the financing and business model for sustainability (stewardship) and identifying which external stakeholders needed to be involved to realise this exemplar. On the basis of these visits, Task 4.3 (establishment of the innovation teams), involved the delivery of workshops (lead by Osmos) to explore and draw together the internal and external stakeholders in each city, with a view to supporting their engagement towards planning, delivery, and stewardship of the exemplar.

in future co-governance structures.

5.2 Innovation Team Workshops: City reflections

5.2.1 A Coruna

For the Connecting Nature Project, The City Council aims to **weave a network of urban gardens** (UG) (connecting the different initiatives that have been running and expanding them) that can **help connect green areas and provide multiple environmental, economic, and social benefits, such as improving biodiversity and resilience against climate change or promoting sustainable, active lifestyles**. In December 2020, a workshop was organised by Osmos in the city of A Coruña to create an innovation cluster in the city, involving all key stakeholders around urban agriculture, including staff from five municipal departments (Environment, Employment, Education, Social Services and Urbanism), schools, NGOs and associations, university, technological centres, gardening enterprises, gardeners, SMEs, etc.

This workshop **allowed the city to identify key profiles for the co-design of the Connecting Nature exemplar**, elaborating a collaborative design of the ideal garden together with the participants, and reflecting on the role that each actor could play. Stakeholders present at the meeting participated in a collaborative exercise of drawing all the desirable features of a garden. While all participants in the workshop engaged in the exercise by proposing or questioning elements of an “ideal” urban garden in the context of A Coruña, the drawing benefited greatly from the knowledge and experience of the instructor of the city’s urban garden training programme.

Guided by OSMOS, the participants drew a **diagram identifying all the relevant stakeholders**, including internal organisations (left side) and external (right side), representing the relationships between them and what each organisation could obtain from the project (in red) and what they could bring (in green).

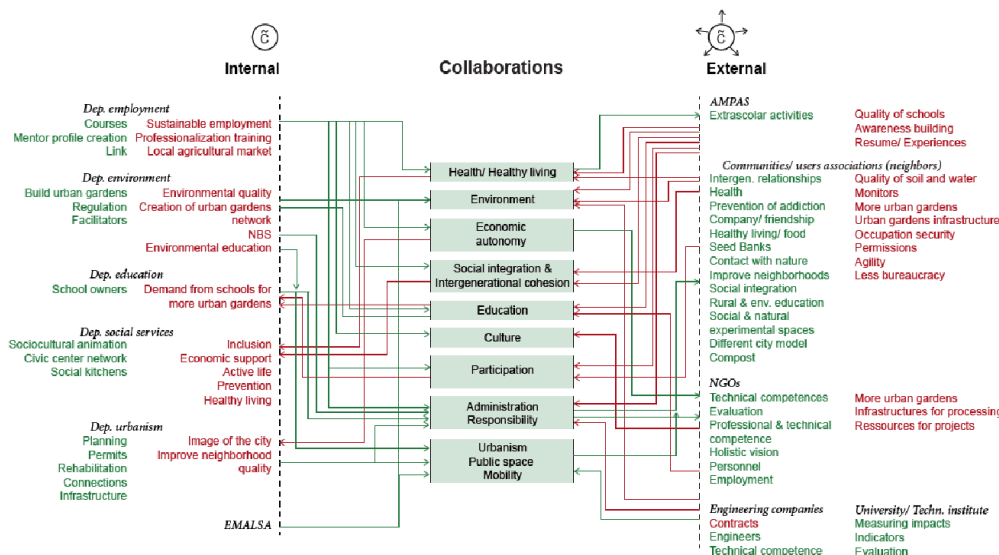


Image 3: Stakeholder Diagram

The workshop was very **useful to map the stakeholders and the relationships between them, to identify possible collaborations** and to get in contact with some strategic partners. The exercise of drawing the ideal garden also helped detect some of the problems that the existing gardens had



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(like the lack of common areas or shaded spaces), which will be avoided in the next gardens to be built, while the existing ones will undergo a renovation to provide them with such spaces.

Main contribution of the workshop/Innovation Team: The workshop helped identify the main stakeholders and establish some valuable connections, internally, especially with the Employment and Education dept., but also externally with different associations and technological centres with whom A Coruna has continued to collaborate with after that first contact. The participation in the workshop **helped engage these partners**, increase their **awareness about the CN Project** and **plant the seed for future collaborations**.

2.2 Burgas

The challenge for the local authority is to find **the right balance between economic development and the protection and enrichment of the city's unique natural and biodiversity**. **This was the reason why Burgas chose Saint Trinity Park as an exemplar within the Connecting Nature project**. The park is a vast green area located in the heart of the city in a highly urbanized area. With its renovation and bringing back its popularity among the population Burgas will make an important step towards:

- the creation of big green area within the city, which is of high quality and safe for its visitors;
- make our city more resilient towards climate changes;
- strengthen the cooperation with citizens and business in realization of significant public projects;
- apply new business models contributing to the financial sustainability of the projects;
- encourage the development and/ or attract nature- based enterprises in Burgas

The innovation team workshop introduced participants to the current status of Saint Trinity Park and some general ideas for its renovation. Through various joint activities and discussions, the participants had to think about and propose appropriate nature- based solutions that can be implemented in the park. Particular attention had to be paid to the effect of the measures proposed by the participants: economic, social and environmental. **The main challenge for the participants was to change their way of thinking and put more imagination and be bolder in their proposals**. Initially, the participants offered traditional solutions related to planting trees, renovation of walkways, and replacing park infrastructure. Gradually, in the course of the work, it was realized that it is not enough just to plant new trees; planting other species such as grasses and shrubs must be taken into account in order to **support the biodiversity in the park**. **Interesting solutions related to the economic feasibility of the investment (from construction to maintenance) were proposed**, such as leasing space to NBEs, creating a shopping area that fits into the overall vision of the park, creating advertising space and others.

The main contribution of the workshop/Innovation Team was that it helped colleagues to be more creative and to take into account the different investment requirements, which are planned to meet the needs of users as much as possible, but also to comply with the protection of the environment and biodiversity, and to take into account the whole life cycle of the project, namely the costs of subsequent maintenance and management.

For the project team, the workshop once again proved **the importance of involving stakeholders from the earliest stage of a project** (initiation phase) and presenting good and reasonable solutions, which will be included in design, implementation and maintenance phase.

2.3 Ioannina



Image 2: Meetings with the Ioannina CN team and stakeholders

The restoration of Pirsinela Park is the project chosen by the Ioannina team as its exemplar in the framework of Connecting Nature Project. Pirsinela Park is the largest green space of the city and the most historic park in the area and as a result the project has a high degree of complexity in its implementation. One of the most important factors in its development is the precise identification of all the involved bodies, stakeholders and users. The contribution and the cooperation that the team of Ioannina had with Osmos through workshops organized in the city was extremely valuable.

During the workshop, different stakeholders involved in the development of the exemplar gathered in order to discuss the project and present their perspective of the key features of it. **These stakeholders represented a variety of agencies and actors in the project, like the Forestry Directorate, the Decentralized Administration of Epirus - Western Macedonia, the Archaeological Agency, the Managing Body of Lake Panvotis, and different Departments of the municipality (Technical Department, Department of Finance, Department of Green Spaces).**

Through an open discussion led by OSMOS, each participant had the opportunity to express their view and provide input in all the stages of the project, e.g., the key design elements of the planning phase of the exemplar, different park management scenarios and financing opportunities during the stewardship phase of it. Furthermore the workshop was **an opportunity for the Ioannina CN team to present the ideas of NBSs and NBEs to various stakeholders in the city**, stakeholders who weren't aware (in most cases) with these concepts.

Key contribution of workshop/Innovation team: The whole open innovation process proved to be a very useful tool in the development of the exemplar, as it **laid the foundations for the successful identification of all stakeholders in the project**, but also **created the conditions for their participation and engagement** in it.

The workshop itself was an opportunity for the Ioannina CN team to **introduce and increase awareness of the ideas and concepts of NBSs and NBEs** to various stakeholders in the city,

2.4 Malaga

Málaga is looking to **incorporate nature-based solutions in small-scale interventions across a neighborhood** (street crossing, publicly owned vacant lots or abandoned buildings, small public spaces). At the time of selection (2019), Lagunillas was the perfect target since the neighborhood had greatest need with regards to revitalization. The area was deteriorated, physically (abandoned buildings, roads, and squares in need of renovation, illegal use of public spaces), socially (high unemployment rates, social exclusion, low schooling levels) and economically (lack of commercial activity). The potential benefits of developing a nature-based solution project were mainly:

- Social: Strengthen the local community, provide access to a wider territory thanks to improved/easier mobility.
- Economic: support the economic development of the neighborhood by building on existing commercial activities and local resources with the possibility of executing several projects in small scale developments
- Environmental: increase ecological integration and connectivity, ensure urban climate comfort during the hot and dry summers, better water management.

The innovation workshop helped Malaga **establish a roadmap towards planning and implementation of the Lagunillas development** and the way to proceed carrying out co-creation workshops and consultative round tables, with neighbors' associations, residents, and businesses. Taking note that the **innovation team has to be made up of people from active organizations willing to collaborate to reach the desired goals**, Malaga was able to determine the key partners, some of the key benefits, elements related to governance, and some of the resources required for the planning phase of the Framework. With respect to this phase of the Framework, the most important aspect was the inclusion of key stakeholders (i.e. people concerned by the developments in Lagunillas like businesses, residents, and associations). Specific to this, the city delivered a series of co-creation workshops in the neighbourhood to foster their engagement in this aspect of the project. That said, Malaga acknowledged that more work was required with respect to financing (i.e. sources of capital, expenditure costs structure).

Key Contribution of Innovation Workshop/Innovation Team: The innovation workshop has been helpful in order to give a full overview of the project by breaking down all the parts and by setting the goals of the future interventions, identifying the stakeholder and other partners to involve them in all the phases of the project. During the workshop participants were able to see how a nature-based perspective on urban space in Lagunillas could improve its urban quality while maintaining a certain stability in the neighbourhood, keeping it predominantly residential, avoiding as much as possible gentrification while improving the quality of life of its residents.

2.5 Nicosia

Nicosia Development Agency aims to create a thriving urban network of high-quality green and open spaces. The core of the park network will be the National Forest Park of Athalassa. The different parks will be linked with each other, but also provide new mobility options to get around in the city, from residential areas to business and commercial districts, and university centres (integrated bicycle and pedestrian network). The network will also be open to different users and uses, and offer a series of environmental, social and economic benefits.

The “Developing NBS in Nicosia Workshop” was held on the 6th December 2019, at the

Environmental Information Centre of Athalassa National Forest Park, in the context of the Connecting Nature project. The objective of the workshop was Nicosia Development Agency invited a number of 30 external stakeholders from various organisations such as the Forest Department, the Directorate General for European Programmes, Coordination and Development, the Department of Environment - Ministry of Agriculture, member municipalities, Universities (UNIC, Frederick and UCY), professionals (Architects, Urban Planners), NGOs etc. All the participants were involved, one way or another, with Nicosia's exemplar.

The first part of the workshop included a short presentation of the exemplar. In order to ensure that all participants had a clear understanding of the terminology, we decided to spend some time on explaining what NBS are, examples of NBS in Cyprus and gave the opportunity to all participants to clarify everything before proceeding to the main part of the workshop. This helped the team of participants to build a common understanding as well as a common language in order to communicate more efficiently during the second part of the workshop.

Considering the involvement of the participants on the project, Nicosia decided to focus the exercises on two parks of the network, Lourka Forest and Ayios Demetrios Park. For each project we illustrated the kind of interventions underpinning a new attractive park network. More specifically:

- 1st Sketched the park including landscape characteristics and infrastructure (trails, viewpoints, belvederes, benches, kiosks, sitting areas, cafes etc).
- 2nd Explored of: a) the connectivity (existing and future links) of the park with the proposed network and in general with the urban context, and b) potentials.
- 3rd Identified the key stakeholders and their role in each phase of the project.
- 4th Analyzed of the planning process (from inception to planning permission and implementation)

The main goal was the development/ structure of an Open Innovation Team that will be instrumental for the implementation of our exemplar, the network of linked open and green spaces. The outcome of the workshop was the development of a diagram where all organisations (public and private/NGOs), identified to have a role in the proposed Open Innovation Team, were included along with their in-between relationships and the work that needed to be completed by distinguishing two types of relations: a) what each organisation could obtain from the project, i.e. how the implementation could cater its interests and objectives; and b) the potential contributions to the implementation process.



The workshop was an opportunity to bring together the key people involved in NBS in the city in order to facilitate a common understanding about the envisaged project. The output of the workshop was presented in the form of sketches, diagrams or charts summarizing the ideas and possibilities that came out of the group discussions. This was seen as a first iteration allowing the



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local partners to move forward in their process towards implementing the specific NBS.

The workshop was very useful and helpful for the Nicosia Development Agency in developing a more structured understanding on how to approach first, each of the selected parks of the proposed network and second, the network as a whole. It also helped the project team to move one step forward and identify from the beginning who to involve in the process (in each phase of the project), to broaden up its knowledge on NBS and to further develop its skills.

The innovation team workshop was seen as very useful and helped the project team to:

- better understand and structure the exemplar;
- Identify all the involved actors in each phase of the project and engage them;
- Understand the relationships between them (public organizations, private and non-profit organisations) and their main workstreams;
- to prioritize immediate actions and resources,
- to build a common understanding as well as a common language among all (core project team, extended team, Open Innovation Team, involved actors), in order to communicate efficiently as in each phase of the project.

2.6 Pavlos Melas.

The aim of Pavlos Melas Metropolitan Park programme is the transition of an ex-military camp into an urban open innovation core with environmental, social, cultural and economic benefits. In order to achieve the goals of Pavlos Melas Metropolitan Park as a multipurpose place with environmental, social, cultural and economic benefits, **the need for an innovative approach**, compared to a regular urban planning process, emerged as an essential element of their exemplar; specifically, the **fundamental opportunity** for Pavlos Melas Metropolitan Park programme was not in developing the site but in **embedding an inclusive and change oriented process that could have much greater impact for the city**. In order to support Pavlos Melas team and initiate this innovation approach, Osmos curatorial workshop took place in January 2020.

The workshop revealed the necessity to set up an Open Innovation Team within the municipality and it brought up that **even before considering involving external actors, the priority lies in creating an open innovation team between the various departments of Pavlos Melas municipality**. Seeing the scale and complexity of the Metropolitan Park programme, it is necessary to have almost all the departments of Pavlos Melas involved and this with a **dynamic exchange, as most workstreams to be dealt with require interactive exchange**.

The workshop concluded that a leading core open innovation team of motivated and committed people from each department is necessary. In order to establish such a team, clear and regular internal communication is needed, which requires a solid understanding and strong clear vision on the project. The workshop involved a mapping session in which all the departments have been discussed in relation to the contribution they can and should bring to the nature-based solution development and what they need to achieve this, as well as their potential gains. The workshop **discussion illustrated the necessity for most departments to contribute actively and for this dynamic and regular exchange is required**.

The workshop resulted in the outline of the first key steps to establish a core open innovation team and in order to find enough workforce to carry all the workload, the next steps to open up the core team. The idea for an open call to join and work on the project was suggested, involving more actors

within the municipality as well as external ones, such as the university, citizens and private actors.

Finally, in relation to the issues concerning the programme implementation and stewardship, an outline of a roadmap towards implementation has been made. Different workstreams have been mapped that showed to cluster over three main and intertwined issues: vision, communication and operational plan.

As a result of the work of Pavlos Melas team in joint with OSMOS, **the innovation workshop outputs were used as a guiding tool in order to capture the programme goals. New perspectives for the involvement of each department in Pavlos Melas Metropolitan Park were identified and developed in practice.**



Image 5: OSMOS workshops on Pavlos Melas Metropolitan Park

Follow-up core open innovation team work sessions on the realization of a clear and short vision were held. The strategic plan of the metropolitan park formed the foundation for this co-visioning process. After three more team meetings, a clear vision was developed to unfold into a both strong internal and external communication base: *“Our vision is the transformation of a historic site into a multifunctional green space, public and open, a driving force for cohesion and well-being and a lever of development for the city, where people relax, participate, have fun and return.”*

This initial work is used as the base for the ongoing development of a workstream plan to set up a timeline with clear deadlines and assigned tasks that are divided over task-oriented work groups. In addition, co-production workshops of the open innovation team with external actors illustrated the need of an innovative and agile governance model as key to have the green space regeneration project become a success in the long term.

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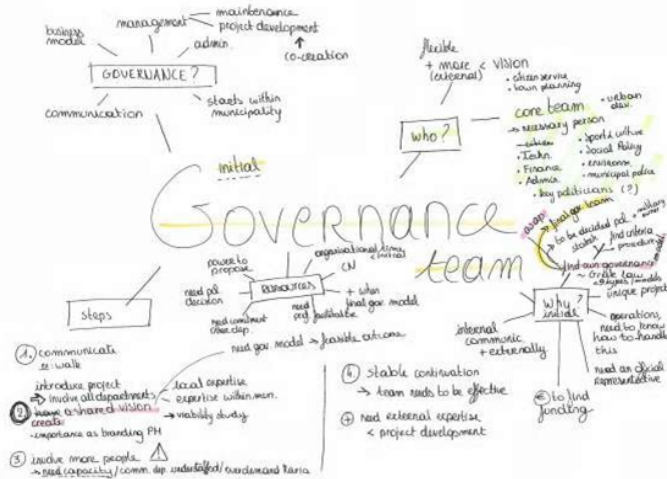


Image 6: Multiple facets of a novel governance model

It was recognized that **multi-level synergy governance model is necessary to support this multi phases programme of such a big scale. In this framework a multi-level synergy of municipal, regional and national scale was developed to support the municipality during the programme implementation.**

Through **co-production workshops with the open innovation team and key stakeholders, it was concluded that the programme funding will be achieved through a multi-phase funding model and based on that model additional amounts were secured.**

Contribution of the Innovation Workshop/Team: The creation and involvement of the open innovation team of internal key stakeholders and external key actors from the planning phase was determinant for the effective implementation of the project, as well as the project sustainability. This **cooperation created new perspectives for an effective interdepartmental way of working.** In parallel, the team accomplished a deep understanding and built important experience on co-production procedure, that was approached, developed and incorporated in the business-as-usual work process, boosting the Pavlos Melas team capacity and strengthening the ability to cope with nature-based solution challenges. These challenges consumed time and resources to be initially identified and then commitment and constant work to be envisaged.

However, common barriers identified by other Connecting Nature cities created conditions for collaboration and support between the partners. In addition, knowledge transfer processes, experience sharing, practice and familiarization with the CN framework helped to address difficulties in an effective way. It was also recognized that the city context is a factor that determines the CN framework adaptation in each city.

2.7 Sarajevo

One of the **most important parts of the developing exemplar was to choose actors who can contribute to the design, implementation and stewardship, and who have knowledge, jurisdiction and interest** to support the exemplar. The Sarajevo exemplar - urban garden and sensory park – will provide the inhabitants of the city a place for relaxation, entertainment, learning and play, not forgetting people with special needs - children with intellectual and/or physical disabilities. This garden will enrich the biodiversity of this area, with different plants and trees planted at the location, with special focus on trees which help fight the air pollution, which is the main

environmental problem in Sarajevo.

The work in the identification of the relevant actors/stakeholders started in 2018 by Osmos visit to Sarajevo. Preparation activity included identification of the stakeholders: public services, business, capital, knowledge and community, where the Sarajevo team identified the most important institutions/organisations. The Osmos conducted exploratory interviews and created the report. The aim of the exploratory stage of interviews was to recognise stakeholders who can be part of a longer stakeholder engagement process - to become more active partners and to support project activities.

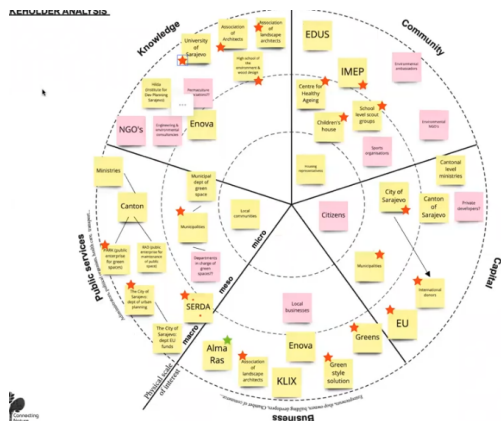


Image 7: Stakeholder mapping

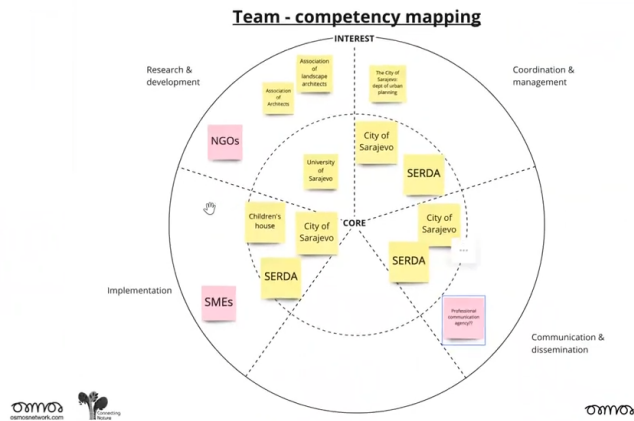


Image 8: Sarajevo Team – Competency Mapping diagram

Taking into account complicated administration/jurisdictions and lack of knowledge on NBS in Bosnia and Herzegovina, the Sarajevo team asked for support of Osmos in more depth identification of the stakeholders, especially in terms of financing and who to use existing resources and how to engage them in the all phases of the exemplar.

Osmos supported project partners by organising the workshop on stakeholder mapping and engagement and open innovation team. The workshop was organised in 2020 and helped the Sarajevo team to check already identified stakeholders and to see opportunities for cooperation for more institutions/organisations on micro, meso and macro level.

Penta helix stakeholder analysis included recognition of the most important actors and benefits they can provide to the exemplar, but also their level of interest in the project activities (collaborative/opposed, active/passive).

The Team – competency mapping included identification of the core team including research and development, coordination and management, implementation and communication and dissemination and their level of interest. Also, Osmos completed the topic on end users’ identification, creation of their profiles and persona as one of the tools which help to be more specific and targeted in order to find the most appropriate way to reach them.

The knowledge the Sarajevo team gained was used to motivate additional stakeholders to contribute to the project – e.g. the team had meeting with Faculty of architecture in order to provide expert’s opinion and suggestions of the exemplar, the team also confirmed earlier conclusion of necessity to have institutional support and to include local government in the exemplar, the team also identified most important SMEs active in environmental protection who can further develop if they also gain knowledge and practices on NBS.

The mentioned workshops and brainstorming provided the Sarajevo team clear picture on necessary



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elements of the exemplar and what to take into consideration, but also it affected to the exemplar in the most positive way - to introduce some innovative aspects within the exemplar in order to include more target groups (e.g. initial meeting with the Municipality led the team to the location of the exemplar - school and discussion with management of the school opened cooperation with their experts for the inclusion of the children with disabilities and how to integrate them into society). Therefore, the Sarajevo team after completing the workshop with Osmos got main actors identified, the structure of the open innovation team, main target groups, end users and got new tools for the stakeholder engagement.

The workshop was an excellent way to gain new knowledge and practices which can be used in all phases of the project and stakeholder engagement provided systematic identification, analysis, planning and implementation of actions designed to influence stakeholders and to include them in a more active and long-term way.

Summary: Key impacts of the Innovation workshops and establishment of the Innovation teams in the FFCs

Each of the cities has provided an overview of activities related to the preparation of the innovation workshops, as well as some of the key outputs and reflections, both in relation to the innovation teams and the overall planning, delivery and stewardship of the city exemplars. While internal collaboration between departments remains a challenge, cities acknowledged the importance of working cross-departmentally with respect to their exemplars.

The workshops and the establishment of the innovations teams offered the cities an opportunity to better reflect on their exemplar, both in terms of stakeholders - both internal and external that are required for achievement of NBS project objectives - and in the context of the Connecting Nature Framework. Below is a table, summarizing some of the key highlights from the city innovation workshops and teams.

City	Innovation Team - Key Outputs
A Courna	The workshop helped identify the main stakeholders and establish some valuable connections , internally, especially with the Employment and Education dept., but also externally with different associations and technological centres with whom we've been collaborating after that first contact. The participation in the workshop helped engage these partners, increase their awareness about the CN Project and plant the seed for future collaborations.
Burgas	The main contribution of the workshop was that it helped colleagues to be more creative and to take into account the different investment requirements , which are planned to meet the needs of users as much as possible, but also to comply with the protection of the environment and biodiversity , and to take into account the whole life cycle of the project , namely the costs of subsequent maintenance and management. For the project team, the workshop once again proved the importance of involving stakeholders from the earliest stage of a project (initiation phase)

	and presenting good and reasonable solutions, which will then be included in the design, implementation and maintenance phase.
Ioannina	<p>The whole open innovation process proved to be a very useful tool in the development of the exemplar, as it laid the foundations for the successful identification of all stakeholders in the project, but also created the conditions for their participation and engagement in it.</p> <p>The workshop was an opportunity for the Ioannina CN team to present the ideas of NBSs and NBEs to various stakeholders in the city, stakeholders who weren't aware (in most cases) with these concepts.</p>
Malaga	<p>The innovation workshop has been helpful in order to give a full overview of the project by breaking down all the parts and by setting the goals of the future interventions, find out the stakeholder and other partners to involve them in all the phases of the project. During the workshop we were able to see how a nature-based perspective on urban space in Lagunillas could improve its urban quality while maintaining a certain stability in the neighborhood, keeping it predominantly residential avoiding as much as possible gentrification while improving the quality of life of its residents.</p>
Nicosia	<p>The innovation team workshop was seen as very useful and helped the project team to:</p> <ul style="list-style-type: none"> • better understand and structure the exemplar; • Identify all the involved actors in each phase of the project and engage them; • Understand the relationships between them (public organizations, private and non-profit organisations) and their main workstreams; • to prioritize immediate actions and resources, • to build a common understanding as well as a common language among all (core project team, extended team, Open Innovation Team, involved actors), in order to communicate efficiently as in each phase of the project.
Pavlos Melas	<p>The creation and involvement of the open innovation team of internal key stakeholders and external key actors from the planning phase was determinant for the effective implementation of the project, as well as the project sustainability. This cooperation created new perspectives for an effective interdepartmental way of working. In parallel, the team accomplished a deep understanding and built important experience on co-production procedure, that was approached, developed and incorporated in the business-as-usual work process, boosting the Pavlos Melas team capacity and strengthening the ability to cope with nature-based solution challenges. These challenges consumed time and resources to be initially identified and then commitment and constant work to be envisaged.</p>
Sarajevo	<p>The workshop was an excellent way to gain new knowledge and practices which can be used in all phases of the project and stakeholder engagement provided systematic identification, analysis, planning and implementation of actions designed to influence stakeholders and to include them in a more active</p>

	and long-term way.
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The establishment of the innovation teams in each city created the conditions for creativity and new perspectives (Burgas, Pavlos Melas); offered opportunities for the cities to better understand their exemplar in the context of the CN Framework (Nicosia, Malaga); and, [provided space to identify and engage with key stakeholders (both internal and externally - all, but it is worth highlighting Sarajevo, Burgas, Ioannina, and Pavlos Melas specifically, as co-production and engagement processes are very new to the cities, and require them to move beyond their comfort zone); helped the cities zero in on their exemplar across the phases of the Framework (Malaga); assisted in solidifying relationships across departments with regards to exemplar delivery (A Coruna, Palvos Melas). Furthermore, the workshops also provided a space to introduce new concepts (Nature-Based Enterprises) and also, reflect on the term NBS, given that it is still considered an unfamiliar or 'new term' in certain European contexts (Ioannina). On that note, it is worth highlighting Nicosia's reflection that the innovation workshops and the establishment of the innovation teams offered an opportunity to agree on and **work within a common language with respect to their exemplar**. This links back to what continues to be one of the more challenging aspects for cities with regards to nature-based solutions, namely how to best communicate with a variety of stakeholders (both internally and externally) on the benefits of NBS.

6.0 Conclusions And Recommendations

Parallels can be drawn between the conclusions and recommendations of the frontrunner cities in Deliverable 10 and the experiences of the fast follower cities in this Deliverable in that virtually all the cities shared some experiences such as a reliance on public sources of financing for capital development, or high levels of bureaucracy and silos existing between departments in public sector bodies. However, notable innovations emerged in the fast follower cities especially around the area of governance, particularly in the stewardship phase of the NbS with establishment of an initiative to attract private finding for NbS in Nicosia and the supported gradual transition from municipal management of community gardens in A Coruna to community managed community gardens. The main findings and recommendations of this Deliverable are summarised below:

Summary of findings and recommendations:

1. The public sector remains the most important source of financing for large-scale implementation of nature-based solutions in the fast follower cities and there is a preference by the cities to use EU and national funding programmes as this is where internal expertise lies.

Recommendation: It is likely that public sector financing will continue to be an important source of financing for NbS, especially for the capital phase of the projects. *A successful outcome would be reduced reliance on public sector funding in the long term and increased co-ownership of NbS by other stakeholders. Case studies of successful use of external financing should be developed and a catalogue of financing instruments made available for municipalities who do not have access to other sources of financing for nature-based solutions.*

2. Governance

There is evidence of growing innovation among the fast-follower cities to find ways to co-fund and co-govern, in particular of the stewardship phase of NbS e.g. pocket parks initiative in Nicosia, community gardens in A Coruna and the multifunctional garden in Sarajevo. This phase is the one where many municipalities struggle to find ongoing funding for in municipal budgets and as NbS become more present in cities, this co-funding and co-governance approach should be mainstreamed and grown from small scale interventions to larger scale projects.

Recommendation: *Case studies of innovative governance models on NbS of different scales should be developed and catalogues of models created for municipalities seeking to introduce new*



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governance methodologies.

3. The importance of pilot projects

As is evidenced from both Sarajevo and Malaga where the concept of NbS is less familiar, the communities in which the NbS are to be implemented are marginalised, may have a distrust of public authorities and the concept of co-creation is nascent, the pilot model is an important mechanism to build trust and demonstrate “proof of concept” in a way that is non-threatening and is of a scale sufficient to show how nature in public spaces can provide multiple community benefits.

Recommendation: Cities should be encouraged to embrace the pilot project model more particularly in locations where public trust and co-creation collaboration need to be strengthened.

4. Further integration and cooperation between municipal departments is needed in the Planning and delivery of NbS. Successful delivery of NbS requires the cooperation of several different departments ranging from environment, enterprise, and finance/economics to health, education and transport and are not the sole responsibility of one department who can struggle to be effectively heard when decisions need to be taken. Certainly steps have been taken in some of the fast follower cities to liaise with multiple departments like in A Coruna and having external agencies that can negotiate or cooperate with city municipalities (SERDA, ANEL, ProMalaga) has benefits too.

Recommendation: Consideration should be given by municipalities to establishing open innovation teams (e.g Pavlos Melas) using co-production techniques that bring stakeholders together internally as well as externally.

5. The establishment of a common language for working cross-departmentally and with various stakeholders is a significant step in addressing the challenge of (a) communication and awareness related to the concept of NBS (and also NBE), and (b) meaningful co-production and engagement. By allowing for a sense of shared understanding across various stakeholders with respect to the aims, objectives of NBS, an agreed upon terms of reference creates the potential to better frame how stakeholders work together to achieve desired objectives and goals..

Recommendation: Successful co-production (with meaningful engagement of a diverse group of stakeholders) should be based on an agreed upon terms of reference that reflects not only a sense of shared understanding, but one which fosters a deeper investment, not only in the process of co-production, but in its outputs and outcomes specific to NBS planning, delivery, and stewardship.



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7.0 Appendices

Links to the full innovation reports:

- A Coruna [20200902 4.3 A Coruña](#)
- Burgas [CON - Report Burgas](#)
- Ioannina [20200901 4.3 Ioannina](#)
- Malaga - [20200902 4.3 Malaga](#)
- Nicosia [20200901 4.3 Nicosia](#)
- Pavlos Melas [20200902 4.3 Pavlos Melas](#)
- Sarajevo [20200902 4.3 Sarajevo](#)